

Eurasia which still lacks in-depth research and thus deserves more attention and efforts by fellow archaeologists.

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Viticulture and Viniculture in the Turfan Region

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In early July 2004 I made a short trip to Turfan. The people there were warm, friendly, extremely hospitable and love dancing and drinking. Although they are good Muslims, drinking is a part of their way of life.¹ Our guide, Dr. Julaiti, a Uyghur ophthalmologist, repeatedly advised us to enjoy wine with our hosts for otherwise, he said, "they would be angry!" He further informed me that Muslims in Turfan not only drank, but also performed religious rituals somewhat differently than Muslims of other regions. There is, he continued, a slight Buddhist flavor in their ritual performances and music. As Dr. Julaiti is a scholar and seasoned traveler of many Islamic countries, I trust his judgment. In fact, it is not at all surprising that there are some Buddhist survivals in Turfan since this was the predominant religion of the country in earlier centuries. This raises the interesting question of whether Buddhists in ancient Turfan drank alcoholic beverages?

The obvious answer, of course, is no; Buddhists are not supposed to drink. The Turfan region is well known for its viticulture, but not necessarily for its wine. Dotted the landscape are numerous shelters used for drying grapes to make raisins; the current winery of the region is a recent phenomenon following French techniques and tastes. However, the people of Turfan often prefer distilled grain alcohol to grape wine. In short, even though there is a long tradition of viticulture, or grape cultivation, viniculture, the

making of wine and its associated culture and rituals, may not be an ancient tradition in Turfan.

However, current conditions and common sense cannot answer historical questions, especially for the oases along the Central Asian Silk Road. Turfan and Dunhuang, the gate to the Chinese interior, have preserved many historical documents, some of which indicate that viticulture began there in Han times and developed into a mature viniculture by the T'ang. Moreover, this development was linked to the spread of Buddhism into this region.

Viticulture is as ancient as agriculture. Recent research traces wine back to the Neolithic period. Egypt, Mesopotamia and the Holy Land all had their wine drinking traditions. Viticulture reached its apex in the ancient world in the Greco-Roman era where grape cultivation, wine making, and special drinking paraphernalia were encased in a complex set of rituals, and where the Dionysus-Bacchus cult made drinking an essential component of public festivals [McGovern 2003; Unwin 1991: 94-133]. In the Mediterranean world, wine was an important sector of the economy and was extensively and widely traded. But this is not the case of East Asia or even the eastern part of Central Asia. Ancient Chinese did drink alcohol, but this was produced from fermented food grains. As for Turfan and the Central Asian oases, they had to wait for the introduction of advanced irrigation technology that made the

cultivation of the vine feasible in this arid environment. Therefore, viticulture and eventually viniculture came with the elaboration of the Silk Road.

Zhang Qian probably brought knowledge of viticulture to China. But only after General Li Guangli made his expeditions to Dawan (Ferghana) and obtained the "heavenly horses" did Han Wudi sent missions back to Dawan to procure seeds of alfalfa and the grape for China. According to *Hanshu*, the Han History, Wudi made this decision because there were many heavenly horses to feed and many foreign envoys to be entertained [Ban Gu 1964: 96a/3895]. In this he was following the practice of ancient Iran and neighboring regions such as western Central Asia where alfalfa was important in breeding and feeding high quality horses. At the same time Wudi obtained the alfalfa from Dawan, he became aware of the viticulture of that region [Laufer 1967: 208-245]. In this period, around 100 BCE, Dawan and Afghanistan, then under the control of the Yuezhi-Kushans, already had a mature viniculture. Elites stored large quantities of wine which could last for several decades before it soured [Ban Gu 1964: 96a/3894]. However, there is no indication that the Han Chinese made wine out the grapes.

Meanwhile, the Han government took measures to protect the trade routes extending from the oases of Central Asia through the Hexi Corridor between the Qilian Mountains and the Gobi Desert. Wudi had a line of garrison towns built in Hexi Corridor, and the Great Wall extended to the Jade Gate and to the western most of these garrison towns, Dunhuang. To establish a military presence in the frontier and to ease the problem of transporting food grains to these remote areas, the Han government imple-

mented the *tuntian* system which placed garrisons around the watch towers and in well-irrigated agricultural colonies. Thus, the soldiers in the frontier could cultivate the land during the periods of peace. The Han government soon extended the *tuntian* system beyond the Jade Gate, with Turfan as one of its major headquarters. As Turfan controlled the lines of communications between the Western Region and the Chinese interior, this garrison, called Wuji Jiaowei, was the center of all military-agricultural colonies beyond the Jade Gate. Though Han government did not always control the Western Region, agriculture developed rapidly in all the oases, thanks to the profit of the passing trade and the introduction of irrigation technology. After a couple of hundreds year, the region from Dunhuang to Turfan became a fertile land growing food grains, mulberries for silk, hemp, and grape. Because of its strategic location and agricultural riches, the Han government stationed garrisons and *tuntian* headquarters wherever possible and strenuously fought the Xiongnu for control of the region [Fan Ye 1965: 88/2914]. In consequence, viticulture along with sericulture reached Turfan by the first or the second centuries, the time of the Later Han.

It is during this period that the volume of trade along the Silk Road accelerated. In Palmyra, the caravan city in Syria desert and a principal trading depot of the eastern Roman frontier, many pieces of Han silk textiles have been recovered from tombs, striking testimony to the fact that Han China and the Mediterranean world were commercially linked by the Silk Road. However, not all these silks were necessarily produced in the Han territory inside the Great Wall. A polychrome silk of compound weave from Palmyra depicts camels under a vineyard [Kat.

240 in Schmidt-Colinet 2000, Tafel 96, 97]. This unique piece has attracted the notice of scholars, and Elfriede Regina Knauer, among others, believes it was made in Turfan [Knauer 1998: 111n92]. I agree with Knauer's judgment, not only because viticulture was established in Turfan during the Later Han, but also because of the presence there of sericulture. If this is the case, it is not only viticulture that reached Turfan but also a new industry and element of material culture worthily expressed in this exquisite silk textile.

The next question is whether viniculture accompanied grape cultivation to Turfan and other Central Asian oases. As mentioned above, when Han China brought in grape cultivation, viticulture and viniculture were already well established in the western part of Central Asia, that is, in the regions of modern day northern Afghanistan and Uzbekistan. Moreover, because yeast for fermentation naturally occurs in grape skins, the transition to wine making in the oases of eastern Central Asia seems an easy and obvious step. This, however, did not happen in the Han period.

Viniculture in northern Afghanistan and Uzbekistan developed under Hellenistic influence. Starting in the later fourth century BCE, Greek colonists brought in vineyards, wine making, drinking vessels and other aspects of the Dionysian festivals. After nomadic peoples took over Hellenistic Bactria, viniculture persisted and flourished under the Kushan Empire. During the first couple centuries CE when the Kushan Empire also flourished, thanks to the expansion of the Silk Road trade passing through its territory, the center of Buddhist activity migrated from the lower Ganges to northwest region of South Asia and Afghanistan, the core territory of the Kushans. Greco-Roman influence, including

viniculture, is well expressed in Gandharan Buddhist art. Amphorae, craters, goblets and all kinds of vessels used in Dionysus-Bacchus festivals appear in the many drinking scenes in stone sculptures associated with Buddhist monuments and shrines. The motifs of grapes and grape vines in these bacchanalian scenes indicate that the beverage depicted was grape wine.

The Buddhist institutions and practices developed in the Kushan era then spread to Central Asia and China. Unfortunately, there is a dearth of Chinese information concerning the Western Region after the collapse of the Han central power. Archaeological finds indicate the Silk Road trade continued, and so did the development of viticulture, probably also viniculture. When the Western Region finally emerged from the darkness, Turfan, now called Gaochang in the Chinese records, is a country famous for grape wine, in addition to its millets, wheat, sericulture and many varieties of fruit. People there worshipped a number of local gods but also adhered to Buddhism [Wei Zheng et al. 1973: 83/1847]. The Gaochang state survived the Sui Dynasty, but was conquered by the T'ang. The history of the T'ang, written in the Song Dynasty, repeats the enumeration of the local products, but adds a new item, cotton [Liu Xu 1975: 198/5294]. Native to India, cotton reached Turfan as a cultivated crop in the post-Han and pre-T'ang period, along with viniculture and Buddhism.

The final question is did the Buddhist population of Turfan drink wine? At various times, Central Asia people have been followers of Buddhism, Manichaeism, and Islam, all of which formally ban the consumption of alcohol. However, despite such prohibitions, they regularly drank

wine for centuries. For example, while Manichaeism doctrine banned alcohol, their monasteries in Qocho nonetheless produced wine.² It is likely that Buddhists behaved similarly. There is no direct evidence of wine-drinking among Buddhists in Turfan, but there is abundant evidence that wine-drinking was a common practice of Buddhists living on the Tang frontier, particularly in Dunhuang. A large number of manuscripts from Dunhuang generated by lay Buddhist societies (*shēyì*) document their establishment, regulations, etc. A special kind of document, called a *Shēyì Zhuantie*, announcing Buddhist festivals, social events and business meetings, was circulated among members of lay Buddhist organizations. Almost all of these notices include a statement concerning the punishment for tardiness and absence: "Each of those who are late should pay the fine of one horn of wine, and of those who do not come at all should pay the fine of half a jar of wine, to the group. The wine will be divided among all the members." Fines of the same type also appear in regulations for lay societies [Ning Ke and Hao Chunwen 1997]. No doubt wine played an indispensable role in both social and religious activities of Buddhism. But these announcements never mention the kind of wine involved; they simply use the character *jiu*, the generic term for alcoholic beverage.

Jiu also appears frequently as an item in accounts of monastic expenditures, some of which have survived in the famous caves of the Mogao Grottoes, in Dunhuang. Buddhist monasteries provided oil, food grains and wine (*jiu*) for the Spring festivals, Autumn festivals, and parades of Buddha images. All the participants, members of lay societies and monks, enjoyed the food and wine. There were also many other occasions when the

monasteries had to provide food and wine, sometimes only for monks, sometimes for visitors and the artisans working there. It seems that the monasteries of Dunhuang stored oil and food grains, but paid for wine with their food grains. Two different verbs are used to express "buying wine": *gujiu*, and *wojiu*. The former is a straightforward phrase "to buy wine," but the meaning of the latter is unclear. Probably due to this ambiguity, some scholars insist that the wines used in Buddhist festivals were made from grain. If the term *wojiu* meant to make wine with the allotted wheat or millet, then the wine was fermented from food grain like traditional Chinese wine. However, as the food grain was allotted for immediate use, festival banquets or meals for workers, this seems most unlikely. For instance, an account of expenditure of Jingtu Monastery in Dunhuang, dated in the period 936-947, notes that some millet was spent for both *gujiu* and *wojiu*, for the purpose of a forthcoming festival [ibid.: 774; Pelliot 2032 back]. An account dated in 991 for the same monastery list millets paid for the principal of wine (*jiubensu*) [ibid.: 777; Pelliot 4907]. Here the character *ben* could either be the capital for investment in trading wine, or the millet used for making wine. However, millet is a better source for vinegar than for wine. In China, since ancient times, the most common materials for fermenting wine have been rice and sorghum. In Dunhuang, during the T'ang and post-T'ang period, millet, sometimes wheat, was currency for payment of goods. On the same account, millet was used to pay for activities of lay societies such as printing Buddha images. Millet and wheat were local agricultural products, but rice and sorghum were not. Thus in this case, the millet is most likely the payment for grape wine. In short, one

cannot exclude the possibility that the Buddhists in Dunhuang, lay persons and monks, drank grape wine. There was no reason why the residents of Dunhuang could not have obtained the well known grape wine of Turfan a short distance to their west.

Evidently, Buddhists in Dunhuang drank wine during the T'ang time, and Turfan was famous for producing grape wine. Based on these two facts, one may speculate that during the T'ang times Buddhists, lay persons and monks, enjoyed grape wine at many festivals and social occasions. This reminds us of one of the famous lines on frontier military life by the T'ang poet Li Bo:

Holding a glowing goblet
filled with grape wine,
Following the melody of a
lute, I am about to drink,
The neighing horse urges me
to ride on him.
Do not laugh if you see me
lying drunk on the battle field,
Few soldiers ever came back
from the military expeditions,
anyway.

Li Bo did not actually serve on the western frontier region of the T'ang Empire. His poem simply evokes romanticized picture of the frontier life: music played on lute, neighing horses ready to depart, and soldiers dinking grape wine to pluck up their courage for coming battle and death.

The wines of Turfan retained their fame well into the Mongolian era. The Mongols were used to wine made from mare's milk, but quickly acquired a taste for grape wine after their conquest of Central Asia. Marco Polo mentioned that Carachoco, the name of Turfan of his time, produced good wine and corn (millet) [Polo 1938: 156]. The famous scholar of the Il-Khans, Rashid al-Din, notes that Qara-

Khocho was a town of Uyghurs and produced good wine [Rashid al-Din 1971: 286]. The wine of Turfan was so well known that the official history of the Mongol Yuan Dynasty records the tribute of grape wine (*putao jiu*) from there [Yuanshi 1978: Ch. 34, p. 755, line 2]. This means that the high quality of Turfan wine was known across the continent and thus, at the time, it was probably the best known vintage in the world. The peoples of Turfan, whether Buddhists or Muslims, always seem to enjoy wine. The current viniculture of there, though now integrated with the global market, has deep roots in history.

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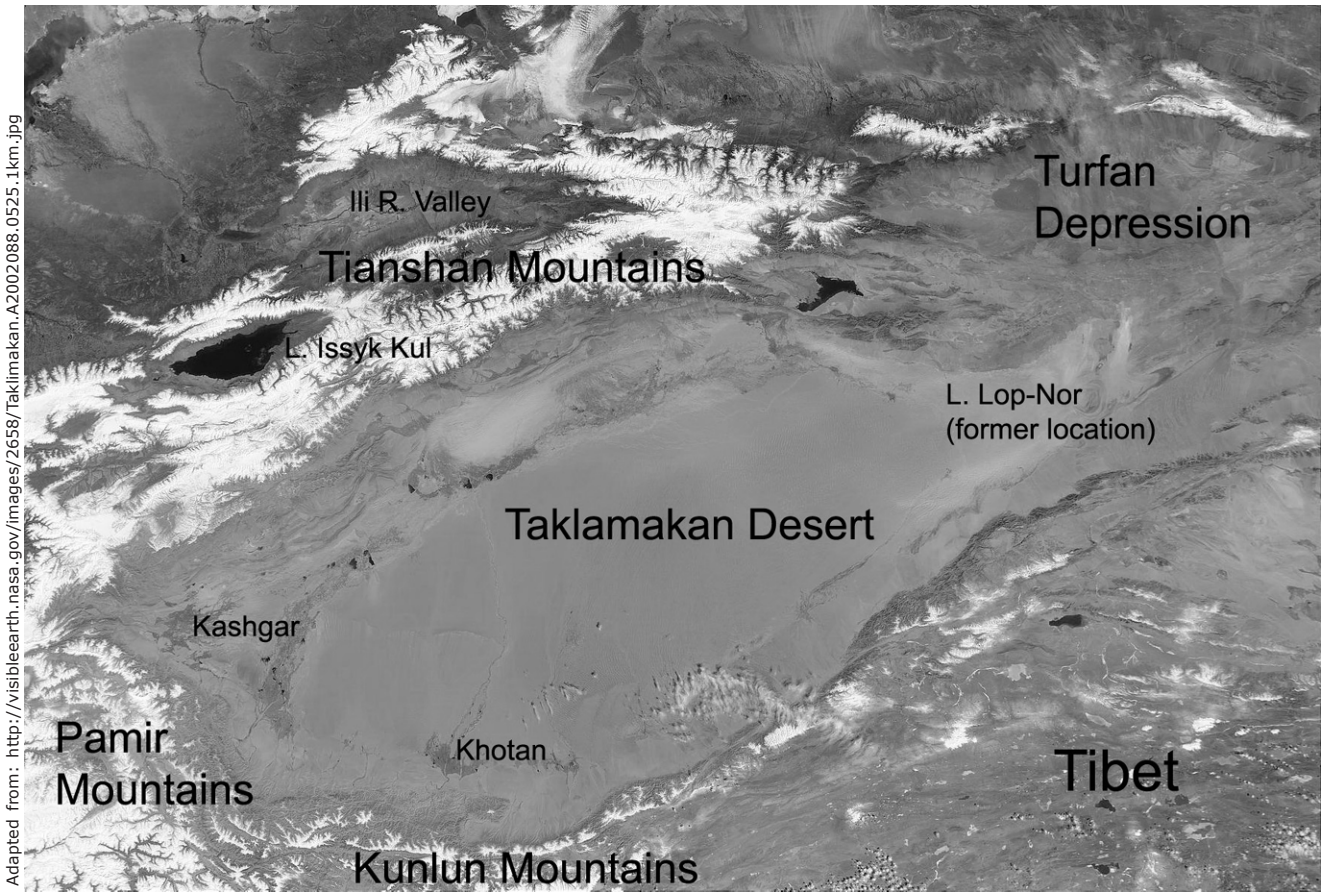
Notes

1. The Koran bans wine drinking as a great sin, but promised Muslims wine in Paradise. Under Islamic rule, viticulture suffered at the early stage of conquest, but recovered by the eleventh century. See Unwin 1991: 150-

155. As for eastern Turkistan, namely today's Xinjiang Autonomous Region of China, grape wine was produced, but drinking was held in contempt as immoral behavior in the early twentieth century. See Jarring 1993: 1, 13.
2. For a Manichaeian monastery with wine, see Lieu 1985: 200-201.

Chinese Characters

<i>gujiu</i>	沽酒
<i>jiu</i>	酒
<i>jiubensu</i>	酒本粟
<i>Shesi Zhuantie</i>	社司转帖
<i>sheyi</i>	社邑
<i>wojiu</i>	卧酒



Southern Xinjiang as seen from a NASA satellite.