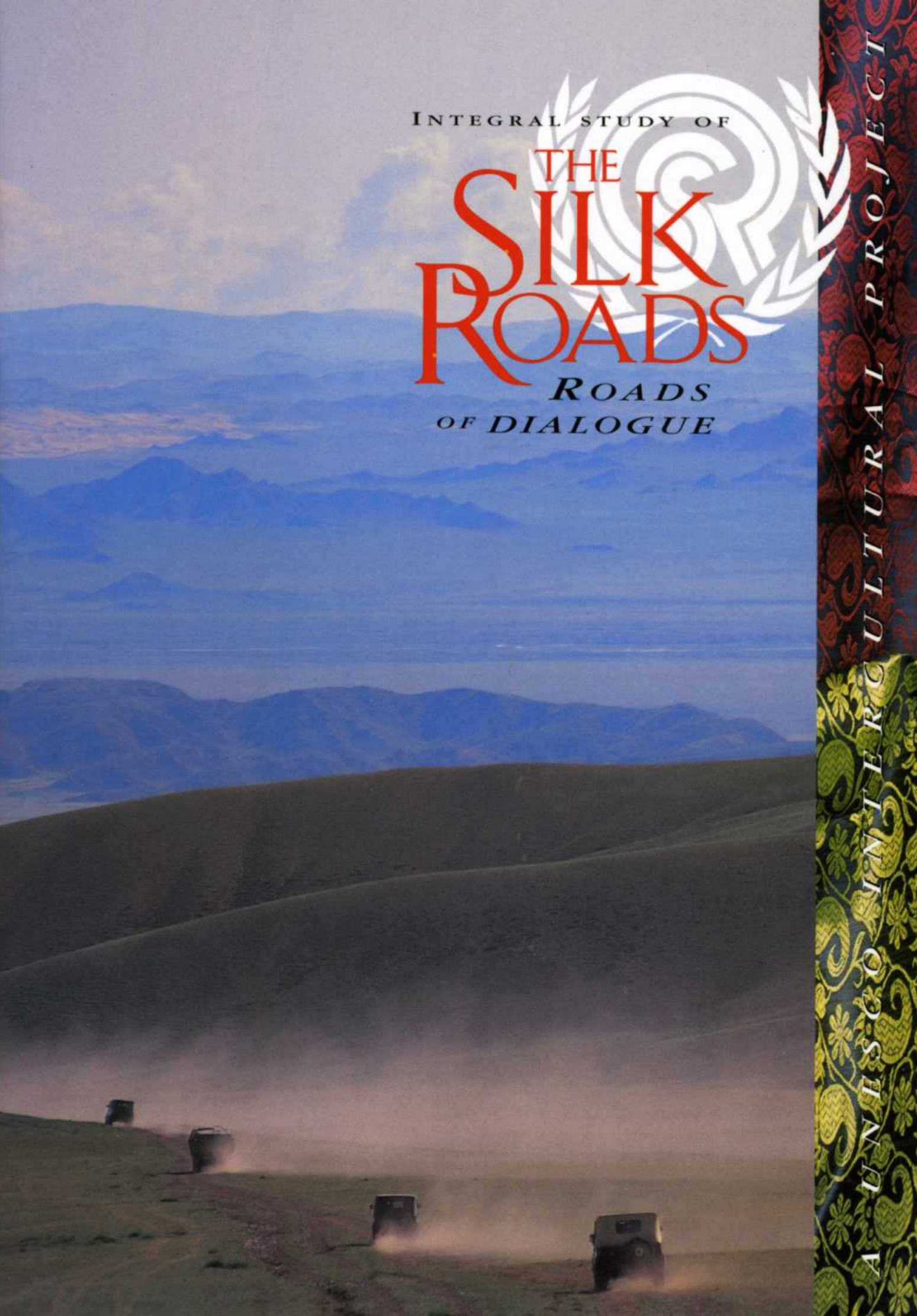


INTEGRAL STUDY OF

THE  
SILK  
ROADS

ROADS  
OF DIALOGUE

UNESCO INTERNATIONAL PROJECT







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◆ The Shirdar Madrasa in Samarkand - one of the many proud monuments that once adorned the Silk Road and are now being restored.

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Designed by **Keenan Design Associates**  
Printed by **Craftprint Pte Singapore**

ACKNOWLEDGEMENTS

The Silk Roads Project wishes to record its appreciation to all Member States and institutions which so generously hosted meetings of the Consultative Committee and international seminars, as well as the international teams during the expeditions. We also thank the many scholars and representatives of the media and the private sector who contributed to the success of this programme, in particular His Majesty the Sultan Qaboos bin Saïd of Oman and the Omani Ambassador to UNESCO, H E Dr Musa bin Jaafar bin Hassan, Dr Ikuo Hirayama, TV Asahi and Asahi Shimbun, Japan; Munhwa Broadcasting Corporation, Republic of Korea, plus the Singer Polignac Foundation, Europ Assistance and the Buddhist Cultural Association, France. Special thanks go to Professor Vadim Elisseeff for his valuable guidance as President of the Consultative Committee, and to the Committee members for their intellectual contribution to the Project.



*The UNESCO Nomads' Route expedition retracing the Silk Road across Mongolia. Chinese Silk was first carried west by nomads migrating across these steppes, laying the foundations of East-West trade and intercultural exchanges via the Silk Roads*





*Preface of the*  
**DIRECTOR-GENERAL**  
*of* **UNESCO**



*Federico Mayor*

**S**ince time immemorial, the movement of peoples and intercultural exchanges have played a crucial role in the evolution and transformation of human civilization. At a time when cultural identities are being fiercely defended in many parts of the world, a look into the past shows that these identities have been gradually forged through influences from elsewhere. Such influences have marked the different civilizations deeply and in doing so have helped to fashion all present-day societies.

The stimulating concept of 'routes' or 'roads' as vectors of culture constitutes the basis of several study projects undertaken by the United Nations Educational Scientific and Cultural Organization (UNESCO). The first, launched in 1988 under the title 'Integral Study of the Silk Roads: Roads of Dialogue', was a bold and ambitious venture that set to reopen doors to the past, thus shedding new light on the present. Through a vast programme of research that has mobilized scientists, academics and media worldwide, and that has included five expeditions mapping out again both land roads and sea routes, the Silk Roads Study has forcefully disproved those concepts and visions that today stand as obstacles to the harmonious coexistence of peoples. Indeed, the numerous studies carried out show that identity, seen from the perspective of history, must not be viewed as a ghetto or a form of confinement, but should rather be achieved and recognized as a process, a synthesis and an encounter.

The Silk Roads have highlighted the fruitful dialectic and give-and-take in the unending dialogue between civilizations and cultures. They show how the movement of people, and the flow of ideas and values, have served to transform cultures, and even civilizations, whether it be through the spread of Buddhism, Christianity or Islam between East and West, the transfer of technologies or the dissemination of scientific knowledge.

Through this project, UNESCO has sought to shed light on the common heritage, both material and spiritual, that links the peoples of Eurasia. To generate an awareness of the different civilizations' shared roots and to foster the concept of a plural world heritage that embraces the masterpieces of nature and culture in all countries is, in the final analysis, to encourage attitudes of openness and tolerance, so necessary in an essentially interdependent world. The fundamental issue at stake in the 'roads of culture' approach is to highlight the significance of pluralism in culture, no less vital than that of biodiversity in nature.

*Federico Mayor*  
**Director-General**  
**UNESCO**

*Even today camel caravans provide vital links in remote regions of Central Asia - as they did in the heyday of the Silk Road.*

# HISTORICAL

## *influence of the* **SILK ROAD**

*A Roman denarii, for centuries the main trading currency along the Silk Road.*

**A**lthough the term 'Silk Road' calls up exotic images of far-off lands, historically its practical effect was to demystify. For trade helped create contacts among far-flung countries and cultures, and make things that had been distant and exotic less strange.

The Silk Road formed the first bridge between East and West. It originated 2,000 years ago as a channel of trade in silk and other goods between the ancient empires of China, India, Persia and Rome. But it was much more than just a trade route, and has a permanent place in world history as an important means of contact between peoples and cultures, and as a conduit for the two-way transmission of art, religion and technology.

Such contact was not always easy to maintain in the face of war, plague and famine, but when one stretch of the route closed down another would take its place. In fact, there was a whole network of routes, both overland and maritime, between East and West, and the expression 'Silk Road' is largely a symbolic one - evoking an enduring spirit of communication between peoples. It was in order to rediscover this eternal spirit that the project 'Integral Study of the Silk Roads' was undertaken by UNESCO.

**T**he foundations of the East-West contacts, which were later channelled along the Silk Road, were laid in the last few centuries of the pre-Christian era with the formation of a number of Central Asian states whose peoples exploited the resources they found locally and competed for trade. This quest for profit led to a flourishing exchange of goods and movement of merchants from region to region. Love of adventure and a thirst for knowledge were two other motives which fuelled the process of exchange between different societies and helped break down the barriers which isolated people in different regions.

The meeting of the peoples of East and West, the exchange of ideas and technologies, and the transmission of languages and literature was made possible for the first time by the Persian Achaemenid empire between the 6th and 4th centuries BC. People were attracted from many points of the compass to the capital of this empire, Persepolis, in present-day Iran,

along roads built by the emperor Darius. The imperial highways of the Persians joined Mediterranean lands to western Asia, which at the same time was connected with Central Asian cities such as Balk, Samarkand and Taxila - later to become important staging posts on the Silk Road. The diverse peoples involved in this process are vividly portrayed by the Greek historian Herodotus, who describes how their societies were organized, their ways of life and their close relationship with the Achaemenid empire in Persia. One example of this commercial and cultural exchange is that of the Aramaean merchants who travelled through Central Asia where their alphabetic script, Aramaic, influenced the evolution of other alphabets such as Sogdian and Kharoshthi.

**C**ontacts between East and West were further facilitated in the late 4th century BC by the conquests of Alexander the Great, who overthrew the Achaemenid empire and campaigned eastwards as far as India. A Macedonian who became steeped in Greek culture after his conquest of Greece, and then an oriental monarch captivated by the idealism of the East, Alexander was himself the embodiment of cultural intermingling.

During his time the culture of the Greek world was transmitted into Asia in an unprecedented flow of men and ideas, technologies, artistic trends and architectural formulae, as well as drama, poetry, music, religions and above all language and literature. The traffic, however, was not only one-way. Alexander and the scholars who accompanied him met Asian philosophers, whose ideas they took back



*Much of Central Asia's turbulent history stemmed from competition for control of the lucrative trade routes which crossed it, and for the glittering caravan cities such as Samarkand (below) that grew up along them.*



*Today Samarkand is the site of the International Institute for Central Asian Studies (left), set up as a result of UNESCO's Silk Roads Project to study the region's past.*

to Greece along with tributes of gold and artefacts which enriched the classical world of the West.

Alexander founded several new cities in Asia, and his men intermarried there, introducing Hellenism but at the same time becoming thoroughly Asianized and integrated into the local population. This cross-fertilization of cultures continued with Alexander's successors, the Seleucids, and was later augmented, under the Kushan empire, by inputs from Scythia and India.

Shortly after Alexander invaded Central Asia, Chandragupta Maurya seized the throne of the Indian kingdom of Magadha, thus taking the first step in the creation of the mighty Mauryan empire. Central Asia was joined to India by a 4,200-kilometre road, built by the Maurya dynasty, that passed through the Khyber Pass and drove diagonally across the subcontinent to the Bay of Bengal, along the course of the River Ganges.

Cultural influences spread along the river valleys of India and Central Asia, and archaeological excavations at Taxila on the Indus and Ai-Khanum on the Oxus have shown how art and architecture of that time drew on a wide variety of traditions. The Mauryan empire, which inherited both Greek and Achaemenid legacies, reached its zenith during the reign of Chandragupta's grandson Asoka (274-237 BC), who inaugurated an era of Buddhist missionary activity that had a far-reaching impact on Central Asia and the Far East.

After its founder's death, Alexander's great empire disintegrated into smaller units including such peoples as the Bactrian Greeks, the Sogdians, the Parthians, the Scythians

and later the Sassanians. This fragmentation did not prevent the movement of people and goods; on the contrary, commercial activity was intensified as a result of advances in geographical knowledge, which also encouraged the movements of learned Buddhists, Zoroastrians, Manichaeans and other missionaries along the Silk Road.

Meanwhile, the Qin dynasty (221-207 BC) unified China and built the Great Wall as a defensive measure against the Huns. The rulers of the Han dynasty (206 BC-220 AD), which followed, defeated the Huns and opened up for the first time the route to Central Asia, establishing contact with the mighty Kushan empire which stretched from the Caspian Sea

in the north through the Oxus, Indus and Ganges valleys to the Arabian Sea in the south. The Kushan empire was so vast that it also had close contacts with the Roman empire, and from the 1st to the 3rd century AD, the Kushans acted as intermediaries between the Roman West and the Chinese East, issuing gold coins on the model of Roman *denarii* to facilitate trade. This period of close collaboration between East and West helped to create the propitious conditions for the opening of the Silk Road.

Another significant development, thought to have taken place around 100 BC, was the discovery of the monsoon, which enabled ocean-going vessels to cross the Indian Ocean from west to east in spring and then to return in winter when the winds reversed, laden with products of the East. New sea routes were developed which reinforced, and when necessary replaced, the overland Silk Road.

The overland Silk Road began in Chang'an (modern Xian), then divided to skirt the Taklamakan Desert along its northern or its southern fringe, before coming together again at Kashgar. From there, caravans proceeded over the Pamir and Tian-Shan mountains to Samarkand, Bukhara and Merv, around the Caspian Sea from Persia to Turkey and on to Rome. Feeder routes led south across the Karakorum range to Kashmir and India, north over the Tian-Shan to Almaty, and through Mongolia to Minusinsk.

The maritime route began in Canton (modern Guangzhou), and crossed the South China Sea. After rounding the Malay Peninsula it passed through the Straits of Malacca and crossed the Indian Ocean, dividing in the Arabian Sea to reach the Middle East via the Persian Gulf, or the Mediterranean via the Red Sea.

**E**urasia underwent a great upheaval during the 3rd century AD. In the west, the Roman empire suffered a grave economic crisis, and its centre of gravity shifted to the eastern Mediterranean, where Antioch, Alexandria and Byzantium (modern Istanbul) took the place of Rome. In the east, Han China disintegrated and was plunged into a period marked by territorial division and a rapid succession of dynastic changes. In Central Asia, the Kushan empire began to shrink as its Persian neighbours encroached from the west. In the north, successive waves of fierce mounted nomads were beginning to sweep to both east and west, pressing ever more dangerously against the fortifications of the frontier zones.

Chinese sources describe how these tribes subsequently moved down the Oxus valley and penetrated south of the Kunlun, Karakorum and Hindu Kush mountains. The Huns spread from the western borderlands of China and Mongolia into the

heart of Asia and Europe and down to India. Many Chinese and western travellers have left a vivid picture of the Huns' horsemanship, polo playing, weapons and dress.

The Huns were followed by another group of fierce martial nomads, the Turks, who won a series of decisive victories over their neighbours in 552, and created an enormous steppe empire stretching from their homeland in Mongolia as far west as the Black Sea. By 565, the Turks had extended their sway over most of the main cities of Central Asia, including Bukhara, Samarkand and Tashkent, and controlled the Silk Road.

The Turks were the first steppe people to realise the importance of trade. They offered security to caravans and concluded treaties with the Sassanids of Persia and Byzantines so securing commerce along the Silk Road.



**T**he rise of the Islamic empire in the West and the T'ang dynasty in China opened a new chapter in the history of the Silk Road. It created two large, hungry markets at each end of the overland and maritime routes, and trade flourished between them. The Arabs invaded Central Asia under the flag of Islam in 711, capturing the cities of Bukhara and Samarkand, then Sogdian strongholds astride the Silk Roads. By the middle of the 8th century the entire region south of the Aral Sea - present-day Uzbekistan - had been incorporated into the Islamic realm.

The Arabs ruled Central Asia for 200 years, bestowing upon the region the Muslim religion and the Arabic script. By the middle of the 10th century Islam had become the only religion of the vast region, and



Central Asia had become one of the world's most verdant and influential centres of culture.

**N**o one culture ever dominated the Silk Road. And only during the 13th-century Mongol empire, which included China, Central Asia, much of the Middle East and eastern Europe, was the Silk Road under the control of a single ruler. It was during this period that European merchants were able, under Mongol protection, to safely traverse the normally unruly steppes, establishing direct contact between China and the West for the very first time.

The united Mongol empire was short lived, but the dream of an Asian empire was not dead: A final dramatic chapter of Central Asian history was written in the 14th century by the Turco-Mongol Timurids. Timur, the dynasty's founder, known in the West as Tamerlane, was one of the most successful warriors the world has ever known. In a series of military campaigns, Timur conquered all of Eurasia from the Great Wall of China to the Urals.

The Timurid capital of Samarkand became one of the showplaces of the Islamic world. Its observatory, colleges and mosques became intellectual gathering places for astronomers, poets, theologians and architects. Indeed, the rich currents of exchange during this period contributed to the flourishing of Ming art in China, Timurid art in Central Asia, and that of the great Mughals in India, as well as to the lyrical rhythms and softness of Safavid poetry, music, painting and architecture in Persia, and to a splendid blend of West and East in the art and architecture of the Ottomans.

Timur's successors, however, lacked the authority of their ancestor, and were unable to hold together the vast steppe empire he had created. Tribes revolted and political instability again set in – followed by economic depression and cultural decline. Weak and disorganised, Central Asia was no longer capable of playing the role of intermediary vital to continued East-West trade. Meanwhile, in 1426, in an effort to expunge long years of foreign influence and resuscitate traditional Chinese values, the Ming Dynasty closed China's borders. After 1,500 years as a main artery between East and West, the Silk Road was finally cut, preserving during the following centuries

*Two outstanding relics of Silk Road civilization: The 10th-century decorative brickwork tomb of the Samanid dynasty at Bukhara (right), regarded as one of the finest examples of early medieval architecture; and (left) a magnificent processional mural that adorned a 7th-century dwelling in Samarkand.*



only the romance of its name and the vague memory that somehow, long ago, it had been important.

**A** fascinating new chapter in the epic history of the Silk Road began recently with the end of the Cold War and disintegration of the Soviet Union. Many lands along the route gained independence, and for the first time this century are welcoming outsiders to explore archives, art treasures and archaeological ruins.

The newly-independent nations straddling the old Silk Road have reopened land borders and re-established direct links with both East and West. After a break of some 500 years it is now possible to travel the ancient Silk Road from one end to the other again.





*In the course of their migrations, the Turks carried nomadic art styles across Eurasia.*

# HUMAN

*influence of the*  
**SILK ROAD**

***T***he Silk Road made an inestimable contribution to the civilization of mankind. For besides merchants and their goods there also moved along it the products of human thought, skill, and imagination. By means of the Silk Road, dialogues were established between diverse peoples, new ideas disseminated and technologies transferred. While as paths of conquering armies and mass migrations it helped shape the present political, ethnic and religious character of entire regions.

Individuals as well as human societies interacted in a great variety of ways along the land arteries between East and West. Merchants who travelled the Silk Road made the oases and caravanserais where they met and mingled, points of communication and dialogue. While artists, musicians and craftsmen made their way along it in pursuit of knowledge of other societies, to which in turn they contributed their own.

This melding of human thought and experience resulted not only from the influences brought by the Silk Road but also from the powers and peoples that sought to control the rich trade that flowed along it. For by its own wealth, as well as the access it provided to yet greater prizes, the Silk Road attracted a long succession of invaders.

In the 8th century, Muslim Arabs swept east along the Silk Road decisively altering the strength and distribution of world religions in Central Asia. While in the 13th century, Genghiz Khan unleashed the Mongol hordes along the Silk Road changing the political organization of much of Asia.

Great migrations, that fashioned the ethnic character of vast regions, also coincided with existing trade patterns. In the 6th century, for example, Turkic tribes began a westward wave of migrations along the Silk Road that ultimately swamped Central and western Asia.

*Mongolian nomads still migrate seasonally in search of pasture for their flocks - a process that in the past helped fashion the ethnic character of Central Asia.*





The Turks' original homeland was the Altay Mountains in Mongolia. As they fanned out across the steppes, tribal divisions among the Turks became more pronounced; by the 8th century such groups as the Kyrgyz and Uighurs had their own kingdoms. Meanwhile, the riches of the Silk Road brought wave after wave of Turkic invaders down onto the plains of Central Asia, where they encountered and eventually adopted Islam. In the 11th century, the Seljuq Turks swept west into today's Iran, Iraq and Syria, followed by the Osmanli Turks, who ultimately established the Ottoman empire in present-day Turkey, the Balkans, North Africa and the Middle East.

Advancing across Asia with the Mongol armies, the Tatar Turks occupied the Volga Valley and Crimea, Kazaks settled in the vast steppelands south of Siberia, Uzbek Turks occupied the semi-desert and oasis system on the southern rim of Central Asia, while the Turkmen roamed the deserts east of the Caspian Sea and the Azeris settled on its western shores.

Turkic peoples, in fact, are now one of the most widespread ethnic groups in the world - inhabiting a vast region from the Great Wall of China in the east to the Balkans in the west, and from Siberia in the north to Afghanistan in the south. Those of Eurasia are directly related to the Turks of modern Turkey, which was settled by Turkic tribes migrating west. They are also indirectly related to the Muslim populations of India and Pakistan, whose ancestors they intermingled with in the Middle Ages.

**A**lthough by the Middle Ages Turks were sufficiently dominant in Central Asia to lend it the name Turkestan, at times the Persians, Greeks, Arabs, Mongols and Russians ruled much of the region. All have left their stamp upon it.

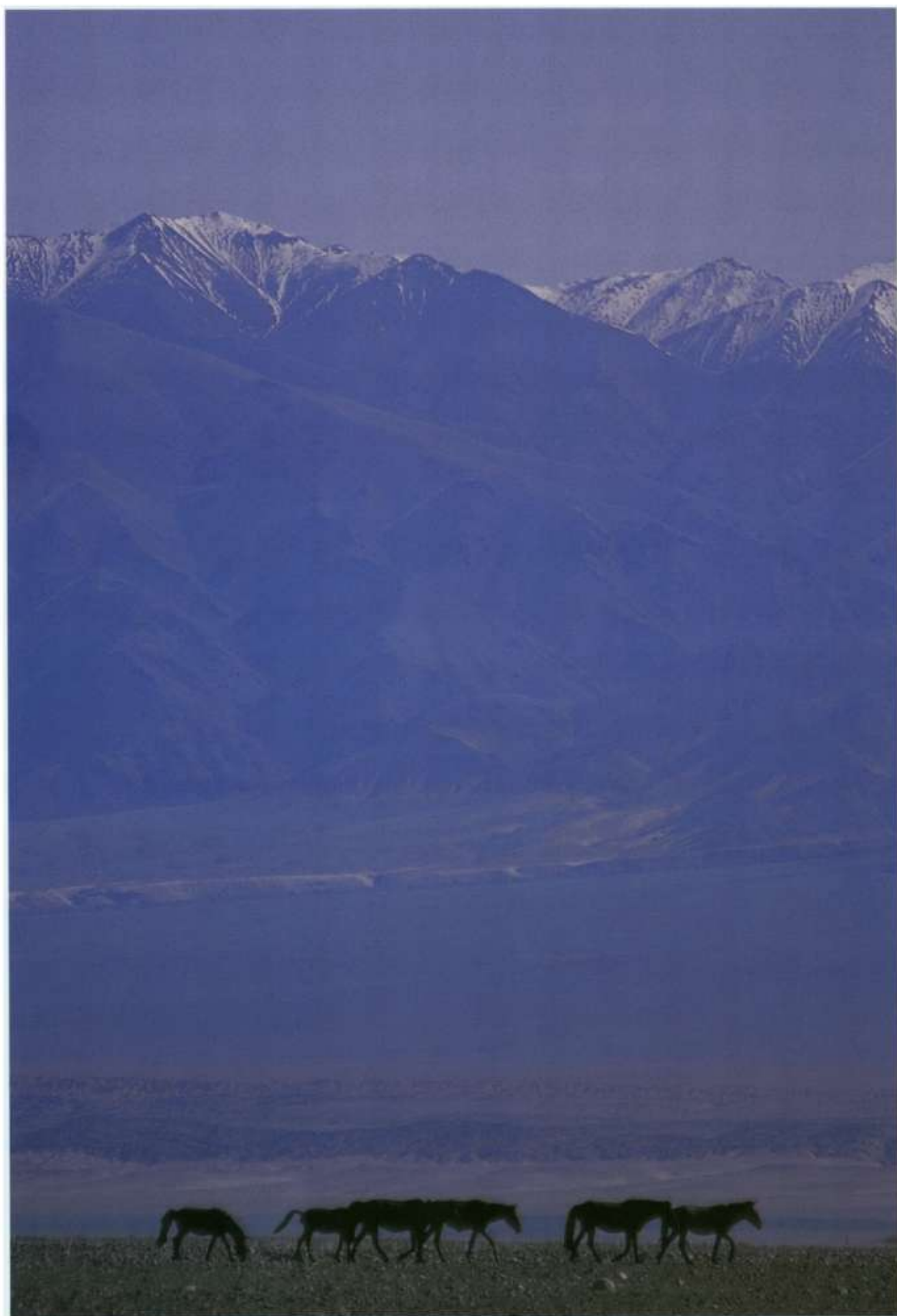
Alexander the Great peopled the Central Asian territories he conquered with settlers - his own troops or Bactrians and Sogdians - introduced Greek civilization, and conducted a deliberate policy of cross-fertilization, not only in outward matters such as customs, costume, and everyday life style, but also in forms of worship and even in the blood of the peoples concerned, through his own marriages to princesses of Persia, Bactria and India and through the thousands of marriages of Macedonian soldiers occupying parts of Central Asia.

Although the Arabs stayed in Central Asia for only two centuries, they left an indelible imprint on the region south of the Aral Sea - bestowing upon it the faith of Islam, which today is the predominant religion of the region, and the Arabic script, which was widely used there both for writing and architectural decoration for 1,300 years.

The Mongols' conquests were of a scope and range never equalled, and had a tremendous impact on world history. The political organization of Asia

*The sweeping grasslands and towering mountains of Mongolia (right), cradle of powerful nomadic nations who rose to assume dominion over the Silk Road.*

*As they swept west, the Turks absorbed many peoples resulting in striking variations (left) in their features.*



and a large part of Europe was altered; and whole peoples were uprooted and dispersed, permanently changing the ethnic character of many regions.

The Mongols imposed within their empire, which included China, Central Asia, and eastern Europe, a respect for law and order that was absolute. And although history remembers them as marauders, it was during this so-called 'Mongol Peace' in Central Asia that European merchants – among them Marco Polo – were safely able to cross the normally dangerous steppes; establishing direct contact between China and the West.

Marco Polo's account of his journey along the Silk Road remains one of the most popular books of travel ever written. But other, less known individual Silk Road travellers had far more influence than he.

First, in the second century B.C., the Chinese envoy Zhang Qian, whose long exploration of regions represented in Chinese geography only by archaic legends, is credited with opening up the Silk Road.

Zhang Qian brought back - not without a good many adventures on the way - a mass of information, alfalfa and grape seeds from Central Asia. Indeed, he is given credit, rightly or wrongly, for a large proportion of all the precious, useful or curious objects introduced into China from the West.

These were supplemented by information gathered by Zhang Qian on countries lying even further to the west, whose almost unrecognisable names indicate Persia, Arabia, Asia Minor and, under a name expressed in two ideograms - Li Jian - probably Alexandria and Rome.

It was the first time that the Chinese field of vision had extended so far to the West, and from then on exchanges of embassies, products and useful knowledge, and travel by merchants, diplomats, men of religion, artists and technicians in both directions became a regular occurrence.

One of the most celebrated of all these travellers - both for his work as a translator and for his descriptions of the countries traversed - is the Chinese monk Xuan Zang, whose wanderings took place between 629 and 645. In the period when Xuan Zang was a young monk, Buddhist doctrine in China had branched into several schools and interpretations, while the problems of translation were aggravated by the lack of original documents. It was necessary to procure reliable texts and to study them in monasteries in India with the great masters before translating them

into Chinese. For these reasons, Xuan Zang undertook the journey via Central Asia to the great monasteries of Kashmir and northern India. The numerous adventures of his 15 years of wandering - including descriptions of the countries he travelled through - make for a narrative that is as invaluable to historians as it is entertaining.

**I**n fact, in the history of trade, few terms are more evocative of mystery and opulence than the 'Silk Road'. But irresistibly romantic though the name may be it is less than descriptive of the reality. All too often the romantic image of the East-West trade in exotic goods obscures the very real hardships of the journeys - over treacherously shifting desert sands and

ice-bound mountain passes - and the tremendous risks to life and capital endured by merchants to maintain the sometimes tenuous links between widely separated markets.

At first they were simply routes that traders travelled between two major areas, but the demands for services along the way - and the profits from managing the trade - created thriving intermediate cities along them. The commercial and cultural vitality of these cities lured the finest intellect of the time. The brilliant physician Ibn Sina, known in the West as Avicenna, wrote his celebrated *Canon of Medicine* in Bukhara, while at Khiva, al-Biruni probed every branch of human knowledge: anticipating the principles of modern geology, laying the foundations of astronomy, and investigating relative speeds of sound and light.

Craftsmen, entertainers and official emissaries from far-off

lands travelled the Silk Road, and many languages were spoken, many cultures blended, in the glittering cities that grew up along it. Inevitably this route formed a cultural causeway carrying new ideas, new philosophies, new artistic styles between East and West.

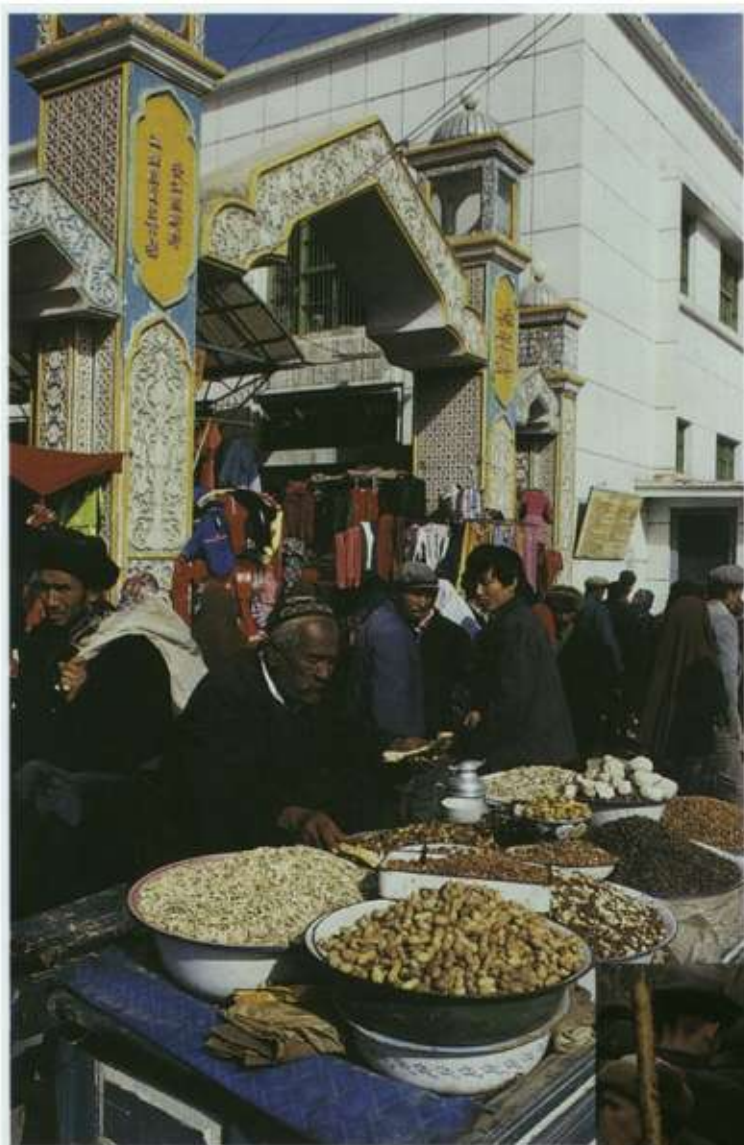
The merchants who traded along the Silk Road were as much an element in promoting the flow of non-material traffic as the teachers and missionaries who travelled along it. For traders also played the role of communicators, passing on new ideas, beliefs, legends and pieces of art.

There appeared among the travellers of the Silk Roads also troupes of dancers, acrobats, actors and musicians. The role played by these groups in

*Muslim invaders bestowed on Central Asia the Arabic script (left) - widely used there for 1,300 years, both for writing and architectural decoration.*

*Even today, travelling traders - like these merchants at Kashgar (right) - act as communicators: passing on information and new styles as they did in the days of the Silk Road.*



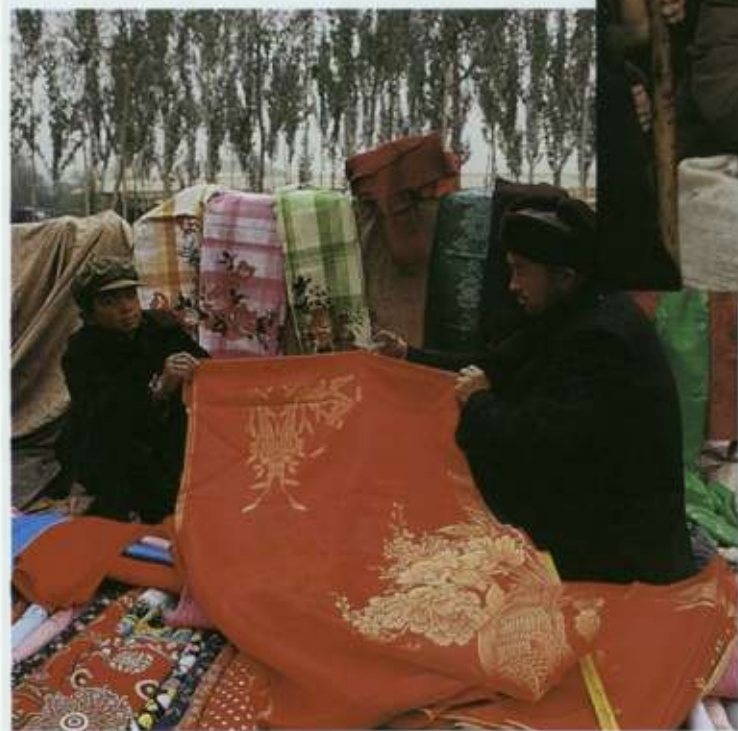


cultural exchange along the Silk Road should not be underestimated. For in their case, pantomime allowed them to overcome linguistic difficulties.

**T**he multiplicity of languages used along the Silk Road was extraordinary. In documents discovered in Turfan at the beginning of this century 17 languages are represented. Users of the Silk Road - merchants, missionaries and others - when starting on their long-distance expeditions, either had themselves a knowledge of some foreign languages, or they used interpreters.

In fact, traffic along the caravan routes could not have thrived without them. For language was indispensable for acquiring information, paying customs duties, and engaging caravan transport. According to Herodotus, Greek merchants, passing in the early days of the Silk Road through the lands of the Argypaioi on their way to Central Asia, had to change their interpreters as much as seven times.

Interpreters were no less in demand on the eastern extremities of the trade routes. Chinese histories of the first millennium tend to indicate the distance between China and far away places by the number of interpreters needed to communicate with them. By this reckoning there were peoples at a distance of 'double', 'quadruple' or even 'ninefold' interpretations.



Interpreters were needed not only for commercial but also for diplomatic purposes, and both the Eastern Roman and Chinese Empires had regular corps of interpreters. Although their numbers must have been considerable throughout the ages, these interpreters have remained anonymous.

But as the caravans plied from China, westwards across Central Asia to Mediterranean markets beyond, or from Europe, eastwards across the Russian steppe to Mongolia, they kept alive a dialogue between the diverse peoples - a process of mutual contact and cooperation that encouraged the peaceful growth of human civilization.







# SCIENTIFIC *influence of the* SILK ROAD

***T***he two-way transmission of science and technology was part of the reciprocal flow of ideas along the Silk Road. Out of China came paper making, printing and gunpowder - technologies that changed the western world. While from the West new developments in mathematics, medicine and astronomy spread to China.

Among the inventions of the Chinese, paper is considered the most important. Before it was invented, people all over the world had used materials like leather and leaves to write on. In ancient India, for example, scribes and scholars wrote on *bhurja*, or birch bark, and *patra*, a kind of leaf. While the ancient Chinese carved their pictographs on bones or tortoise shells, and wrote on bamboo or wooden strips.

The search for a cheaper and easier material to write on occupied the Chinese for many centuries, and according to Chinese historical sources paper was invented there in 105 AD. The man credited with producing the earliest form of paper - from old clothes, silk and plant fabrics - was a eunuch named Cai Lun, who lived during the Eastern Han period (25-220 AD). But archaeological evidence indicates this so-called 'rag' paper had already existed in the earlier Western Han period (206 BC to 24 AD). And scholars now believe that Cai Lun should be credited with improving the production of paper, rather than inventing it.

The people of Central Asia became familiar with paper very early; Sogdian merchants wrote letters home on it from China. But it was not until the battle of Talas in 751 AD, when T'ang-Chinese forces were defeated by Muslim-Arabs, that they learned how to make it. Chinese prisoners captured at Talas and taken to Samarkand taught the Arabs how to make paper - a process the Arabs in turn introduced to Europe.

*The Jai Singh astronomical observatory, in Delhi (left) represents the Greco-Arab tradition that began with Ptolemy and was transmitted - along with other new scientific developments - from West to East. These included the astrolabe (above), an instrument used for calculating the altitude of stars.*



Art styles were exchanged by imitation, as European craftsmen copied imported trade goods, such as Chinese porcelain, to meet local demand for exotic looking wares that were less expensive than the original.



# R U S

The people of the Eurasian Steppe developed a culture particularly suited to their nomadic way of life. This included the fiddle and trousers that were later adopted by the settled peoples of the Silk Road.



Technical ideas moved freely along the trade routes. The astrolabe, for example, was invented by the Greeks and perfected by Muslim astronomers, who introduced it to China.



Printing and papermaking technology was transferred from China to the West by the Arabs, who in turn translated and transmitted western scientific knowledge in book form east.

# The SILK ROAD

The Silk Road was neither a single road nor simply a trade route. It was a network of routes along which flowed not only merchandise but also new ideas, art styles and technologies, some of which - as well as its main arteries - are shown here.



The influences that flowed along the Silk Road depended very much on commerce. This in turn was dependent on the Bactrian camel, whose importance was evidenced by magnificent ceramic models found in Chinese imperial tombs.



As well as their religion, Buddhist monks carried icons and art styles along the Silk Road that were copied and adapted in Buddhism's new realms.

Although China acquired breeding stock in the 1st century BC, Chinese noblemen continued to import Ferghana horses from Central Asia for another thousand years. Such was their status that ceramic models were often interred with their wealthy owners.



Chinese silk provided the initial impetus for East-West trade. Even after the secret of its manufacture - from filaments spun by the larva of a flightless moth - spread westwards, silk remained one of China's chief exports.



Greek ideals were transmitted to Asia during the conquests of Alexander the Great. For example, this 2nd century head of Buddha from Gandhara reflects the influence of Hellenistic styles.



Map compiled by Adrian Franks  
Ceramic art pieces courtesy of Roger Keverne, London

Printing technology too was invented in China, where it originated from seals. Ancient Chinese craftsmen carved texts on pieces of wood and stamped it on paper, a technique which soon spread to Korea and Japan. The earliest extant text printed by this method dates from the T'ang period (618-906).

During the Northern Song dynasty (960-1127), a Chinese craftsman named Bi Sheng invented movable type. For each Chinese character he made an image from plaster, which he arranged in a type case to form text. This technique was quickly improved by other Chinese technicians, who made type with wood. Later, Korean printers produced metal type from bronze. During the Mongol-Yuan period (1206-1368) Chinese technicians introduced these new printing techniques to Central Asia, where wooden Uighur type was used to print translations of Buddhist texts.

The spread of printing technology westward increased the availability of books - previously laboriously copied by hand - quickening the accumulation and transmission of knowledge around the world.

**G**unpowder was invented in China during the T'ang dynasty (618-907). A 9th century Chinese text describes its preparation, but warns the unsuspecting not to make it. The explosive compound was first used in Chinese firecrackers in the 10th century, but it was not until the 13th or 14th century that Europeans learned about fireworks - either from Middle Eastern merchants or directly from traders who reached China along the Russian trade routes.

Gunpowder was first used in war by the Northern Song dynasty (960-1127). After Genghiz Khan defeated the Jurchen Jin dynasty (1115-1234), artillery troops consisting mainly of Han Chinese and Jurchen soldiers were conscripted into the Mongolian army. During the western campaigns of Genghiz Khan and his descendants canons were widely used by the Mongols against their enemies, and in this way became known to the Persians and Arabs, who soon were producing canons of their own.

Via the Arabs the technology of canon

building reached Europe, where it was rapidly developed. Europeans installed canons on their warships, and by the late 14th century had developed their first primitive handguns. In 1510 Portuguese traders introduced western firearms to China, and in the 1540s to Japan. Ironically, the Chinese - who had invented them - found European canons better made than their own, and hired European engineers to help modernise China's artillery.

In fact, the direction of movement of technological influences is often difficult to trace. Some inventions, whose sources are obscured by time and distance, later returned to their countries as trade goods. One example is the European clock sent to east Asia as a marvel from the West. Modern research has shown, however, that the principle of clockwork was, in fact, a Chinese invention of about the 6th century, which made its way westwards with traders and was applied to time-keeping mechanisms in 12th-century Europe.

Imported trade goods, such as Chinese porcelain, introduced western craftsmen not only to new art styles, but also new technologies. Chinese potters developed the process of making porcelain - by vitrifying two secondary clays called kaolin and petuntse at kiln temperatures of 1450 degrees Centigrade - in the 9th century.

Porcelain's translucency and thinness gave it great appeal, and potters outside China went to great lengths to duplicate the originals or to produce passable imitations. Unaware of kaolin, the basic ingredient of porcelain, Persian and European potters found ingenious ways of imitating Chinese import wares. Middle Eastern potters, for example, invented a compound of clay and ground quartz, which produced passable imitations of the fine white wares imported from China. Experiments by European potters eventually led to the unlocking of the secret of kaolin in the late 17th century. Once known, many ceramic factories produced copies of Chinese ware.

**S**ericulture, the art of rearing silkworms for thread, also began in China. For the peoples of Central Asia and further west, Chinese silk was a miraculous fabric. Light and strong, glossy and soil-resistant, silken fabrics provided the impetus for East-West trade. How silk was made and what it was made of were mysteries, and this added to its allure.

Sericulture was first discovered by neolithic farmers along the Yellow River in north-central China some 4,000 years ago. By the time of the Han dynasty (206 BC-220 AD), silk weaving had become an important industry and its products one of China's chief exports. Even more valuable than perfumes or jewels, silk sold in ancient Rome at the same price as gold.



*The allure of Chinese silk not only stimulated East-West trade, but the secret of its manufacture (right) was one of the technologies spread by it.*

*Other inventions transmitted via the Silk Roads included printing, which originated from Chinese seals (upper left), and clockwork mechanisms (lower left).*



So important was silk that the process of making it was guarded in ancient China as carefully as nations today guard their atomic secrets. Exporting the eggs of the silkworm was punishable by death, and visiting foreigners were kept well away from silkworm nurseries. Because of this, sericulture remained a mystery to the West for centuries.

Eventually, however, the secret leaked out. Chinese and Tibetan sources recount that in the 5th century a Chinese princess, married off to the King of Khotan on China's western frontier, smuggled silkworms past Chinese border guards hidden in her hair. The technique of silk weaving quickly spread throughout Central Asia, and by the 6th century had reached Persia. Meanwhile, in one of the earliest feats of industrial espionage, two Nestorian monks smuggled the secret of sericulture to Byzantium: concealing silkworm eggs in the hollows of their staffs and travelling in winter so they would not hatch out.



**T**he signs of the zodiac of Babylon were introduced into India from Mesopotamia during the campaigns of Alexander the Great. As Buddhism spread from India to China, many Buddhist texts were translated into Chinese, and from these, Chinese monks too learned the concept of the 12 signs. Buddhists also introduced Indian medicine into China, where doctors were strongly influenced by it. Not only did they copy its prescriptions, they also wrote Indian medical theory into their own works.

The rise of Islam in Arabia in the 7th century triggered a profound social and religious revolution among the Arabs, who expanded into Asia, Africa and Europe. Their expansion also opened up new vistas in science and philosophy as they began to plumb the ocean of knowledge contained in Greek manuscripts and to translate them into Arabic. Through their contacts with India and China they also followed new developments in mathematics, medicine and astronomy.

The Arabs now became the intermediaries in a dialogue which extended from China to Venice and

then westwards to France, Spain and Portugal. As well as passing on Greek science and philosophy to the newly developing world of the time, they propagated Indian mathematics, the new symbols of number and the decimal system that became the foundations of modern science. They also disseminated the science of chemistry, knowledge of the properties of metals and of new Chinese technologies, and above all medical information which opened up great possibilities in the human and biological sciences.

When Qubilai Khan, founder of the Mongol-Yuan dynasty, noticed that many medicines used by Muslim nations were not mentioned in Chinese medical books, he ordered Chinese and Muslim doctors to work together and compile a new work in which medicines of all nations would be included. A state-owned Muslim hospital was established in Beijing during Qubilai Khan's reign, and many Chinese soldiers and officials were treated there. Not only Muslim doctors worked in this hospital, but Christian Nestorian doctors too were employed there.

Mediterranean prescriptions were introduced into China during the Ming Dynasty (1368-1644). The names of famous Greek doctors like Galen, Rufus and Hypocrites, and Roman philosopher Phyrphyrios became known to the Chinese through Arab translations of their works. While Greek and Roman prescriptions, including those Aristotle prepared for Alexander, were used by the Chinese.

**M**uslim interest in astronomy led to the development of new concepts of the universe and of astronomy. During Timurid rule of Central Asia, the royal astronomer Ulugh Beg, using an enormous sextant set in a hillside overlooking Samarkand, plotted the position of over 1,000 stars. The map of the heavens he drew was used as the basis for a later Gregorian star chart, and was also adopted by Chinese astrologers.

During the Mongol-Yuan Dynasty (1206-1368) many Muslim astronomers were brought to China by its Mongol rulers. Under the leadership of Jamal al-Din, a native of Bukhara, Muslim scientists used Greek and Muslim astronomical instruments, like the astrolabe and terrestrial globe, in their research. They also introduced the Muslim calendar into China.

Even after the overthrow of Mongol rule in China, the Muslim calendar was still used there as a comparative astronomical system against the traditional Chinese calendar. Muslim and Chinese scholars often discussed solar and lunar eclipses' predictions together from the point of view of their different astronomical observations.

It was collaboration of this kind - not only in trade, but also in developing scientific, political and religious ties - that made the Silk Road the first case in history of multilateral cooperation: a symbol of cultural and material interdependence that made a major contribution to the development of mankind.





# CULTURAL

*influence of the*  
**SILK ROAD**

**T**he uniqueness of the cultural and artistic heritage of the peoples of Central Asia owes much to the Silk Road. For it not only served as a route for trading caravans, but it also played a significant role in the creation of the artistic symbiosis of the region. For each group whose caravans stopped to make its rugged tracts their temporary home contributed, both in terms of human experience and imagination, to the art created there.

*The nomadic traditions of the Turkic peoples of Central Asia gives rise to a colourful equine culture, including strenuous competitive games like Ulak Tartısh, an unruly battle game played over the carcass of a goat.*

The assimilation of cultures of peasant, nomadic and sedentary populations, as well as interaction between the artistic traditions of different peoples was nothing new to Central Asia. The Silk Road, however, gave a new, strong impetus to the process of exchange of ideas and experiences between different cultural and ethnic zones, which had taken place in Central Asia since ancient times.

The earliest examples of applied and fine arts of Central Asia date back to the 3rd century BC. But the development of these arts in this region reached its highest point in classical and early medieval times. It was no accident that at this time trade on the Silk Road was extremely active. It was during this period - between the 2nd century BC and 8th century AD - that strong Central Asian states such as Bactria, Sogdiana and Khorezm were established. New cities were built, fresh construction methods employed, fine art and sculpture further developed, and the production of different kinds of artistic goods expanded.

The culture created in that period had an open, transcontinental character. There were interactions between Indo-Buddhist, Hellenistic, Persian, and local Central Asian artistic traditions. Because of its geopolitical location between East and West, North and South, Central Asia became an interpreter and re-transmitter of different cultural traditions and artistic styles. For example, Hellenistic ideas and cultural traditions of Persia, having mixed with the arts of Central Asia, were transmitted East to India and China, enriching the diversity of world arts and culture of the classical period.

Traces of intense cultural activity still mark the routes that joined East and West centuries ago. Ruins of ancient cities, such as Kapisa, near modern Charikar, in the heart of Afghanistan, tell

a story of complex exchanges with other countries. Rock carvings portray people wearing the costumes of different tribes, while inscriptions speak of different peoples and languages.

Another important archaeological discovery is that of an entire Hellenic city at Ai-Khanum, in northernmost Afghanistan. The architecture has been described as an orientalized provincial Hellenic style, and includes an auditorium and large acropolis.

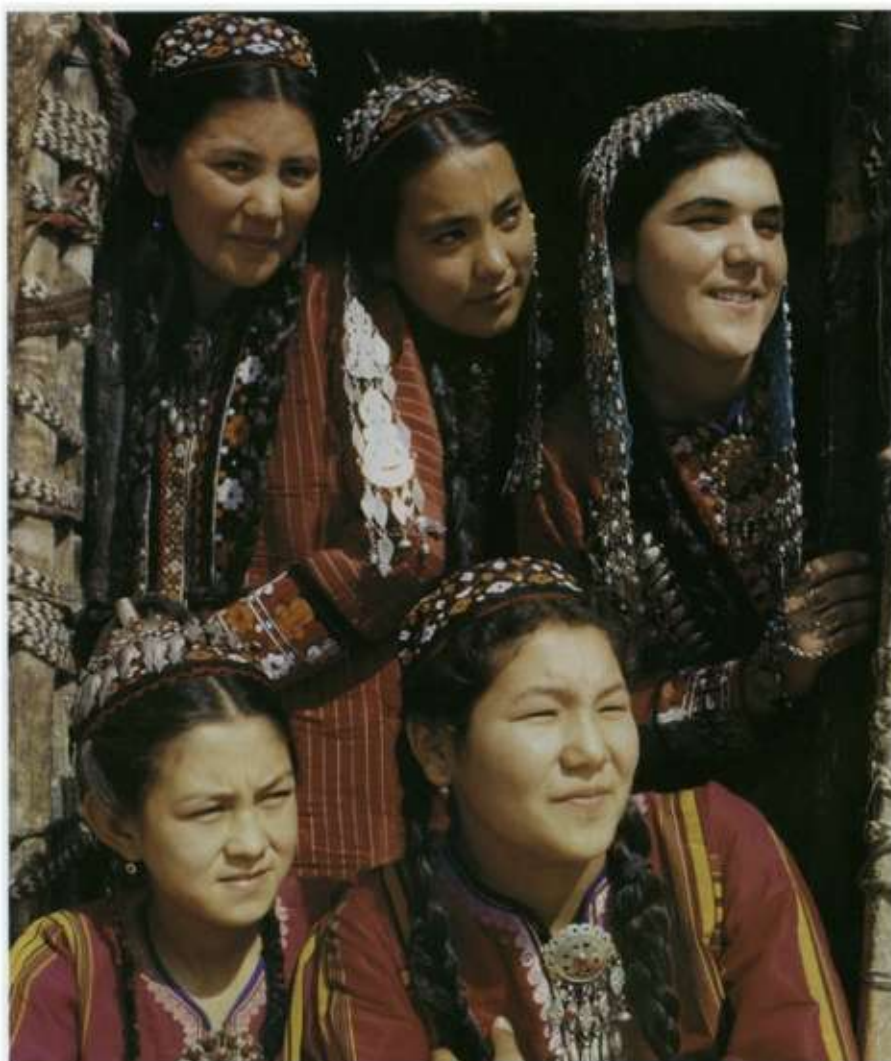
The influence of Hellenistic traditions made a strong impact on the artistic trends of settled peoples of southern Central Asia from Bactria to the peripheries of Sogdiana and Khorezm. A new concept of human personality was reflected in their arts; portraits appeared on coins, and clay sculpture, which was widespread in the Bactrian period, became rich in human images.

At the same time, Buddhist art also crossed the borders of its land of origin penetrating the cultures it encountered. Thriving schools of Buddhist learning sprang up in the oasis cities and garrison towns along the Silk Road. Under the patronage of local rulers and the religious community, great programmes of Buddhist subject matter were painted in glorious colours on the walls of cave temples and monasteries. There were also Buddhist sculptures fashioned from clay, wood, and more precious materials.

Similarities between sculpture of southern regions of Central Asia and the north Indian Gandhara school of carving are found during this period of Buddhist expansion - for instance, a 2nd century BC stone frieze at Aitarma. While traits of Gandharan, Hellenistic and nomadic Scythian traditions, merged with Bactrian arts, are displayed in sculpture and wall painting at Dalverzin-tepe, murals at the monasteries of Fayaz-tepe and Kara-tepe, and frescos and sculpture at Toprak-kale.

**A**t the beginning of the Christian era the Kushans became the dominant people of Central Asia, founding an empire which existed until the 3rd century AD. Hellenistic traditions were reinterpreted by Kushan masters in accordance with local artistic canons, which tended to create images symbolising the unlimited power of monarchs granted by God.

At Tillya-tepe in the vicinity of the city of Shibarghan on the northern Afghan plain, archaeological excavations, begun in 1978, revealed a treasure trove of the art of the heirs of the Greco-Bactrian world. Six graves dating approximately from the first century AD, the zenith of Kushan power in these regions, were found in the



ruins of a fortified temple of an earlier origin. The excavators speculate that the tombs, five of them containing women, were of the nobility of the nearby ancient city of Yemshi, perhaps even the rulers.

Coffins were draped with cloth shrouds decorated with hundreds of gold and silver disks. The art styles reflect the many traditions of Central Asia. Indian, Greek, Iranian, and Chinese motifs are readily perceptible, but perhaps most interesting is the influence of the animal art style of the pastoral nomads. The infusion of this pastoral style gave life to an art that was fast becoming static, as the hybrid traditions from which it derived lost their vigour.

**I**n the middle of the 5th century AD a powerful state was founded by nomadic Ephthalites in Central Asia. Interaction of different artistic traditions continued during their rule, and the melding of elements of Bactria-Kushan, Sassanid and Gupta arts in the Ephthalite kingdom created new forms of artistic symbiosis.

Unification of different tribes and peoples of Altay, Etilsuv and Central Asia under the state of nomadic Turks - the Turkic Kaghanate - took place in the 6th century AD. The decorative and applied

*Metal adornments still worn by Turkmen women today (above) reflect ancient nomadic art styles, typified by the battle dress (right) found in the tomb of a Scythian chief in the Issyk region of Kazakhstan.*



arts of the Turks continued the tradition of the Huns. Scenes of devouring animals and running deer adorned carpets and clothes, and were depicted on metallic brooches and horse harnesses. While the decor of articles made of more expensive metals, such as bronze, silver and gold, interpreted motifs of Iranian and Chinese arts.

The Turkic peoples' conquest of Central Asia gave them control over the export of Chinese silk to Europe. Trade between the Turkic Kaghanate and China created a unique Turkic-Chinese symbiosis in artistic craft. Through the Turkic crafting, that artistic symbiosis spread to the arts of agricultural Sogdiana which it enriched with new ideas, images and motifs. At the same time crafts and artistic goods from Central Asia became popular in the royal court of Chinese emperors.

**I**n the 7th-8th centuries, Central Asia developed its own silk production, incorporating elements of local, Iranian and Chinese design in patterned fabrics. At the same time, Central Asian silk became an object of export according to findings in the northern Caucasus region and Europe. Sogdian script on the back of the famous fabric featuring the tree of life in the cathedral of the city of Huy in Belgium, was identified as *zandanachi*. Eleven other pieces of fabric exhibited in museums in western Europe are classified as *zandanachi* according to scientific analyses of their patterns and oils. Some 50 pieces of *zandanachi* fabric were found in tombs in the northern Caucasus, located on the Silk Road from Central Asia to Byzantium.

Originally *zandanachi* silk fabrics were produced in Zandana village near the city of Bukhara, in present-day Uzbekistan. Later, due to increased demand, production was started in Bukhara itself, and fabrics made there were marketed under the 'zandanachi' trade mark. Mural paintings in the palace of Warahash featured patterned fabrics of *zandanachi* type with beautiful tracery reflecting mutual interaction between local and Sassanid artistic tradition.

**T**he spread of Islam in Central Asia in the 7th and 8th centuries brought profound changes in the art and culture of the region. In the 9th to 13th centuries figurative fresco and sculpture - forbidden by Islam - disappeared, and was replaced by

non-representational art. Four main styles of decoration: floral, calligraphic, geometric and arabesque dominated all other art forms.

This was the start of a new period in the history of Central Asian arts. Nevertheless, the main feature of its culture - its transcontinental character - not only remained but had a tendency to strengthen under the influence of the unifying role of Islam.

In the history of culture, it was an epoch of erasing artistic borders and creation of a new global Muslim art. The sphere of influence of the new Islamic culture was extremely widespread - from the Mediterranean to the Indian Ocean. Central Asian arts were also included into the orbit of this worldwide artistic process, caused by the rapid spread of Islam.

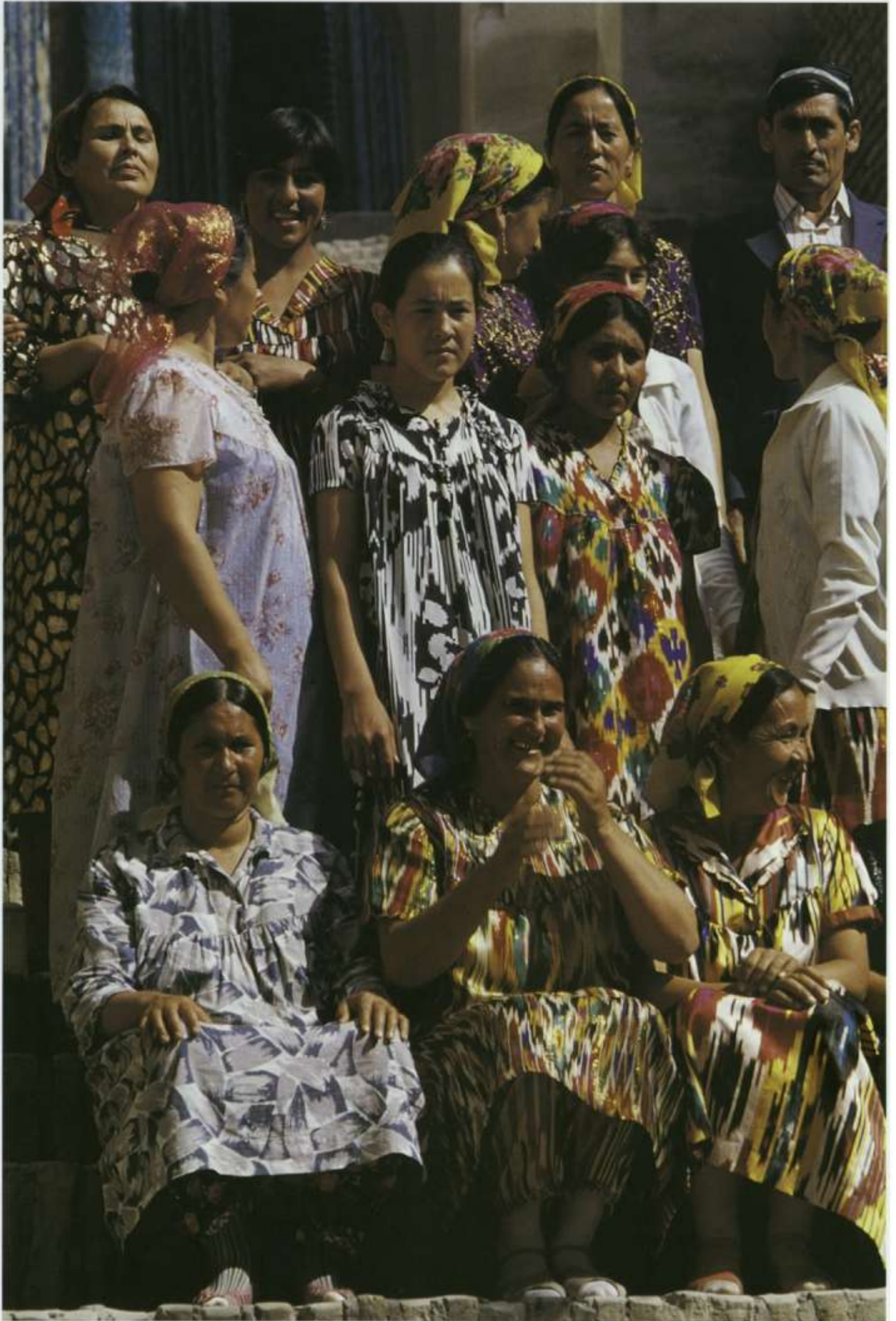
In the fields of art and architecture Muslims allied the traditions of the past with scientific and mathematical precision and contributed new forms in building and new tastes in decoration which incorporated calligraphy and arabesque. In the 9th to 13th centuries, cities such as Samarkand and Bukhara developed as trading and craft centres where excellent fabrics, ceramics, metallic goods and accessories were produced. As

in ancient times, these works became not only the objects of international trade but also played the role of interpreter, representing a form of spiritual enrichment and exchange of cultures of the recently Islamized Muslim nations.

**A**lthough each region preserved the individual features of its art and culture, there was at the same time a dominance of common Islamic values. This fruitful cultural development, which produced a large number of masterpieces of architecture and art, was



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interrupted by the devastating invasion of Central Asia by the armies of Genghiz Khan. Only in the 14th and 15th centuries with the emergence of the Timurid dynasty did Central Asia have the opportunity for a renaissance of culture. Trade revived, and Samarkand, the capital of the empire, became a centre for painters and craftsmen from all over the Middle and Near East. Craft production was resumed and civic building and science, literature and poetry developed at a fast pace.

The process of erasing local artistic boundaries in the 9th to 13th centuries, through the unifying force of Islam, resumed after the collapse of the Mongol empire. The determining factor during this period, however, was not religious but political, as the Timurids created a united, centralised state from the lands they conquered. Thus Timurid art forged a new aesthetic by linking the cultural traditions of many lands with their own Turkic origins.

The 14th and 15th centuries were characterised by the rebuilding of artistic traditions, including wall painting. According to historical sources, the palaces of Timur were decorated with frescos, depicting the life of the ruler and his court, that resembled in style the Roman school of miniatures used in illuminated manuscripts. Crafts like embroidery and weaving, and the making of weapons and jewellery also thrived, while new styles of ceramics reflecting Chinese influence were developed.

Schools of decorative patterns reached their peak, reflecting not only local artistic traditions but also the achievements of masters of the Middle East region. Traceries were dominated by floral patterns and ornate scripts. Special attention was paid to calligraphy in coinage and metal carving. Ceramics were decorated according to a strict pattern of dark designs on white backgrounds. Cups, trays and jugs made of metal bore floral and epigraphic motifs which harmonised with the piece itself. Geometric patterns gave an impression of continuous movement, while at the same time creating a feeling of tranquillity and eternity.

**D**uring the 15th century, artistic patronage reached new heights as the Timurids sought to bolster the dynasty's stature and their personal reputation through sponsorship of a brilliant programme of monumental art - building spectacular mosques, theological schools and shrines.

The Silk Road once again became a road of caravans linking East and West, and creating new types of transcontinental culture. Samarkand and

Bukhara at that time were hubs of international trade and cosmopolitan centres of science and art.

During the 16th century, however, these formerly prominent Central Asian cities dwindled in importance as the Silk Road - once a symbol of human encounter and communion - fell into disuse. But the brilliant artistic legacy of the Timurids - in calligraphy, poetry, metalwork, bookbinding and a broad range of other arts, as well as in architecture - has survived, and in careful restorations now under way in Central Asia, as well as in museum collections in Europe and the United States, is receiving the recognition it deserves.

**D**espite the economic and cultural isolation of Central Asia following the severing of the Silk Road, the rich artistic traditions accumulated by it continued to flourish. And although it was the end of the era of transcontinental culture, the production of silk in the region expanded and the artistic and technological quality of handmade silk fabrics improved. Handwriting and bookmaking were significantly developed in the 16th and 17th centuries in Samarkand and other Central Asian cities, while local schools of miniature fresco flourished, especially in Bukhara.

In the 18th century Bukhara was one of the main centres of silk manufacture in Central Asia. Bukhara shawls and *kalgai* scarves were highly valued for the quality of their artistic design and fabric. They were exported to Afghanistan, Iran, and Russia, and enjoyed great demand among the nomadic peoples of Central Asia such as the Kyrgyz,

Kazaks, Kipchaks and Kalmyks. Bukhara fabrics, preserved in museums, show a significant growth in silk manufacture at the end of the 19th century, followed by a decline of this craft in the 20th century Soviet period as a result of mass production.

For most of this century Central Asia was excluded from the mainstream of international enrichment and developed within an original cultural and economic system. The art of the peoples of the region was presented as a part of 'Soviet multinational art' to the world cultural community.

The gaining of independence by the former Soviet-ruled countries of Central Asia in 1991 opened up new perspectives for objective and non-ideological rethinking and study of their own history and heritage. They now have a unique historical opportunity to return to the mainstream of world culture and revive the best artistic traditions of their common past - a living legacy of the Silk Road.

*Elements of Chinese design were incorporated in patterned silk fabrics produced in Central Asia, such as the richly embroidered cape (right) made in Bukhara. Even today Uzbek women (left) favour brightly coloured silks for special occasions.*







*Mani, founder of Manichaeism, one of five faiths diffused over vast distances via the Silk Road.*

# SPIRITUAL

*influence of the*  
**SILK ROAD**

***T***he diffusion of new faiths was facilitated by trade along the Silk Road. By this route Buddhism, Christianity, Islam, Zoroastrianism and Manichaeism spread vast distances from their original homelands - first through the activities of traders themselves, and later by travellers and missionaries.

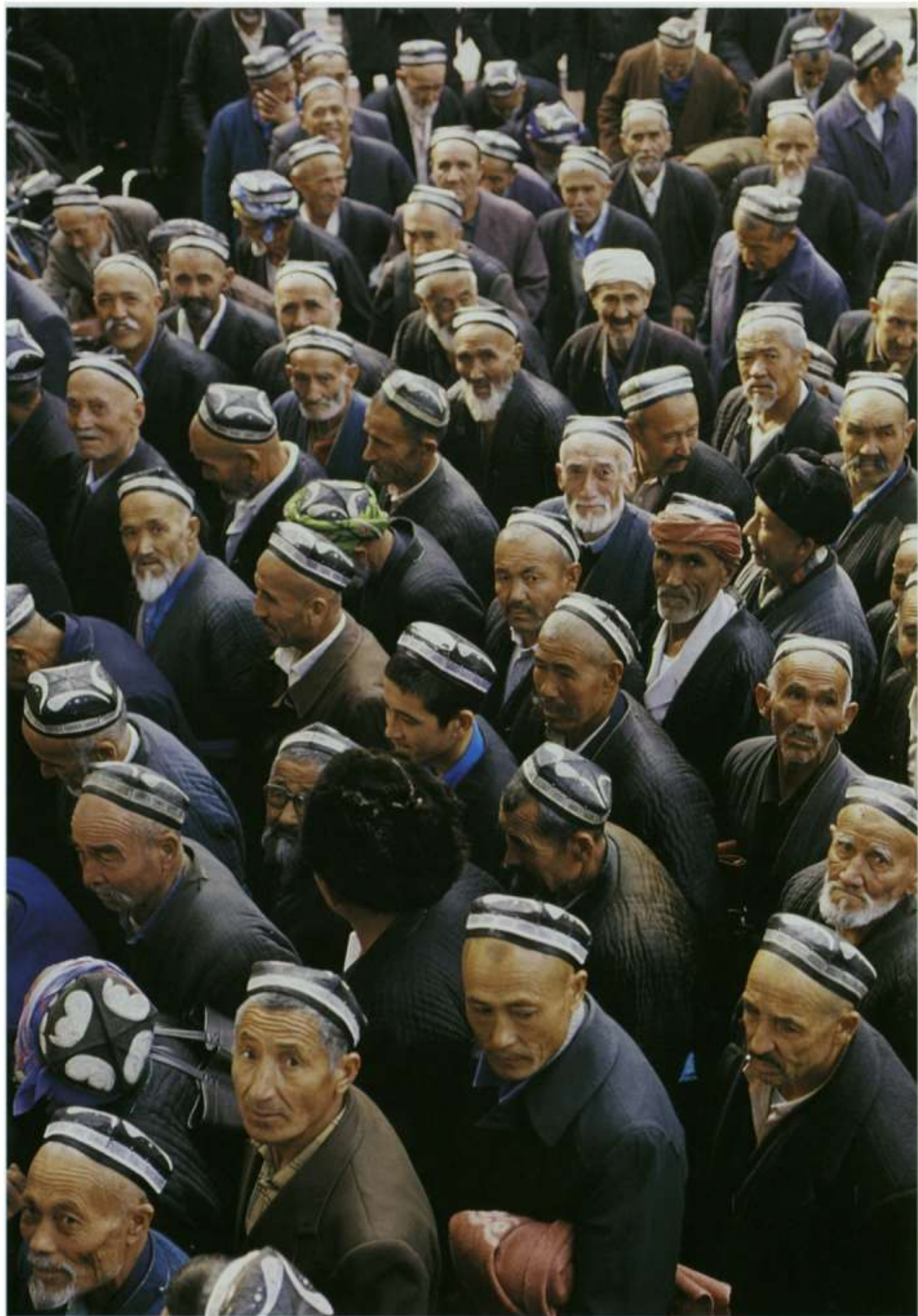
From Arabia, pious Muslim merchants carried both their trade goods and their faith across Central Asia, where it remains the predominant religion. Monks in saffron robes travelled the Silk Road as missionaries, laying the foundation for the prevalence of Buddhism in east Asia. Zoroastrianism, the ancient pre-Islamic religion of Persia, spread to India along the Silk Road. While two other religions, Manichaeism - a blend of Judaism and Christianity - and Nestorianism, a Christian sect, also spread to China via this route.

In the vast region between northern China and eastern Iran, the so-called 'Land of the Silk Roads', these religions from the Near East, Persia, India and China met and existed peacefully side by side for centuries. Not only written documents in a variety of languages, but also archaeological and artistic finds, attest to this fact. These materials come mainly from the oasis towns along the Silk Road, between Merv (Mari) in today's Turkmenistan, and Dunhuang in northern China.

The ruins of monasteries and other religious centres along the Silk Road also provide clues to the routes by which these religions spread. Of Buddhist sites, Dunhuang is undoubtedly the most important. Here, Buddhist paintings are preserved in 492 caves, covering a surface totalling 45,000 square metres. Here too, a walled-up library was discovered at the beginning of the century where manuscripts were stored that together weighed one ton.

Other important centres were further to the west: Turfan, Kucha and Khotan, to name just three. The materials that were found in these centres of former East Turkestan - today China's Xinjiang Province - as well as West Turkestan - former Soviet Central Asia - are important sources for the

*Karakoram, capital of the Mongol empire and commercial crossroads of the Silk Road, was also site of the enormous walled monastery of Erdene Zuu. It became active again in 1990 when religious freedom was restored following the collapse of communism in Central Asia.*



history of the religions that had spread into this area. But although they include Buddhism, Manichaeism, Nestorian Christianity and Islam, sources for ethnic religions are conspicuously absent. The reason is that the inhabitants of the oasis towns, as opposed to nomads living out on the steppes, turned to world religions, giving up their original ethnic faiths.

One exception was Zoroastrianism, the ancient pre-Islamic religion of Persia, emphasising the contending forces of evil and good. It was founded in the 6th century BC by the reformist prophet Zoroaster in an attempt to unify worship under one god. It flourished in Sogdiana up to the 8th century, and is still practiced in isolated areas of the world, most notably in India. But being the religion of Iranian people it never really took root among other ethnic groups in Central Asia and was eventually displaced by Islam.

Likewise other ethnic religions were also largely displaced by the world religions. This included Shamanism, an ancient religious cult based on the belief that certain people - shamans - can serve as intermediaries between the secular and sacred realms. Shamans once had considerable influence among the nomadic tribes of the steppes - acting as traditional healers, judges and priests, and shamanism remained the main religion of Mongolia until the 16th century, when it was displaced by Buddhism.



*Dominant today in Central Asia, Islam draws many worshippers (left) to a mosque at Fergana in Uzbekistan. While near-extinct, Zoroastrianism boasts only a deserted temple (right) preserved at Sarakany in Azerbaijan.*

**U**ntil the appearance of Islam, which spread in West Turkestan in the 8th and 9th centuries and in East Turkestan between the 10th to 15th centuries, Buddhism was by far the most important religion in Central Asia. How early it entered Central Asia is difficult to say. Legend has it that the missionaries of the 3rd century BC Mauryan emperor Asoka, who launched Buddhism's development into a world religion, reached Khotan in his lifetime. It is more probable, however, that it was at the time of the 2nd century AD Kushan king Kanishka I that the religion of the Buddha spread from Gandhara in northwest India through Bactria, roughly today's Afghanistan, to areas further north and east.

The historical Buddha was born in approximately 563 BC in Lumbini, a village in what is now southern Nepal, close to the Indian border. The son of a warrior-caste prince, he was given the personal name Siddhartha. Prince Siddhartha left his father's kingdom as a young man and lived his adult life in the northeast Indian state of Magadha, now called Bihar, where he founded the Buddhist religion. After his death in 483 BC, at the age of 80, in the Indian town

now known as Kushinagar, Buddhism spread over vast distances throughout and beyond India, and rapidly became the faith of more than a third of Asia's population. Following existing trade routes, merchants and missionaries carried the message by sea to Southeast Asia and southern China, and overland to Central Asia and northern China. By the mid-sixth century AD Buddhism had been transmitted to Japan by way of Korea.

At the same time, Buddhist art also crossed the borders of its land of origin penetrating the cultures in its path. Wherever Buddhism took root, monasteries and temples sprung up, and wealthy believers donated wall paintings and sculptures to honour the Buddha and to earn religious merit for themselves.

It was not only the Mahayana form of Buddhism that made its presence felt all the way to China, but also various Hinayana schools like the Sarvastivadins and Mula-Sarvastivadins. One of the main centres of Hinayana Buddhism was Kucha, where many documents of these schools were found. It was also from Kucha that one of the most important translators of Indian books into Chinese, Kumarajiva (died 415 AD), hailed.

It was in the 4th and 5th centuries that Buddhism became well established in centres like Turfan and Dunhuang. The observations of the Chinese monk Fa Xian, who travelled along the Silk Road to India around 400 AD, make clear how wide-spread the religion was at that time. Another Chinese, Xuang Zang, who journeyed to India in the 7th century, reported that although Bactria was thoroughly Buddhisized at that time, Khorezm and Sogdiana were not. Indeed it is only on the fringes of these countries that Buddhist sites were discovered, whereas areas further east were dotted with centres of Buddhist learning and art.

The Manichaean faith was founded by Mani (216-276) in Mesopotamia in the 3rd century. It soon spread to North Africa in the west and China in the east. For even during the time of the founder, who threaded together elements of Judaism, Christianity and the Persian religion to a new whole, Manichaean missionaries were sent to Egypt on the one hand and to the area beyond the Oxus on the other. It was at the beginning of the T'ang period (618-907) that Manichaeism made inroads into China. In the short period up to 845, when a general persecution of foreign faiths set in, Mani's missionaries established themselves at various Chinese centres. In 762, the

prayers reflect a strong yearning for salvation, for the 'Realm of Light', where dwells the 'Father of Light'.

Turfan is the only place where Manichaean works of art were found. They include both book illuminations and wall paintings, the most recent being discovered in 1981. Manichaeism must have vanished in Central Asia by the time of the Mongol invasions of the 13th century. But in spite of its eventual decline, it must be ranked as one of the great world religions that left their mark on the traditions of Europe and Asia.



Although Nestorian Christianity was always a religion of a minority, it too played an important role in the oasis towns of Central Asia. Nestorianism was a type of Christianity that developed in Persia, the Persian Church making itself independent of the Western Church in a series of councils in the 5th century. Since Syriac was its ecclesiastical language, the Nestorian church was strongly influenced by Syrian mysticism and asceticism, although there was a counter movement in the 6th and 7th centuries when it was made a requirement that all clerics be married.

It was both in its monastic garb and its more open and layman oriented form that Nestorianism spread east from Persia. Important centres in the eastward spread of Nestorianism were Merv, Herat, Samarkand, Bishbaliq, Turfan and Kara Khoto.

Nestorianism spread from Central Asia to China where it flourished in the T'ang period up to 845, when persecution of foreign religions set in. This Christian religion died out in China at that time, appearing again only in the Mongol period, when many Turks in the service of the Mongols were Nestorians. With the collapse of Mongol power in 1368, however, Nestorianism again disappeared.

In Central Asia there was a greater continuity than in China. The sources we have for this history are widespread and varied. To these belong the acts of the Synods of the 'Church of the East', plus archaeological finds and documents discovered in Central Asia itself, both in West and East Turkestan.

These included over 600 grave stone inscriptions, mainly from the area of Semirice south of Lake Balkash, covering the period from the 9th to the 14th century, and Christian documents found in Turfan, Dunhuang and Kara Khoto. The documents from Turfan are written in Syriac, Sogdian and Uighur, those from Dunhuang in Chinese, and those from Kara Khoto in Syriac and Uighur.

These documents make clear that there was an increasing tendency to 'indigenize' Christianity.

Khan of the Uighurs, a Turkic people living on the Mongolian steppe, became acquainted with Manichaeism in China and converted to this religion. At the same time he made Manichaeism the state religion of his steppe kingdom.

The Manichaean Uighur state was shattered in 840, when another Turkic people, the Kyrgyz, invaded Uighur lands. Many Uighurs fled south, seeking refuge in the oasis towns of the Silk Road in present-day Xinjiang and along the Gansu Corridor in China. It was in the oasis of Turfan that the Uighur princes established a kingdom called Kocho (850-1250). Up to the beginning of the 11th century, many rulers of that kingdom were Manichaeans. Manichaean learning and art flourished, many wealthy donors giving means to copy documents and create new works of art.

A great number of these documents have been preserved, mostly in Middle Persian, Parthian, Sogdian and Uighur script. They are supplemented by the Chinese Manichaean texts from Dunhuang, as well as Coptic material discovered in Egypt in the 1930s. Material so far translated encompasses mainly hymns, prayers and dogmatic treatise. The hymns and



This tendency is most marked in the Chinese texts which even employ Taoist and Buddhist concepts to express contents of the Christian faith.

**T**he religion that has dominated West Turkestan since the 8th-9th centuries and East Turkestan since the 15th century is Islam, which is represented there in both its Sunnite and Shiite forms. Whereas the advance of Arab armies was the decisive factor in the Islamization of West Turkestan, Islam seems to have spread peacefully in East Turkestan, the 'missionaries' often being Muslim traders.

Marco Polo gives us a description of how Muslims and people of other religions lived together peacefully in oases like Turfan. The same would have been true of many other oasis towns too. Usually it was only after the ruler embraced Islam that the major part of the population would follow. In Turfan, the Islamization of the population occurred only in the 15th century.

With the rise of the religion of the prophet Mohammed, Buddhism, the main spiritual force in Central Asia, was ultimately ousted in large parts excluding Tibet, Mongolia and the Gansu Corridor. Yet Islam established a new order of life and developed an indigenous Central Asia Muslim culture that was to have a strong effect on Persia and India. After all, Babur, the founder of the Moghul Empire in India, was of Turkic Central Asian origin. Central Asia now came into the larger setting of the Islamic world, and this is reflected both in its literature and its art.

Iranian and Turkic people of Central Asia were mainly instrumental in developing that Muslim culture. Although they stubbornly preserved many strong traditions of their pre-Islamic past, most of the Turkic peoples embraced Islam during the 11th and 12th centuries. Indeed, the Turks of Central Asia came to be among the faith's main champions. Successive waves of Central Asian Turks poured southeast through the Khyber Pass and across the Indus and Ganges plains, making Islam the dominant religion of Pakistan and northern India.

Though the rise of Mongol power, the Mongol occupation of Iran and the sack of Baghdad were a great setback to Islam, the times became favourable for that religion again when the Mongol Il-Khans of Persia themselves turned to Islam in the 14th century. Meanwhile, under the banner of Islam, the Seljuq Turks swept west into Asia Minor, which makes up most of today's

Turkey, where, in 1453, their successors, the Ottomans, conquered Constantinople and finally extinguished Islam's old adversary, Byzantium.

*Contrasting Silk Road ecclesiastical architecture: The ornate Christian cathedral at Almaty (left); a simple Buddhist stupa in Mongolia (below); and (right), the mosque at Paniflov on the Sino-Kazak frontier - its prayer hall typical of Islamic architecture, but its minaret shaped like a Chinese pagoda*



**T**he vitality of religious centres, like that of Silk Road cities and oases themselves, depended on commerce. With the collapse of East-West overland trade monasteries, temples, mosques and madrasa were abandoned and fell into ruin. Many religious sites in Eastern Turkestan were covered by desert sands and remained hidden until their re-discovery at the beginning of this century.

Preserved from destruction by dry climate and immured hiding places where they were concealed at the approach of invaders, thousands of manuscripts found in these religious centres bear witness to the power of the religious currents that passed along the Silk Road recapturing the faith of disciples of a triumphant religion or of a religion seeking refuge from persecution elsewhere, of a religion still dominant today or practically extinct.

These are now in museums and libraries where researchers are deciphering texts written in known or unknown languages. While through the passion of archaeologists, their messages are circulating internationally on a scale that the missionaries who travelled the Silk Road centuries before could never have imagined.





# ACHIEVEMENTS OF THE *SILK ROADS* project

Total

## EXPEDITIONS

**1990:** Desert Route across China  
**1990/1991:** Maritime Route from Venice to Osaka  
**1991:** Steppe Route across Central Asia  
**1992:** Nomads' Route across Mongolia  
**1995:** First stage of Buddhist Route in Nepal

In all, 227 specialists from 47 countries took part, plus local scholars and more than 100 representatives of the world's media.



*Omani royal yacht sailing the Maritime Route*

## SEMINARS

26 seminars were held during the expeditions and 17 organized either by the Project or in the framework of its programme.

27 Member States hosted the seminars at which more than 700 papers were presented.

## RESEARCH PROGRAMMES

Petroglyphs of Central Asia

Epics of the Silk Roads

Silk Roads' Scripts and Languages

Preservation of Caravanserais

Space Archaeology on the Silk Road

## RESEARCH CENTRES

Set up through the Project or linked to its activities:

- China Maritime Silk Roads Study Centre, Fuzhou

- Buddhist Information and Research Centre, Colombo, Sri Lanka

- Nara Research Centre for Silk Road Studies Japan

- International Institute for Central Asian Studies, Samarkand

- International Institute for the Study of Nomadic Civilisations, Ulan Bator

- International Institute for the Comparative study of Civilizations, Taxila, Pakistan (in preparation)

## FELLOWSHIPS

Hirayama Fellowships Programme 1990-1999: 10 awards each year for research in fields relating to Silk Road studies. To date, 90 scholars from 38 countries have received awards.

## PUBLICATIONS

By UNESCO or generated by the Project

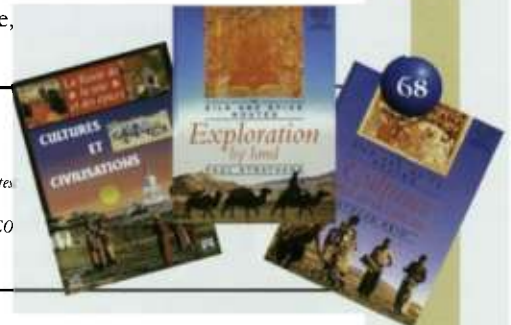
UNESCO: 10

Seminar proceedings: 19

Associated Projects: 22

Others: 17

*The Silk and Spice Routes a children's book series co-published by UNESCO and Belitha Press*



## AUDIO/VISUAL

**Films:** UNESCO/ARTE/NDR - "Die Seidenstrasse" (German)  
 UNESCO "Sur la piste des caravanes la soie" (French)  
 UNESCO "La Chine et les Routes de la soie"  
 UNESCO/ IMA - "Les Potiers de Samarcande"

**Videos:**  
 UNESCO/WTN - "Travelling the Silk Road"  
 UNESCO - "Central Asia and the Silk Road"

**National TV documentaries:** 41

**Exhibitions:** Staged at UNESCO and in Member States

**Image Bank:** Some 400 hours of film footage, photos and slides from the expeditions

**Radio programmes**

**Articles:** Some 400 in specialised magazines and national newspapers

**Posters**

**Wallchart** for schools

**CD** of religious music of Mongolia

**CD ROM** on the Silk Road (in preparation)

*The Nomads' Route expedition camped for the night by Mongolia's Lake Dungan Nuur*





1988  
1997

'EAST-WEST INTERCULTURAL DIALOGUE IN CENTRAL ASIA' is a new UNESCO project in which support to certain activities launched during the Silk Roads project has been extended. Within this new framework, UNESCO provides assistance to the international institutes, such as the International Institute for the Study of Nomadic Civilizations in Ulan Bator, Mongolia, supports the establishment of an Inventory of Caravanserais in Central Asia and participates in the joint World Tourism organization/UNESCO project for the promotion of cultural tourism in Central Asia and along the Silk Roads.



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