

A MEDIEVAL BURMESE ORCHESTRA

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Harvey's *History of Burma* (1924), includes a translation by Arthur Waley of the poem written by Po Chü-i on the dancers and musicians presented to the Chinese emperor in 802 by the king of Pyü. In view of Dr. Waley's manifest delight in music and the dance it seems doubly appropriate therefore to offer this study of the other sources concerning these musicians as a tribute for his seventieth birthday.

In A.D. 794 the state of Nan-chao, which occupied Yünnan and some adjacent territories, returned to its traditional allegiance to the T'ang court, after having been allied to the Tibetans for some forty years. The rulers of Nan-chao resumed tributary relations with the Chinese, and embassies were sent to Ch'ang-an in 794, 796, and 800.¹ The last of these embassies presented the Emperor with a troupe of Nan-chao musicians and dancers who aroused some interest at court.² Their presentation was arranged by the Provincial Governor of Western Szechuan, Wei Kao 韋皋 who had been primarily responsible for the resumption of the Chinese-Nan-chao alliance against the Tibetans on the south-western border and who was keenly interested in music.³

To the Chinese, the music of the Nan-chao court was by no means completely exotic. The ruling clans had long been subjected to the influence of Chinese culture, though such influences are unlikely to have been perfectly assimilated. There is clear proof of direct Chinese influence on the music of their court, for after Wei Kao's treaty had been concluded and the allegiance of Nan-chao accepted in 794, the Chinese envoy to the Nan-chao, Yüan Tz'ü 袁滋, was entertained at a banquet during the course of which the King pointed out to him some aged singers and flute players who were the only surviving members of a Kucha-style orchestra presented by the Emperor Hsüan-tsung to one of his predecessors.⁴

At this period Nan-chao had a wide sphere of influence in the Tibeto-Burmese-Chinese border region. Among the peoples with whom they were in communication were the Pyü of upper Burma, whose kingdom they later destroyed in 832.⁵ Following the resumption of relations between the Nan-chao and the Chinese court, the Pyü wished to follow the example of

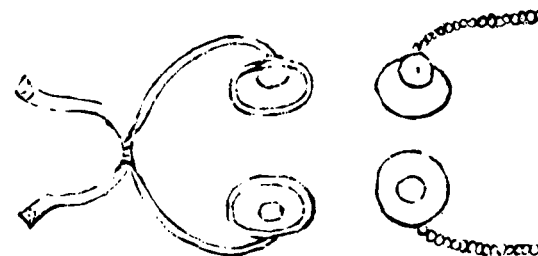


FIG. 1. Cymbals from *Yüeh shu*

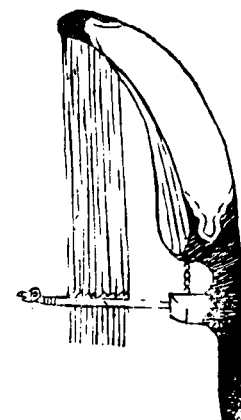


FIG. 2. Harp from *Yüeh shu*

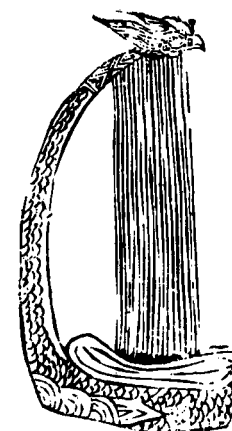


FIG. 4. Phoenix headed harp from *Yüeh shu*



FIG. 3. Harp with tuning pegs, Candi Barabudur



FIG. 5. Modern Mon "crocodile" zither

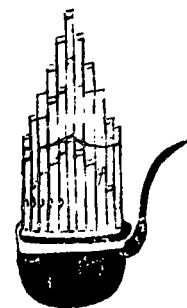


FIG. 6. *Shêng* from *Yüeh shu*

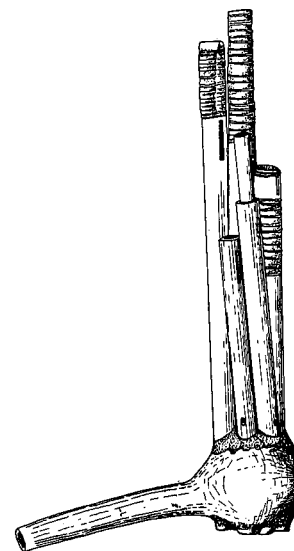


FIG. 7. Mouth organ from Shan States (Shorto collection)
(Drawing by Dr. F. R. Allchin)

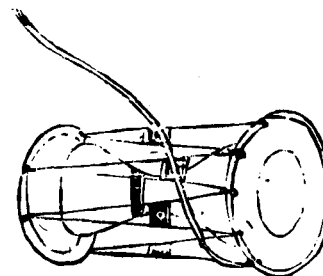


FIG. 8. Waist drum from *Yüeh shu*

their neighbours. There is little doubt that possible advantages in the exchange of gifts—perhaps with the encouragement of the example of Nan-chao's generous reception—rather than any desire to enter into anything more than a purely formal political relationship with China, provided the motive.

With the precedent of the Nan-chao embassy of 800 in mind the Pyü king sent his son Sunanda and his Commander-in-chief (*mahāsena*) at the head of an embassy which included a troupe of 35 musicians and dancers. These were presented to the throne at the New Year celebrations in 802.⁶ Their performance aroused a good deal of interest. Both Po Chü-i and Yüan Chên wrote poems on the occasion, their reactions combining orthodox disapproval of things barbarian with pleasure in the exotic dancing. Such disapproval of foreign music, however, can have been no more than a formal public attitude for during T'ang times musical taste, both at Court and in society at large, had a preference for foreign music, especially that from Central Asia.⁷

Both Po Chü-i and Yüan Chên make the point, in their poems, that the performance was described and recorded by the official historiographers. Four short descriptions of the embassy survive, in *T'ang Hui-yao* 33, *T'ang Hui-yao* 100, *Chiu T'ang-shu* 197 and the Sung dynasty *Yüeh shu* 159, which clearly derive from a common source, probably the lost Veritable Records (*Shih-lu*) of the reign of Tê-tsung. The most complete among them is the first, which reads:

"In the first month 802, the Kingdom of Pyü brought tribute. In all there were 12 pieces [of music]. Thirty-five musicians were brought to court. The pieces were all expositions of stories from the Buddhist *sūtras* and *śāstras*. Pyü lies to the south-west of Yünnan, and is close to India, which is the reason why so many expositions of Buddhist stories occur in their music. When they perform a piece they all chant in an even tone, each of them evenly opening and closing their fingers to give the appearance of marking the rhythm. They never fail to keep time together. It is something like the Chinese *chê-chih* dance."⁸

The other historical sources dealing with the period merely note the arrival of the embassy.

Hsin T'ang-shu 222C, however, contains a very detailed description of the musicians, which is translated below.⁹ The sources from which the *Hsin T'ang-shu*'s chapters on foreign countries were compiled are unknown, and the origin of this account can only be conjectured. One possibility is that it is a full version of the record made by the historiographers at the New Year celebrations in 802. But it seems more likely that it was based on the description of the music, the instruments and the dances which were compiled by Wei Kao when they arrived in Ch'êng-tu and later presented

to the throne together with a set of pictures. It was one of the duties of provincial officials to collect details about foreign peoples and report them to the central authorities, and we know that when the Nan-chao musicians were sent to court Wei Kao had written down their pieces in notation and sent his report to the capital.¹⁰

Since the description of the orchestra is obviously the work of a musician, it is perhaps more likely to have been written by Wei Kao than by the scribes of the Historiographer's office. Whoever wrote it, it is an excellent and detailed piece of description, even though the editors of the *Hsin T'ang shu*, in their customary passion for compression, have in places abbreviated the text until the sense is far from clear.

Beside being of great interest in connexion with the Pyū people, about whom we are not very fully informed, it has great musical interest, for it is the earliest known description of an orchestra which specifies the tuning of the instruments. No similar document exists for Western music until considerably later, and there is nothing comparable for any other Asian orchestra—ironically enough not even for a Chinese one.

The Pyū were the first of the Tibeto-Burman people whose presence in Burma can be established from historical records. But although they seem to have spoken a language which was fairly closely related to that of the Burmans, with whom they shared other cultural traits, the musical performance recorded in *Hsin T'ang shu* cannot be called characteristically Burmese.

Our earliest knowledge of Burmese music, apart from the present text, depends upon gleanings from XIth–XIIth-century inscriptions at Pagan, but these do not suggest an orchestra of the type employed by the Pyū.¹¹ In the eighteenth century this type of orchestra underwent further changes as the result of instruments imported from Thailand after the sack of Ayuthia by Hsinbyushin in 1767, and of the important modifications and innovations made by Myawadiwungyi U sa in the same period. Nor indeed, if we are to accept the tradition recorded by U Khin Zaw as being anything more than the expression of an ideal rather than of an actual situation, can the Pyū have shared the traditional attitude to music of Burmese in more recent times.

"Indeed the Buddhist religion so frowns upon music that it was practised rather shamefacedly, and its devotees are often called *phet-khwet-sa*, eaters of leaves, *i.e.* vagabonds. Even so recently as last year (1939) a learned old Burmese gentleman loth to depart this life without imparting all his Burmese learning concluded a series of Burmese articles on Burmese music and dancing with an apology for having indulged in such frivolities."¹²

In the case of the Pyū, far from the Buddhist religion frowning upon music and the dance, all the songs whose names were noted by the *Hsin T'ang shu* were on Buddhist themes, and each was accompanied by dancing.

The instruments—bells, cymbals, conches, harps, lutes, zithers, stick-zithers, flutes, mouth-organs, drums—do not include any instrument which is specifically Burmese, except for the crocodile-shaped zither, clearly the ancestor of the *migyaung saung*.

The instruments mentioned in the Pagan inscriptions also were not the same as those of the Pyū orchestra. The Mon inscriptions, dating from the XIth century, mention drums, frog-drums, drum-chimes, mouth-organs, reed-horns, flutes, and a number of unidentified instruments.¹³ The slightly later (XI–XIIIth-century) Burmese inscriptions mention drums, side-drums, cymbals, reed-horns, horns, trumpets, harps, dulcimers, bell-chimes and mouth-organs, together with singers, dancers, and what appear to be performers who combined singing and dancing.¹⁴ The inscriptions also give us a rather clear picture of the use of musicians in the course of a series of great ceremonies. Their main function seems to have been to punctuate rather than to accompany the ceremonial. A typical instance is to be seen in the Kyangitthas Palace Inscription,¹⁵ where, after the Brahmins had made offerings of *paritta* water,

"Then they sounded all the drum-chimes, flutes, trumpets and mouth-organs, made the *lāthar* and the *mhāsār* rumble, beat the drum and blew the *kakā*; and all the troops raised a shout."

A similar practice may be observed in Burma today, and it may be that the role of music was analogous with that of the drum in Buddhist temples where it serves to draw Heaven's attention to a prayer or offering.

The Pyū orchestra lacks the gong and drum chimes, the *kyewaing* and *hsaingwaing*, which occur in the inscriptions and are typical of later Burmese music. The *pattala*, which is either a xylophone or a metallophone and which is depicted in Java in the IXth century¹⁶ is lacking in both the Pyū and Pagan orchestras. Later Chinese sources state that it was of Burmese origin, but it seems possible that together with the gong and drum-chime, two other characteristic Burmese instruments whose absence has been noted, it was introduced to Burma through the Mons, whatever its ultimate origin. The fiddle also does not appear in the Pyū orchestra, and the grounds for assuming the *saro* of the Pagan inscriptions to be equivalent to modern Burmese *thayaw*, fiddle, appear to be defective.¹⁷

But if the orchestra is not particularly Burmese, nor does it appear to be modern Indian. The conch (*saṅkha*) and the phoenix-headed harp are characteristic, and were employed in the Indian orchestra maintained at the T'ang court. The stick-zithers too are a common Indian instrument. But the conch is to be expected in the Buddhist context, while the phoenix-headed harp, unlike the Indian harp, had tuning pegs, and all the other instruments which are known as occurring in the Indian orchestras are also to be found elsewhere in South-East Asia. Both the *shēng* mouth-organ and the gourd-bodied stick-zither are common throughout South-East Asia and

were known to the Chinese as South-East Asian instruments. When Sui Yang-ti conquered Lin-i at the beginning of the VIIth century he captured Funanese musicians who employed gourd-bodied stick-zithers. But here again India comes into the picture, for we are told that this was an instrument of which only the Indian musicians at the Chinese court had the tradition, and that it was not suitable to rank with the instruments of the court orchestras. The Lute (*pi-pa*) may well have been transmitted to the Pyū from India, or even possibly from Nan-chao, for it was an important instrument in Kucha music which, as we have seen, was known there during the VIIIth century. In any case it is an importation from its place of origin in Iran. Flutes decorated with animal heads and double-ended transverse flutes are well known among the peoples of the Sino-Burmese borders and elsewhere in South East Asia.

Of the percussion, little can be said. It is, however, worth noting that Po Chū-i's poem speaks of a sounding of brazen drums¹⁸ at the beginning of the performance, in a context which recalls the use of the orchestra for interjections during ceremonies noted in the Pagan inscriptions.

A further difficulty complicates any comparative study of this orchestra. At the end of the text in *Hsin T'ang-shu* we are suddenly told that all the musicians were *k'un-lun*.

"All the musicians were *k'un-lun*. They were dressed in deep red cotton fabric and wore aprons of *chao-hsia* which they called *kai-man*(?). Around their shoulders was wrapped a piece of *chao-hsia* passing under their armpit. They wore gold or jewelled bracelets on their arms and legs. They wore golden caps, and ear pendants in their left and right ears."¹⁹

The term *k'un-lun* always presents difficulties, sometimes meaning simply a dark-skinned foreigner, sometimes having a more specific meaning. It is possible that here it relates to the Mons, who at this period certainly occupied lower Burma in which region we should locate the *K'un-lun kuo* mentioned in the *Man shu*.²⁰ Moreover, it is suggestive that several of the instruments which no longer play a part in Burmese music proper survive in popular use among the Mon peoples of southern Burma. But above all, the description is reminiscent of the Funanese dancers and musicians who served at the court of Lin-i. Not only was this dress similar, but they too danced in pairs and employed a comparable range of instruments.²¹ It is clear that both Lin-i and in this contest Funan were included by the Chinese among the *k'un-lun* kingdoms, and various interesting parallels have been shown between these kingdoms and Lower Burma.²²

Upon the dances themselves, there is very little information. The *Hsin T'ang-shu* passage tells us that

"At the beginning of the performance of a number, there is a compère (*tsan-ché*) who first expounds the meaning of the piece. The form of

the dances accords with the [subject of the] piece. Either 2, 6, 4, 8 or 10 dancers are employed. All wear pearl head-dresses. They make obeisance, bowing their heads to the ground, to signify the end of a section. The [subject of the] music is understood through five-fold interpretation."

The similarity with the Chinese *chê-chih* dance, which was noted by *T'ang hui-yao*, again suggests a dance with two dancers or ranks of dancers responding to one another's movements.²³ There is certainly no resemblance to the dances performed by the Nan-chao troupe, whose members performed complicated evolutions forming the characters "Nan chao" and so forth.

The dances were based on Indian legends of Buddhist origin, but from the scant details of the descriptions it is quite impossible to say whether the dances themselves were of Indian origin. The obeisance, which one would expect at the beginning as well as the end of the piece, is typical of Indian-influenced dancing throughout South East Asia to this day, but again provides no direct evidence. The *Hsin T'ang-shu* records the Pyū titles of the dances in transcription, but it has proved impossible to equate these with any of the small Pyū vocabulary otherwise known through inscriptions.²³

At the present state of our knowledge of the history of South East Asian music, and in the absence of further documentation and the lost pictures of Wei Kao which would certainly have clarified the text, it would be rash to attempt any too precise identification of this orchestra. It does, however, seem likely that the orchestra sent by the Pyū king to the T'ang court was based upon common South-East Asian instruments such as the mouth-organ, clapper, drum and flute, with the addition of more sophisticated instruments from elsewhere—particularly from India.

The importance of the present text for the historical study of South East Asian music was already appreciated by Courant, who used it in the preparation of his admirable study of Chinese music.²³ More recently a complete translation was published in a study of Burmese music by Khin Zaw,²⁴ but this translation is neither annotated nor accurate, and we feel that there is room for a fresh translation and for some attempt to place the information given in *Hsin T'ang-shu* in the general context of our knowledge of South-East Asian music.

NOTES TO THE INTRODUCTION

¹ See *TFYK* 972, p. 5a; *TFYK* 976, p. 7b; *TFYK* 996, p. 6a; *THY* 99, p. 1764, etc.

² See *HTS* 221*hsia*, pp. 106-112; *THY* 33, p. 620.

³ For Wei Kao's career see his biographies in *CTS* 140, *HTS* 158.

⁴ See *TCTC* 235, p. 7561.

⁵ See *Man shu*.

⁶ See *TFYK* 996, p. 6a; *TCTC* 236, p. 7599; *THY* 100, p. 1795; *THY* 33, p. 620.

⁷ For Po Chü-i's poem see *Po Hsiang-shan chi* 3, p. 44, and Waley's translation in Harvey, *History of Burma*, pp. 15, 16. Yüan Chen's poem is in *Yüan-Shih Ch'ang-ch'ing chi* 24, p. 6a-b.

⁸ *THY* 33, p. 620.

⁹ *HTS* 222 *hsia*, pp. 9a, line 6, to 11a, line 2.

¹⁰ See *T'ang yü-lin* 3, p. 115. This work contains an amusing story of how a member of the Imperial Conservatory saw a rehearsal of the dances at an inn on the road to the capital, and immediately hurried back so that the imperial musicians were able to present the piece themselves before the Embassy arrived.

¹¹ See below, and notes 13, 14. In particular, the inscriptions do not mention the complex string section which the Pyü employed, comprising harps, zithers, lutes and stick-zithers. It is probable that too much weight should not be placed on this since the inscriptions describe ceremonies very different from these ritual dances. The instruments mentioned in Claudie Marcel-Dubois: *Les instruments de musique de l'Inde ancienne*, Paris, 1941, p. 209 *seq.* are by no means exhaustive.

¹² See *BSOAS* (1940), p. 747.

¹³ The following are the instruments mentioned in the Mon inscriptions.

<i>pham</i>	drum
<i>singir</i>	drum
<i>pham klo'</i>	frog-drum
<i>tseu</i>	? mouth-organ (? cf. <i>sheng</i>)
<i>tapüw</i>	reed-horn
<i>murā</i>	flute (? sanscrit <i>murāli</i>)
<i>kakā</i>	unidentified wind instrument
<i>lāthar</i>	unidentified: The verb governing these two instruments means "to make to rumble"
<i>mhāsār</i>	

We are indebted to our friend Mr. H. Shorto for this Mon material.

¹⁴ The instruments mentioned in the Burmese inscriptions are

<i>can</i>	drum
<i>pasasan</i>	side-drum
<i>khwakkhwan</i>	cymbals
<i>tapüw</i>	reed-horn (cf. Mon <i>tapüw</i>)
<i>nhan</i>	horn
<i>khara</i>	trumpet
<i>narancra</i>	trumpet
<i>con</i>	harp
<i>candra</i>	dulcimer
<i>nonnan</i>	bell-chime
<i>saro</i>	(see note 17 below)

Beside dancers and singers the inscriptions mention *pantya-san* who appear to have combined dancing and singing.

¹⁵ See *Epig. Birm.* III, i:F:34, 35. We are indebted to Mr. H. S. Shorto for allowing us to quote from his new translation of this important inscription before publication.

¹⁶ This may be the instrument shown on a bas relief on Barabudur. See T. van Erp and N. J. Krom, *Beschrijving van Barabudur* (S. Gravenhage, 1920), Platen, Vol. I: Serie O Plaat V, No. 39.

¹⁷ Luce considers that the *saro* of the Pagan inscriptions (see note 14 above) is the equivalent of modern Burmese *thayaw*. But *thayaw* (recte: *tayaw*) would normally derive from a form with a dental initial, which is in fact to be found in Mon *draw* and the cognate Khmer form *trê*. It is tempting to see in *saro* some connexion with the Mon *srey*—mouth-organ (*khêne*), but this is no more than a preliminary hypothesis.

¹⁸ *T'ung-ku* 銅鼓. This may mean a gong, or *t'ung* "brazen" may be used in a figurative sense. All the drums mentioned in the text are skin-headed, and no gong appears. The drums are mentioned at the beginning of the dance, and may perhaps be the small drums used by the compères. There is certainly no connexion with the famous bronze drums of the southern Chinese borderlands—though these do depict men dancing to the sound of mouth-organs and drums. There is at present no evidence

of the existence of the Dong-son culture, with which these drums are linked, in Burma.

¹⁹ *HTS* 222 *hsia*, p. 11a.

²⁰ *Man shu* 10, p. 46

²¹ See the description of the Funan orchestra employed at the Chinese court in *TT* 146, p. 762 and translated by Demiéville, *La musique émerge au Japon: Études Asiatiques* (1925), I, pp. 199–226, in particular p. 220 ff. The instruments which are listed by *T'ung tien* 146 and are admittedly incomplete, comprised the following: goatskin drum (*chieh-ku*), *tu-t'an* drum 都曇, *mao-yüan* drum 毛員, pan-pipe (*hsiao*), transverse flute, reed-pipe (*pi-li* 篳篥) bronze handbells (*t'ung-pa*) and conch. Besides these, we know from *THY* 33 p. 620 that the orchestra originally employed gourd-bodied stick-zithers, which were abandoned as unsuitable for court use.

²² See *CTS* 197 p. la-b. R. A. Stein, *Le Lin-yi, Han-hsüeh* II, 1, 2. (Appendix VI, *L'ethnique du Lin-yi*) has dealt exhaustively with this problem.

²³ There is some confusion over the form of the *ché-chih* dance. The middle *T'ang* form is described in a quotation from the *T'ang tsa-shuo* 唐雜說 preserved in Ch'ên Ch'ang's *Yüeh shu* 184. This passage says that there were three variant tunes in different modes going under this name. "They employed two boys to dance it, whose dresses and caps were sewn with golden bells which sounded as they moved. At the beginning of the dance the two were concealed in lotus flowers which opened to reveal them. They then danced responding to one another and advancing upon one another." Ch'ên Ch'ang notes that this was evidently quite different from the dance which went under the same name in Sung times. *Mêng chi pi-t'an* 5 (Hu Tao-ching's *Chiao-chêng*, p. 228) says that it was of the same type as the *Hun-t'o chieh* mentioned in the *Chieh-ku lu* 羯鼓錄. In modern texts of this work, this name does not appear, but it is mentioned in the *Yüeh-fu tsa-lu*, p. 25, 樂府雜錄 and elsewhere. It was a dance of barbarian origin. *Yüeh-fu tsa-lu*, p. 28, also lists the *Ché-chih* dance among the "strong dances", i.e., vigorous drum dances. From further information in the *Mêng-chi pi-t'an* (loc. cit.) it seems to have been a long narrative piece, which at the beginning of the XIth century took a whole day to perform in full, though by the end of the century only two or three parts in ten were preserved. A passage in the *Shih-lin yen-yü* 4 石林燕語, describes an early XIth-century performance as employing 24 dancers. It seems almost certain that the dance in the mind of the compiler of *THY* was the dance of Hsüan tsung's time as described in the *T'ang tsa-shuo*, rather than the "strong dance" of the late IXth century *Yüeh-fu tsa-lu*.

²⁴ See *HTS* 222 *hsia*, p. 11a-b.

²⁵ Maurice Courant, *Essai historique sur la musique classique des Chinois*, forming part of the historical section of Lavignac, *Encyclopédie de la Musique et Dictionnaire du Conservatoire*, Tôme I, pp. 77–241.

²⁶ Khin Zaw, *Burmese music: A preliminary enquiry*, in *Journal of the Burma Research Society* XXX, iii (1940), pp. 395–8. We have not noted all the places where our rendering differs from this translation, which is full of errors.

HSIN T'ANG-SHU 222 *hsia*¹

... During the *Chêng-yüan* reign period (785–805),² the King [of P'iao] Yung-ch'iang 雍羌,³ hearing that Nan-chao had returned to their

¹ *Po-na* edition, pp. 9a, line 6, to 11a, line 2.

² The submission of Nan-chao was accepted in 794, the actual embassy from P'iao (Pyü) arrived in Ch'ang-an late in 801.

³ The original Pyü form of this name is quite unknown. Karlgren's reconstruction of ancient Chinese gives **iwong-k'iang*. The name of the king is substantiated both by Po Chü-i's poem cited above, and by the state letter sent to the King, which was also composed by Po Chü-i. However, *TCTC* 236, p. 7599, gives his name as Mo-lo-ssü-na 摩羅思那. The source of this may perhaps be sought in the account of P'iao given in *THY* 100, pp. 1794, 1795, which reads:

allegiance to the T'ang, desired to submit in his turn. I-mou-hsin 異牟尋⁴ sent an envoy, Yang Chia-ming 楊加明⁵ to Wei Kao 韋臯⁶ the Military Governor of the Province of Chien-nan hsi-ch'uan⁷ requesting that he might offer barbarian music to the throne. He also ordered the P'iao kingdom to present musicians. . . .

. . . Yung-ch'iang also sent his younger brother Shu-nan-t'o 舒難陀, Governor of his city Hsi-li-i 悉利移,⁸ to present the music of his country. When they arrived at Ch'êng-tu, Wei Kao took down their music also⁹ in

"The King's surname is K'un-mo-ch'ang 困沒長 and his personal name Mo-lo-ni 摩羅惹. The name of the Chief Minister (*Kuo-hsiang*) is Mo-ho-ssü-na 摩訶新那."

The title Mo-ho-ssü-na (*Mahasena*), which is not a name, as the text says, and means Commander-in-chief rather than Chief Minister in any case, was known as such to the Chinese of the time, and is used in the State Letter to the Pyü king. The compilers of *TCTC* probably conflated the name Mo-lo[ni] and the title [Mo-ho]-ssü-na into a single name.

⁴ I-mou-hsin was the King of Nan-chao, one of the most powerful rulers of the Mêng clan. After attempting to play off the Chinese and Tibetans against one another on the south-western border in 794 he turned on his former Tibetan allies and resumed the alliance with the Chinese which had been broken by his predecessor Ko-lo-feng 閣羅鳳 in 750.

⁵ This appears to be a Chinese name. However, many of the aristocratic clans of Nan-chao had adopted Chinese surnames, and the Yang clan was one of the most powerful.

⁶ Wei Kao (745-805) was governor of western Szechuan from 785 until his death. This was a period of very weak central authority, and he led a comparatively independent career. He was mainly instrumental in regaining the initiative in the frontier warfare with the Tibetans, but his campaigns put a great strain on the economy of Szechuan, and were probably a contributory factor in the rising of Liu Pi in 806. Wei Kao's biography is in *CTS* 140, *HTS* 158.

⁷ This province comprised 26 prefectures and 112 counties and extended over modern Szechuan west of the watershed between the Pai-chiang and the T'o-chiang. On paper it also included much of the borderland of modern Hsi-k'ang and northern Yunnan, but it is very doubtful whether these regions were under more than purely nominal Chinese suzerainty. This was an area of long-standing military administration, having had a Military Governor (*Chieh-tu-shih*) since 717.

⁸ The title and name of this envoy has caused havoc with the historiographers. There is no doubt that the form given in our text is the correct one. It is used in identical form in Po Chü-i's poem, and in the slightly variant form Shu-nan-t'o-na (= ? Sunandana) in the State Letter to Yung-ch'iang. However, both of these documents describe him not as the younger brother, but as the son of the King.

The bulk of the sources, however, have taken the name of the city Hsi-li-i as the envoy's name. It is thus used in *CTS* 13, *THY* 100, *TFYK* 976, *TFYK* 996, and *TCTC* 236. A variant spelling 悉利夷 occurs in *TFYK* 972. These passages are not unanimous as to whether he was the son or brother of the King. Presumably this confusion must date back to the *Veritable record*, which was the source of *CTS* 13. This would reinforce our opinion that the *HTS* account is independent of that written at the time by the state historiographers. There can be little doubt that the city is the Hsi-li ch'eng which is mentioned in Chia Tan's itinerary preserved in *HTS* 43, p. 18a. This is tentatively identified by Luce (*The Ancient Pyü*, *YBRS* 27, p. 249) with Bhamo or Tagaung. The mistaking of a place-name for a personal name was probably due to the Chinese being familiar with the common element Śrī in Indian names.

⁹ This refers back to his notation of the Nan-chao music in 799-800.

notation, and as the form of their dances and their musical instruments were different from the usual ones, he had pictures made of them and presented these to the throne.

There were twenty-two instruments. They had the eight categories of instrument: metal, shell, stringed, bamboo, gourd, skin, ivory and horn.¹⁰ There were two metal, one shell, seven stringed, two bamboo, two gourd, two skin, one ivory, and two horn instruments.¹¹ There were four small bells (*ling-pa* 鈴鉞) arranged like those of the Kucha section 龜茲部 [of the Court orchestra].¹² They were three inches in circumference, and were threaded on leather thongs. They were struck in time with the rhythm of the music.¹³

There were two iron plates (*t'ieh-pan* 鐵板), which were three and a half inches long and two and a half inches wide. Their faces were flat, while on the backs were handles to which were bound leather straps.¹⁴ Both these and [the preceding] small bells were ornamented with cords in profusion, and decorative knots¹⁵ made from the threads of coloured cotton cloth.¹⁶

¹⁰ The *pa-yin* 八音 were the eight timbres, roughly corresponding to our brass strings, woodwind, etc. The term first appears in the *Shun-tien* chapter of the *Shu ching*. See Karlgren, *Book of Documents*, p. 7. The writer here is concerned to show that the P'iao orchestra retained all the traditional categories of instrument, including the "gourd" category, which as he points out later (see p. 192) was obsolescent in China. The Burmese themselves have followed Indian tradition in dividing instruments into five classes: brass, string, percussion, wind and clapper. It is not clear how old this system is in Burma. The *Hmannan Yazawin* states that the stone musicians set up by Anawratha during his foray into Bengal in the XIth century represented five musicians with the five instruments. But his 19th-century compilation gives such a confused account of the whole legend that it seems not unlikely that the compilers may have tried to reconcile what they considered the correct normal system (of five classes) with a traditional account based on some different classification.

¹¹ The individual items add up to nineteen, not to twenty-two, while the text itself describes twenty instruments.

¹² The Kucha section was one of the special troupes of foreign musicians who formed part of the personnel of the Music Bureau (*T'ai-yüeh shu* 太樂署), the sub-department of the Court of Imperial Sacrifices (*T'ai-ch'ang ssü* 太常寺) which was responsible for ceremonial music. Beside the Kucha orchestra there were troupes of Indian, Korean, Hsi-liang (eastern Turkestan), Bukhara, Turfan, Samarkand, and Kashgar musicians. The list of instruments used by the Kucha orchestra in *TLT* 14, p. 37a, includes two *t'ung pa* 銅鉞 bells to which presumably our text refers.

¹³ That is, these bells were clapperless, like most of those in the Far East. Modern bells of this type are tied together in pairs and struck together.

¹⁴ These were a type of cymbal. See Fig. 1.

¹⁵ This, I take it, must be the sense of *jui* 藥 (literally "buds").

¹⁶ *Hua-tieh* 花疊 was a type of cotton fabric widely mentioned in T'ang sources. The terms *po-tieh* 白疊, 白疊, and *po-tieh-tzu* are found in a variety of pre-T'ang texts, generally in connexion with cotton fabrics coming from central Asia, and Hirth and Rockhill, *Chau Yu-kua*, p. 218, suggested that the term is a transcription of some Turkic word cognate with *pakha*. However, some doubt is thrown on this hypothesis by the use of the term in *Hou Han shu* 116 where it refers to the textiles worn by the aborigines of Yunnan. *Hua-tieh* is presumably coloured or patterned fabric of this same type.

There were four conch-shells.¹⁷ The largest had a capacity of a pint (*shêng*). They were decorated with cords in profusion.

There were two phoenix-headed harps (*k'ung-hou* 笙).¹⁸ One of these was two feet long with its belly seven inches wide. The phoenix-head and neck were two feet five inches long, and the upper surface was decorated with snake skin. It had fourteen strings, and the neck carried the tuning pegs.¹⁹ The phoenix head faced outwards.

¹⁷ These are the Indian *sankha*; but the instrument was closely identified with Buddhism, and was already well known in China in this context.

¹⁸ The modern type of *k'ung-hou*, as illustrated for instance in the *Tz'u hai* dictionary, is very misleading in this context. Whereas the modern instrument appears to be somewhat similar to the cimbalon, it is possible to identify the old type of *k'ung-hou* quite distinctly with the arched harp, known from India since the 3rd century B.C., and apparently originating in Sumeria. T'ang musicians differentiated between an upright harp (*shu k'ung-hou* 豎 | |) and a horizontal harp (*wo k'ung-hou* 臥 | |). Both types are illustrated in the fragmentary Yüan edition of the Sung period *Yüeh shu* 樂書 of Ch'ên Ch'ang 陳暢. From this work it would seem that there was little difference in the construction of the instruments, and presumably the difference lay in the manner of performance. Both types of harp were employed in the various court orchestras. The various central Asian orchestras used the upright harp, the Chinese ceremonial orchestra (*Yen yüeh* 燕樂) also employed the upright harp according to *TLT* 14, p. 35b, together with a "small harp", but the parallel passage in *CTS* 29 specifies a horizontal harp. The Korean orchestra used both types (Fig. 2).

The phoenix-headed harp mentioned in our text was included in the Indian orchestra at the Chinese court. See *TLT* 14, p. 36b, *CTS* 29, p. 11b. It is illustrated in the Yüan print of the *Yüeh shu* 128, p. 5b, with a description *ibid.*, p. 6a (see Fig. 4). It was of the upright type.

¹⁹ The Burmese harp had only seven strings until the latter half of the 18th century when Myawadiwungyi U Sa added a further six strings to make the modern *saunggauk*. Courant, *op. cit.*, p. 147, mistakenly likens the phoenix-headed *k'ung-hou* to the Chinese *sh*, although on p. 176 he illustrates the modern Burmese *saunggauk* under its Chinese transcription *tsung-kao-chi* 總稿機 (see his Fig. 214).

The *saunggauk*, however, was not the model for the instrument described in our text, for, like the Chinese *k'ung-hou* prior to the 18th century, the Burmese *saunggauk* and its direct ancestors had no tuning pegs. Each string was attached to a tasselled cord tied to the neck, and the tension of the strings was altered by sliding these up and down the neck, or by turning them about it.

The Tenasserim harp, in Lower Burma, on the other hand is fitted with tuning pegs (see *Horniman Museum catalogue of musical instruments*, p. 80), and a similar instrument is recorded elsewhere in South-East Asia. An arched harp with tuning pegs is represented on Candi Borobudur, Central Java (9th century A.D.), (see N. J. Krom and Th. van Erp: *Bechrijving van Barabudur*, Serie. 1 a Plaat xxvi, No. 52; our Fig. 3). A similar instrument also appears in Cambodia on the Terrasse des Éléphants at Angkor (12th century A.D.) (Musée Guimet, photo No. 31133/14; cf.: Marcel Dubois, *op. cit.* sup. Pl. xxiv, 2). Moreover, the harp with tuning-pegs is well attested in Central Asia. For an illustration of a wall-painting from Bâzâklik dating from the VIIIth-Xth century, see Hackin, *Recherches archéologiques en Asie Centrale*, 1931, pl. xvii b. The example from Panjikent (A. L. Mongait, *Arkheologiya v. SSSR*, Moscow, 1955, between pp. 292 and 293) which is of earlier date, seems, on the other hand, to be without tuning-pegs.

The instrument is probably of ultimate Egyptian origin, and its presence in Java may be the result of the trade between that country and the Middle East from early times. Its presence in the Pyü orchestra is interesting, since it may have been a borrowing

The other harp had a [long tuning peg ?]²⁰ on top of the head.

There were two *chêng* 箏 zithers with crocodile heads. One was shaped like a crocodile.²¹ It was four feet long and stood on four legs. Its belly was hollow, and the back decorated with crocodile skin. Its front face and up-turned shoulder²² were like those of the *ch'in* (lute). It was seven inches wide, while the belly was eight inches broad. The tail was more than a foot long, curling upwards and leaving a space [in the middle of the scroll]. A bar (*kuan* 關) was placed to extend the nine strings. There were eighteen movable bridges²³ to the left and right of the performer.

The other had its face ornamented with coloured flowers, and was differentiated by its being covered with snake skin.

from Mon-kmer culture, in view of its existence in present-day Tenasserim and its representation at Siemreap. There are various references in Chinese sources to *k'un-lun* kingdoms in Lower Burma, and as has already been noted, the account of this orchestra suddenly informs us that all the musicians were *k'un-lun*, a term which Luce thinks is to be understood here as Mon. On the other hand the Pyü are said to have claimed some sort of political relation with Java, and the possibility of a direct borrowing from this country cannot therefore be wholly excluded. Its survival in Tenasserim would not argue against this view, and it may even have been a Mon introduction into the Khmer orchestra.

²⁰ The meaning of *t'iao-ch'ên* 條軫 is obscure. It may possibly refer to some device for tensioning the strings similar to that of the *saunggauk* described above (note 19). The harp may, however, have been of the type illustrated in Fig. 2, from *Yüeh shu* 128.

²¹ This crocodile shaped instrument is undoubtedly the ancestor of the *migyaung saung*, which, despite its name and the frequent misinterpretation of it, was not a harp, but a kind of zither. This more modern form of the instrument was known to the Chinese under its Burmese name in the transcription *Mi-kung-tsung* 密穹總 and Couvreur, *op. cit.*, p. 174, Fig. 209 reproduces an illustration of it taken from the Ch'ing *Yüeh shu* 36. This shows a five stringed instrument with frets. More interesting is a picture in Henry Yule; *A narrative of the mission sent by the Governor-General of India to the court of Ava* (1858), p. 15, Fig. 11. Yule writes:

"Another instrument used in these concerts is a long cylindrical guitar of three strings, shaped like an alligator and so named. It is placed on the ground before the performer."

The figure shows an instrument having three strings, each with a tuning peg in the tail, and in this connection it is perhaps worth noting that Courant's illustration shows only three tuning pegs for the five strings, so that the two additional strings may have been sympathetic. Yule's picture shows the upcurling tail and a device for tensioning the strings which may well bear some relation with the obscure "*kuan*" in our text.

Although the instrument was still in use in Burma itself in the 19th century, it has now become obsolete, except among the Mons in South-West Burma. We reproduce a photograph of a modern Mon instrument by courtesy of Mr. H. Shorto. This instrument is fretted, as are those shown by Courant and Yule, and has six tuning pegs (Fig. 5).

²² The upturned shoulder (*yang-chien* 仰肩) of the lute is not known to us as a technical term for a part of the instrument.

²³ The term *chu* 柱 is a constant source of confusion in the description of musical instruments, as it has two distinct meanings in relation to stringed instruments. First is a type of movable bridge placed under a single string, such as is illustrated by Courant, *op. cit.*, p. 175, Fig. 211. The second meaning which is almost equally common went unnoticed by Courant. This is a fret. The term was for instance used for the curious single-string frets in very high positions on the highest string of the

There was a dragon-headed *pi-pa* 琵琶 lute. It was made like those of Kucha²⁴ with a neck more than two feet six inches long and a belly six inches broad. The head was formed of two confronted dragons. There were three tuning pegs and frets²⁵ and the strings accorded with these numbers. Two of the tuning pegs were on the neck and the other on the collar of the instrument. The fixed bridge (*fu* 覆) was in the form of a lion.

There was a cloud-headed *pi-pa* lute. Its shape was like that of the preceding instrument. Its face was decorated with snake-skin, the four faces having ivory studs. The head was in the form of a cloud. There were flowers [carved] on top of the tuning pegs, which were placed in the form of the character *p'in* 品.²⁷ There were three strings. The fixed bridge

pi-pa (lute), which according to late Chinese and Korean works were no longer used in performance. In the description of the dragon-headed *pi-pa* which follows, *chu* are certainly frets, since movable bridges on a *pi-pa* would be unthinkable. With the evidence of the modern fretted *migyaung saung* in view, we are tempted to read *chu* as frets here also. Indian stick-zithers with 18 or more frets exist, and it is not an impossibly large number. But if *chu* were frets they would all be to one side of the performer. Moreover, the number 18 gives two to each string, and it seems most likely that movable bridges are in question here, one to each side of the player on each string. If this is in fact the true interpretation, the form of the instrument must have been changed at some subsequent period.

²⁴ The *pi-pa* lute was an instrument ultimately of Iranian origin which had been widely adopted in China during the semi-barbarian northern dynasties between Han and T'ang. Both the performers and instruments of Kucha were famous. It shows the familiarity of such foreign music from Central Asia during T'ang times that the author of this text is able constantly to refer to Kucha instruments as a norm with which his readers would be well acquainted. On the *pi-pa* in general see the excellent study by Laurence Picken, "The origin of the Short Lute", *Galpin Society Journal*, VIII (1955) pp. 32-42. To judge by the measurements the instrument described in the text is clearly a long-necked lute. This is interesting for the long-necked lute is generally held not to have reached India until the tenth century.

²⁵ *Chu* here is indubitably a fret (cf. note 23 above). For other technical terms connected with the frets of a *pi-pa* see note 27 below.

²⁶ The term *fu* refers to the fixed bridge on the body of a stringed instrument, together with the attachment for the strings.

²⁷ This passage is by no means clear. Courant, *op. cit.*, p. 176, has taken *hsiang* 象 and *p'in* 品 in their technical sense as the two types of fret on the *pi-pa*. The *hsiang*—usually written 相 rather than 象—were the semi-cylindrical frets situated on the neck of the instrument, while the *p'in* were the sharp frets of triangular section, usually made of bamboo, which were fastened to the body of the instrument and gave a sharp intonation for the higher notes. It is possible that the text here employs the two characters in this technical sense, in which case we must assume that the compilers of *HTS* were unaware of these meanings and wrongly interpolated the character *tsu* 字 into the text so as to force some meaning into it. If we assume such an emendation and reject *tsu* as interpolated the translation would read,

"There were flowers [carved] on top of the tuning pegs. It had semi-cylindrical and sharp frets and three strings."

This might be more satisfactory in some respects, for no known Chinese lute is shown with tuning pegs set out in a way which could be described by any stretch of the imagination as "in the form of the character *p'in*"—i.e. in a triangle. The pegs in Chinese and Central Asian instruments go through the neck from side to side. However,

(*fu-shou* 覆手)²⁸ was decorated with snake skin. The plectrum (*han-po* 捍撥)²⁹ was carved in the form of a dancing *K'un-lun*³⁰ and decorated in various colours.

There were two large gourd *ch'in* 琴 zithers.³¹ The belly³² was made from half a gourd, which was all painted in colours. Above was also placed a copper bowl.³³ The board (*ch'in*)³⁴ of the instrument was made of bamboo, with a serpent motif running transversely across its upper face. It was over three feet long. The head was curled like a pair of folded hands, and was two inches long. This [upper board of the instrument] was tied to the belly with cords. The copper bowl was fitted into the stem end of a gourd³⁵ and was large enough to hold two pints. The largest string played *t'ai-ts'u* and the next string *ku-hsien*.

some Near Eastern and Indian instruments have the pegs piercing the neck from front to back. Three stringed examples normally have the pegs set in a triangle, and it seems most likely that our text describes such an instrument.

²⁸ Here again the text appears to be corrupt. The character *chieh* 皆 is very odd, for it is preceded only by *fu-shou*, a well-attested binom meaning a fixed bridge, and synonymous with simple *fu* (see note 26 above). *Shou* alone has no known technical meaning. It is possible that the text read originally *fu fu-shou chieh* 腹覆手皆, and that the *fu* 腹 has fallen out through confusion with the other *fu* 覆. In the very next paragraph there is a clear case of the confusion of the two words, so there are some grounds for such a hypothesis of a copyist's error. If this is adopted we may translate,

"Both the belly and fixed bridge were decorated with snake skin."

²⁹ It is worth perhaps noting that the text specifies the use of a plectrum with the cloud-headed *pi-pa*, whereas this was not noted for the dragon-headed instrument. In Indian orchestras there was a clear distinction between lutes and zithers played with the fingers and with a plectrum. This was for example the case with the seven or nine-stringed *vina*, and among the sculptures of Gandhara and Central Asia we may see some lutes played with a plectrum and others without.

³⁰ Here again there is a link between the Pyū orchestra and the *K'un-lun*—presumably those of the *K'un-lun kuo* placed in Lower Burma by *Man shu* 10, p. 46.

³¹ These and the instruments which follow are obviously of the stick-zither type, with a large gourd used as a resonator. Such instruments were already known to the Chinese, having been used by the Funanese musicians captured at the Sui conquest of Lin-i, but were considered unsuitable for general use. Only Indian musicians were said to be able to master them. See *THY* 33, p. 620, Ch'en Ch'ang's *Yüeh shu* 174, p. 3b.

³² There can be no question here of *fu* meaning a fixed bridge. It is undoubtedly a mistake for *fu* 腹 belly.

³³ This description is not at all clear, but the copper bowl was certainly an extra resonator giving a different tone colour. Stick-zithers with double resonators were quite common in India, and metal resonators were also common. But the text as it stands seems to suggest that the copper bowl was either placed inside the gourd body, or perhaps placed in a separate gourd resonator.

³⁴ *Ch'in* 琴 here is employed not for the whole instrument, but for the upper board (the "stick" of the stick-zither) over which the strings were stretched.

³⁵ This seems to be the sense of *ch'uan ou chi p'ao-pên* 穿颯及匏木. Presumably *pên* "stem" refers to the end of the gourd which was attached to the stem. It occurs later in the text in an equally difficult context. Whether the gourd is the same one which formed the belly of the instrument is not clear, but I feel that had it been a separate one forming a second resonator-unit the author would have made this clear.

There was a single-stringed gourd *ch'in* zither.³⁶ This was made from mottled bamboo³⁷ without any decoration. A serpent's head carved from wood was used to stretch the string. There was no tuning peg, the string being tied to the neck of the instrument. There were four frets³⁸ as on the Kucha *pi-pa* lute. The string played *t'ai-ts'u*.

There were two small gourd *ch'in* zithers. They were shaped like the large gourd zithers and were two feet long. Their largest string played *nan-lü* and the next string *ying-chung*.

There were two transverse flutes (*heng-ti* 橫笛). One of them was more than a foot in length, and all [the instruments] took their pitch from it. The knots [of the bamboo tube] were shaved down so that there were no spurs left. A head was formed with wax, and on top of this was placed a lion's head made of ivory.³⁹ There were six finger-holes, and it played the scale *huang-chung shang*,⁴⁰ providing the five notes of the pentatonic scale and the seven notes of the diatonic scale.⁴¹

There was also a flute to which was fitted only an ivory head.⁴² Its pitch was identical with that of Hsün Hsü's 荀最 *Ti-p'u* 笛譜.⁴³ It was also in tune with *chung* in a *Ch'ing-shang* orchestra.⁴⁴

³⁶ Simple single-stringed stick-zithers of this type are well-known throughout South-East Asia.

³⁷ *Pan-chu* 斑竹 mottled bamboo was a common item of tribute from the south-western border regions.

³⁸ Here again, as in notes 23, 25 above, *chu* is undoubtedly a fret, not a movable bridge, since it would be impossible to have four movable bridges on a single string.

³⁹ Transverse flutes with an ornamental head of this type were common in China. Courant, *op. cit.*, p. 155, notes a dragon-headed flute, and informs us that this type of instrument was normally a bamboo pipe reinforced with bindings of silk thread. His reference to the present text, however, is quite inaccurate.

⁴⁰ That is a scale in the *Shang* mode with the note *huang-chung* (f#) as fundamental. This mode was also known by the technical terms *Ta-shih t'iao* 大食調 or *Ta-shih t'iao* 大石調 showing its association in the Chinese mind with Near Eastern music. See Courant, *op. cit.*, pp. 98 and 117.

⁴¹ On the structure of the Chinese scales see Courant, *op. cit.*, and Levis, *Chinese Musical Art*, pp. 63 ff. In European terms this would give the following scale g#, a#, c, c#, d#, f, f#, g# 1.

⁴² This may possibly mean an "elephant head".

⁴³ Hsün Hsü was an official in the Chin period, who in 274 produced a new series of pitch-pipes and a new method of construction for the flute. There is a long and detailed discussion of his work in Yang Yin-liu 楊蔭瀏, *Chung-kuo yin-yüeh chih-kang* 中國音樂史綱 (Shanghai, 1953), pp. 155-61. According to Yang's calculations (*loc. cit.* and pp. 235, 236) the fundamental *huang-chung* in his system was equivalent to g natural. The work known as the *Ti-p'u* was presumably a book including the results of his work on the flute, but it has long been lost. We must presume that it was still in existence at the time of Wei Kao, but it is curious that a work by such a well-known author should not figure in the catalogues of literature either in *CTS* or *HTS*. The latter work records only a *T'ai-yüeh tsa k'o-tz'u* 太樂雜歌詞 in 3 chapters and a *T'ai-yüeh k'o-tz'u* in 2 chapters, neither of which could conceivably have anything to do with the *Ti-p'u*.

⁴⁴ This is equivalent to g#.

There were also two double-ended flutes. These were two feet eight inches long. In the middle a joint of bamboo was divided, and holes for the breath to rush through opened to right and left of the joint. Each of the two extremities was divided into a hollow form to make a flute.⁴⁵ We estimated that the left-hand extremity plays *ta-tsu*, while the three finger holes in the end of the pipe give the notes *ku-hsien*, *jui-pin*, and *i-tsé*. The right-hand extremity plays *lin-chung* and the three finger holes in the end of the pipe give the notes *nan-lü*, *ying-chung* and *ta-lü*. Underneath there was a single [thumb]-hole which gave the octave of *t'ai-tsu*.⁴⁶ The two extremities and the seven finger-holes provided the complete scales of *Huang-chung* and *Lin-chung*.⁴⁷

There were two large gourd *shêng* 笙 mouth-organs.⁴⁸ Both had 16 pipes arranged in two ranks of eight on the left and right, the shape formed by the pipes being like a phoenix wing. The longest pipes were four feet eight and a half inches long. The other pipes were of differing length and set out in order. The construction of the pipes was like that of the pipes of a [Chinese] *shêng*, and may also be classified as "phoenix-wing" in shape.⁴⁹ The reeds

⁴⁵ This instrument was not the double-ended *aulos* known widely in Near-Eastern and Classical antiquity. Double flutes of the *aulos* type were known in Tibet, but the most common type of double flute in China and especially in the south-western borderlands was the double-ended transverse flute. The mouthpiece is in the centre of the instrument with the finger-holes on either side of it. Courant, *op. cit.*, notes this text, but has badly misinterpreted it, taking it that there were seven finger-holes on either side of the mouthpiece. It seems probable that the mouthpiece was bored over an internal membrane of the bamboo, through one of its joints, forming two separate tubes. The sense of the word *tuan* "extremity" is obscure, and we do not fully understand the differentiation made in the text between these and the simple finger-holes in the pipe.

⁴⁶ *Ch'ing* indicated the upper octave of any note of the scale.

⁴⁷ The *huang-chung* scale is *huang-chung*, *t'ai-ts'u*, *ku-hsien*, *jui-pin*, *lin-chung*, *nan-lü*, *ying-chung*, *huang-chung* [f#, g#, a#, c, c#, d#, f, f#]. The *lin-chung* scale (a fifth above *huang-chung*) is *lin-chung*, *nan-lü*, *ying-chung*, *ta-lü*, *t'ai-ts'u*, *ku-hsien*, *jui-pin*, *lin-chung* [c#, e#, f, g, g#, a#, c', c#]. The more common mode would have been the *Shang* mode beginning on the second degree in each case. The flute described provides all the notes except *huang-chung* f# which was presumably the note with all finger holes closed. The left hand played f, g#, a#, c, d. The right hand c#, d#, f, g. The thumb-hole would give the octave of g#.

⁴⁸ The *shêng* is the mouth-organ, on which see Courant, *op. cit.*, pp. 161, 162, Soulié, *La Musique en Chine*, pp. 54-7. The instrument was well known from the earliest times both in China where it is mentioned in the *Odes*, and in the Indo-Chinese borderlands where it is depicted on the Dong-son drums. The primitive form of the Chinese *shêng* had a gourd body, and was still preserved in T'ang times in Korea under the name *Hu-lu-shêng* 胡蘆笙; the Chinese had by then replaced the gourd with a wooden body as in the modern instrument.

⁴⁹ What "phoenix-winged" means in this context may be seen from Fig. 6 taken from a plate in Ch'en Ch'ang's *Yüeh shu* 123, p. 42a. This work contains a great deal of information on various types of *shêng* and similar mouth-organs.

were made of bamboo. The body of the gourd was pierced right down to the stem⁵⁰ [by the pipes].

[In China] the eight musical timbres of antiquity have all been replaced by instruments of wood and lacquer. Metal is used for reeds, and we have no longer the true "gourd" timbre.⁵¹ Only in the P'iao kingdom may we find the ancient pattern.

There were also two small gourd *shêng* mouth-organs, constructed like the large ones. They were tuned to play the scale of *lin-chung shang*.⁵²

There were two three-faced drums, shaped like wine-jars and two feet high. They were broad at the head and pointed at the bottom; above they were seven inches wide, at the bottom four inches wide. The width of the belly was not more than that of the head. They were strung with snake skins, three being stitched together to form one skin, and these were bound on with blue cords. Beneath, where they stood upon the ground, they were not covered [with skin]. The four surfaces⁵³ of the drum were decorated with paintings of P'iao musicians holding *shêng* mouth-organs and drums.⁵⁴

There were four small drums, constructed like waisted drums.⁵⁵ They were five inches long, and the heads were three and a half inches wide.

⁵⁰ This seems to be the sense of *chuan p'ao ta pên* 穿匏達本. However, in most types of mouth-organ with a gourd body surviving in South East Asia, the stem of the gourd is used to fit the mouthpiece. It is probable then that the expression may mean that the pipes pierced right through the gourd and projected below the bottom. Such a form is found in Dyak and Miao mouth-organs, but here the body is not made from a gourd. However, the mouth-organs at present found in the Shan States are precisely of this type. Here the interstices between the projecting ends are filled with pitch to provide a smooth surface. This arrangement allows finger stopping of the upper sections of the pipes above the top of the gourd, and thumb stopping of the bottom ends of the pipes, the gourd being moved between the player's hands to facilitate the operation. Fig. 7 illustrates a modern example in the collection of Mr. H. Shorto. The mouth-organ is still found among the Mrung of North Arakan and in the Chittagong Hill Tracts (see Emil Riebeck, *Die Hügelstämme von Chittagong*, Berlin, 1885, Pl. 15, Fig. 2), as well as in Laos and in Borneo and among various peoples of the Indo-chinese hill areas.

⁵¹ The original timbre would of course have been a reed timbre, and nothing to do with "gourd". The date of introduction of the metal reed in China is unknown, and we have been able to find no evidence to assign a date to this development.

⁵² That is, the *shang* mode of the scale with *lin-chung* as fundamental: *nan-lü*, *ying-chung*, *ta-lü*, *t'ai-ts'u*, *ku-hsien*, *jü-pin*, *lin-chung*, *nan-lü* [d#, f, g, g#, a#, c, c#, d#]. (Courant's Mode XXXVII.)

⁵³ That is the three sides and the top.

⁵⁴ The decorations recall those found on the Dong-son drums, which feature musicians with clappers, drums and mouth-organs.

⁵⁵ For an illustration of the type of instrument known as a waisted drum, see our Fig. 8 which reproduces a plate from Ch'en Ch'ang's *Yüeh shu* 126, p. 4a. This is quite different from the large suspended drum illustrated by Courant, *op. cit.*, p. 150. Fig. 185, under the name *yao-ku* 腰鼓, but is identical with the instrument which he lists under the alternative name *chang-ku* 杖鼓 and illustrates in Fig. 187 on the same page.

They were strung with snake skins. They had no handles and were shaken⁵⁶ to give the rhythm to the music. The compères all hold them.⁵⁷

There was an elephant-tusk *shêng* mouth-organ. [The body of a] gourd was pierced down to the stem, and lacquered. Two elephant tusks were placed in it in place of pipes.⁵⁸ These had twin reeds⁵⁹ which both played *ku-hsien*.

There was a three-horn *shêng* mouth-organ. Here again, a gourd was pierced down to the stem and lacquered. Three ox-horns were placed in it.⁶⁰ One had a reed, and played *ku-hsien*; the others played *nan-lü*.⁶¹ The points of the horns were placed downwards piercing the gourd to the stem. Both the handle⁶² and mouthpiece were straight.

There was a two-horn *shêng* mouth-organ. Here again, a gourd was pierced down to the stem, and two ox-horns were set up in it. [They] had reeds and played *ku-hsien*. The gourd was decorated in colours.

TABLE OF THE INSTRUMENTS AND THEIR TUNINGS

The transposition into European terms is based on Yang Yin-liu's determination of the T'ang fundamental *huang-chung* as f#. In fact the pitch of *huang-chung* is between f natural and f#, and the following tunings are therefore all slightly sharp. We are indebted to Dr. Laurence Picken for help with this table, and for pointing out the relevance of some of this information.

⁵⁶ The precise significance of *yang* 揚 shake, excite, escapes us. A shaken drum would of course give no sound at all. Perhaps this describes either a drum played by fingering, or it is possible that the instrument was some sort of rattle of the maracas type.

⁵⁷ The term *yin-tsan chē* 引贊者 which I render loosely as "compère" refers to the members of the troupe who, before the performance of each item, gave the audience an account of the story and its meaning. They are referred to elsewhere as *tsan-chē*.

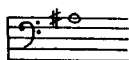
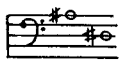
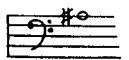
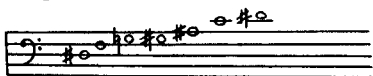
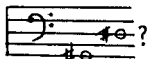
⁵⁸ The Lamet possess these instruments to the present day. An example of a single elephant tusk with a free reed and without a wind-chest is shown in Izikowitz, *The Lamet* (Göttingen, 1951), p. 198, Fig. 98.

⁵⁹ The term *shuang-huang* 雙簧 cannot, of course, refer to the double reed of the type employed in the oboe or bassoon, which was unknown in China and the Far East. It presumably refers to the fact that the reeds were identical in pitch, both giving the same note *ku-hsien* (a#). But if this is so, why are not the reeds of the two-horn mouth-organ mentioned below not also described in the same way?

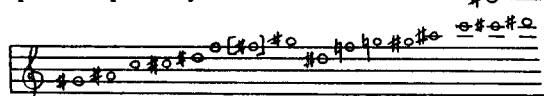
⁶⁰ A *tondo* from Kyontu Paya Prome, probably of the 11th century shows such an instrument without a wind-chest. The Srê have a descendant of this instrument, with a single ox-horn and a free reed. See Dam Bo, *Les populations montagnardes du Sud-indochinois* (Lyon, 1950), p. 149.

⁶¹ That is a# and d#.

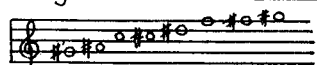
⁶² This is the only reference of which we are aware to a mouth-organ with a handle. No known example has one.

2-horn *shêng* reeds3-horn *shêng* 1 reed
2 other hornsElephant tusk *shêng*2 small *shêng*2 large *shêng* unspecified: probably fundamental

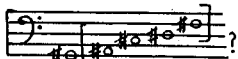
Double-ended flute



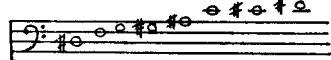
Transverse flute



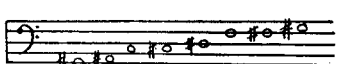
Stick-zither, monochord four frets probably giving



2 small stick-zithers



2 large stick-zithers 2 strings

If they had four frets this would give complete *huang-chung shang* scale.

Lute Tuning unknown. Three strings and three frets.

If the strings were tuned in fourths, *g# c# f#* and the frets arranged as below, this would give a *shang* scale on *huang-chung* on the lower two strings, and a *shang* mode on *lin-chung* on the upper two strings.

<i>g#</i>	<i>c#</i>	<i>f#</i>	open string
<i>g#</i>	<i>d#</i>	<i>g#</i>	first fret
<i>e</i>	<i>f</i>	<i>b</i>	second fret
<i>e#</i>	<i>f#</i>	<i>e</i>	third fret

Harps 14 strings. ? 2 octaves heptatonic or
3 octaves pentatonic

Dr. Picken considers it very likely that the zithers played in parallels at intervals of a fifth.

COMPARATIVE TABLE OF PYŪ ORCHESTRA AND THE INSTRUMENTS OF PAGAN

<i>Pyū</i>	<i>Mon</i> (11th c.)	<i>Burmese</i> (11th-13th c.)
Percussion		
2 3-faced drums	drum (<i>pham</i>)	drum (<i>can</i>)
4 small drums	drum (<i>singir</i>)	side-drum (<i>pasasan</i>)
	frog-drum (<i>pham-klo</i>)	
	drum chime	
2 cymbals		cymbals (<i>Khwakkhwan</i>)
4 small bells		bell-chime (<i>nonnan</i>)
Strings		
2 harps		harp (<i>con</i>)
2 crocodile-zithers		
2 lutes (one with plectrum)		
2 large gourd-bodied stick-zithers		
2 small gourd-bodied stick-zithers		
1 monochord stick-zither		dulcimer (<i>candra</i>)
Wind		
4 conches		
2 transverse flutes	flute (<i>murā</i>)	
2 double-ended flutes		
		trumpet (<i>khara</i>)
		trumpet (<i>narancra</i>)
		horn (<i>nhan</i>)
		mouth-organ ?
		(<i>saro</i>)
2 large gourd mouth-organs	mouth-organ? (<i>tsen</i>)	
2 small gourd mouth-organs		
1 elephant-tusk mouth-organ		
1 3-horn mouth-organ		
1 2-horn mouth-organ		
	reed-horn (<i>tapiw</i>)	reed-horn (<i>tapuiw</i>)

ABBREVIATIONS AND EDITIONS OF SOURCES

- Epig. Bir.* *Epigraphia Birmanica* Rangoon 1919—.
- CTS* *Chiu T'ang-shu*, Po-na edition.
- HTS* *Hsin T'ang-shu*, Po-na edition.
- TCTC* *Tzu-chih t'ung-chien*, edition of Ku-chi ch'u-pan she Peking, 1956.
- THY* *T'ang hui-yao*, edition of Kuo-hsüeh chi-pen ts'ung-shu.
- TLT* *T'ang liu-tien*, edition of Konoe Iehiro.
- TFYK* *Ts'e-fu yüan-kuei*, edition of Li Ssu-ching, 1642.
- T'ang yü-lin*, *Chieh-ku lu*, *Yüeh-fu tsa-lu*; editions of the Chung-kuo wên-hsüeh ts'an-k'ao tzu-liao hsiao ts'ung-shu, 1957.
- Po Hsiang-shan chi*, Nawa Döyen's edition reprinted in Kuo-hsüeh chi-pen ts'ung-shu.
- Yuan-shih ch'ang-ch'ing chi*, Ssu-pu ts'ung-k'an.
- Mêng-chi pi-t'an*, Hu Tao-ching's *Mêng-chi pi-t'an chiao-chêng*, 1956.
- Man shu*, Ts'ung-shu chi-ch'eng, vol. 3117.
- TT* *T'ung tien*, Shih-t'ung edition 1935.
- Yüeh-shu* of Ch'en Ch'ang. Fragmentary Yüan print in Peking National Library.
- Library of Congress microfilm.