



CENTRAL ASIA X. ECONOMY BEFORE THE TIMURIDS

CENTRAL ASIA

x. Economy Before the Timurids

From the historical perspective Central Asia does not lend itself to easy geographical definitions. It comprises, grosso modo, the lands extending from the eastern shores of the Caspian Sea in the west to Chinese Turkestan in the east, from the Kazakh steppes in the north to the northern borders of Persia, Afghanistan, China, and Tibet in the south. Politically and culturally it has often encompassed the area from the Black Sea to the Pacific Ocean. It has had particularly intense interaction with Mongolia, Western Manchuria, and Tibet, that is, Inner Asia, a term that has been used to designate the whole of this region. Modern-day Central Asia lies within the USSR and the People's Republic of China and is composed of the Turkmen, Uzbek, Tajik (Tadzhik), Kirghiz, and Kazakh SSRs and the Karakalpak ASSR within the Soviet Union and Xinjiang province (the Uighur Autonomous Region) of the People's Republic of China. With the exception of the Iranian-speaking Tajik SSR, the indigenous populations of these regions are today overwhelmingly Turkic in speech with, in some cases, vestigial Iranian populations. The classical Islamic geographers divided the region into two major areas: Khorasan of which only the northeastern section, that is, southern Turkmenia (largely centering on the region of Marv/Mary, the classical Margiana), is part of Central Asia and



Transoxania (Mā Warā'-al-Nahr), which was subdivided into several large units (e.g., K̲v̲ārazm, Sogd, Farḡāna) as well as lesser units. The primary focus of this article will be on those regions that historically were significant parts of the Iranian world.

Climate and geography have, of course, in large measure determined economic pursuits in pre-industrial times. Lying at the center of the Eurasian land mass and at considerable distances from the oceans, little rainfall from those sources reaches this region. The mountain chains on the southern borders of the region also block out moisture coming from Southern Asia. The northern zone fares best with respect to precipitation (10-12 inches of rain annually). Rainfall amounts, however, decrease as one goes southward. Much of the land here is desert or semi-desert (Matley, pp. 119-20). Historically, the northern region was of little or at best marginal use to agriculturalists and hence was the domain of the pastoral nomads. Elsewhere, agriculture, in a number of forms, is undertaken. In the somewhat elevated or mountainous regions, where precipitation is slightly higher (e.g., the foothills of the Tien Shan in Uzbekistan), a type of dry-farming dependent on the spring rains, called *lalmikārlik* (Taj., Uzb. *lalmī*, Pers. *deymī*, q.v., “unirrigated, taking its water from rain,” *lalmikār* “agriculture carried out by taking advantage of rainfall,” Maʿrufov, I, p. 426) or *bahārīkārlik* “unirrigated crops planted in spring” (Pers., Uzb. *bahārīkār* “planting in spring,” Maʿrufov, I, p. 91, cf. Russ. *bogara* “dry-farming”), often combined with pastoralism, is practiced. Elsewhere, farming is of the oasis type, based on regular irrigation (Taj. *obikorī*, Uzb. *suwli*), irregular irrigation and *qayir* agriculture based on silt soils of river deltas (Shaniyazov, pp. 166-67; Khazanov, forthcoming). Major centers are associated with the Mary-Murgab (Morḡāb) system, the Tejen (in Turkmenistan), the Upper Amu Darya (medieval K̲v̲ārazm), the Farḡāna valley, Tashkent, the Zeravshan (Zarafshān), and Qaşqa Darya zones. The principal crops are wheat, barley, sorghum, rice, alfalfa, millet, a variety of melons and fruits, sesame, hemp, poppies, and tobacco (a more recent addition). In addition, sericulture, viniculture, and cotton-growing are widespread (Matley, pp. 124-28). With some exceptions, this is a pattern that can be seen in medieval times as well.

Our sources, the Islamic geographers of the 3rd-4th/9th-10th centuries, usually depict the economy of the sedentary populations of Central Asia as flourishing. That of the nomadic population, however, although capable of producing considerable wealth, was much more precarious. Unlike agricultural



production, the pastoral economy is not, fundamentally, self-sufficient, nor can it support populations equal in size to those of sedentary states (Khazanov, 1984, pp. 46, 50, 69, 70-72, 81, 83). The nomads must interact with the surrounding sedentary communities to gain access to certain foodstuffs not available in pastoral production (and not produced in sufficient quantities by the primitive forms of seasonal agriculture practiced by some nomads) as well as the products of urban manufacture. Nomadic herds, the composition of which varied according to the natural conditions, usually consisted of sheep, horses, cattle, camels, and goats. Sheep and horses tended to predominate. In those groups moving towards sedentarization the number of cattle and oxen increased. In Central Asian conditions a nomadic family usually needed 60-100 head of sheep, horses, and other livestock to survive. Those who slipped below this minimum number were either forced to sell their services to other family, clan, or tribe members (the relationship was the nomadic equivalent of sharecropping) in the hope that eventually they would be able to return to nomadism (Barth, pp. 16-17, 108-09; Smith, p. 62; Khazanov, 1975, pp. 149-50; idem, 1984, p. 30). Such desperate men were the willing participants of raiding parties against nomad and sedentary alike. Although we have accounts, undoubtedly exaggerated, of herds of 10,000 horses and 100,000 sheep (noted by Ebn Faḡlān, ed. Dahār, p. 106, cf. also a Turk prince who, in 626, was able to offer as a gift to the Chinese emperor some 10,000 sheep and a multitude of horses; Schafer, p. 75, with further references), most nomads managed with herds very much smaller than this. Indeed, nomads had to monitor the size of their herds carefully. Overproduction inexorably led to struggles for pasturage. These wars, not infrequently, spilled over into the lands of sedentary states. The stronger ones drove the nomads off. Weaker states succumbed, and ruling houses of nomadic origin (cf. the Saljuqs in Persia and numerous dynasties in China) took over and gradually acculturated. These conflicts touched off the great Eurasian migrations that profoundly influenced the course of Near Eastern and European history.

Herds, which have cyclical life spans, could also be destroyed by epizootics or the vagaries of a difficult climate. Consequently, the prudent herdsman was continually selling off part of his herd for portable wealth (gold, silver, jewels) that could be quickly transformed into new livestock in the event of disaster (Barth, pp. 103-04). Many of the nomads were actually semi-nomadic, sometimes moving back and forth between the two systems. Inevitably, certain numbers of them, in time, became impoverished and were forced to sedentarize. These were held in disdain by the nomads. The Oghuz termed



them *yatuq*, which according to Kāšgārī (mid-5th/11th century; p. 153), designated “a class of Oghuz, in their own land, who never nomadize or go on raiding expeditions; they are called *yatuq* meaning “lazy ones, ones left behind”.”

Given the precariousness of the nomadic economy, its need for the goods being produced by sedentary societies, nomadic-sedentary relations revolved around the forms that nomadic access to these goods would take: trade, predation, and conquest. The form that this interaction took largely rested on military might. Indeed, nomads often had to fight for the right to trade. In general, the conquest of sedentary territory did not have a great appeal to the nomads. It usually meant the creation of a state with a strong central authority and the transformation of their chieftain clans into urbanized, acculturated monarchs who took on the trappings of the royal houses they had conquered and in time sought to make obedient subjects out of their tribesmen. On a few occasions, the nomads sought to convert agriculture lands into pasturages (e.g., the Mongols in Semirech’e, Barthold, *Turkestan*⁴, p. 467). But, in Central Asia, this was the exception to the rule. Moreover, given the shortage of pasturage in the vicinity of the oasis cities, nomads directly entering these regions faced enormous pressures to sedentarize.

The history of the economy of Central Asia is inextricably tied to the relationship between steppe and sown land, nomad and sedentary populations. Large-scale irrigation works in the region, bespeaking organized sedentary life, date to the early first millennium b.c. (e.g., the Murgab delta, Masson et al., p. 50). Urban centers of the oasis type developed at Bactria (Balk), Maracanda (Samarqand), Margiana (Marv; the *gorodishche* at Gyaurkala) in the course of the 6th-4th centuries b.c. (Gafurov, pp. 75-78). Incorporated into the Persian empire, the Central Asian satrapies of the Achaemenids appear to have served as intermediaries in the trade of Persia and the Near East with the steppe nomads and peoples to their north. It was by this route that Siberian gold came to Persia. Cornelian, turquoise, silver, and lapis lazuli from Sogdiana, Choresmia, and Bactria were other items of trade. Archeological finds point to the existence of a trade network going through the Central Asian cities that extended from the Near East to the Ural zone and Siberia (Dandamaev and Lukonin, p. 220; Holt, p. 28).

According to classical sources, with the exception of the oases, much of the region seems to have been largely uninhabited. Thus, Quintus Curtius Rufus (7.4.27), the later Roman historian of Alexander’s campaigns, says that the



greater part of Bactria was covered with sterile sands and because of its squalid dryness had neither a human population nor crops. Ancient historians (e.g., Strabo, 11.11.4) credit Alexander with founding as many as eight (or more) Central Asian cities. The number and nature of these cities have been called into question. Similarly, the nature and extent of Seleucid rule in Central Asia is unclear. Much of their effort seems to have been concentrated in Bactria, in which there was a relatively sizable Greco-Macedonian settlement. The Greco-Bactrian kingdom (mid-3rd to mid-1st century b.c.), which, in all likelihood, extended its authority to the oasis city-states of Sogdiana and Margiana, became the diffusion point for Hellenism in Central Asia (Frye, 1984, pp. 173, 180). Little is known of the economic impact of these events. The growth of irrigated agriculture seems to have continued. Given the nature of the sedentary-nomadic paradigm, we may presume that trade with the various Saka nomadic tribes continued.

As a consequence of a series of migrations set off by the activities of the Hsiung-nu in Mongolia in the first half of the 2nd century b.c., a number of Iranian (and possibly non-Iranian Tokharian) tribes were pushed into the borders of Greco-Bactria. According to the report of [Chang Ch'ien](#), an official of the Han dynasty sent in about 128 b.c. to gather information on the western lands, Ta-yüan (Da-yuan; Farḡāna? Sogdiana?) was a region of sedentary habitation, in which rice and wheat were grown and grapes cultivated. The region was also famous for its “many fine horse which sweat blood” (Ssu-ma Ch'ien, II, p. 266). There were some 70 fortified settlements in the area. K'ang-chü (Kang-ju), however, which probably corresponds to the Samarqand region later associated with Yen-ts'ai (Yan-cai; they later took the name A-lan-liao, i.e., Alan; see *Han-shu*, tr. Hulsewé, p. 129), was largely nomadic. Similarly, the Yüeh-chih who took over Greco-Bactria (Ta-hsia/Da-xia) were nomads (Ssu-ma Ch'ien, II, pp. 266-68; Pan Ku/Ban Gu, pp. 119-21, 131-32). The latter, however, together with other nomadic elements gave rise to the Kushan state sometime in the 1st century a.d. The Kushan era witnessed a further development of the canal-based irrigation (Guliamov, pp. 98-107) and the appearance of the *āmāč*-type plough (Uzb. “a primitive wooden implement with metal teeth which is harnessed to an animal while ploughing the soil,” Ma'rufov, I, p. 537), which continued in use into the 14th/20th century.

The Kushans, who developed a sophisticated culture, became an important part of the silk route which brought this and other luxury items from China to the Near East and Roman Europe. Urban development, the growth of market



centers and handicraft industries were spurred on by their far-flung commercial contacts. The Kushan realm also was a source of entry for the valuable furs that the nomads brought from their contacts with the forest and forest-steppe peoples (Gafurov and Litvinskiĭ, I, pp. 369-73). The prosperous Kushan era seems to have been crucial to the creation of the agricultural (system of canals) and commercial infrastructure that formed the underpinnings of the oasis city-state system of the late pre-Islamic and early Islamic era (Zeimal, 1983, p. 250).

The advent in the early 4th century of new nomadic elements, tribes of Inner Asian origin, especially the [Chionites](#) and other groups that would become associated with the Hephthalite state, seems to have brought about a decline in urban life and to some extent a “barbarization” of culture. But, the importance of this region as part of the east-west artery of trade continued. It was in this era that the Sogdians began to establish colonies in the Semirech’e region (Gafurov and Litvinskiĭ, I, pp. 420-25; Tolstov, pp. 197-205). These colonies would ultimately reach Inner Mongolia and play an important role in the transmission of culture as well as goods to the Turkic peoples.

The Hephthalites were crushed by the Turks in 557 and the Central Asian city-states were brought into a largely profitable relationship with the Western Turk khanates (qaghanates). The Sogdians, in particular, played a prominent role in the commercial, diplomatic and cultural affairs of both the Eastern and Western Turks. There is evidence that new and more complex irrigation networks were created and their commercial network expanded. A Chinese source comments on their love of commerce, “the people of K’ang are all able merchants, when a boy reaches the age of five, he is sent to study books; when he understands them he is sent to study commerce” (“The Notice of Wie Tsie,” in Chavannes, p. 133). In addition to a variety of agricultural products, the Central Asian cities were also becoming important centers of handicraft production: gold and silverware, rugs, silk goods and other textiles (Gafurov and Litvinskiĭ, II, pp. 59-60, 70-73).

The wars between the Western Turks, local Iranian dynasts, and the advancing Islamic armies disrupted the economy. Arab military expeditions continued throughout much of the Omayyad era. The period of Qotayba’s campaigns (86-96/705-15) were particularly difficult. The devastation visited on the Central Asian cities was considerable and the populace, as one contemporary observed, “left sitting in its nakedness” (Gibb, p. 48). Nonetheless, trade with the East continued. Thus, among the gifts that the “king of Bukhara”



sent to the T'ang emperor in 726/1326 with an embassy seeking aid against the Arabs were rugs, as well as saffron and "stone honey." From the "western lands" China received exotic metalware, such as ostrich-egg cups from Bukhara and Samarqand and a jeweled couch from Bukhara (Schafer, pp. 198, 258-59, citing *Ts'e fu yüan kuei/Ce fu yuan gui*, 1642 ed., 971.3a, 13a). According to Naršakī (p. 29, tr. Frye, pp. 20-21), pre-Islamic Bukhara twice a year hosted a fair for the buying and selling of pagan idols. This was, undoubtedly, a rather important element in the local handicraft industry.

With the advent of the 'Abbasid era a full economic recovery is in evidence. The Zarafšān valley became a major source of grain production for Central Asia and Khorasan (Gafurov and Litvinskiĭ, II, p. 121). The cities and hence handicrafts and trade revived. The Islamization of Central Asia brought with it the introduction of certain Muslim economic institutions, such as the *waqf* (pious foundation). Little is known, however, about the impact of this and other institutions on the Central Asian economy.

Our sources, the classical Islamic geographers and historians shed far more light on the economy of Central Asia during the 3rd-6th/9th-12th centuries. With the fragmentation of 'Abbasid political authority the major Islamic governing powers in the region were of indigenous Iranian (Samanids, 204-395/819-1005, in Khorasan and Transoxania) and Turkic origins (Ghaznavids, 366-582/977-1186, largely in Afghanistan; Qarakhanids, 382-607/992-1211, in Western and Eastern Turkestan; Saljuqs, 429-590/1038-1194, who, from their base in Persia, were overlords of the Western Qarakhanids; and the K̲v̲ārazmšāhs, who, from the Ghaznavid era on, were of Turkic stock, 408-617/1017-1220, in K̲v̲ārazm). The only exception was the Buddhist Qarā Ketāy of Proto-Mongolian stock, who held Eastern Turkestan (531-615/1137-1218) and after their defeat of the Saljuq sultan Sanjar in 536/1141 were masters of much of Transoxania as well. The irrigated agriculture of the oasis city-states, except for during periods of warfare, is universally described as flourishing. This was due to the extensive system of canals that brought water to the fields. Naršakī (pp. 44-45, tr. pp. 31-32) mentions some 12 canals for the Bukhara region alone. Such a vast network could only be supported at state expense. This came largely from local authorities, but on occasion funds were received from the caliphal center itself. Thus, in 221/835-36, the caliph al-Mo'taṣem (218-27/833-42) gave two million dirhams for the building of a canal for the people of Šāš (Ṭabarī, III, p. 1326). In addition to the cultivation of wheat, sorghum, millet, barley,



rice—which was grown as far north as Fargāna (Watson, p. 17)—a variety of fruits, beans, oils and other foodstuffs, important textile industries based on the cultivation of the silkworm (especially in the Marv oasis, which was famous for its silk textiles: Moqaddasī, p. 324), and cotton developed. Cotton appeared in Eastern Turkestan in the 6th/12th century and figured importantly in the trade with China and the rest of the Islamic world (Watson, p. 38; Schafer, p. 205). It formed the basis of the textile industry in Bukhara and K̲w̲ārazm (for the latter see Eṣṭaḳrī, p. 304; see also Bartol'd, 1963, pp. 440-43). Naršaḳī (p. 28, tr. pp. 19-20) writes of a textile workshop (*bayt al-ṭarāz*) in Bukhara that produced carpets, door-hangings, Yazdī cloth, cushions, prayer rugs, and hazel-colored robes for the use of the caliph.

The commercial abilities and acumen of the peoples of Central Asia were noted in a number of sources (see above). According to Eṣṭaḳrī (p. 318) Samarqand was the “port [*forṣa*] of Mā Warā’-al Nahr and the gathering point of the merchants.” Once the goods were collected there they were shipped out to other districts. This city was also noted for a great variety of textiles, bronze kettles, jugs of very fine quality, tents, stirrups, scissors, sal amoniac, mercury, hazel nuts, slaves, and paper, which was supposed to have been brought there by Chinese prisoners of war captured at the battle of the Talas in 133/751 (Moqaddasī, p. 325; Ṭa’ālebī, p. 140). Bukharan textiles were famous throughout the Islamic world. Thus, the Zandanījī cloth developed at the village of Zandana near Bukhara was exported to Iraq, Persia, and India (Naršaḳī, pp. 21-22, tr. pp. 15-16). Participation in this transcontinental trade was not limited to the major urban centers. Even a small city like Paykand, a target of the early Arab invasions, was involved in the trade with China and overseas; it grew wealthy, and became known as the city of merchants (*madīnat al-tojjār*; Naršaḳī, pp. 25-26, tr. p. 18; Ṭabarī, II, p. 1186). Muslim trading colonies, largely of Iranian (especially Khwarazmian) origin (cf. the Muslim merchants and mercenary soldiers, the Orsīya of the K̲azar capital Itil [Lewicki; Golden], the ubiquitous Khwarazmian merchants in Khorasan, see Mas’ūdī, *Morūj*, ed. Pellat, I, p. 213; Eṣṭaḳrī, pp. 304-05), were spread across Eurasia. These were organized societies that controlled the caravan trade, were in contact with one another, and appear to have used a sophisticated system of letters of credit, the ancestor of the modern system of checks (Bartol'd, 1968, p. 110).

The nomadic interest in trade, an essential element of their economy, was not passive. In the Samanid era Muslim merchant-nomadic relations followed the



hospitality requirements of the *qonaq* (guest) system described by Ebn Faẓlān (pp. 94-95), in which the Muslim merchant guest gave his host gifts in exchange for protection and hospitality. The Turk could expect reciprocal hospitality when visiting his friend. Subsequently, these relationships became more complex, as reflected in the Turkic institution expressed in the term *ortaq* “partner” (Agadzhanov, pp. 47, 53; Bartol’d, 1968, p. 110). The Turkic proverb noted by Kāšgarī (II, p. 103) depicts this symbiotic relationship: “as the Turk cannot exist without the Tat [i.e., foreigner, especially Iranian], a hat cannot be without a head,” *Tatsız türk bolmas başsız börk bolmas*. Increasingly, Turkic populations not only came to the border cities for trade, but began to take up sedentary life in them. A number of the towns associated with the Qarluq, Čigil, Oghuz, Kimek, and other Turkic tribal confederations experienced considerable growth in the 5th-6th/11th-12th centuries. Older Sogdian colonies now became Turkicized (Baĭpakov, pp. 192-94). The Iranian Muslim merchants and Sufis were also the most effective conduit for the proselytizing of Islam among the Turkic nomads (Bartol’d, 1968, p. 68).

Ḳvārazm was the great emporium for trade between the Islamic lands and the Turkic nomads and through them the Slavic and Finno-Ugric peoples of the forest and forest-steppe zone. Moqaddasī (pp. 324-25) notes the following products coming through Ḳvārazm: from Volga Bulgaria came “sable, squirrel, ermine, fence, weasel, stote, fox, beaverhide, hares of varied colors, goat-skins, wax, arrows, *tūz* (the bark of a tree, used to wrap around bows), hats, fish glue, fish teeth, castoreum, yellow amber, shagreen leather (*kaymoqt*), honey, hazel nuts, falcons, swords, chain-mail, *kalanj* (a kind of tree from which vessels were made), Slavic slaves, sheep, and cows.” Ḳvārazm itself sent forth “grapes and many raisins, pastries, sesame, garments, furnishings, clothing, blankets, gift-brocade, *malḥam* veils, locks, colored clothing (*āranj* < Pers. *ārang*), bows that only the very strongest can bend, *rekbīn* (buttermilk; Ṭa‘ālebī, p. 142, has *raḥqīn* “buttermilk cheese”; he also adds the “melon called *bāranj* [cf. *bālang*], a single container of which packed in snow brought 700 dirhams), whey, fish and boats.” There were also skilled craftsmen working in silk, ivory, ebony and other wood-carving, and so on, in the principal Khwarazmian city of Gorgānj (Buniyatov, p. 101).

The Turkic trading partners of the Khwarazmians were the Oghuz tribes until the 5th/11th century and then increasingly those of the Qıpchaq/Qangli confederation. Eṣṭakrī (p. 305), writing in the mid-4th/10th century but using earlier sources, attributed the wealth of this city to “trade with the Turks and



livestock-breeding.” They had also by that time become a major entrepot for the slave trade. Caravans went out to and through the Turkic steppes to trade directly with the polyethnic population of Eurasia. The nomads also came to trade. They brought their herds and goods to the border towns, such as Sabrān/Sawrān (northwest of the city of Turkestan in the Kazakh SSR) and Asfijāb (present-day Saïram, east of Chimkent; Ebn Ḥawqal, ed. Kramers, II, p. 511; tr. Kramers, II, p. 488; Moqaddasī, p. 274; *Ḥodūd al-‘ālam*, tr. Minorsky, pp. 118, 119; Bartol’d, *Turkestan* ⁴, pp. 175-77) which became important centers of commerce. Kāšgarī (I, pp. 329, 333, 352, 353, 362) names Sabrān, Sitkūn, Suḡnāq (Sūnāk), Qarāčuq (Fārāb), and Qarnāq as towns of the Oghuz. The Turkic nomads did not, in essence, found many towns, but rather were drawn to already existing urban settlements. Sedentarizing Turks took up residence in them and made them their own. The establishment of a conquest dynasty in the territory significantly accelerated the process (Nagrodzka-Majchrzyk, pp. 112, 116). The leader of the Oghuz, the *yabḡu*, made his winter pasturage (*qışlaq*), Yangikent (Pers. Deh-e Now, Ar. al-Madīna al-Jadīda or al-Qarya al-Ḥadīṭa), into a kind of capital city (Sümer, p. 34). In some instances, political centers, the *orda/ordū* which had become fixed in a particular *qışlaq*, could become the embryo for a town of native Turkic origin. Such a town (e.g., the Kazar capital Itil) inevitably attracted foreign merchants, and in Eurasia these were usually Iranian. From the account of Ebn Faḡlān (pp. 93, 98-99) it would appear that the (Iranian) Khwarazmian language functioned as the lingua franca of the Oghuz in their dealings with the non-Turkic world. Further evidence of the impact of the Central Asian Iranian trading cities on the nomads can be seen in the use of Khwarazmian goods in their bride-prices.

In addition to the goods in the conveyance of which they acted as middlemen the nomads also brought livestock, hides, and dairy products to the sedentary societies. Although rug-making and felt-working were widespread skills among the nomadic population, there developed a class of professional artisans who made a variety of goods (footwear, horse-trappings, dishes, jewelry). These, however, were largely for home consumption (Agadzhanov, pp. 42-43). Trade, as has been noted, was a key element in maintaining an uneasy peace with the nomads. But, it also brought many goods to the oasis cities. Thus, the Saljuq sultan, Sanjar (511-52/1118-57), in his order concerning the appointment of a *šeḡna* over the turbulent Turkmen tribes, commented that the nomads’ “goods and objects which provide increase [i.e., profit] are the cause of the growth of well-being, contentment and benefit for sedentary peoples” (*Materialy* I, p. 314). The Saljuqs and Qarakhanids, in an attempt to



co-opt the nomadic tribal elite into their polities, also began, it has been suggested, to distribute *eqṭā*'s to their servitors. Elements of this system may have dated back to the Samanid times, but, it is by no means clear to what extent it was applied in Central Asia (Gafurov and Litvinskii, II, pp. 247-50). It has also been suggested that the growth of *eqṭā*' was, in part, due to the "silver crisis" of the 5th-6th/11th-12th centuries, the causes of which are still much discussed. The crisis led to a sharp decline in the amount of silver available for use in coins, and this may have played a role in the expansion of the use of various paper instruments of credit (Agadzhanov, pp. 49-52: *qerṭās*, *ḥawāla*, *softaja*, *barat*).

The Mongol era was inaugurated with a series of devastating invasions, great loss of life and massive dislocations in the economy. Skilled workers, specialists in various handicrafts, were identified and exploited by the Mongols, who often moved them to different regions of their empire (Allsen, pp. 210-16), thus reducing further the productive capacities of the already damaged local economies. Chaotic and seemingly capricious taxation caused further ruination. Jovaynī (ed. Qazvīnī, III, p. 77, tr. Boyle, II, p. 599) reports that, at the time of Möngke's (Mengū Qā'ān) accession to the throne (649/1251), the peasants' crops hardly amounted to one half of the provisions (*mo'ūnat*) taken from them. The nomads did not escape the Mongol tax collector either. Economic and fiscal reforms were undertaken during the reign of Möngke (649-58/1251-59) based on the program developed by Maḥmūd Yalavāč, a Khwarazmian (Allsen, pp. 79ff., 147-51). By the late 7th/13th century economic prosperity had been substantially restored to pre-invasion levels or something approaching it (Jovaynī, ed. Qazvīnī, I, pp. 75, 84-85 tr., I, pp. 96-97, 108-09). This was in keeping with Mongol practice elsewhere, which aimed at exploitation of the productive capacities of the conquered territories. The Mongol khans, like all nomads, were keenly interested in trade. With the large-scale influx of nomads, however, some regions of previously sedentary culture (in Semirech'e) were given over to pastoralism. Although it appears, by and large, that *waqf* lands were not seriously tampered with (cf. Arends et al., ed. and tr.), much research remains to be done on the nature of Mongol-era landholding. *Eqṭā*'-type land grants seem to have continued under the name *soyūrḡāl*. The legal status of the peasants is not clear. On the whole, they appear to have remained, much as they had before, retaining certain traditional rights to rent land in their villages. De facto enserfment may have taken place, but there is no direct evidence for its de jure existence. Some artisans, forcibly drawn into state service, became little more than slaves,



working in state-owned *kār-kānas* (Arends, p. 11; Gafurov, pp. 464-69).

Central Asia largely fell into the *ulus* (appanage) of Genghis (Čengīz) Khan's son Čaġatay (Jaġatāy) and his descendants. Under Kebek (709/1309, ca. 718-26/ca. 1318-26), who moved his capital to Transoxania and showed a more than passing interest in its cities, some attempts at administrative, economic, and monetary reforms were made. These proved to be insufficient to stem the chaos to which Chingisid internecine strife and the rivalry between the dynasty and nomadic aristocracy were leading.

BIBLIOGRAPHY

Primary sources. E. Chavannes, *Documents sur les Toukiue (Turcs) Occidentaux*, St. Petersburg, 1900; repr. Taipei, 1969.

Pan Ku (Ban Gu), *Han-shu*, tr. A. F. P. Hulsewé, *China in Central Asia*, Sinica Leidensia 14, Leiden, 1979 (a tr. of chaps. 61, 96).

Ssu-ma Ch'ien (Si-ma Qian), *Shih-chi (Shi-ji)*, tr. B. Watson, *Records of the Grand Historian of China Translated from the Shih chi of Ssu-Ma Chien* II, New York, 1961.

Strabo, *Geography*, ed. A. Meineke, Leipzig, 1898-99.

Quintus Curtius Rufus, *Historiarum Alexandri regis Macedonum libri qui supersunt*, ed. and tr. V. S. Sokolov et al., *Istoriya Aleksandra Makedonskogo*, Moscow, 1963.

Materialy po istorii turkmen i Turkmenii I: VII-XV vv. *Arabskie i persidskie istochniki*, ed. S. L. Volin et al., Moscow and Leningrad, 1939.

A. K. Arends et al., ed. and tr. *Bukharskiĭ vakf* XIII v., Moscow, 1979.

Aḥmad b. Faẓlān, *Resāla*, ed. S. Dahār, Damascus, 1379/1960.

Maḥmūd Kāšġarī, *Dīwān loġat al-Tork*, ed. and tr. R. Dankoff and J. Kelly, *Compendium of the Turkic Dialects*, 3 vols., Sources of Oriental Languages and



Literatures 7, Cambridge, Mass., 1982-85.

Abū Manṣūr ‘Abd-al-Malek Ṭa‘ālebī, *Laṭā‘ef al-ma‘āref*, tr. C. E. Bosworth, *The Book of Curious and Entertaining Information*, Edinburgh, 1968.

Studies. S. G. Agadzhanov, *Sel’dzhukidy i turkmeny v XI-XII vv.*, Ashkhabad, 1973.

T. T. Allsen, *Mongol Imperialism. The Policies of the Grand Qan Mongke in China, Russia, and the Islamic Lands*, Berkeley, 1987.

K. M. Baïpakov, *Srednevekovaya gorodskaya kul’tura yuzhnogo Kazakhstana i Semirech’ya*, Alma-Ata, 1986.

F. Barth, *Nomads of South Persia. The Basseri Tribe of the Khamseh Confederacy*, Boston, 1961.

V. V. Bartol’d, *Sochineniya*, 9 vols., Moscow, 1963-77.

Idem, “Khlopkovodstvo v Sredneĭ Azii s istoricheskikh vremën do prikhoda russkikh,” in *Sochineniia* II/1, 1963, pp. 435-48.

Idem, “K istorii orosheniya Turkestana,” *ibid.*, III, 1965, pp. 97-231.

Idem, “Dvenadtsat’ leksiĭ po istorii turetskikh narodov Sredneĭ Azii,” *ibid.*, V, 1968, pp. 17-192.

M. A. Dandamaev and V. G. Lukonin, *Kul’tura i ekonomika drevnego Irana*, Moscow, 1980.

R. N. Frye, *Bukhara. The Medieval Achievement*, Norman, Okla., 1965. Idem, *The History of Ancient Iran*, Munich, 1984.

B. G. Gafurov, *Tadzhiki. Drevneĭshaya, drevnyaya i srednevekovaya istoriya*, Moscow, 1972.

Idem and B. A. Litvinskii, *Istoriya tadzhikskogo naroda*, 3 vols., Moscow, 1963-65.

H. A. R. Gibb, *The Arab Conquest of Central Asia*, New York, 1923, repr. 1970.

P. B. Golden, “The Urusoba,” in D. Sinor, ed., *Aspects of Altaic Civilization* III, forthcoming.



- I. G. Guliamov, *Istoriya orosheniya Khorezma s drevneishikh vremën do nashikh dneï*, Tashkent, 1957.
- L. F. Holt, *Alexander the Great and Bactria*, Leiden, 1988.
- A. M. Khazanov, *Sotsial'naya istoriya skifov*, Moscow, 1975.
- Idem, *Nomads and the Outside World*, Cambridge, 1984.
- Idem, "Nomads and Oases in Middle Asia," forthcoming.
- T. Lewicki, "Un peuple iranien peu connu: les *Arsîya ou *Orsîya," in Gy. Káldy-Nagy, ed., *Hungaro-Turcica. Studies in Honor of Julius Németh*, Budapest, 1976, pp. 31-33.
- Z. M. Ma'rufov, ed., *Özbek tilining izâhli luğati*, 2 vols., Moscow, 1981.
- V. M. Masson et al., *Ocherki istorii zemledeliya i agrarnykh otnoshenïi v Turkmenistane*, Ashkhabad, 1971.
- I. M. Matley, "The Population and the Land," in E. Allworth, ed., *Central Asia, A Century of Russian Rule*, New York, 1967.
- T. Nagrodzka-Majchrzyk, *Geneza miast u dawnych ludow tureckich (VII-XII s.)*, Wroclaw and Warszawa, 1978.
- K. Sh. Shaniyazov, *K ètnicheskoi istorii uzbekskogo naroda*, Tashkent, 1974.
- E. H. Schafer, *The Golden Peaches of Samarkand*, Berkeley, 1963.
- J. M. Smith, Jr., "Turanian Nomadism and Iranian Politics," *Iranian Studies* 11, 1978, pp. 57-81.
- F. Sümer, *Oghuzlar*, 3rd ed., Istanbul, 1980.
- S. P. Tolstov, *Po sledam drevnekhorezmiïskoi tsivilizatsii*, Moscow and Leningrad, 1948.
- A. M. Watson, *Agricultural Innovation in the Early Islamic World*, Cambridge, 1983.
- E. V. Zeïmal' (Zeimal), "Politicheskaya istoriya drevnei Transoksanii po numizmaticheskim dannym," in V. G. Lukonin, ed., *Kul'tura Vostoka. Drevnost'*



i srednevekov'e, Leningrad, 1978, pp. 192-214.

Idem, "The Political History of Transoxiana," in *Camb. Hist. Iran* III/1, pp. 232-60.