MUSIC AND MEMORY IN CHINESE FOLK SONG PERFORMANCE

Frank Kouwenhoven
Antoinet Schimmelpenninck
CHIME Foundation, Leiden, Netherlands

ABSTRACT

Background. Over the past sixteen years, much of our on-going field research on folk songs in China has focused on monothematic song regions. We try to answer questions like: why do certain people sing all the lyrics they know to only one, or a small handful of tunes ? What does music mean to them in such a sharply delineated context ? And what can we learn, if anything, from such limiting circumstances, about the way in which the brain shapes, reshapes, remembers and reproduces music ? Many Chinese rural regions harbour only one (or at best two or three) prefered tunes to which all the local folk singers sing all (or most) of their lyrics. 'Monothematic' folk song regions are also known to exist, or to have existed, among Balto-Finnic and Finno-Ugric peoples, in parts of Russia and the Ukraine, and in American Indian communities. In China, the phenomenon is remarkably widespread, and part of a living tradition.

Aims. Monothematic song regions offer an ideal laboratory for research on the reproduction and actualization of melodies. The limited nature of the musical material and the potential for endless repetition offer attractive conditions for comparative study, and for musical experiments with singers (who may be fed with deliberately modified or 'distorted' versions of tunes, to test their responses).

Method. Transcription and computer analysis of repeated performances. Performance experiments with singers.

Results. We find that certain basic features of Chinese folk melodies are directly shaped by the nature of the mnemonic tools and cognitive processes involved. These tools and processes can be 'read' from the contours of the tunes. Our experiments in dialogue singing indicate that some singers *can* be influenced in their own performances by exposure to 'wrong' melodies, if only marginally so.

Conclusions. We find that social and cognitive functions of the songs inhibit a large degree of musical innovation, while facilitating change under specific circumstances. We propose a theoretical outline for this. We hope to make further discoveries via comparative analysis of monothematic song traditions elsewhere in the world, and via our continuing work in China, notably on the biological, sexual and cognitive constraints of courtship singing in Northwest China.

1. INTRODUCTION

Charles Darwin has often expressed surprise at the bewildering amount of variation in nature, as opposed to the very limited amount of true innovation. Musicologists are confronted with a similar problem in music: they see huge amounts of variation, but only limited structural change. Variations and fluctuations in performances seems to result only piecemeal in new standards of music. So how do new forms emerge, and how are they consolidated ?

In the current paper we will propose a theoretical framework for change and consolidation in local Chinese folk song repertoires, and will argue that certain basic features of the melodies are directly determined and shaped by the nature of the mnemonic tools and cognitive processes involved. The song examples stem from our fieldwork in Jiangsu Province (1986-1997).

Singers of *shan'ge* (Chinese rural songs) usually sing the bulk of their textual repertoire – which may comprise hundreds of different lyrics – to only one melody. In practice they often use two or three different variant tunes, of which one clearly dominates their performances. Every melody is associated with a specific region, which may differ in size from a local village community of 10.000 souls to an areal an areal of fifty or sixty kilometers wide with millions of inhabitants. Within every region all the singers roughly share the same melodical form, and to some extent the same textual repertoire.

Naturally there is musical variation within every region: between different villages, between individual singers, and between subsequent performances of a tune by one singer. Such variations should not necessarily be viewed as 'innovations', since the basic melodical ingredients of every regional tune remain the same throughout hundreds of performances, and over a longer period of time, as we found in our fieldwork on the basis of repeated recordings, supplemented by study of archival recordings from the 1950s.

The earliest extant folk song lyrics (written texts) available for southern Jiangsu date from the late 16th century, and resemble the current ones very closely in terms of structure, formulae, padding words and vocabulary. The close unity of words and music in this repertoire leads us to assume that changes in the musical structure are unlikely to have been very dramatic during the last four hundred years. But *some* change will have taken place. The fact is that, from all the hundreds of lyrics that survive from the 16th century, only *one* text is strictly identical to one that still circulated there at the beginning of the 20th century. As a first step to measure some of the limited changes that may have taken place in the music, we have carried out dialogue experiments with singers, to get an idea of how readily 'one-tune singers' can adapt their own tune to that of other singers.

2. DIALOGUE EXPERIMENTS

In Jiangsu, *dui'ge* (dialogue) singing between individuals or between groups was traditionally common during work on the land, during festivals and temple fairs. In our experiments we acted as singers ourselves, engaging directly in dialogues with

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our informants, or we brought together singers from different regions (with different tunes). For statistics and details on the outcome of these experiments, see Schimmelpenninck (1997: 294-301).

The main result was that singers generally ignored unfamiliar tunes: they happily continued their dialogues, responding in very different keys, different rhythms and different melodical figurations to whatever tune they heard. The only element that seemed to obstruct or inhibit dialogue singing was the intrusion of unfamiliar dialects, which would make it difficult to respond to the (semi-improvized) texts. Some musical interaction *did* occur in a minority of cases (20 per cent). This outcome may not be so surprising: of course, if we had witnessed more musical adaptiveness in these experiments, it would have become very hard to understand why the tunes in the entire area remained so fixed and so few. But where do the inhibitions come from ? Given the fact that musical interaction and mutual influence *does* take place in 20 per cent of cases, why does it not happen more often ? And why do most 'performance variations' remain fleeting and one-time events ? Could one envisage situations in which such variations lead to structural and permanent change ?

3. HOW DOES CHANGE COME ABOUT ?

We know that structural changes in the repertoire *do* occur. The many detailed transcriptions and computer analyses of hundreds of folk songs from the area that we have collected since1986 have led us to identify the following factors which can play a role in structural change.

1. individuality. Individual singers all have their own unique performance variant for the tune which they all share. Individuality obviously plays a role in innovation, since (individual) innovations occur every time a new generation of singers emerges. The noticeable melodical variation within each village should count as evidence for this. Via comparative analyses of hundreds of tunes in one particular region we found that the tunes had 62 per cent of their motivic and rhythmical material in common, but since every new performance would feature a different cross-section of those characteristics, individual versions could sometimes still resemble one another for no more than 30 per cent. This would not deter the singers from speaking about 'one and the same tune'.

2. social interaction: 'paternal' and 'sexual' models. Our transcriptions show that every singer generally sticks to his or her own individual tune version, even over a span of many years. A different situation arises if singers emphatically point at another singer as their 'model' or mentor. Some singers learned most of their musical habits from one or two particular persons. In this way, what begins as an individual style may find its way into the communal repertoire. Creative and remarkable individuals can become 'fathers' for subsequent generations of singers. In courtship dialogues, some singers turn out to be sexually very attractive for their listeners. Their social success urges many others to imitate their style of singing. We are currently investigating the possible influence of 'sexual models' on musical innovation in rural Gansu and Qinghai (Northwest China), by screening the social interaction in courtship singing rituals. For this we take inspiration from Darwin's theories of sexual selection as discussed in Geoffrey Miller's recent book 'The mating mind' (2000).

3. cross-regional influence. We can be certain of substantial interaction between the melodical repertoires of adjacent regions across southern Jiangsu. Under normal circumstances such exchange between different regions remains very limited, but it may increase rapidly in times of increased mobility, when floods, epidemic diseases, crop failures, famines or war violence force villagers to move elsewhere. In such cases new melodical blends of regional tunes are likely to emerge, at least in the long run. Music example 2 in this paper shows a series of regional tunes from four different areas ('fields' 1 to 4), with strongly variable rhythms and tempi, but with strikingly similar overal melodic direction and other corrresponding features, indicated in a 'skeletal' version at the bottom of the series. It is hardly an exaggeration to assume that the ebb and flow of musical cross-fertilization in China must be partly related to the fluctuating water levels of the big rivers and lakes!

4. 'imprinting' ? Individual singers may not change much in the basic features of their tune, yet every time they sing it anew certain elements come to the foreground which are unique for that particular performance. Music example 1 shows two versions of the same *shan'ge* tune by one singer to illustrate this. The second song is more ornamented than the first one, and more frequently explores certain pitch constellations. The spontaneously created form of the first stanza – itself an instantaneous recollection of elements from many previous performances – immediately assumes the role of a 'model' for all subsequent stanzas of that performance. The impact of short-term memory offers a suitable explanation for this, and also for the fact that singers produce certain musical variations under the influence of dialogue partners only once, forgetting them soon afterwards. While unique and instantaneous appearances of a tune may not be preserved wholesale in the memory of grown-up singers, we can imagine that they occasionally find their way into the (photographic) memory of infants and very young children, who are amply exposed to the local song tradition as we have noted in our fieldwork. The age at which children begin to participate in the song tradition is usually much higher (from nine years up). We hope to find out more about this (admittedly wild!) hypothesis of 'imprinting' by screening children who are still in the process of learning to sing *shan'ge*.

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4. HOW IS CHANGE INHIBITED ?

Inhibitions of musical change are every bit as complex and multi-layered as factors which incite change. We have reason to believe that melodical conservatism relies on many different causes. Here we list some of our findings and speculations.

1. Unification due to constant recycling of existing material. This is the 'classical' explanation for cultural uniformity first proposed by the folklorist Carl von Sydow (1948: 11, 44 ff), who argued that any local tradition will undergo a process of unification within its own area through the mutual control and reciprocal influence of its bearers.'

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2. Functional features. Some features in music persist because they are functional – for example the loud falsetto parts, a (documented) aspect of outdoor *shan'ge* singing in China since many centuries, unlikely to have changed much in the course of time. Long-held high-pitched sounds ensure that *shan'ge* can be heard from a considerable distance, useful whenever people working in the fields try to keep in touch with one another.

3. Evolutionary conservatism and 'skeuomorphic' features. We assume that many elements of culture persisted simply because human beings, in the course of evolution, learned to be cautious and to mistrust change (as a potentially dangerous type of behaviour). Consequently, some (or even many) features in music persisted without necessarily making much 'design sense'. The intervallic leaps of a fourth that we found in some *shan'ge* in Jiangsu (discussed below) may be a case in point. In general, many elements and patterns of culture (music, language, architecture, clothing, art design etc) are copied century after century by new generations of users, long after their original functions have been forgotten. We coin the term 'skeuomorphs' (from the Greek, 'utensil' 'form') for such features, inspired by Nicholas Humphrey's use of the same term for patterns which persist in biological evolution (Humphrey, 1993: 185-186).

4. Fixation on cultural identity in alien surroundings. The Russian ethnomusicologist Ekaterina Dorokhova claims that certain Russian song traditions in the Ukraine are monothematical as a consequence of migration: in the Ukraine, the Russians who went there – from the 18th century onwards – forcibly hung on to what they remembered from their native culture. Some of the song tunes which they brought along were consciously cultivated and propagated in a new and culturally alien environment, leading to a strongly dimished number of song forms and to a strong degree of petrification (cf. Dorokhova, 1995).

5. Ritual inhibitions. Ritual specialists are generally inclined to guard and propagate the 'unchangeable' nature of their performances and their musical forms very strictly. This may apply to certain types of runic songs in Estonia.[1] Naturally, not every ritual song tradition is necesarilly musically conservative, and ritual songs may be as changeable and re-negotiable as any other type of tradition.

6. Courtship and sexual selection. Among Dong communities in Guizhou (Southern China), monothematism plays a crucial role in courtship dialogues: sexual contact between close kin (within one and the same clan-based village community) is avoided by ensuring that the potential partners in dialogue love songs sing *different tunes* (Research by Han Mei, 1998). We have indications that the same mechanism of clan-identification plays (or played) a role also in musical courtship in other monothematical folk song traditions in China. Our recent research in Gansu and Qinghai focuses on this same question. In brief, while sexual selection may play a role in the rise of new and exciting melodical variants (as observed above), it can also inhibit new variants when they deviate too much from the standard!

[1] Personal communciation from Taive Särg, of the Estonian Literary Museum, Tartu, 2003.

5. A NOTE ON 'COMPOSERS'

We need to acknowledge considerable differences between the performance activities of oral performers on the one hand, and of composers in learned and literate traditions on the other. In our view, it remains open to question whether musical creation in oral traditions and in recorded traditions of elite classical music should really be viewed as nothing more but 'different dimensions of the same process', like R.Anderson Sutton, Ricardo D.Trimillos and others have argued when they compared 'improvisation' with 'musical creation' (see their contributions to the ICTM Yearbook 1987). Such viewpoints may sound very attractive and 'politically correct', but we can by no means be certain that we are dealing in both realms with the same cognitive processes of musical creation. Relatively 'modern' modes of creation and transmission, such as complex written notation and computer sampling may co-involve different cognitive processes in the act of musical creation. This is not the focus of the present paper, but it should be borne in mind when we explore 'general' mechanisms of musical creation.

6. HOW DO MELODIES EMERGE TO BEGIN WITH ?

The question how we move from 'variation' to 'composition' can be answered differently depending on our cultural definitions of those words. The question how certain song forms emerge in the first place is a very different one. We are unlikely to find basic explanations for every single detail in a melody, but we may be succesful in uncovering some of the processes at work in tune formation in some repertoires. In *shan'ge*, we find that certain basic features of the melodies are directly shaped by the nature of the mnemonic tools and cognitive processes involved. These tools and processes can be 'read' from the contours of the tunes. Here we offer two examples.

The songs in Jiangsu consist of four-line stanzas with basically seven Chinese characters (syllables) per line. This basic stanza form is very common all over China. But melodical and the textual phrases do not coincide very precisely: the first words of the second textual line are often linked to the end of the first line. The same happens at the end of the third textual line: the first words of the fourth line are sung before the third musical phrase ends, and only after a musical caesura do we hear the final part of the melody and the remainder of the words. In the following text example – the first two stanzas of a riddle song – every line is sung to a complete melodical phrase (four phrases making up the entire melody). Note the odd text placement:

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1. *Sage yu yu ti lang ti / Sage*
2. *yu yu si wei mi*
3. *Sage yu yu ying ying ei yong / Sage yuyu*
4. *sang bu jia sen bi*

(translation:)

1. What is round and goes up in the sky ? / What ?
2. is round and floats on the water ?
3. What is round and used by all ? / What is round
4. and is always at a girl's side ?

(answering verse:)

5. *Ngeliang yu yu ti lang ei ti / Wu ye me*
6. *yu yu si wei mi*
7. *Yangbi yu yu ying ying yong / Jinzi*
8. *yu yu sang bu jia sen bi*

(translation:)

5. The moon is round, goes up in the sky / Lotus leaves
6. are round and float on the water.
7. Silver coins are round and used by all. / A mirror
8. is round and is always at a girl's side

(For the musical setting see music example 1.) The 'wrongly placed' bits of text are often sung faster than the rest of the stanza. So why do singers frequently attempt to sing a little 'ahead of their text', in a somewhat hurried manner ? In our view, this is not a rhetorical device, no trick to reinforce the audience's attention, because folk singers do not normally try to enhance the effect of their songs in any theatrical way. In the above example, the singer is actually giving away the answer to his riddles ahead of time, which hardly seems a good way to ensure further attention.

There is a more plausible explanation. The singer's most essential concern is to ensure an uninterrupted performance. First and foremost, he has to remember the text and make sure that the words are ready to hand when the next phrase comes up. He needs to mobilize his memory, and this must be done in advance. Once cannot expect him to recall, in the middle of his singing, the complete remainder of the text. Probably he just manages to think a few words ahead, and must rely on those words to help call up the rest. In his key study on 'remembering' (1932), Frederic Bartlett has argued that, 'in the recall of narratives, beginnings and ends, especially provide those stand-out, persistent features that serve as focal points of the reconstruction.[2] The same goes for the reconstruction of song lines. If a singer gets lost in the middle of a line, it will not necessarily prevent him from finishing. He may skip a few words. The beginning of a new line is more problematic. With nothing to start with, there is no way to continue. A singer can avoid obstruction by paying extra attention to the connecting points - endings of lines and beginnings of subsequent lines. Presumably, we have caught the singers of Chinese folk songs in the act of doing precisely this: they secure the next line by safely storing the first part of it at the end of the phrase they have just finished. The corresponding musical motifs used in such places, which we call 'bridge motifs', are important mnemonic tools. [The bridge motifs in Music Examples 1 and 2 are indicated with the letters x and y.]

That these motifs really have a mnemonic function is supported by the occurrence of similar bridge motifs and of 'singing ahead of the text' in many other vocal traditions. The Scottish musiciologist Warwick Edwards has pointed out this phenomenon in folk songs in Serbo-Croatia, Bulgaria, Romania, Greece, France and Britain (personal communication with the authors, 1991), while Izaly Zemtsovsky has observed it in West Russian wedding songs (Zemtsovsky, 1975).

The second example: the *shan'ge* of the southern Jiangsu region are sung almost entirely in conjunct melodical motion along pitches of the pentatonic scale. We will not speculate on the causes of this type of pentatonicism, but we have noted one place in many *shan'ge* melodies where conjunct melodic motion is frequently interrupted: a bigger leap (of a fourth) is often inserted at the beginning of the third line.

This leap could be interpreted simply as a kind of melodical caesura, or as a textual division, cutting the stanza in two halves, with an older Chinese poetic form (the couplet) shimmering through the structure. But we tend to explain the leap primarily as a sign that the singer braces himself for an extra effort: in the third line singers have the option of turning that line (of seven syllables) into a much long structure via rapid improvisation and piling up of extra words. The longer line should preferably be sung in one breath, and as fast as possible. It's a kind of game, which the singers refer to as *jikou* ('rapid mouth'). Here is an example of a basic 7-syllable line, and how it may be turned into a *jikou*:

> ***Ni jiunian lai chi libie jiu***
>
> [Last year you came to drink wine with me to say farewell]

Which may be extended to:

> ***Ni*** *jiushi* ***jiunian*** *bayue sanshi ri yeli* ***lai*** *wo xiaomei fangzhong sanceng lou shang Jiangxi yaoli shaochu longfeng wanli* ***chi****zi santou liangbei en'ai siqing shi* ***li*** *ya* ***bie jiu****.*
>
> [Last year, then, you came during the night of the 30th day of the eighth month to my room on the third floor to say farewell and drink with me two times three cups of the wine of love and eternal faith from a dragon-phoenix-shaped bowl baked in a Jiangxi oven.]

This is realized musically by pitch repetition, and by monotonous 'toing and froing' between two or three intervals, until the entire line is completed. Music example 3 shows a simple melodic phrase can be extended musically.

[2] Bartlett as paraphrased by Treitler, 1974. For Barlett's theories see Bartlett, 1932.

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These two example show how processes of remembering (of texts) may directly influence the shape of the music. Naturally musical patterns which result initially from mnemonic processes may eventually turn into mere musical conventions. Reversely one could argue that such conventions may persist precisely *because* they accommodate so well the process of retrieving and reconstructing long lines of text. This may apply especially to tunes which are used to accommodate epic texts of tens of thousands of lines. In such cases, the construction of every new stanza (with the aid of formulaic principles) puts a lot of pressure on the creative capacities of singers.

7. CONCLUSION

We argue that it is of major importance to study these processes in practice. They may provide us with further new insights into many aspects of musical innovation and consolidation which we have failed to grasp so far. From 1997 onwards we carried out further fieldwork in Gansu and Qinghai. This has largely corroborated our observations. Recently we have set up a joint project with folk song researchers in Russia and Estonia to pursue this type of analysis on a comparative basis, co-involving monothematical song repertoires from outside China. Comparative research can help us to find out to what extent the phenomena which we have discovered in Chinese songs are culturally specific, or more widespread.

8. REFERENCES

1. Bartlett, Frederic C. (1977) *Remembering: A Study in Experimental and Social Psychology.* Cambridge: Cambridge Univ. Press, 1932. Repr. CUP 1967, 1977.

2. Dorokhova, Ekaterina (1995) 'Ethnic Islands: ways of musical evolution.' Paper presented at the 11th European Seminar in Ethnomusicology, Rotterdam, 1995, unpublished.

3. Han Mei (1998) 'Marital Traditions of the Dong People, Guizhou.' Unpublished MD thesis, in Chinese, Beijing, 1998.

4. Humphrey, Nicholas (1993) *A History of the Mind.* First published by Chatto & Windus Ltd, 1992. Vintage paperback edn, London, 1993.

5. Lu Guang (1987) 'Cong liangshou Zhangzu min'ge kuitan shengdiao yu xuanlü zhi guanxi.' [A study into the relation between speech tones and melody in two Tibetan folk songs.] In: *Zhongguo yinyuexue*, 1987/3, Beijing, pp.126-130.

6. Mark, Lindy L. and Fang Kuei Li (1966) 'Speech tone and melody in Wu-Ming folk songs.' In: *Essays offered to G.H.Luce*, ed. Ba Shin et al, Vol.1, Artibus Asiae, Ascona, Switzerland, 1966, pp.167-186.

7. Miller, Geoffrey (2000) *The mating mind. How sexual choice shaped the evolution of human nature.* Published by W. Heinemann, London, 2000.

8. Schimmelpenninck, Antoinet (1997) *Chinese Folk Songs and Folk Singers. Shan'ge Traditions in Southern Jiangsu.* CHIME Foundation, Leiden.

9. Sydow, Carl von (1948) *Selected Papers on Folklore.* Rosenkilde and Bagger, Copenhagen.

10. Treitler, Leo (1974) 'Homer and Gregory: the transmission of epic poetry and plainchant.' In: *The Musical Quarterly* 60/3, pp.333-372.

11. Zemtsovsky, Izaly (1975) *Melodika kalendarnych pesen* [Melodic aspects of Calendric Songs], Leningrad.

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