

THE SAMANID STATE*

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By the tenth century, the majority of the various Iranian peoples of Khurasan, Transoxania and Khwarazm – Persians, Bactrians, Sogdians, Khwarazmians and others – were using the New Persian (Farsi-Dari) language as their spoken and written form of communication, although such Middle Iranian languages as Khwarazmian and Sogdian were still in use in certain regions – in the case of the former, for some four centuries subsequently. The terms *Tāzīk/g* (Middle Persian) and *Tāzī* (New Persian), originally coined in western Persia to denote the conquering Arabs, now came in Khurasan and Transoxania to be applied to all the Muslims there (at this time, the majority were Persians), in distinction to the largely pagan Turks of the adjacent steppelands. Very soon it became used for the Persians as

* See Map 3.

against the incoming Turkish tribal or military ruling class. From the thirteenth century onwards, the later form *Tāzīk* developed and became standard in Central Asia.

Under the Samanids, i.e. in the later ninth and the tenth centuries, there was a period of expansion and florescence for the cities and towns of Khurasan and Transoxania – Nishapur, Merv, Balkh, Bukhara, Samarkand, Khujand, Bunjikat, Hulbuk, and so on – around which the cultural, social and economic life of the whole region was concentrated.

The creation of the Samanid state¹

Almost contemporaneously with the Tahirids (see above, Chapter 2), the representatives of another local dynasty, that of the Samanids, began to assert themselves in Transoxania. An ancestor of the Samanids, Sāmān-Khudā, was the founder and ruler of the estate of Saman, which is identified in a number of sources with various settlements of the same name in the provinces of Balkh, Samarkand and Tirmidh (Termez). Sāmān-Khudā enjoyed the patronage of the governor of Khurasan, Asad b. ʿAbd Allāh al-Qasrī (725–7, 735–8), and converted to Islam, while Sāmān-Khudā's son Asad was later converted to Islam in Merv by the future caliph al-Ma'mūn (813–33). The sons of Asad – Nūh, Ahmad, Yahyā and Ilyās – took part in putting down the uprisings of Rāfiʿ b. al-Layth (805–10), served the caliph al-Ma'mān and, as a reward for their services to him, were appointed rulers of a number of rich provinces: Nūh of Samarkand, Ahmad of Ferghana, Yahyā of Chach and Usrushana, and Ilyās of Herat.

The Samanid brothers, while initially subject to the Tahirids, were largely autonomous rulers in their own territories, minted bronze coins in their own names, and mustered militias and mounted campaigns against surrounding provinces. The energetic Nūh b. Asad did much for the advancement of the Samanids and the consolidation of Transoxania, subjugating the province of Isfijab on the frontier with the Turkic nomads in 839–40. However, the basis of the future unitary Samanid state was laid by Ahmad b. Asad, the most capable of the brothers. Ahmad had seven sons: Nasr, Yaʿqūb, Yahyā, Asad, Ismāʿīl, Is'hāq and Hamīd. After the death of Nūh b. Asad in 841/842, the governorship of Samarkand passed into the hands of Ahmad's son Nasr, and after the death of Yahyā b. Asad, the governance of Chach and Usrushana was transferred to Yaʿqūb, another of Ahmad's sons. Thus, in the middle of the ninth century, the first partial unification of Transoxania took place, with its main provinces under the authority of the house of Ahmad.

The process of uniting the state was completed with the entry into the political arena of Nasr's brother, the energetic, intelligent and far-sighted Ismāʿīl b. Ahmad, who became

¹ For the chronology of the Samanids, see Bosworth, 1996, pp. 170–1.

the virtual founder of the Samanid state. The activity of Ismāʿīl (b. 849) began in Bukhara, where he was invited by his elder brother Nasr (865–92) to be governor after the fall of Tahirid power in 874. The more powerful role played by Ismāʿīl and his appanage of Bukhara, the military clash between the brothers in 888 and the victory of Ismāʿīl over Nasr greatly strengthened Ismāʿīl's de facto power in Transoxania. In the subsequent years of his rule, Ismāʿīl (892–907) displayed great ability in setting up an orderly system of central and local state administration (*dīwāns*), organizing the army and ensuring the internal and external security of the country, and creating opportunities for economic and commercial development and for the resurgence of local scientific and literary traditions. Ismāʿīl's military victories over the Saffarids in 898 and 900 made possible the incorporation into the Samanid state of Khurasan, Sistan, Tukharistan and Kabulistan, while in the Syr Darya basin he managed to create a fortified border from Isfijab to Taraz and eastern Ferghana. A little later, at the high point of Samanid power, the southern frontiers of the state extended as far as the Sulayman mountains, Ghazna, Kandahar and the Persian Gulf. But at the same time, the peripheral provinces retained a substantial degree of autonomy, paid no regular tribute and, indeed, many of the local ruling dynasties in those provinces were not replaced. Some degree of religious freedom also continued. Not all had yet fully converted to Islam in the upper Oxus river valley, where the populations of Badakhshan, Wakhan and Shughnan continued to profess their ancient religions.

Ismāʿīl was succeeded by Ahmad b. Ismāʿīl (907–14), portrayed in the sources as a devout Muslim. He reinstated Arabic as the language of administration in place of Persian and favoured officials who knew Arabic, thereby displeasing the court circles and palace guards. He was soon assassinated by plotters; the youthful Nasr II b. Ahmad (914–43) ascended the throne, and the task of ruling the state was entrusted to the enlightened viziers ʿAbd Allāh Jayhānī (914–18) and Abu 'l-Fadl Balʿamī (918–38), who restored order, put down rebellions and created the essential conditions for social and cultural development.

The reign of Nasr II, like that of Ismāʿīl, was a period of florescence for the Samanid state. The rule of subsequent amirs was distinguished by a gradual consolidation of centripetal forces in the state, more frequent rebellions and court disputes and an increase in the influence of the Turkish palace guards. In the reign of Nūh II (976–97), there were increasingly frequent attempts at invasion by the Karakhanids (see below, Chapter 6), and in the south-east the rise of the Ghaznavids began (see below, Chapter 5). In the reign of the later Samanids, the Karakhanids invaded Transoxania and the Samanid lands were divided up between the Karakhanids and the Ghaznavids. The energetic Ismāʿīl b. Nūh al-Muntasir

made unsuccessful attempts to re-establish the Samanid state in 999–1005 before he was killed.²

The documentary sources are unanimous in confirming that the Samanids were able to create a strong, partly centralized state (but see below, Chapter 6), which, for almost a century, at the time of its florescence, shielded Transoxania and Khurasan from large-scale external attack or incursions from the steppes and created important preconditions for the development of agriculture, craftsmanship and trade, learning, literature and art. In this connection it is worth noting the words of a contemporary of the later Samanids, the geographer and traveller al-Maqdisī, who comments that ‘the character of the Samanids, their appearance and their respect for learning and for men of learning make them the best of rulers’. Among the members of the Samanid dynasty, and also their viziers, were some who valued learning, poetry and art, and a number of them wrote poetry and works of geography and history. For example, the fine poetry of the Samanid Ismā‘īl b. Nūh al-Muntasir is well known, as are the geographic writings of the Samanid vizier Abū ‘Abd Allāh Muhammad b. Ahmad b. Nasr Jayhānī and the historical works of the vizier Abū ‘Alī Muhammad b. Muhammad Bal‘amī (d. 974).

The system of government

In this system, the head of state was the amir, and the provinces were governed by his appointed governors. Together with the royal court (*dargāh*), ten centralized military and civilian bureaux (*dīwāns*) were created. The main *dīwān* (the *dīwān* of the vizier) controlled all administrative, political and economic institutions. Financial affairs were conducted by the *dīwān* of the *mustawfī*, diplomatic relations and important state papers were the responsibility of the *‘amīd al-mulk* (or the *dīwānal-rasā’il*, i.e. of correspondence), the royal guard and military affairs generally came under the *dīwān* of the *sāhib al-shurta*, and the state mail and the clandestine surveillance of local rulers and officials were dealt with by the *dīwān* of the *sāhib al-barīd* which was answerable solely to the central authority. Markets, weights and measures and trade generally, and, later, public morals, were controlled by the *dīwān* of the *muhtasib*. Control over revenue and expenditure and over other state matters was exercised by the *dīwān* of the *mushrif* (inspector). There were also *dīwāns* for juridical affairs, state lands and *waqf* (pious endowment) lands. The local organs of all the *dīwāns*, apart from the postal administration, were responsible both to the central authority and to the local provincial rulers.

² Barthold, 1968.

The very names of the *dīwāns* indicate the functions of a clearly structured state apparatus, one of whose major functions was the collecting of taxes from the population of the agricultural oases, artisans and merchants. Available information indicates that the overall budget of the Samanid state amounted to some 45 million dirhams, of which about 20 million dirhams were spent on maintaining the army and state officials.

The nature of political authority under the Samanids

The Samanid state was a provincial successor-state to the ^cAbbasid caliphate centred on Iraq. As was almost universal in the Islamic world at this time, society was hierarchical, with the caliph-imams being, in theory at least, the delegators of all authority, so that the Samanid amirs were their lieutenants. In practice, the amirs enjoyed virtual independence, but were careful to pay lip-service to the caliphal ideal. This ideal was one of a hierarchical, socially static society under a ruler governing with the ultimate authority of God and the divinely ordained *sharīʿa* and exercising power in the Sunni Islamic tradition. Within this system, the indigenous Iranian landowning classes (*dihqāns*) retained much of their ancient local authority and social influence, especially in outlying provinces of the Samanid amirate such as Ustrushana, Ilaq and the upper Oxus principalities. Thus fixed land assets were in the hands of the Samanid dynasty, major landowners, state officials and the Muslim religious leaders (the *waqf* lands). Minor landowners and peasants had the use of the so-called *kharāj* lands. The taxes they paid to the state treasury depended on the quality of the land and the crops grown. The *waqf* lands, and the lands of many landowners, were exempted from taxes, while some properties (the ^c*ushr* lands) only had to pay a tithe. The principal form of land use was the share-cropping system, under which the land was divided into small plots and let out to tenants in exchange for a specified proportion of the harvest.

Vast masses of peasants were almost or entirely landless, with a largely subsistence economy, and their situation may have been a contributory cause for some of the outbreaks of unrest in the period. In 907 in Ghur and Gharchistan, some 10,000 peasants and artisans rose up under the leadership of one Abū Bilāl. In 961 the citizens of Bukhara revolted. Perceptible elements of some of these movements were various religious heresies; one of these, for example, was the Carmathian or Isma^cili movement, which gained strength in the first half of the tenth century (see above, Chapter 2).

The struggle of centrifugal forces against the central government, together with discord and endless intrigue in the amir's court and the *dīwāns*, eventually led to the decline of the Samanid state and enfeebled it politically and militarily. The economic weakening of the state and its financial difficulties exacerbated this decline still further, so that at the end of

the tenth century the Samanid state was unable to withstand the external invasions of the Karakhanids.

Agriculture

The unification of Khurasan and Transoxania around a single centre, the preservation of the country's de facto independence, the ending of incursions by nomads, and a number of other measures taken by the Samanids, created the essential preconditions for the development of the economic and cultural life of the country. Agriculture, mining, the craft industries and trade developed further.³ Under the Samanids, Transoxania and Khurasan were shielded from external invasion by the might of the state. This circumstance, together with the other measures taken, promoted the successful development of Transoxania. At the period we are considering, the main provinces of Transoxania, and above all the Zarafshan valley, were, in economic terms, the most advanced provinces of the east.

Transoxania and Khurasan were primarily agrarian lands. Agriculture was based in the main on the use of water from seasonally filled wadis, springs and artificially constructed surface and underground canals. In Transoxania there were numerous working irrigation systems that had been created earlier, particularly in the Zarafshan and Ferghana valleys and in a number of other regions. For example, in the Bukharan oasis, the Samjan and Shahrud canals were operating, as was the irrigation system of Varagsar in the central Zarafshan valley. There were also canals in the regions of the main town of Usrushana, Bunjikat, and in other provinces. During the ninth and tenth centuries a number of new canals and hydrotechnical installations were constructed. For example, in one of the gorges of the Bast Tagh mountain range, in the Nuratau peak, a large stone dam was built (today called Khan Bandi) and a water reservoir created. New canals were also dug from the Hari Rud and Helmand rivers.

Non-irrigated land (i.e. land where dry-farming was possible) was cultivated as well as irrigated land. In the irrigated lands of Sogdiana – in Ferghana, Chach, Usrushana, Khuttal, Chaghaniyan, Khurasan, Gharchistan and Sistan – the peasants cultivated wheat, barley, rice, millet, legumes, oil-seed and other crops, while cotton was an enormously important agricultural crop in a number of regions (the Zarafshan and Ferghana valleys, the Merv oasis, and so on). In the cultivated oases, horticulture was highly developed (apricots, peaches, apples, pears, quinces, cherries, plums, pomegranates, figs, walnuts, almonds), as were viticulture (with dozens of varieties of grape, the Herat grape being especially celebrated) and the cultivation of vegetables and melons. The melons of Bukhara and Merv

³ Negmatov, 1977, pp. 66–87.

were particularly well known and were regarded as the best in the world at that time. Date palms were grown in Sistan and sugar cane in the province of Balkh. This catalogue of agricultural crops indicates how specific was the method of cultivation used, being primarily based on artificial irrigation. Geographers of the ninth and tenth centuries give many enthusiastic accounts of the fertility of the oases and their 'unbroken carpets of greenery'. The most fertile lands were considered to be the province of Balkh and the region between Herat and Merv al-Rudh. In Transoxania and Khurasan and their mountain and steppe regions, animal husbandry was practised, particularly the rearing of sheep and horses.

Mining

In various regions of Central Asia many different kinds of minerals were mined and processed. Evidence for this comes both from written sources and from archaeological data. In Badakhshan, Darvaz, Rushan and Shughnan, rubies, lapis lazuli and silver were mined; in Tukharistan, lead, sulphur and other metals and minerals; in the upper Zarafshan valley, iron, gold, silver and vitriol; in Ustrushana, large quantities of iron; and in Asbara (Isfara), coal was reportedly to be found. Many minerals were mined in Ferghana: iron, tin, silver, mercury, copper, lead, tar, asbestos, turquoise, sal ammoniac and, apparently, petroleum oil. Ilaq (the Ahangaran valley) was known as a major centre for the processing of silver and lead ore. In Ilaq, and in the Kashka Darya basin, salt was mined. Minerals were processed in Khurasan: turquoise (in the district of Rivand, near Nishapur), marble (in the district of Bayhaq), fine stone for craft working (in the Tus region), gold and iron (in Gharchistan), iron (in the Nishapur district), copper (in the Merv district), vitriol, sulphur, lead, arsenic (in the Balkh district), jet, clay for pottery, and so on. The mountains of Jurjan produced gold, silver, iron, copper and various kinds of vitriol; silver came from Parwan and Panjshir, and marble from Bayhaq.

Archaeological and geological research gives some idea of the development, scale and technology of mining and of how deposits were prospected and explored. By the standards of the time, ore-workings were extremely successful. Numerous mine-workings of the Middle Ages have been excavated and studied. They include such enormous mines as the group of Koni Mansura, Kukhi Sim, Konjol, Kansai, Tarazkan and others in the Karamaz mountains, Koni Gut in Ferghana, and so on. The mining industry employed both free men and serfs and slaves. Thus in Koni Gut, the iron fetters of slave miners have been found. Mining occupied an important place in the economy of Transoxania and Khurasan in the ninth and tenth centuries. It is possible, by analogy with the state of development of the mining industry, to judge the general level of development of the economy of the age.

Crafts

The growth in agricultural output and mining was the basis for an advance in the craft industries, which were economically very important for the population of Transoxania and Khurasan. One of the main developments took place in textiles. Several centres of this craft are known: the settlements of Zandana (near Bukhara), Wadhar (near Samarkand) and Darzangi (in the Surkhan Darya valley). These centres produced fine cotton fabrics and their wares were widely known far beyond the boundaries of Transoxania. Both fine and coarse cotton fabrics were produced in large quantities in Samarkand, Dabusiyya, Bukhara, Iskijkat, Nasaf (Karshi), Kish (Shahr-i Sabz), Benakat and other locations. Woollen cloth and garments were manufactured in many places, including towns near the nomadic steppes: in Dizak, Urgench, Arbinjan and Chach. These places, particularly Chach, were centres of leather-working, manufacturing leather goods and other items for which there was a market among the nomads.

The paper produced in Samarkand, which was famous in Transoxania and throughout all the countries of the Middle and Near East, gradually displaced papyrus and parchment in the central Arab lands. Glass was also produced in Samarkand and was highly prized in China. In the towns and population centres of Ferghana and Usrushana, and also in Khujand, armour, weapons, agricultural implements and metal dishes were produced.

The processing of agricultural products was widely developed. For example, in the Hari Rud valley, Balkh, Sistan and other provinces there were many watermills in operation. One river alone, the Balkh river, provided the motive power for seventy water mills. Wind energy was effectively used: it powered windmills and also, as reported in the *Tārīkh-i Sīstān* [History of Sistan], raised water from the wells for irrigation.

The production of ceramics flourished; potters made exquisite and high-quality glazed wares decorated with a variety of ornamentation, and it became fashionable to inscribe the rims of ceremonial ware with passages from the Qur'an, quotations from the works of celebrated poets or simply messages of goodwill. Potters also made cheap ceramics on a large scale intended for the poor, while metal and glassware were also produced.

Domestic and external trade

The development of agriculture, mining and the craft industries, together with urban expansion, led, in turn, to an increase in the exchange of goods between town and country on the one hand, and, on the other, between rural and agrarian regions and the nomadic steppe. Bread, dried fruits, cloth, weapons and utensils were exported from agrarian regions and

towns into the surrounding nomadic steppe. In exchange, the nomads brought livestock, wool, dried skins and slaves to the markets of Transoxania and Khurasan.

A very clear picture of the specialization of certain towns and localities in the production of goods, for both domestic and foreign markets, is given by al-Maḡdisī. Bukhara exported fine fabrics, cloth for use as floor coverings, various fabrics, carpets, prayer mats, brass lamps, saddle-girths, grease, sheepskins, oil for anointing the head, meat and melons. From Karminiya came napkins; from Dabusiyya and Wadhār, Wadhari cloth; from Arbinjan, red woollen winter cloaks, prayer mats, skins, strong hemp, sulphur and pewter vessels; from Samarkand, brocade, which was exported to the Turkish peoples, silver cloth (*sīmgīn*), red cloth (*mamarajil*), linen cloth (*sinizi*), much silk and silk cloth, tents, paper, glass, large brass cauldrons, elegant goblets, stirrups, bits, straps, hazelnuts and walnuts; from Dizak, high-grade wool and woollen clothing; from Ferghana, Turkish slaves (for resale), white cloth, armaments, swords, copper, iron; from Chach, cotton, which went to the Turkish peoples, cloaks, tents, shoulder ornaments, high saddles made of horse leather, processed skins, fine bows, quivers, needles, scissors and grain; from Termez, soap and fragrant resin; from Balkh, skins, soap, sesame, rice, walnuts, almonds, raisins, honey, vitriol, sulphur, lead, women's shawls and striped garments; from Merv, brocade, embroidered fabrics, cloaks, silk and cotton shawls, sesame oil, cheese, copper, etc.; from Nishapur, yarn, cloth, cotton and woollen garments, turbans, shawls, cloaks, needles, knives, iron, etc.; from Nasa and Abiward, cotton and silk garments, silk, sesame oil, fox and sable furs; and from Herat, large quantities of raisins, pistachios, honey and other delicacies.

In the ninth and tenth centuries, the caravan trade with China, India, Iran, the Caucasus and the countries of Western Asia and eastern Europe acquired importance. The major caravan routes of Asia passed through Khurasan and Transoxania. Local merchants embarked on enterprising commercial expeditions and probably reached China, India and Inner Asia. Al-Maḡdisī reports that he saw people travelling with caravans from Sogdiana and Khurasan to Tibet and China. The busiest route was from the countries of the Levant to China, the so-called 'Great Silk Route'. It passed through Baghdad, Hamadan, Nishapur, Merv, Amul (Charju), Bukhara, Samarkand, Ushrushana, Chach, Taraz (Jambul), Balasaghun, the southern shore of Lake Issyk-kül and thence into Mongolia and northern China.

The route to eastern Europe, described by Ibn Fadlān, was likewise of importance. It passed through Merv, Bukhara, Khwarazm, Zanzan, the River Emba, Yik (the Urals) and Cheremshan to the city of Bulghar on the middle Volga. The caravans took the same route into the Khazar kingdom as far as the city of Itil on the lower Volga. There was also trade with the ancient Russian princedoms through the trans-shipment points of the cities of

Itil and Bulghar, to which rice, dried fruits, cotton, woollen and silken fabrics and silver dirhams were exported. From Rus, Bulghar and Khazaria came furs, wax, honey, skins, cattle and Slav and Turkish slaves. The large number of Samanid coins found in various regions as far away as northern Russia and the Baltic is evidence of the busy trading links with the ancient Rus and their western neighbours.

Caravanserais were set up along the roads, with storerooms and accommodation quarters, wells and other facilities. Caravans were both small and large; the largest caravan of the caliph al-Muqtadir (908–32) comprised 3,000 pack animals and 5,000 men. Caravans had personnel to service them (drivers and armed guards). Artisans, scholars and diplomatic envoys often travelled with them.

In the period that we are considering, the range of goods changed. Whereas luxury items such as jewellery made of gold, silver and precious stones, costly weapons, bronze and silverware, glass, high-quality fabrics, and so on, had earlier been the main goods carried in the caravan trade, now there were increasing quantities of utilitarian items, foodstuffs, raw materials for the craft industry and craftwares.

Material culture

Under the Samanids, there was a widespread development of urbanization and of architecture and the decorative arts. The standard attained in these areas by architects and master artisan-decorators is shown above all by the Samanid mausoleum in Bukhara, which was probably built in the early tenth century. The mausoleum is constructed of baked brick and is in the form of a cube topped by a dome. The external corners have three-quarter columns and in the middle of each of their four façades is an entrance bay with a pointed arch. Inside the mausoleum, the simplicity and massiveness of the forms are combined with the decorative treatment of brick-tiled wall surfaces. The decoration is austere and simple. The architectural style of the mausoleum, while expressing the traditions of the past, at the same time shows clear signs of something new that is characteristic of provincial, dynastic architecture.

Another outstanding building of the subsequent phase of monumental architecture is the ^cArab Atā mausoleum in the village of Tim near Kattakurgan. This single-chamber structure, square in plan, has a splendid decorative portal. Similar to it is the small mausoleum of the last Samanid, Ismā^cīl b. Nūh al-Muntasir, near the town of Kerki. It is square in plan and was built *c.* 1005 of baked brick, topped by a dome based on a hexagon of niches and squinches. The centralized-plan structure of the mausoleum, emphasized by the small octagonal corner columns, relates it to the mausoleum of the Samanids, but its

pīshṭāq (fore-porch) and incised bricks give it an affinity with the later monuments of the eleventh century. The °Arab Atā and al-Muntasir mausoleums show the evolution of this form from the centralized-plan structure to a portal structure. These Samanid mausoleums also exemplify an important process in the history of architecture: the development of the use of baked brick in monumental architecture.

Documentary sources refer to the construction in towns of central mosques, mausoleums, minarets and covered bazaars. The main building material was raw brick (adobe). It is to this period that such adobe buildings as the Kīrk kīz caravanserai in Termez, two Kīz-kala buildings in ancient Merv, and others belong. The structures in Bukhara were, for the most part, timber-framed adobe buildings. Remarkable examples of architectural detail and decoration have survived in the regions of the upper Zarafshan, such as the celebrated monuments of carved wood, including the mihrab from the settlement of Iskodar, and columns from the settlements of Obburdon, Kurut, Rarz, Fatmev and others, all richly ornamented with vegetation and including stylized animal motifs. Among the monuments of applied art of the time is the exquisite carved stucco of the palace of the princes of Khuttal in Hulbuk (the small town of Khishtep in the settlement of Kurbansaid in the southern region of modern Tajikistan), with painted relief ornamentation ranging from simple geometric rosettes to highly complex designs and wickerwork patterns forming large stucco panels. One fine monument using this decorative technique is the tenth-century alabaster panel from Afrasiyab (Samarkand), which shows traces of a rich and ancient tradition. It is composed of trefoils, sinuous leafed stems, circles filled with small squares, six-pointed stars, and so on.

The degree of sophistication attained in the applied arts is demonstrated by the Afrasiyab glazed ceramics of the ninth and tenth centuries which were the peak of Central Asian artistic achievement in ceramic technique and decoration. A white or red *engobe* covering was initially applied to this type of ware as a ground; it was then painted white, red, black or other colours and a transparent glaze was applied on top, giving the ware a luminous sheen. The surfaces of dishes, bowls and other vessels were ornamented with various geometric designs and plant motifs, as well as inscriptions conveying greetings. Animals and birds were sometimes also depicted.

Intellectual life

In the ninth and tenth centuries, intellectual life in Transoxania and Khurasan attained a high level. It was inevitable that the local Samanid dynasty, seeking support among its literate classes, should cultivate and promote local cultural traditions, literacy and literature.

Poetry in Persian made rapid strides and is best exemplified in the work of Abū ʿAbd Allāh Rūdakī, the father of Tajik-Persian poetry, of Abu ʿl-Qāsim Firdawsī, the greatest poet of the age and author of the famous *Shāh-nāma* [Book of Kings], and of a pleiad of other magnificent poets. Poetry was only one manifestation of this culture; equally interesting was the development of scholarship and its various branches (mathematics, astronomy, geography, chemistry, medicine, history and philology), with such outstanding exponents as Ibn Sīnā (Avicenna), Abū Rayhān al-Bīrūnī and others (see below; for a detailed discussion of these arts and sciences, see Volume IV, Part Two).

The main towns – Bukhara, Samarkand, Balkh, Merv, Nishapur, Khujand, Bunjikat, Hulbuk, Termez and others – became the major cultural centres of the time. Scholars, poets, artists and other men of culture from many Muslim countries gathered in the Samanid capital of Bukhara, where a fertile soil was created for the burgeoning of creative thought, so that it became one of the outstanding cultural centres of the East. In Bukhara, a rich library was assembled known by the name of *Siwān al-hikma* (Storehouse of Wisdom), containing books on various branches of learning, including the most esoteric; and the rarest and best works of scholarship were to be found in the Bukhara book bazaar.

Although a generally hostile and contemptuous attitude towards the Arabs was one of the main features of the so-called Shuʿūbiyya literary movement in the early ʿAbbasid days (eighth and ninth centuries), by the tenth century the movement no longer involved opposition by the Iranian peoples to the Arabs and to Arab culture *per se*. Anti-caliphal and even anti-Islamic motives were still discernible in the Shuʿūbiyya of the tenth century, but the Tajik-Persian poets and people of culture extolled the history and culture of their own people without rejecting the cultural achievements of the Arabs.

SCHOLARSHIP

In the ninth and tenth centuries, scholarship made great strides and there was a host of scholars in the various branches of knowledge who gradually began to write in Persian. In the fields of history, literary studies and geography, there were Abū Bakr Narshakhī (d. 959), the author of the *Tārīkh-i Bukhārā* [History of Bukhara]; the Samanid vizier Abū ʿAlī Muhammad Balʿami, the author of a Persian epitomized translation, with numerous interpolations, of the work of al-Tabarī; the great connoisseur and scholar of poetry and history Abu ʿl-Muʿayyad Balkhī, the author of books in Persian such as *ʿAjāʿib al-buldān* [Marvels of the Lands], a *Shāh-nāma* and a *Garshāsp-nāma* [Epic of Garshāsp]; and the anonymous geographer who wrote the *Hudūd al-ʿālam* [The Limits of the World].

Islamic religious and legal scholarship was particularly flourishing at this time in the north-eastern provinces of the Iranian world and enjoyed the enthusiastic patronage of the

Samanid amirs; Ahmad b. Ismāʿīl is said to have been assassinated in 914 by his Turkish slave soldiers because of his undue frequentation of the *ʿulamāʾ* (religious scholars) and religious lawyers. It was not without significance for the strength of Sunni Muslim learning in these provinces that five out of the six authors of the canonical collections of *hadīth* (Muslim tradition), the *Sunan*, should be from the north-eastern Iranian world or have connections with it.

In Transoxania and Khurasan, mathematics and astronomy of global significance developed out of a synthesis between the traditional local expertise in irrigation and other technology, and the mathematics of ancient Greece and India – this was the foundation of all subsequent mathematical advances in Asia and Europe. Particularly prominent among these scholars was the eminent mathematician, astronomer and geographer Muhammad b. Mūsā al-Khwārazmī (780-c. 850), whose name lives to this day in modern mathematical terminology in the word ‘logarithm’ (the medieval distortion *al-garizm* from ‘al-Khwārazmī’). The name of the science of algebra (in Arabic, *al-jabr*) also comes from the first word of the title of al-Khwārazmī’s work on algebra. He discovered how to solve linear and quadratic equations. The mathematician Ahmad b. ʿAbd Allāh al-Marwazī, known as al-Habash al-Khasīb (d. c. 870), already used tangents and cotangents and their tables in his calculations. The astronomer Abū Maʿshar Balkhī (d. 886) wrote some forty works. The astronomer and mathematician Abū ʿAbbās Ahmad al-Farghānī (ninth century), in his work *Usūl ʿilm al-nujūm* [Principles of Astronomy], expounded the knowledge of his time and described instruments and the sundial. The astronomer and mathematician Abū Mahmūd Khujandī (tenth century) invented the sextant, which is used as an astronomical instrument for accurately determining the positions of the planets and the fixed stars appearing in the vicinity of the planets. The mathematician Abū ʿl-Wafā al-Būzjānū (940–98) solved a number of geodesic and geometric problems, gave a systematic account of trigonometry and, together with al-Battānī, was the founder of trigonometry. In the tenth and eleventh centuries, the mathematician Abu ʿl-Hasan al-Nasawī and many others worked in the region.

Medicine also developed. A number of scholars were active in that field in the ninth and tenth centuries, the most outstanding of whom was Zakariyyā Rāzī. Another able physician was Akhawayni Bukhārī. He was engaged in medical practice, particularly in the field of mental disorders, and was one of the first to use Persian to write his medical treatises in which he expounded on human anatomy and physiology, described illnesses and their cures, and gave the dosage of medicines and as many as ten original prescriptions. Another learned physician was Hakīm Maysarī, the author of many books including a medical work

in Persian verse, the *Dānish-nāma* [Book of Knowledge]. The well-known pharmacopeia of Muwaffaq is also written in Persian.

ABŪ °ALĪ IBN SĪNĀ AND ABŪ RAYHĀN AL-BĪRŪNĪ

In this period, the two greatest medieval polymaths of the East, Abū °Alī Ibn Sīnā and Abū Rayhān al-Bīrūnī from Khwarazm, began their work which has left an indelible mark on world scholarship. Abū °Alī Ibn Sīnā (known to the West as Avicenna) was born c. 980 in the village of Afshana near Bukhara. His childhood and early student years were spent in his native village, after which the family moved to Bukhara, where he studied all the sciences of that time and, while still a young man, began his scholarly and medical activity. After the fall of the Samanid dynasty, he was sought in vain by the Ghaznavid Sultān Mahmūd. Ibn Sīnā lived in Urgench and Isfahan before becoming a court physician and vizier to the Kakuyid ruler of Hamadan. He died and was buried in Hamadan on 18 June 1037.

Ibn Sīnā was the greatest scholar of the Islamic Middle Ages – a philosopher, natural scientist, physician, mathematician, poet and original thinker. He gave voice to the developing tendencies of his time and, in an age when religious orthodoxy was dominant, endeavoured to revive interest in the study of nature, to give an impetus to creative and analytical thought and to review critically what had been achieved by scholarship in earlier days, systematizing and developing it further. In his research, Ibn Sīnā placed great emphasis on experimentation, practical experience and the objective observation of facts. He wrote many works, the most important of which were *al-Qānūn fi 'l-tibb* [The Medical Canon], a medical encyclopedia in five parts, and *Kitāb al-Shifā'* [The Book of Healing], a philosophical work in eighteen parts, which were written in Arabic. He became widely celebrated in the East and in Europe, and many of his works were translated into several European languages. His *al-Qānūn fi 'l-tibb* was used for many centuries for teaching and treatment in both East and West. It was translated into Latin (as early as the twelfth century), classical Hebrew, Persian, Urdu and other languages; the Latin translation went through thirty editions. In the *al-Qānūn fi 'l-tibb*, Ibn Sīnā expounds a general theory of medicine, anatomy, physiology, surgery, diagnosis, therapeutics, drugs and prophylactic medicines, and discourses on acute and chronic illness. In Persian, he wrote a short philosophical encyclopedia entitled the *Dānish-nāma* [The Book of Knowledge] in which he touches on questions of philosophy, logic, mathematics and astronomy. In the *Kitāb al-Shifā'* he gives an exposition of questions of logic, natural science, metaphysics, mathematics and other sciences of his time. These books by Ibn Sīnā may be regarded as among the best works of enlightened medieval thought of the tenth and eleventh centuries. He was

also a poet, writing in Persian and mainly using the *rubāʿī* (quatrain). In these verses, he openly expresses something like free-thinking.

Another outstanding encyclopedist, Abū Rayhān al-Bīrūnī (973–1048), was the author of many works of major importance in which he examines problems of mathematics, astronomy, physics, botany, geography, geodesy, general geology, mineralogy, history, chronology and ethnography. One particularly well-known work of his is *al-Āthār al-bāqīya* [Memorials of Past Generations], which among many other topics describes in detail the calendar systems of the peoples of the Middle and Near East, including the peoples of Sogdiana and Khwarazm. His great work on India is an important description and criticism of the higher Indian learning and sciences of the early Middle Ages. Part of his treatise *Kitāb al-Taḥḥīm il-awāʿil sināʿat al-tanjīm* [The Key to Astronomy], with its popular exposition of the fundamentals of mathematics, astronomy and astrology, has survived. He also wrote *al-Qānūn al-Masʿūdī* [The Canon of (Sultan) Masʿūd], a lengthy treatise on mathematical and descriptive geography; and *Kitāb al-Jamāhir* [Book of Data for the Recognition of Gems] (on mineralogy), in which he gives detailed information on over fifty minerals, ores, metals and alloys, and on glass, enamel, porcelain and so on, and in which he also catalogues mineral deposits and gives other data. Mention must also be made of his book *Istikhrāj al-awṭār* [Chords] on the topography of Central Asia; and his *Rules for Determining the Specific Gravities of Minerals*, among others.

LITERATURE

In the ninth and tenth centuries, there was an enormous growth in literature, principally poetry. It was during the Samanid period that Persian literature began to appear in Transoxania and was officially recognized. The development of an Islamic New Persian literature thus began in Transoxania and Khurasan rather than further west in Fars. The work of a large number of poets dates from this period, of whom the best known are Rūdakī (d. 941), Daqīqī (d. 977) and Firdawsī (d. c. 1020).

Together with the nascent literature in Persian, literature in Arabic also continued to enjoy high prestige and royal favour under the Samanids. The most active part in the creation of this literature, both original and in translation, was taken by the Central Asians and Khurasanians. For example, Thaʿālibī wrote his anthology, the *Yatīmat al-dahr* [The Unique Pearl], in Arabic; in its fourth section, it gives a detailed account of the poets of the Samanid period living in Bukhara and Khurasan, and also those of Khwarazm, who wrote in Arabic.

The recognized founder of Persian-Tajik classical poetry, and a man of great culture, was Rūdakī, who was born in the village of Panjrudak in what is today the Panjikent region

of modern Tajikistan. From his early years, Rūdakī's poetic gift, his fine voice and his skilled playing on the *chang* (a harp-like musical instrument) made him popular. He was invited to the Samanid court, where he spent almost the whole of the rest of his life. Somewhat fewer than 2,000 lines of his output have survived, but they demonstrate his mastery in all the poetic genres of the age. He perfected the basic verse forms of medieval Persian poetry: *mathnawī*, *qasīda*, *ghazal* and *rubāʿī*. Another noted poet was Shahīd Balkhī, born near Balkh in the village of Jakhudanak. Little is known about his life, but at one time he was one of the best court poets of the Samanid Nasr II, and one of the leading scholars of the age. A close student of Rūdakī, he died in 936, before Rūdakī, and the latter wrote a touching elegy on the death of his favourite student.

Daqīqī began his literary activity at the court of the ruler of the principality of Chaghaniyan and was later invited to Bukhara. Under the Samanids, particular attention was paid in literary circles to making compilations of ancient legends embodying the heroic traditions of their past. It was thus that the prose *Shāh-nāma* of Abū Mansūr was created. Nūh II entrusted Daqīqī with the task of putting the *Shāh-nāma* into verse, but the poet was killed in 997 before completing his work. The part of Daqīqī's poem describing the struggle between Gushtāsp and Arjasp was included by Firdawsī in his own *Shāh-nāma*. In addition to a fragment of his *Shāh-nāma*, the surviving work of Daqīqī includes *qasīdas*, *ghazals*, *qitʿas* and *bayts*.

The greatest poet of that age, however, was Firdawsī. He was born in Khurasan, in a suburb of Tus, between 934 and 941 into a middle-ranking aristocratic family. His youth coincided with the period of growth of the Samanid state. The idea of stimulating a resurgence of the Iranian national and heroic spirit in culture induced him to write his epic *Shāh-nāma*, which he completed in 994, by which time the Samanid state was in full decline. The second version of the poem (completed in 1010) was presented to the Ghaznavid Sultān Mahmūd; but the poet's masterpiece was not appreciated in his lifetime.

In his poem, Firdawsī revealed to the people their heroic past and apparently sought to arouse their sense of patriotism. He made the basis of his work the epic of the Iranian peoples (the ancient Saka tribes, Sogdians, Khwarazmians and others), including the tales about such epic heroes as Rustam, Siyāwush and Isfandiyār, and about national uprisings led by the blacksmith Kāwa and Mazdak. Firdawsī drew much inspiration from the monuments of material culture in Khurasan and Transoxania. In particular, a whole epic cycle of exploits connected with the name of Rustam – the struggle of the heroes against monsters – is depicted in the murals of ancient Panjikent.⁴ Another scene in temple painting, also

⁴ Belenitskiy, 1960.

in Panjikent, is devoted to mourning for the mythological hero Siyāwush.⁵ In the ruined palace of the Afshins of Ustrushana (near Shahrīstan), a large carved wooden panel has been discovered depicting scenes of the struggle of the forces of good (the prince and the blacksmith Kawā) with the wicked and murderous King Zahāk. The Rostam epic of the Sogdian texts, the Sogdian tales of Siyāwush, Farīdūn and the blacksmith Kāwa, and these paintings at Panjikent and Bunjikat, undeniably indicate the Central Asian provenance of many of the themes of the *Shāh-nāma*.

Firdawsī also masterfully reworked the written sources (the Sasanian historical chronicle, the *Khwadāy-nāmak* [Book of Kings], Mansūr Balkhī's *Shāh-nāma*, and others), drawing on the treasures of material culture and on popular oral legends. He recounts events in his own way and celebrates the ideas of Iranian national feeling and love of his homeland. From beginning to end, the poem is written in a heroic metre (*mutaqārib*), in an austere and monumental poetic style, and is distinguished by its epic grandeur and unique emotional tone. It contains between 50,000 and 60,000 couplets (*bayts*). Firdawsī's *Shāh-nāma* has immortalized the author's name and is a major contribution to the treasure-house of world culture; it had an enormous influence on the subsequent development of Persian literature and there have been frequent translations of his poetry into many languages of both East and West.

MUSIC

In the ninth and tenth centuries, the musical culture of the eastern Iranian peoples, the origins of which went back to antiquity, continued to develop. They had a long tradition of virtuoso musicianship and a developed musical theory. In the period that we are considering, a series of patterns of musical art in various genres was created. Classical professional music in the oral tradition and settings of poems to music continued to be produced and these were subsequently combined in the *duvāzda maqām* (twelve *maqāms*, or modes), and then reworked in the *shash maqām* (six *maqāms*). Poetry and song were not only intimately interwoven but were regarded as branches of a single art. Many poets were at the same time well-known musicians, singers and musical theorists. Popular creative art had a marked influence on the development of professional poetry and music.

As noted above, the poet Rūdakī was also a gifted musician and a well-known singer. He had a fine voice and was a performer on several instruments (*ūd*, *chang*, *barbat* and *rūd*). It was he who was responsible for reworking two classical modes and melodies, the

⁵ D'yakonov, 1951.

tarona and the *ufar*, and tradition has it that he himself perfected the design and nature of the *rūd*.

Among the musicians of the age were the poet and musicologist Abū Hafs Sughdī, who invented the musical instruments called *shāh-rūd* and *mūsīkār*, the poet and composer Abū Sālih (ninth century); the poet Abū Tayyib Tāhir al-Khurāsānī, an outstanding performer of one of the *maqāms* called *khusrawān*; the well-known *chang*-player Lukari Changzan; the musicologist Abū ʿl-Abbās Bakhtiyār; ʿĪsā Barbatī; one of the best-known female singers, Sitt Zarīn; the flautist Zilzil Rāzī; and the flautist and *tunbūr*-player ʿAlībegī. The foundations of musical theory were also laid, and Ibn Sīnā is even credited with having invented the instrument known as the *shāhnāy* (*surnāy*).

This eastern Iranian music became a firmly established part of all aspects of social life and was an inseparable element in weddings and feasts, festivals and battles, anniversaries and formal ceremonies, religious and funerary rites. In particular, the historian Narshakhī refers to songs of mourning, and we find information on celebratory, military and funerary music in Firdawsī's *Shāh-nāma* and in the poetry of Rūdakī and Daqīqī. There were a number of musical modes: the *dāstan-i khusrawān*, *surūd* (*rūh*, *khafīf*), *tarona* and others, and a large number of melodies: *khusrawānī*, ʿ*ushshāq*, *rāst*, *bāda*, *irāk*, *zarafkanda*, *busalik*, *sipāhāʿī*, *nāwa*, *basta*, *chawasht*, etc. There were also a large number of musical instruments: the stringed ones mentioned above, and others; wind instruments like the *nāy*, *shāhnāy* (*surnāy*), *shāhrūd*, *shaypūr*, *karnūy* (*būq*), etc.; and percussion instruments like the *daff* (*dāʿira*), *tanbūrak* and *tabl* (*shandaf*). In addition to those that have been enumerated, one must also mention the *duruya*, *zīr*, *chagana*, *santūr*, *kāpun*, *urghunūn*, *ankā*, etc.

Central Asia and the Ismaʿili movement

In the ninth and tenth centuries, the Sunni form of orthodox Islam became firmly established in the eastern lands. Yet even though Islam was already generally accepted as the state religion and had spread to almost all parts of Central Asia, there continued to exist, at the same time, vestigial communities of Zoroastrians, Manichaeans and Christians.

In the first half of the tenth century, the propaganda of Ismaʿilism achieved a foothold in Central Asia, as has been described in Chapter 2 above. The movement was initially led by the Samanid commander Husayn b. ʿAlī Marwazī. In an attempt to turn it to his advantage, he quickly provoked an uprising but was defeated and captured. Leadership next passed to the Ismaʿili propagandist Muhammad b. Ahmad Nakhshabī, whose activities were at first highly successful. Many eminent dignitaries converted to Ismaʿilism and the movement

gathered strength, particularly during the reign of Nasr II, who may also have accepted its teachings. This incensed the orthodox Sunni Muslim religious classes, who conspired against Nasr II with representatives of the Turkish palace guard. Even though the plot was discovered, Nasr II was obliged to renounce the throne in favour of his son Nūh I (943–54). Nūh organized the extermination of Ismaʿili sympathizers and the execution of the leaders of the movement of Muhammad Nakhshabī. The doctrine survived in Transoxania only as a clandestine tendency, although in Bukhara a secret organization of supporters of the heresy may have been active.

The ethnic composition of the Samanid state and the creation of an Eastern Persian-Tajik ethnic identity

In early Islamic times, there were a number of Iranian peoples in Khurasan and Transoxania. The Zarafshan valley, the Kashka Darya oasis and Ustrushana were occupied by Sogdians; the upper Oxus basin and its tributaries by the Bactrian-Tukharian population; the basin of the lower Oxus by the Khwarazmians; the Ferghana valley by the Iranian Ferghanans; the southwestern oases of Central Asia by the Iranian Khurasanians; and the Pamir mountains and their foothills, and the mountains surrounding the Ferghana valley, by the remnants of Saka and other early Iranian peoples. All these peoples were ethnically related and spoke languages and dialects of the Middle Iranian and New Persian language groups; they were the basis for the emergence and gradual consolidation of what became an Eastern Persian-Tajik ethnic identity.