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BELAE BARTÓK  
SACRA

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## EINE VORBEDINGUNG DER VERGLEICHENDEN LIEDFORSCHUNG

Trotz gewisser Anfangsresultate der vergleichenden Liedforschung empfindet jedermann, der sich darin versucht, den Mangel musikalisch geordneter Sammlungen als grosses Hindernis. Der Forscher ist ausschliesslich auf sein Gedächtnis angewiesen, das bekanntlich oft versagt. Die vergleichende Sprachwissenschaft wäre auch nicht weit gekommen ohne alphabetisch geordnete Wörterbücher.

Das erste bedeutende Beispiel geordneter Liedersammlungen — um frühere Versuche wie Zahn's monumentale Sammlung deutscher Kirchenlieder nicht zu erwähnen (Siehe den Aufsatz von *Gy. Kerényi* in diesem Buche, S. 453) — bieten die von *Ilmari Krohn* und seinen Nachfolgern, *A. Launis*, *A. O. Väisänen*, redigierten finnischen Sammlungen und *Maissen—Schorta—Wehrli*: Rätoromanische Volkslieder I—II. Basel, 1945.

Es ist zu verwundern, dass ihr Beispiel so wenig Nachahmung findet. Noch in unseren Tagen erscheinen Sammlungen ohne jeglichen Versuch einer Systematischen Ordnung des musikalischen Teiles. Höchstens der Text ist irgendwie geordnet, im Sinne der einseitig literarischen Auffassung, wonach der Text der wichtigere Teil, die Melodie nur eine zufällige Beigabe ist.

Auch in solchen Sammlungen wäre es leicht möglich, durch einen musikalischen Index einen Überblick der Melodien zu geben, oder wenigstens auf Varianten hinzuweisen, die inner- und ausserhalb der betreffenden Sammlung aufzufinden sind.

Doch was geschehe mit älteren Publikationen, die oft wertvolles, heute nicht mehr zugängliches Material enthalten? Es erscheinen zwar hie und da anastatische Neudrucke (wie *Haupt* und *Schmaler*, Volkslieder der Sorben 1953., oder *Beljaev's* musterhafte Neuausgaben der Sammlungen *Rupin*, *Lvov-Pratsch* und *Trutovsky*), die allerdings einen modernen Variantenindex nicht entbehren sollten. Doch alles neu herauszugeben wäre wohl unmöglich, aber auch unnötig.

## TWELVE RITUAL MELODIES OF THE T'ANG DYNASTY

The total volume of medieval (eighth to fourteenth century) music surviving in China is remarkably small considering the length of the Chinese musical tradition and the constant efforts of successive dynasties since the beginning of the Christian era to maintain a faithful performance of the Confucian Rites. The chief reasons for this paucity, apart from political disturbances, are first, that music other than ritual music was rarely regarded as worthy of preservation before the beginning of the fifteenth century; secondly, the repertoire of ritual music was probably small enough to be memorised, and what was committed to paper was little more than a mnemonic of which the *cognoscenti* had no need. It is certain that ritual melodies underwent in performance the sort of elaboration and transformation observable at the present time in the expansion of the cantus of a Balinese *gamelan*-composition, or of the written parts in a Japanese *gagaku*-performance. There is no evidence, however, that any Chinese before *Prince Chu Tsai-yü* (late sixteenth century) ever compiled a full-score of the performance of a ritual melody, so that music of the Rites must have been highly sensitive to the destruction or dispersion of sets of instruments in a particular clan-shrine or temple, or to the premature decease of musicians and masters of ceremonies.

Of the music which has survived, the greater part was intended for ritual use and probably owes its preservation to that intention. Very little of this music has as yet been transcribed into staff-notation, either in the West or in China, and until recently, four ritual melodies from a set of ten by *Chiang K'uei*,<sup>1</sup> dating from the first years of the thirteenth century and transcribed by *J. H. Levis*,<sup>2</sup> were the only examples available in the West. The ritual tunes in *Courant's* famous essay<sup>3</sup>

<sup>1</sup> *Chiang K'uei: Pai-shih Tao-jen Ko-ch'ü, Yüeh chiu ko.*

<sup>2</sup> *Levis, J. H.: Foundations of Chinese Musical Art, (Peip'ing, 1936).*

<sup>3</sup> *Courant, M.: 'Essai historique sur la musique classique des chinois', Lavignac & La Laurencie, Encyclopédie de la musique, I (Paris, 1931), pp. 77-211.*

are taken from *Prince Chu's* treatise of the late sixteenth century;<sup>4</sup> but while it may fairly be claimed that in *Prince Chu's* day they were reputedly ancient, they do not occur in any earlier source known to us. *Prince Chu's* statement, that one of the melodies is taken from the stone-engraved classics set up in 853—7, and surviving to the present in the *Pei Lin* (Forest of Inscriptions) at Hsi-an, is not supported by the stones. This stone-text of the *Book of Songs* (*Shih Ching*) was recently (December, 1954) examined on my behalf by Professor *E. G. Pulleyblank* of the University of Cambridge, who subsequently learned that Chinese musicologists have searched in vain for evidence in support of *Prince Chu's* claim.

There survive, however, twelve melodies for poems from the *Book of Songs* which may be somewhat earlier in date even than *Prince Chu's* unconfirmed example. The earliest text in which they occur is a post-humously printed work of the Sung philosopher *Chu Hsi* (1130—1200), the *I-li Ching-chuan T'ung-chieh* — the title may be paraphrased as *A General Survey of Ritual*. The preface to the first edition is dated 1223, but the work was reprinted on several occasions in Ming times, and again in early Ch'ing times — for example, the *Lü-shih Pao-kao T'ang* edition of ca. 1700, which I have consulted.<sup>5</sup> These twelve melodies were also printed by *Hsiung P'eng-lai* (1246—1323) in the *Sé P'u* (*Large-Zither Scores*), of which the earliest surviving print is that in the *Yung-lo Ta Tien*, the Ming encyclopedia, finished in 1407, of which fragments only of a single copy survive; from this it has many times been reprinted. The text in the *Yüeh-ya T'ang Ts'ung-shu* (1829) has been used here. The first section of this as yet unexplored source of Chinese medieval music reproduces *Chu Hsi's* tunes, both in pitch-pipe notation and in flute-notation. *Hsiung's* version in the pitch-pipe notation does not indicate the octave of the fundamental or of any higher degree, though these are unambiguously indicated in the flute-notation. In the transcriptions given here, it may be assumed that wherever *f'* or *g'* occurs, *Hsiung's* pitch-pipe version has *f* or *g*. A third version of the twelve melodies, ostensibly derived from *Chu Hsi*, occurs in the *Yüeh Tien* (*Encyclopedia of Music*) of *Huang Tso*, printed in 1544; a reprint of 1853 has been consulted. This also gives the tunes in pitch-pipe and flute-notations. *Huang Tso*, however, like *Chu Hsi*, discriminates between *f* and *f'* and *g* and *g'*; he differs chiefly from the latter in that two of his melodies are shorter by one or more stanzas than *Chu Hsi's* version. In the transcriptions given here, the text followed is that of *Chu Hsi*, and it may be assumed that *Sé P'u* and *Yüeh Tien*

<sup>4</sup> *Chu Tsai-yü*: See in particular the volumes *Hsüan Kung Ho Yüeh P'u* and *Hsiang Yin Shih Yüeh P'u*.

<sup>5</sup> Edited by *Lü Liu-liang*, 1629—1683. The rarity of this print may be due to burning of his work because of hostility to the Manchus.

agree with the transcription unless the contrary is expressly stated. In several places in *Chu Hsi's* text, lexigraphs have been deliberately obliterated in the *Lü-shih Pao-kao T'ang* edition — a usual practice when blocks are worn. The gaps have been filled from *Sé P'u* and *Yüeh Tien*.

*Chu Hsi* states that his text derives from the Sung scholar, *Chao Yen-su*, who had the songs from a source dating from the K'ai-yüan period (713—741) of the T'ang dynasty. This attribution is accepted both by *Hsiung* and *Huang*. The writings of *Chao* — who took the degree of *Chin-shih* in the period 1165—1173 — were extensively used by *Chu Hsi* as a source of information on matters of ritual. There is no reason to doubt *Chu Hsi's* ascription of the transmission of the songs to *Chao*, but in view of the 'Golden Age' halo which hung about the K'ai-yüan period already in Sung times, the ascription of the songs to precisely that period can only be accepted with reservations.

A single melody from this set of twelve has twice been printed in recent historical surveys of Chinese music published in China. The melody to the first poem in the *Book of Songs* (No. 1 in the standard order of *Mao*) was transcribed into the common flute-notation by *T'ung Fei* in his *Chung Yüeh Hsin-yüan* (*Fundamental of Chinese Music*), Shanghai, 1926 (Book 2, pp. 1—3). More recently, Professor *Yang Yin-liu*, Head of the Institute for Musicological Research in Peking, has transcribed the same melody into staff-notation in his *Chung-kuo Yin-yüeh Shih-kang* (*Historical Summary of Chinese Music*), Shanghai 1952. Both *T'ung* and *Yang* accept *Chu Hsi's* ascription of the tunes to the K'ai-yüan period.

The transcription of the tunes, so far as the relative pitch of the notes is concerned, is a simple matter because the note to which a word is sung is unambiguously shown by the name of one of the twelve pitch-pipes. In theory, the chromatic series of the pitch-pipes was generated as a cycle of pure fifths from a fundamental, reduced to the space of an octave, the thirteenth fifth yielding the (slightly sharp) 'octave'; but it seems very likely that some degree of tempering of the series was practised from early times. In any case, the complex sounds of bell-chimes and stone-chimes must surely have obscured the fine edge of intonation in the ensemble. The ritual orchestra furthermore included large zithers, and it is difficult to believe the Chinese did not use consonant octaves on these. If, moreover, heterophony was practised, as described by *Moule*<sup>6</sup> in the last century, and as argued for the past by *Prince Chu*, it must have been difficult, if not impossible, to distinguish between a 'chromatic octave' generated by the cycle of fifths and an equal-tempered chromatic octave. It is therefore probably legitimate

<sup>6</sup> *Moule, G. E.*, 'Notes on the Ting-chi, or half-yearly sacrifice of Confucius', *Journal of the North China Branch of the Royal Asiatic Society*, xxxiii (Shanghai, 1901), pp. 37—73.



to transcribe the melodies in terms of an equal-tempered chromatic octave.

The question of the absolute pitch of the fundamental of the system is more difficult. Professor Yang has recently calculated values for the fundamental, at all periods in Chinese history, from the lengths of the standard pipes adopted by successive dynasties, and from supposed values of the standard 'foot' and 'inch' of each period. For the K'ai-yüan period of the T'ang he proposes  $f\sharp$  as fundamental. His transcription is printed in facsimile (without acknowledgement) in Achilles Fang's introduction to Ezra Pound's version of the *Shih Ching* entitled *The Classic Anthology*.

The melodies are settings of lyrics taken from two main sections of the *Book of Songs* (ca. B. C. 800): from the *Hsiao Ya* (*Lesser Elegancies*) and from the *Kuo Feng* (*Airs of the Principalities*), which latter is represented by songs from two sections only: *Chou Nan* (*Chou State and South thereof*) and *Chao Nan* (*Chao State and South thereof*). Following Waley's grouping,<sup>7</sup> the themes of the songs are: Courtship (9), Marriage (7, 8, 10, 11, 12), Blessings (4, 5, 6), Welcome (1), Public Life (3), Warriors and Battles (2).<sup>8</sup> For the traditional meaning of the songs, the general reader may consult *Couvreur*.<sup>9</sup> A first attempt to translate certain of the songs without reference to their traditional interpretation was made by Granet<sup>10</sup>; but it was Waley who carried through this attempt to its logical conclusion, making use of the philological researches of Simon and Karlgren; as indicated here, he groups the songs for comparative purposes according to their social function. For all that is known about the ancient sounds of the poems, the reader is referred to Karlgren.<sup>11</sup>

The form of the lyrics is variable, but a majority exhibit a small number of stanzas (two to five) of from four to eight four-word lines. The rhyme-schemes vary; but the same rhyme may occur at the end of each line throughout a stanza. On occasion the rhyme occurs on the penultimate word (see Song 4, for example); in these cases, the last words of the rhyming lines are identical. There are a few places where a reduplicative binome is rhymed, for example, in Song 8, stanza I, where *ts'ier-ts'ier* rhymes with *ker-ker* (sound-values from Karlgren). In three of the poems (1, 4, 5) the lines are occasionally lengthened to six or seven words, or reduced to three or even to two.

Musically the songs are of great interest. The melodies are strictly syllabic (more accurately: one-note-to-one-word), and are ascribed to

<sup>7</sup> Waley, A. D.: *The Book of Songs*, (London, 1937).

<sup>8</sup> The numbers in brackets are the serial numbers of the songs in the set of twelve.

<sup>9</sup> *Couvreur, S.: Cheu King*, (Sien Hien, 1896, 1926).

<sup>10</sup> Granet, M.: *Fêtes et Chansons anciennes de la Chine*, (Paris, 1919).

<sup>11</sup> Karlgren, B.: *The Book of Odes* (Stockholm, 1950).

two modes only, both heptatonic: *huang-chung ch'ing kung* (mode 1) and *wu-i ch'ing shang* (mode 2).<sup>12</sup> In respect of note-series only (that is, of their relative pitches), these are Lydian on  $f$ , with  $f'$  as final (Nos. 1—6) and Mixolydian on  $f$ , also with  $f'$  as final (Nos. 7—12) but for two exceptions.

Though all the melodies make use of semitone steps, it is clear that the extent to which they do so varies from example to example. Some, indeed, appear to be a patchwork consisting of phrases from a purely pentatonic series mingled with others from a heptatonic series (No. 7 for example). The ritual melodies of *Chiang K'uei*, previously mentioned as dating from the thirteenth century, are more consistently heptatonic.

Most of the tunes show instances of the repetition of entire musical lines — particularly marked in Nos. 5 and 6. This is also observable in the tunes of *Chiang K'uei*.

From the nature of the verse, it might be expected that each musical phrase, corresponding to a single line — that is, to a complete sentence — would itself be complete and self-contained. It is known from *Prince Chu's* exposition that the lines of the stanzas were separated from each other in performance by several beats of percussion, sometimes equal to the duration of the line itself (see *Courant*, p. 129). This would lead us to expect that the last note of a four-note phrase would possess 'final' or at least 'subfinal' (secondary final) quality. Examination of the songs showed in fact that a limited number of degrees of the mode occur as line-finals, and that the number of stanza-finals is even more restricted. While picking out line- and stanza-finals, however, I noticed that the half-lines also tend to end on the same few degrees as the lines, so that each four-note phrase is made up of two two-note phrases. This seemed at first sight so remarkable that a detailed analysis of all the tunes in mode 1 was undertaken, setting out for each nature and frequency of the degrees that act as stanza-finals, line-finals and half-line finals. A similar enumeration was made of the various stanza-initials, line-initials and half-line initials. A complete analysis is shown for Song 2, p. 153; for the remaining songs, a summary analysis follows each transcription.

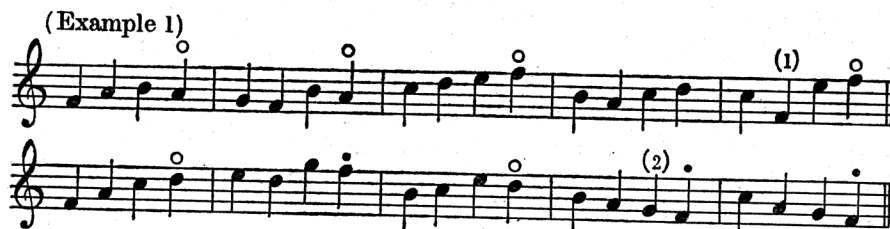
In setting out the transcriptions, the following data are given for each song: (1) A transcription into staff-notation on the basis of  $f$  as fundamental. Bar-lines mark the ends of lines; double bar-lines mark the ends of stanzas. The notes are of equal duration; this is in accordance with nineteenth century practice and with that recorded by *Prince Chu*.

<sup>12</sup> The meaning of the phrases: *huang-chung ch'ing kung* and *wu-i ch'ing shang* will be considered later (p. 169). For the present it will be sufficient to remind the reader that *kung* is the basic series in root position, while *shang* is the modal inversion on the second degree of the basic series.

(2) The rhyme-scheme, based on the sound-values given in *Karlgren* (op. cit.). This is given in full only for Song 2. (3) For all the songs, notes on rhyming syllables are marked with a small circle over the note. If two different rhymes occur in the same stanza, one is marked with a dot, the other with a circle. (4) The figures in brackets above the notes refer to alternative readings given below the transcription, either from *Sé P'u* (SP) or *Yüeh Tien* (YT). The *I-li Ching-chuan T'ung-chieh* is referred to as IL. The word 'flute' in brackets indicates that the reading derives from the flute-notation. Where no alternative is given, the text is attested by three versions: IL, SP (pitch-pipe and flute), YT (pitch-pipe and flute); where an alternative is given, the text is attested by two versions, one of which is that of *Chu Hsi*. (5) For each song, the number of repetitions of entire musical sentences is recorded as 'line-repeats'. (6) For Song 2, a complete list of steps and leaps to and from each degree of the mode is also given; (7) for all songs, the information derived from such a list is summarised in a staff-notation diagram. Arrows mark the direction of movement, and the value of the note (following *von Hornbostel's* notation) is proportional to its frequency of occurrence as subfinal; the final is marked by a pause-sign.<sup>13</sup>

An important point in the transcription of the songs is that (as shown in the notes to the transcriptions) the lexigraph 'ta' is occasionally used in error for 'tai' — the difference amounts to one dot, and the confusion is a common one. These words are abbreviations for the expressions *ta lü* and *t'ai ts'ou*, *f#* and *g* respectively (*f* being the fundamental). The error is of little significance here, since we have the flute-notation as a check; but it suggests that similar emendations would not be inappropriate in certain ritual songs of *Chiang K'uei*, where a strict adherence to the text would lead to a note-series that transgresses the limits defined by the nominal mode.

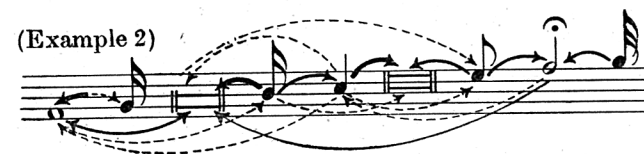
Song 2: 'My four steeds are weary' (Mao 162; Waley 146)



<sup>13</sup> This diagram is only complete for Songs 2 and 10. For the others it is reduced (for ease of reproduction) to conjunct steps and the most frequent steps and leaps, these latter indicated by heavy arrows.



(1) SP *d* (2) YT *f* (3) YT *a* (4) SP *f* (flute) (5) SP *d*  
Rhymes: I *p'iwär, d'iar, k'iwär, p'iar*. II. *p'iwär, k'iwär; mä, ko, t'io*. III *g'a, x'wo, ko, b'wo*. IV *iäg, k'äg, mäg*. V *ts'äm, s'äm*.  
Line-repeats: I. 2, III. 4, V. 4.  
Stanza-finals: *f f f f f*. Line-finals: *7a 7d 2f 2f 2c*. Half-line finals: *8a 7d 5f*  
2e 1c 1b 1g. All-finals: *15a 14d 9f 5f 3c 1b 1g*. Stanza-initials: *f f f f f*. Line-initials: *8c 5b 3g 2e 1a 1f*. Half-line initials: *7b 6c 4e 3g 3g' 1f 1f'*. All initials: *14c 12b 6e 5f 3f 3g' 1a*.  
Steps and leaps to and from each degree. Movement occurs from left to right; forms in brackets occur only between phrases. Minor second: *ef bc*. Second: *gf fg (ag) ba (ab) cd (dc) ed (de) g'f*. Minor third: *(ac) ca bd (db) (df')*. Major third: *fa (bg) ce (ec)*. Tritone: *fb (f'b)*. Fourth: *f'e (cg) (dg')*. Fifth: *cf ae*. Sixth: *f'a (df')*. Seventh: *ef*. Octave: *(ff) (f'f)*. Ninth: *(fg')*.



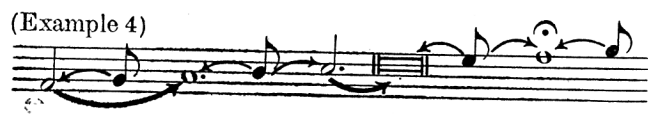
Arrows indicate the direction of movement. This diagram includes only movement within phrases (not between phrases). The weight of the arrow indicates the frequency of occurrence of a particular step or leap. Dotted arrows mark movement of least frequency.

Song 1: 'Yu, yu, cry the deer' (Mao 161; Waley 183)





(1) YT *d* (2) YT *a* (3) SP *f* (flute). Line-repeats: I. 6+7, III. 6+7. The six- and seven-note lines are broken down, following the structure of the text, as follows: (II. 6) *ef' ab ad*; (II. 8) *cd ed g'f'*; (III. 8) *cd f ed g'f'*. (see p. 171).



Song 3: 'Bright are the flowers' (Mao 163; Waley 290)



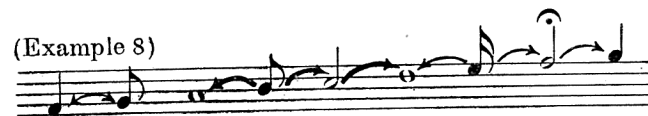
(1) SP *f* (flute) (2) SP *d* (3) IL obliterated (4) YT *f d g' f*-end of stanza and song; this presumably arose as a contraction of the first note of stanza IV, line four, and the last three notes of stanza V, line four. Line repeats: I. 4, V. 4; II. 2+3, IV. 2+3.



Song 4: 'The fish caught in the trap' (Mao 170; Waley 168)



(1) SP *a* (flute) (2) SP *f* (flute) (3) YT *f* (4) SP *a* (5) SP *f* (6) SP *g'* (flute). Line-repeats: I. 4, III. 4.; II. 3, V. 1; III. 3, IV. 2. The rhyme-scheme clearly indicates six stanzas, and these are marked in all three texts. Nevertheless, the last three stanzas are combined to form a single musical unit, a 'stanza' of six lines; for the purposes of analysis, this has been treated as a single stanza. The three-note lines have been broken down as: *cd f* and *bc f*.



Song 5: 'In the South there are lucky fish' (Mao 171; Waley 169)

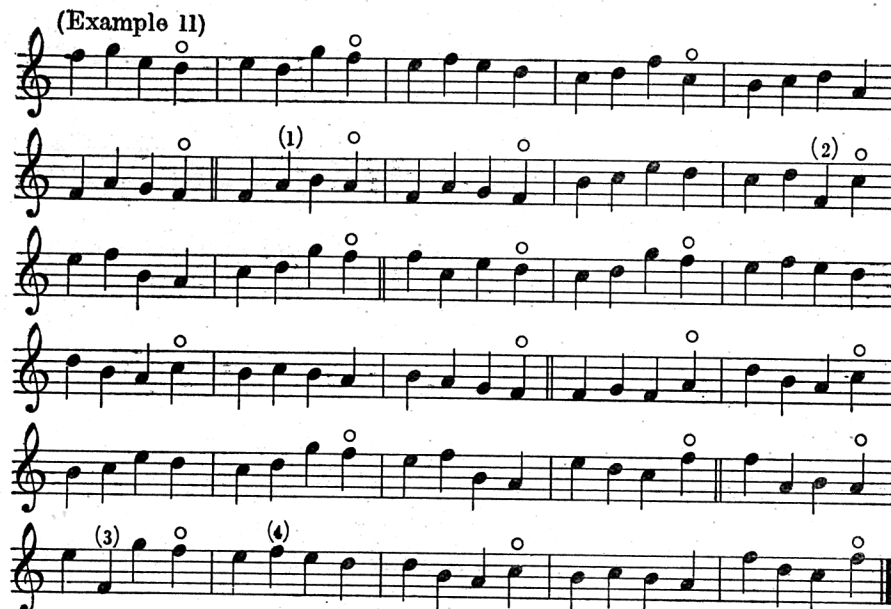




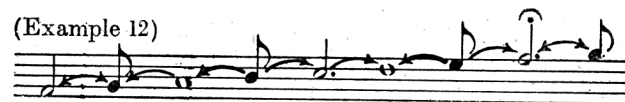
(1) YT *e* (2) 'ta' for 't'ai'. Line-repeats: I. 3, IV. 2; III. 3, IV. 1. The six-note lines are broken down as 2 + 2 + 2.



Song 6: 'On the southern hills grows the nutgrass' (Mao 172; Waley 170)



SP *g'* (flute) (2) SP *f'* (flute) (3) SP *d* (4) YT *f*. Line-repeats: I. 3, III. 3, IV. 3 I. 6, II. 2; II. 3, IV. 3; II. 5, IV. 5; II. 6, III. 2; III. 4, V. 4.

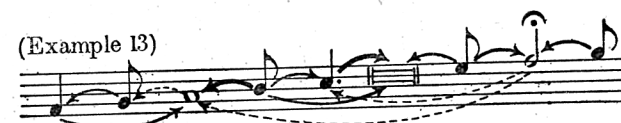


From the full analysis of Song 2, it is evident that the half-line finals include a greater number of different degree than the line-finals; but in all six songs in this mode, *d* and *a* are the degrees which occur most frequently as subfinals, whether as half-line or line-finals. The songs in mode 1 do not all show the same frequency of occurrence of

the same subfinals. Whereas in 1, 3, 4 and 6, the most frequent line- or half-line finals are *d*, *a*, *c* and *f'*, for 2 and 5, the most frequent are *d*, *a*, *f'* and *f*. In 4, and even more so in 6, *c* is of greater relative weight, and in 6 challenges both *a* and *d* as line-final.

The commonest line-initials are *e*, *b* and *c*, and the frequency of occurrence varies in different songs. Again, as for half-line finals, there is a greater number of degrees acting as half-line initials than as line-initials, but the frequency of occurrence of degrees other than *e*, *b*, *c* and *g*, is low. A glance at the list of line- and half-line initials in Song 2 shows that these include the two auxiliary notes (*pien*), *b* and *e*, which convert the pentatonic to a heptatonic series. They also include, among the most frequently occurring initials, *c*, *g* and *g'*. All these act, as we shall see, in a general sense as 'leading notes' or 'passing notes' to one or other subfinal or final. What is true, with regard to initials, of Song 2, is also true of Songs 1, 3—6.

When the half-line structure of 'initial' and 'final' was detected, lists were made of all half-lines in each song. These showed that the number of two-note motifs actually used was far smaller than the possible maximum. Accordingly, for each of Songs 1—6, a list was prepared of the various possible steps or leaps to or from each note throughout the note-series. An example of such an analysis is given in full for Song 2. The movement in each case is from left to right; brackets indicate that the movement occurs only between four-note or two-note phrases, never within a two-note phrase. For the Songs 1—6, the results of this analysis are shown in staff-notation diagrams. Although the diagrams are never identical, there is a common pattern of permitted steps and leaps:



For conjunct movement, this diagram is valid for all six songs, save that the step *b* to *a* is reversible in Song 1. For leaps, the diagram is valid for at least five songs, but not necessarily for the same five for each leap. It shows the essential dynamic structure of mode 1. Clearly, *f'*, *d*, *a* and *f*, are focal points towards which movement occurs; while *g'*, *e*, *c*, *b* and *g* are points to be quitted, sometimes in a specific direction only. These are the 'finals' and 'initials' isolated by the analysis of half-lines.

A distinction between line-initials and line-finals was established by Levis<sup>14</sup> in his analysis of certain purely pentatonic, and in part

<sup>14</sup> Levis *op. cit.* p. 120.

melismatic, *tz'ü* melodies of the nineteenth century. In the pentatonic series: *c d f g a c' d'*, for example, he showed that when *d* is final, *a* and *d* alternate as line-finals; while the line-initials in a nine-line song are: *3f 3c' 1c 1f 1g*. His attention was first directed to the 'harmonic relationship' between line-initials and line-finals by *Prince Chu's* remarks in the *Yüeh-lü ch'üan shu* (1595); but since *all* combinations of the degrees of the pentatonic series are harmonious in the Chinese sense (c. f. the beneficent harmony of tinkling jade pieces tuned to the pentatonic series and hung at the girdle<sup>15</sup>), what is important is surely the distinction between line-initials and line-finals, rather than their 'harmonic relationship'. We shall return to Chinese rules for composition later.

Leaving now the detailed structure of the mode, it is convenient to consider the types of melodic movement deducible from Songs 1—6. In classical western contrapuntal melody — as to some extent in Turco-Arabic melody — the melodic line is controlled by prohibition of leaps of augmented or diminished intervals, of sevenths or of ninths, or of direct conjunct movement following a leap, etc. The musical line of the four-note phrases of these T'ang melodies is evidently not controlled by this sort of prohibition (phrases of other lengths will be dealt with subsequently). It might be supposed that the leaps arise from gross corruption of the text (they could not arise from simple graphic confusion of similar characters); but against the view that they are spurious is the fact that such leaps also occur in the flute-versions of the *Sé P'u* and *Yüeh Tien*, as well as in the ritual tunes of *Chiang K'uei*. If we analyse the movement from note to note in the four-note phrases in terms of the nature of the steps — whether conjunct or disjunct — and the direction of movement in relation to previous movement — whether direct or contrary — the unexpected fact emerges that, with two or three exceptions only, every logical alternative is realised. This does not mean that all possible groups of four-notes from the note-series are used; but that the movement of the musical line at any point does not depend on the nature of the previous movement or its direction as such. Whether the second of the three steps in a four-note phrase is conjunct and contrary, for instance, is unrelated to whether the first step is disjunct; and this is true for the third step as well. At each point, all possibilities of movement are open; and which movement actually occurs depends on factors other than the character of previous movements as defined by the criteria: conjunct or disjunct; direct or contrary. The evidence for this assertion can best be presented as a table; in this, the terms 'direct' or 'contrary' are used with respect to the immediately preceding step, and 'conjunct' implies a step of a minor or major second. Each type of movement is illustrated by the individual song-lines listed in the column on the extreme right. The

<sup>15</sup> *Li Chi* 9, 'Yü Tsao' (*Szü Pu Pei Yao* edition: folio 9 v.°)

Note-to-note-movement in a four-note line

| FIRST    | SECOND   | THIRD    | Reference  |
|----------|----------|----------|------------|
| conjunct | conjunct | direct   | 2. I. 3    |
|          |          | conjunct | 1. II. 8   |
|          |          | disjunct | ****       |
|          |          | contrary | 2. V. 3    |
|          | contrary | conjunct | 6. III. 3  |
|          |          | conjunct | 10. II. 4  |
|          |          | disjunct | 10. III. 2 |
|          |          | contrary | 2. V. 1    |
| disjunct | conjunct | direct   | 10. I. 1   |
|          |          | conjunct | 2. II. 3   |
|          |          | disjunct | 2. III. 5  |
|          |          | contrary | ****       |
|          | disjunct | direct   | 2. IV. 3   |
|          |          | direct   | 2. I. 4    |
|          |          | conjunct | 2. IV. 4   |
|          |          | contrary | 2. V. 4    |
|          | contrary | direct   | 2. I. 2    |
|          |          | conjunct | 2. II. 2   |
|          |          | disjunct | 2. III. 4  |
|          |          | contrary | 7. III. 5  |
| conjunct | conjunct | direct   | 6. II. 4   |
|          |          | conjunct | 2. II. 5   |
|          |          | disjunct | 2. I. 1    |
|          |          | contrary | 8. III. 6  |
|          | disjunct | direct   | 6. V. 6    |
|          |          | conjunct | 6. II. 2   |
|          |          | conjunct | 2. IV. 1   |
|          |          | disjunct | 7. III. 2  |
|          | contrary | direct   | 11. I. 4   |
|          |          | conjunct | 2. II. 1   |
|          |          | conjunct | 9. III. 1  |
|          |          | disjunct | ****       |
|          | disjunct | direct   | 1. II. 5   |
|          |          | conjunct | 2. III. 1  |
|          |          | direct   | 2. I. 5    |
|          |          | disjunct | 2. IV. 5   |
| disjunct | conjunct | direct   | 2. IV. 2   |
|          |          | conjunct | 2. III. 2  |
|          |          | disjunct | 2. III. 3  |
|          |          | contrary | 2. V. 5    |
|          | disjunct | direct   | 11. III. 2 |
|          |          | direct   | 9. IV. 1   |
|          |          | conjunct |            |
|          |          | contrary |            |

examples have been taken in the first place from Song 2, each line of which finds its appropriate place in the table. Illustrations of other types of movement are taken from the rest of the songs, and no attempt has been made to find more than a single example of each type of movement. The reference to a given line is in the form of three numerals; 6. II. 2 indicates the second stanza (II) of Song 6, and the second line (2) of that stanza.

The three types of movement which do not occur are shown by the asterisks in the last column. The first (conjunct, conjunct direct, disjunct direct), though not occurring in the twelve songs, is exemplified by the opening of the second stanza of the 'Hymn to the Ancestors' transcribed by *Courant* from *Prince Chu*.<sup>16</sup> As we shall see, there is good reason for its not occurring in the songs of *Chu Hsi*. The absence of the second and third types (conjunct, disjunct direct, disjunct direct; disjunct, disjunct direct, disjunct direct) can also be plausibly explained.

What determines the fixed compass of these twelve songs? In the light of the ten songs of *Chiang K'uei*, which display three modes in several different keys, but which fall, all ten, within the compass of a minor tenth (= 16 semitone degrees), the answer is undoubtedly that the compass is that of the standard bell- or stone-chime of sixteen pieces. According to the *Sheng-men Yüeh-chih* (1766) — the handbook of ritual musical instruments, dance, etc. issued at the shrine of Confucius — the arrangement of the chime was as follows:<sup>17</sup>

c# d d# e f' f# g' g#  
c b a# a g# g f# f

For the Lydian note-series on *f, g'* will be the upper limit of the mode possible within the compass of the chime (*f* being the lowest note of the chime). The limitation suggests that other features of the song-melodies may derive from their conception primarily in terms of a chime of fixed range. In particular, the markedly non-vocal character of the melodic line strongly suggests that the melodies are primarily instrumental compositions. As *Bose* writes of the 'Hymn to Confucius', the melodies exhibit 'die strenge Kahlheit einer rein spekulativen Melodik, das Äusserste an Künstlichkeit und Naturferne'.<sup>18</sup>

If now we approach the construction of such a song-melody from the composer's point of view, the seeming complexity of analysis vanishes. The rules for the composer as revealed by analysis are few and simple. His stanza-initial may be the final or the octave above the final; his stanza-final may be the octave of the final, but in his last stanza must

<sup>16</sup> *Courant op. cit.* p. 130.

<sup>17</sup> *Sheng-men Yüeh-chih*, folio 6 r°.

<sup>18</sup> *Bose, F.: Musikalische Völkerkunde* (Freiburg i. Br., 1953). See p. 126.

be the final itself. In a four-note phrase he has on the whole to respect the 'final' qualities of *f', d, a* and *f*, and the fugitive or leading note properties of *g', e, c, b* and *g*. In stanzas of a large number of lines, or in songs of a large number of stanzas, an 'initial' may occasionally occur in half-line final position, approached from a 'final' (c. f. 2. IV. 5).

The 'impossible' movements already referred to are: (1) conjunct, conjunct direct, disjunct direct; such a movement is impossible with the dynamics shown in Example 13, where *ag* and *gf* are not reversible. But *Prince Chu's* example (*Courant*, p. 114) shows that this movement could occur in other variants of mode 1. (2) conjunct, disjunct direct, disjunct direct; here too there is no point in the series (Example 13) at which such a movement can begin and end without disturbing the 'initial' and 'final' relationships. Finally, (3) disjunct, disjunct direct, disjunct direct; this again is impossible in this mode; but in *Chiang K'uei's* Sixth Song such a movement occurs.

We can now see the major restraints which impose order on the seeming freedom of movement suggested by the Table. Movement in a four-note phrase can occur in any of the logical alternatives shown in the Table provided only that, in each half-line, movement occurs from an 'initial' to a 'final' according to the permitted movements summarised in Example 13.

Although with three exceptions all types of movement are possible, it is clear from the analysis of Song 2, shown in the Table, that some patterns are used more frequently than others, presumably because they offer a larger number of melodic alternatives. They are, in particular, the oscillatory types of movement with mutually compensating contrary leaps, such as: conjunct, disjunct contrary, conjunct direct or contrary; and disjunct, disjunct contrary, conjunct direct or contrary.

The analysis thus far has proceeded without reference to any previously recognised type of modal structure, or to the modal functions recognised by the Chinese themselves. We may begin with the function of the two *pien*, indicated by the term *pien* itself. The fourth degree of the basic Lydian series is *pien chih*, 'becoming *chih*', that is, leading to the fifth degree; while the seventh degree is *pien kung*, 'becoming *kung*', that is, leading to the octave of the fundamental. The question whether the Chinese basic note-series was anciently heptatonic or pentatonic has been hotly disputed — by the Chinese themselves as early as the sixth century A. D. As *Courant* has pointed out<sup>19</sup>, the fact that the names for the fourth and seventh degrees are not distinct (as are those of the other degrees) in itself suggests that the *pien* were acquired later. The observed tendency for the degrees *b* and *e* in Songs 1—6 to 'resolve' on *c* or *a*, or *f* or *d*, respectively, accords with the view of them as 'leading' or 'passing' notes, though their observed resolution either by ascent

<sup>19</sup> *Courant op. cit.* p. 93.



or descent indicates that the functional analogy with leading notes must not be pressed too far. *Levis's* translation of *pien* as 'side' has little justification; and *Courant's* 'modifié' does not convey the notion of self-transformation implicit in *pien* — this is its customary use in Taoist texts, for example. *Van Aalst*<sup>20</sup> also gives the meaning 'changing into *kung* (or *chih*)'.

The scheme in Example 13 shows, however, that in the complete note-series of mode 1 the *pien* are not the only degrees to be treated as passing notes; the degrees *c* and *g* or *g'* are treated in a similar way. If we abstract *b* and *e* from the note-series, there remains the pentatonic *kung*-mode series. Now in purely pentatonic tunes, such as the Ritual Hymns in *Prince Chu's* treatise,<sup>21</sup> it is clear that within the pentatonic series itself, a *pien*-like function is performed by both *c* and *g*. This can be seen in the first stanza of Song 7, and in parts of Songs 11 and 12. In more extended purely pentatonic specimens, it can be seen that *g* and *c* (or more generally, the second and fourth degrees of the basic pentatonic series) are also the degrees least frequently occurring as line-finals. Within the basic pentatonic series itself, there is evidently a system of modal dynamics such that (for the *kung*-mode on *f*) *f'*, *d*, *a* and *f* are focal points, and *g'*, *c* and *g* are points of departure.

The treatment of the pentatonic degrees as line- or sub-finals is supported by *Chu Hsi* (quoted by *Prince Chu*<sup>22</sup>): 'If the note at the head is the *kung*-note, the note ending the tail will also be the *kung*-note; this then is the *kung*-mode. If there are places midway where the beat is arrested, there the five degrees — following ancient usage — are all employed [as finals] and not only and exclusively *kung*'. *Prince Chu* gives three examples. A much later compilation, the *Ch'in T'ing Ta Ch'ing Hui Tien (Statutes of the Ch'ing Dynasty)* (1818)<sup>23</sup> gives a further illuminating definition: 'The two *pien* degrees established in each *yün* (= the basic series in one of twelve keys) are not modal initials (*ch'i tiao*). The note established in the fifth degree position (*chih*) [that is, *c* in the series with *f* as fundamental] also is not initial. The note established in the sixth degree position (*yü*) [that is, *d* in the series with *f* as fundamental] is identical with the modal dominant (*chu tiao*)'. Two points merit comment: 'modal initial' also implies melody initial, so that this text informs us that there are neither modes nor melodies beginning on the *pien*. Secondly, the modal dominant with which the sixth degree is identified is defined as the note in the sixth degree position

<sup>20</sup> *van Aalst, J. A.: Chinese Music* (Shanghai, 1884) p. 14.

<sup>21</sup> *Courant op. cit.* p. 103.

<sup>22</sup> *Courant op. cit.* p. 114. I have translated from *Prince Chu: Yüeh-hsüeh Hsin Shuo* (1595) folio 18 v°. *Prince Chu* gives the reference as *Chu Hsi Yü Lu*, but the passage is not to be found in the *Lu (Lecture Notes)* and in fact occurs in the music section of the complete works. In the *Yü-tsun Chu Tzu Ch'üan Shu* (1714), the passage will be found under *Yüeh, Ch'üan* 41, folio 6 v°.

<sup>23</sup> *op. cit.* folio 8 v°.

two places before *kung*, the fundamental of the *yün*. Accordingly, the observed conspicuous role of the sixth as line- and half-line final in the T'ang melodies here receives verbal authority. According to *Han Pang-ch'i*<sup>24</sup> there existed a tradition that the initial of every mode in Chou times was the sixth of the basic note-series.

These references will not on this occasion be pursued further. They are given only to show the extent to which the observed structure of the six tunes in mode 1 accords with principles stated in Chinese texts, for which illustrative material from sources earlier than the sixteenth century has hitherto been lacking. The avoidance of the fifth degree as melody-initial agrees with the *pien*-like use of *c*; a similar avoidance of *g* would be in accordance with the tradition of Chou,<sup>25</sup> for this is the nefast *shang* degree. Combining the citations, it is clear that there is textual support for much of the observed dynamic structure; there is, however, no textual support thus far for the observed detailed line-structure, with alternation of 'initial' and 'final'.

Turning now to the modal functions as revealed in Songs 7 to 12 inclusive, it is evident that they differ from those of mode 1.

Song 7: 'Fair, fair', cry the ospreys' (Mao 1; Waley 87)

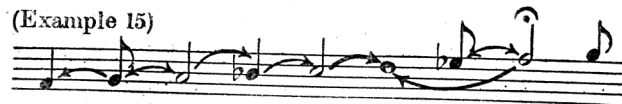


(1) SP *f'* (flute). Line-repeats: I. 1, II. 1, 5. Stanza-finals: *f' f' f'*. Line-finals: *5d 3a 3c 2f 2f' 1g 1g'*. Half-line finals: *8d 4a 3b 3c 1f 1e*. Stanza-initials: *f' f' f'*. Line-initials: *4c 4f' 3a 2f 2g 1b 1g'*. Half-line-initials: *6c 4d 4e 3g 2a 1f'*.

<sup>24</sup> *Yüan Lo Chih Yüeh* (1508). See *Courant op. cit.* p. 107.

<sup>25</sup> *Courant op. cit.* p. 101.

(Example 15)



Song 8: 'How the cloth-plant spreads' (Mao 2; Waley 112)

(Example 16)



(1) YT *d* (2) IL obliterated; YT *b<sup>b</sup>* (3) IL *f a g* obliterated (4) IL obliterated (5) '*ta*', but flute confirms '*t'ai*' (6) *f* (flute). Line-repeats: I. 2, II. 6; II. 4, III. 3.

(Example 17)



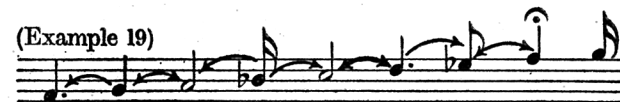
Song 9: 'Thick grows the cocklebur' (Mao 3; Waley 40)

(Example 18)



(1) SP '*ta*' for '*t'ai*' (2) YT omits this stanza. Line-repeats: I. 4, IV. 2; II. 2, III. 2. The six-note lines are broken down as *bcd eag*; *aga fga*; and the five-note lines as *g'c def*, *f'c def*.

(Example 19)



Song 10: 'Now the magpie had a nest' (Mao 12; Waley 89)

(Example 20)



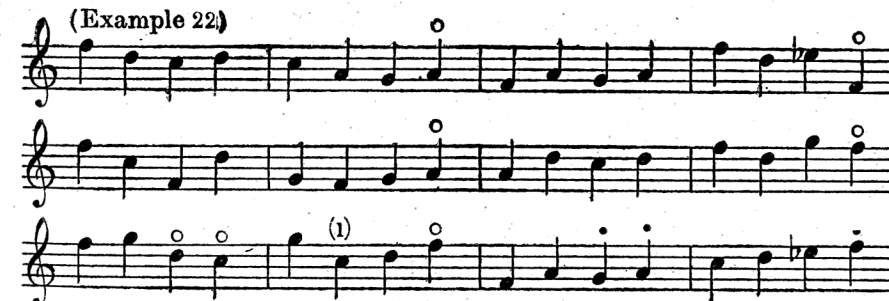
(1) SP '*ta*' for '*t'ai*'. Line-repeats: I. 2, III. 1. Stanza-finals: *f' f f*. Line-finals: *5c 1f 1g 1a 1f*. Half-line finals: *5c 2f 2e<sup>b</sup> 1g 1a 1d*. Stanza-initials: *f f f*. Line-initials: *3f' 2c 1g 1d 1b<sup>b</sup> 1g'*. Half-line initials: *6d 2g 1a 1b<sup>b</sup> 1c 1e<sup>b</sup>*.

(Example 21)



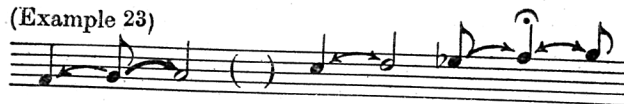
Song 11: 'See, she gathers white aster' (Mao 13; Waley 98)

(Example 22)



(1) YT *a*; this melody is hexatonic. Line-repeats: I. 3, III. 3.

(Example 23)



Song 12: 'Here we are gathering duckweed' (Mao 15; Waley 76)

(Example 24)



1) SP *f'* (flute). Line-repeats: I. 3, II. 3.

(Example 25)



Songs 9, 10 and 12, show clear dominance of *c* as subfinal; in Song 11, *c* is less important than *a* and *d*, which are of about equal importance. In Song 8, the most frequent line-finals are *g* and *a*, while in Song 7, *d* is the most important subfinal. The mode evidently embraces a number of *rāga*-like variants.

The occurrence of the same notes as subfinals in both groups — with the exception of Song 8 — is surely very remarkable, since in the *shang*-mode (that is, the modal inversion commencing on the second degree of a Lydian series) the position of the auxiliaries (*pien*) ought theoretically to be different. Instead of the *kung* series: first degree, second, third, *pien*, fifth, sixth, *pien*, first degree (*8va*); that is, on *f*, for example:

*f g a b (= pien) c d e (= pien) f'*,

the series runs: second degree, third, *pien*, fifth, sixth, *pien*, first (*8va*), second (*8va*). For the *shang*-mode on *wu-i* (*e<sup>b</sup>*) this is:

*e<sup>b</sup> f g a (= pien) b<sup>b</sup> c d (= pien) e<sup>b</sup> f'*

The observed dynamics are not at all what would be expected: *a* and *d* (by analogy with the *kung*-mode) should be initials (since they are the *pien*), not subfinals; while *b<sup>b</sup>* and *e<sup>b</sup>* might be expected to act as subfinals. Clearly in spite of being classified as *shang*, this mode is merely a variant of *kung* in which both *pien* are flattened (*b<sup>b</sup>* and *e<sup>b</sup>*). The true *pien* (*a* and *d*) are not treated as *pien* — except to some extent in Song 10, where *d* sometimes resolves on *c*; but the example is very short and is largely pentatonic.

When writing in the *shang*-mode then, the composer's practice — judging by these six examples — was to treat *b<sup>b</sup>* and *e<sup>b</sup>* as if they were *pien*, ignoring the auxiliary nature of *a* and *d*, and forgetting that *e<sup>b</sup>* is the upper octave of the fundamental of the entire *wu-i* system, and *f'* merely the modal final.

All this would seem to suggest that by the time these tunes were composed the significance of the old classification of the modes, with its complete set of modal inversions, had been forgotten. The names *shang* and *kung* define note-series; if they ever implied those changes in dynamics which the inversion of the pentatonic series would lead us to expect, these implications have been obliterated. Mode 1 and mode 2 are nothing more than two versions of the *kung*-mode with different auxiliaries. But if the earlier modal system seems to be in decay, there can be no question that heptatonic construction is incompletely assimilated, as shown by the long stretches of purely pentatonic writing in the twelve songs. It would seem a point of great importance then, that as late as (or later than) the eighth century A. D., and in spite of intercourse with India and Central Asia, the auxiliary degrees are used with such diffidence.

Although the pentatonic skeletons of the *kung* and *shang* modes are identical, once *b*, *e*, *b<sup>b</sup>* and *e<sup>b</sup>* are removed (c. f. p. 166), there is nevertheless a profound difference between the two — apart from the flattening of *b* and *e* — for *shang* tends to break into conjunct tetrachord and pentachord (Song 10), and *kung* does not. This behaviour may be related to the persistent dominant rôle of the sixth degree of the basic series in all modes of any given system, implied in the passage from the *Ta Ch'ing Hui Tien* already cited (p. 162); for *c* is the sixth degree (*yü*) of the basic series starting on *e<sup>b</sup>*. But it must also be pointed out that the basic note-series of heptatonic *shang* approximates to the descending form of the Persian mode *rast* (in the ascending form the seventh is sharpened); *kung*, on the other hand is without parallel in the Perso-Turco-Arabic system. Is it possible that an original structural similarity — namely, the rôle of the fifth above the initial as dominant — in *shang* and *rast*, led to a re-inforcement of the popularity of *shang*, because foreign melodies in *rast* (or a *rast*-like mode) could be assimilated, owing to their affinities with *shang*?

The Lydian note-series of heptatonic *kung*, on the other hand,



occurs in classical and medieval Indian music; for example, the *ga* modes as defined in the *Nāyāśhāstrā* (first centuries A. D.) and in the *Saṅgītā Ratnākara* of *Śhārṅgadeva* (thirteenth century).<sup>26</sup> Grosset's account of the constitutive elements of the *jātis* (the *lakṣhanas*) reads like a summary, using Indian technical terms, of the analysis of the T'ang melodies presented here; in particular the Indian discrimination of initial, final, medials-phrase-finals and sub-finals, and the recognition of a group of tonic-initials, some or all of which can act as subsidiary finals, suggests that the technique of melodic composition in eighth century China may have been influenced by ideas still potent in thirteenth century India. The greater richness of the Indian vocabulary (as compared with the Chinese) in terms for functional elements of melody, suggests that the analysis (and the technique of composition) may be Indian rather than Chinese in origin.

On the other hand, if — as seems reasonable — the basic Chinese pentatonic series is to be thought of as an assembly of overlapping three-note (tritone) structures<sup>27</sup>, certain degrees of the series are likely to retain the character of passing notes, and we need not appeal to an Indian model for the basic dynamics of the Chinese pentatonic modes.

It has been shown that a common modal dynamic unites the six *kung*-melodies (and to some extent the six *shang*-melodies as well), so that we can define the Chinese *kung*-mode, for example, just as we can define a Turkish or Arabic *maqam* or an Indian *rāga*. Moreover, these Chinese modes share yet another characteristic with *maqam* and *rāga*, namely, the recurrence of entire phrases (four-note phrases in this instance) in different songs in the same mode. Thus in the *kung*-tunes, the following four-note phrases occur in two or more different songs: *b a c d* (3. IV. 2) (4. III. 3, IV. 2) (5. II. 2); *f g f a* (2. V. 1) (6. IV. 1) (4. VI. 1) (5. IV. 1, III. 3); *b c b a* (3. I. 3) (4. II. 3) (6. III. 5, V. 5); *f a b a* (2. I. 1) (3. II. 1) (6. II. 1); *c d g' f* (II. 8, II. 2) (2. III. 5) (6. II. 6, III. 2, IV. 4); *e f g' f* (2. V. 5) (3. III. 4) (6. V. 2); *f' d b a* (1. I. 1) (5. II. 1). (No attempt has been made to record all occurrences of a given phrase or even all phrases recurring in this way.)

In the *shang*-melodies, the following phrases occur in two or more songs; again the list is not necessarily complete: *f' d e' b' f'* (8. I. 6) (7. III. 4); *f' e' b' d c* (7. IV. 1) (9. II. 1) (10. I. 2, III. 1); *f' d e' b' f'* (11. I. 4) (12. III. 4); *b' b' c e' b' g* (8. I. 5.) (9. I. 3) (10. I. 3); *f' d c d* (7. I. 1, II. 1, III. 1) (11. I. 1.); *a b' c d* (7. IV. 3) (8. III. 4).

It is striking to see how frequently, both in *kung* and *shang*, the same phrase is used in the same position in the stanza in different songs. In one and the same song this is also true to a large extent (see the lists of line-repeats following each song). For example, the same four-

<sup>26</sup> Grosset, J.: 'Inde', Lavignac & La Laurencie *op. cit.* I, pp. 257–376. See p. 305 *et seq.*

<sup>27</sup> Bose *op. cit.* pp. 110, 111.

note phrase may tend to recur in initial, or medial or final position in a stanza. Thus, *f g f a* and *f' e' b' d c* are initial lines in three out of four occurrences; *f' d e' b' f'* is final in both its appearances; *b a c d* is medial in three out of four occurrences, and so on.

I have suggested that the *shang*-mode was in effect only a variant of *kung* with two different auxiliaries. This view is supported by the fact that a number of medial four-note phrases are common to *kung* and *shang* tunes, as shown here: *f a g f* (6. I. 6, II. 2) (5. II. 4) (7. I. 2) (12. I. 4) (9. I. 4, III. 2); *f a g a* (11. I. 3) (12. II. 1) (8. II. 4, III. 3); *f' a c d* (3. II. 2) (9. I. 1) (5. IV. 4); *c a g f* (8. III. 2) (2. II. 5) (10. II. 2) (12. III. 2); *c a c d* (3. I. 2) (7. V. 2) (9. I. 2); *f' c d f'* (5. II. 4) (7. I. 4) (10. I. 4).

An important implication of these three lists of 'stock' phrases is that both *kung* and *shang* tend to use purely pentatonic stock phrases in *medial* positions — that is, neither as initial line, nor as final line of the last stanza. The stock *initial* and *final* phrases in use in both modes tend to include the functional auxiliaries, and are therefore characteristic of the particular mode. This generalisation only applies to the stock phrases, not to the structure of the ritual melodies in general. The sequence and relative frequency of purely pentatonic phrases, and of phrases with auxiliaries, varies from stanza to stanza and from song to song. A song such as No. 11 with twelve four-note phrases is purely pentatonic save for two final phrases; while Song 2, with twenty-five four-note phrases, exhibits one or other auxiliary in all but six of these. In general, the modal dynamics of mode 1 show less variation in the six songs than do those of mode 2.

From a passage in the Music Section of *Chu Hsi*'s works, it is evident that he could make no sense of the description: *huang-chung ch'ing kung*, defining mode and key. If the description were *huang-chung kung*, there would be no difficulty; this would be the usual formula indicating that the mode is the *kung*-mode of the system whose fundamental is the pitch-pipe *huang-chung* (*f*). *Huang-chung* defines the key and *kung* the mode. Now the expression *huang-chung ching* normally means the octave of *huang-chung* — the note given by a pipe of half the length. And *Chu Hsi* reads *huang-chung ch'ing kung* as: 'the octave of *huang-chung* acts as *kung* (*huang-chung ch'ing wei kung*)'.<sup>28</sup> But this seems to him preposterous, because in his view the modal final, *kung*, must be at the bottom of the note series; if its octave were allowed to take precedence there would be confusion in the social order! He does not refer, however, to the description of mode 2: *wu-i ch'ing shang*, which should be read (if he is right about the first) as: 'the octave of *wu-i* acts as *shang*'. But such a reading is explicitly contradicted by the note-series of this group of songs, unambiguously defined by the pitch-

<sup>28</sup> *Chu Hsi op. et editio cit.* folio 11 v°.

pipe notation. The note-series is that of a *shang*-mode; and *wu-i* (*e<sup>b</sup>*) is not *shang* (the final) but the fundamental of the system. *Shang* is in fact *huang-chung* (*f*).

I conclude that *Chu Hsi*'s reading is wrong, and that *ch'ing-kung* and *ch'ing-shang* are specified variants of the *kung* and *shang* modes. The tunes themselves show that the final degrees, *kung* and *shang* respectively, are indeed 'ch'ing', for they occur at the top of the modal series in ten out of the twelve songs. The fact that *Chu Hsi* did not recognise *ch'ing-kung* and *ch'ing-shang* as modal variants seems to me to increase the probability that these songs are indeed of pre-Sung date.

The existence of the set of six melodies in *ch'ing-shang* is of great interest in view of the literary associations of what has usually been thought of as the 'upper *shang*-mode'. In an open letter to me, published in the *Pei-p'ing Ching-shih Jih-pao*, October 29th, 1947, Professor *Yin Fa-lu* recognises five different meanings of the term *ch'ing-shang*. They are: (1) A *shang*-mode transposed up a semitone. The term *ch'ing-shang* (as well as *ch'ing-chih*, *chih* being the fifth degree) occurs already in *Han Fei Tzu* (third century B. C.). [Transposition is not implied by this text, however (L. E. R. P.).] (2) A type of music evoking a nostalgic ('autumnal') emotional response. This is suggested by seasonal correlation in the *Yüeh-ling* section of the *Li Chi* (ca. third century B. C.) and also by the passage from *Han Fei Tzu* already mentioned. (3) A class of melodies, recognised from Han times onwards, for a chamber-ensemble of strings and wind and in three modes: *p'ing tiao*, *ch'ing tiao* and *sé tiao*. (4) A particular mode of this set of three, namely *ch'ing tiao*, in which *shang* was 'dominant'. (5) A general term in Sui and T'ang times for old tunes in use in the Music Bureau (*Yüeh-fu*) under the Southern Dynasties (i. e. Sung, Liang etc.); as used in the Music Section of the *T'ung Tien* (early ninth century). In the light of the ritual melodies preserved by *Chu Hsi*, it would seem probable that a sixth meaning can be added to *Yin*'s list: that at some time prior to the twelfth century, *ch'ing-shang* was the name for a mode on the second degree of a Lydian note-series with the final at the top of the mode. That is to say, the qualifying 'ch'ing' does not refer, as has been supposed, to the *tessitura*, but to the upper position of the final in the note-series. This implies a special modal dynamic and suggests that at one time the Chinese had something of the attitude to modal structure which Middle Eastern and Indian peoples have today.

It is sometimes held<sup>29</sup> that the nostalgic quality of *shang* melodies cannot have resided in musical attributes, but was due to cosmological associations. This may well be; but it is plain that the *ch'ing-shang* mode possessed a peculiar dynamic, as well as a characteristic note-series; and it is difficult to believe that the musical quality of the

<sup>29</sup> *Bose op. cit.* p. 122.

rising final cadence, for example, had nothing to do with the literary associations of *ch'ing-shang* during so many centuries. Moreover, there would seem to be no reason why all modes should not occur in 'ch'ing' forms; we have already noted *ch'ing-chih* from *Han Fei Tzu*, and the Songs exhibit *kung* as well as *shang* with upper finals.

The fact that no less than half the songs should be in this mode adds weight to the view that they are indeed music of the T'ang dynasty. For cosmological reasons, the *shang*-mode was not inimical to the T'ang dynasty, as it had been to the Chou, and a certain *Chao Shen-yen*<sup>30</sup> is reported to have expressed the view in 720 A. D. that the *shang*-mode should be added to those used in the great sacrifices.

*Hsiung P'eng-lai*, writing in the thirteenth to fourteenth centuries, also gives the modes of the twelve songs as: *huang-chung kung* and *wu-i shang*, as if (like *Chu Hsi*) he no longer saw the significance of *ch'ing*, though he adds a note to the effect that the old score gives the modes as *huang-chung ch'ing kung* and *wu-i ch'ing shang*.

It has been shown that the note-to-note movement within the four-note phrases, each corresponding to a four-word line, consists of a twice-repeated movement from 'initial' to 'final'. This segmentation of the phrases is surely linked with the tendency of the four-word lines of the Chinese text to split up into meaningful binomes or two-word phrases. Without embarking on a full discussion of the matter, it is fair to say that the first member of such a word-pair carries a different psychological weight from the second in that, in the most general sense, it qualifies the second member. In lines of five, six or seven words, the placing of the words on initial or final degrees seems again to be related to the meaningful articulation of the text. As a single example, we may take the last line of the third stanza of Song 1. The text in *Kuo-yü*, with commas to mark natural breaks, runs: *I yen lo, chia pin, chih hsin*. The notes are: *c d f e d g' f'*. If commas are inserted in accordance with the meaning, the initial-to-final movement is preserved: *c d f, e d, g' f'*.

On several occasions<sup>31, 32</sup>, it has been suggested that the fitness of music for words, so stressed in ancient China, was related in some way to the inherent melodic accent (tone) of each word of the text. There is no evidence that the tones played any part in the construction of the ancient verses of the *Shih Ching*, however; nor is it easy to see how a one-note-to-one-word melody could be related to the tonal structure of the language, inasmuch as the 'tone' is not merely a pitch but a neume — a melodic accent. On the other hand, an unexpectedly close parallel exists between the structure of the four-word lines and the

<sup>30</sup> *Courant op. cit.* p. 101.

<sup>31</sup> *Levis op. cit.* Chapter III, p. 47.

<sup>32</sup> *Bose op. cit.* p. 92 et seq.



articulation of the musical phrases corresponding to each line of the verse; the dynamics of the individual melodic phrases would seem to be immediately related to the tendency of the verse to break into binomial units.

While it must be remembered that the four notes constitute a *line* and not a *bar*, there would seem nevertheless to be a sense in which this unit of four is a *measure* with 'good' and 'bad' beats. May not the excellence of ancient Chinese song have resided in the psychological matching of the text with the movement of tension and relaxation in the melody? In order to establish this point, however, a more detailed study of the correlation of text and music in the earliest sources would be necessary.

The principles of melodic composition as they emerge from this analysis of the twelve songs may now be summarised as follows: (1) The first line of the first stanza must begin on the final or its octave. (2) The last line of the last stanza must end on the final; medial stanzas may end on the octave of the final. (3) For variety, stanzas may begin alternately on the final or its octave. (4) Within a stanza, the line-finals will be chosen from the first, third, fifth, sixth or eighth degrees. These are also the most frequent half-line finals; but in one or other of the six *ch'ing-kung* songs all notes of the series may occasionally act as subfinals, though some do so but rarely. (5) The frequency of use of the various line-finals varies. While first and eighth degrees are relegated for the most part to initial and final lines, the third, fifth and sixth may occur with equal frequency or the sixth or third may dominate. There is no evidence here that the Chinese distinguished between the different resultant *rāgas*. (6) The most frequent initials in medial or final lines are the fifth, fourth and seventh degrees in *ch'ing kung*, or fifth, eighth and first degrees in *ch'ing-shang*. With descending frequency, all notes of the series can act as initials. (7) Each four-word line (one note to each word) includes two phrases of two notes. Each of these phrases involves movement between an 'initial' and a 'final' — ascending or descending, conjunct or disjunct; there is no instance of a repeated note. (8) Subject to the movement within two two-note phrases of a four-note line being (in general) from a note of the 'initial' group to one of the 'final' group, the musical line in medial phrases is restricted only by the compass of the standard bell- or stone-chime of sixteen semitone degrees. (9) Repetition, independent of the text, of entire musical lines, often in the same position in different stanzas, helps to give coherence to the melody. (10) In *ch'ing-kung* as in *ch'ing-shang* there are certain characteristic melodic formulae which can be used in any melody in that mode. (11) The notes of the melody never transgress the note-series of the nominal mode.

In view of this highly organised and largely instrumentally conceived structure, these melodies can as little be claimed as 'folk' songs

as their verses can be as 'folk' poetry.<sup>33</sup> Nevertheless, analysis reveals certain features which may surely be regarded as echoes of a very ancient musical tradition, held with great tenacity. For example, in spite of the note-series being heptatonic, the modal structure is basically pentatonic. Furthermore, both in *ch'ing-kung* and *ch'ing shang* there is a tendency for the sixth degree of the basic series to act as dominant; this is in accordance with a tradition associated with the Chou dynasty. Again, melodies nominally in the *shang*-mode tend to revert to the *kung*-mode with the same initial; this might be expected in view of the great popularity of the *kung*-mode in China. Lastly, the four-note phrases are surely a very ancient feature, shared with certain syllabic folksongs of Japan and Indo-China, and with the majestic bases of Indonesian *gamelan*-compositions. They may be regarded as a manifestation of that standard quaternary rhythm so typical of Chinese melody,<sup>34</sup> and as such they embody an ancient folk trait.

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<sup>33</sup> Karlgren, B.: Glosses on the Kuo Feng Odes', *The Museum of Far Eastern Antiquities, Bulletin No. 14* (Stockholm, 1942) pp. 71–247. See p. 75.

<sup>34</sup> Bose *op. cit.* p. 86.