

聽秋

馮遼鳴蟲音樂隊



Ting Qiu

LISTENING TO AUTUMN

108 CHINESE CRICKETS CONDUCTED

BY LARS FREDRIKSSON



Living with Chinese Crickets

THESE RECORDINGS ARE the result of labourious experimenting with live crickets over many, many years. The compositions on this CD have been planned and carried out over months of living with crickets at home, in the wild and in the studio. Literally hundreds of hours have been recorded, edited and narrowed down to a repertoire of little over eight hours, which in its turn, has been shaped into this compositional audio distillation. What you hear are true acoustic recordings of the crickets' natural sound, never tampered with in any synthetic fashion. The extraordinary tonal variation comes from the care taken in the arrangement and selection of crickets and their positioning at the time of recording. 🦗

Sounds of Crickets

CRICKETS PRODUCE SOUND by rubbing their jagged wing covers, called tegmina, each with a sound-producing membrane, together. This rubbing, called stridulation, goes on for hours, and is only interrupted when the cricket is startled or changes its position in order to be heard better. The cricket's tympanic organs can vibrate with up to 20,000 cycles per second, well beyond the sensitivity of the human ear, and recent research has also shown that even the fluid in the veins of the wings has an amplifying capacity. The singing males themselves are said to be able to block out their own sound – they supposedly don't hear it – as it is so loud it might otherwise be unbearable for them during their extended playing sessions.

IT IS ONLY the males that produce sound, and they do it to attract females, to make sure there will be more of their kind in the future. To avoid confusion, each species has its own song. It is necessary to adhere to this sonic identity for several reasons, but apart from the collective denominating sound of a species (so as not to attract females from the wrong species) it is also important to have an individually distinguishable sound. The most predominantly heard crickets on this CD are of the *Oecanthus* family, with species and subspecies from different parts of China, all with their own distinct stridulations.

For these recordings I have selected groups that, when singing in unison, produce tone interference

and have complex rhythm that makes them go in and out of synchronisation. The pitch of *Oecanthus* crickets depends on the temperature, and to a degree also on their bodily constitution. Volume and resonance are determined by the size and shape of the wing covers.

A TREE FULL of the same species of *Oecanthus* will eventually reach total synchronization, and the whole tree will pulsate as if they were one huge cricket. This attracts a lot of females from the nearby region, but it is equally important to stand out individually, as the male who would provide the best quality offspring – and indeed after careful listening one may identify the distinct features and tonal quality of many individuals even within the same species.

It is common for the tree cricket to bite a hole in a leaf or sit in a leaf fold, using it as a megaphone or an open baffle loudspeaker. The cricket can also direct his sound in a very concentrated manner, virtually scanning the landscape. Slight movements at intervals makes it possible to cover large areas of the surroundings angle by angle and grade by grade.

ALL THESE THINGS, as well as numerous other parameters that influence the tonal quality (the age of the crickets, the temperature they are singing in, the time of day or night, how well and how long ago they were fed, if they are singing in a large group, in a small group or alone, together with spe-

cies of their own kind, if females are present or not, calling for females or defending territory, the resonance of the surroundings – for example, if they sit in a glazed or an unglazed clay pot, soft or hard calabash, hourglass-shaped or just plain round, muffled or open, with or without a lid, cork or ivory lid, etcetera, etcetera) have been considered, formed the basis for experimentation with the capture of their sounds, and has had great artistic impact on the final selection and meticulous editing of the recordings.

It was not too long ago that there was a highly specialized profession in China: the “cricket tuner”. To tune crickets, known as *dian yao* 點藥 (i.e. attaching medicine), one had to be extremely skilled, almost like a brain surgeon, because it involved putting a perfectly heated, very minute lump of resinous material similar to colophony on the exact spot on one of the wing covers to change the weight of the wing, and thus the pitch and timbre. If this was made with the least bit of carelessness, as it was an irretractable process, it would ruin the cricket forever.

A multitude of these changes in tonal quality have been carefully recorded and investigated in my recordings, and some of the more spectacular and beautiful aspects are evidenced in the musical composition that is presented here to a wider audience. But of course, this universe of sound can be further explored ad infinitum. ☺





Fossil remains of a 125 million years old cricket from Ceará, Brazil.

Introduction to the Cricket Ensemble

THE CRICKETS IN these recordings are mostly from Anhui, Jiangsu and Zhejiang provinces. Only a few, but very significant ones, are from the Beijing region.

The most prominent are the **Bamboo Bells** 竹鈴 (*Oecanthus sinensis*) and the **Purple Bamboo Bells** 紫竹鈴 (*Oecanthus longicauda*), heard here in many different constellations and in various numbers. They synchronize their singing, and it is very impressive to hear a large group of Bamboo Bells come in and out of perfectly joined stridulation.

The **Ink Bells** 墨鈴 (*Homeoxipha lycoides*) are more discreet, but also the most versatile. They have a larger repertoire than most other crickets and they also play differently depending on the environment and time of day.

The **Large Yellow Bells** 大黃鈴 (*Anaxipha sp. n*) are probably the most indefatigable of all cricket musicians, singing no matter if it is dusk or dawn, night or broad daylight. Its only requirements seem to be peaceful surroundings and some moist fruit to nibble at.

The **Small Yellow Bells** 小黃鈴 (*Anaxipha pallidula*) has a softer sound and does not sing for such long continuous periods as the Large Yellow Bell, but shows some more variety in its stridulations.

The **Gold Bell** 金鈴 (*Sivistella bifasciata*) has a very high pitch, and is a distinct and clear addition to the overall soundshape of the group. It adds a certain crispness and struck crystal-glass tone quality.

Probably the most powerful singer of all, the **Heavenly Bell** 天鈴 (*Trujalia hibinonis* – known as the **Green Lute** 綠琵琶 in Northern China) is unsurpassed in volume. There are two main kinds on these recordings, the “single mouth” and the “paired mouth”, with distinct differences in singing.

Finally, at least among those recorded here, we have the wonderful brilliance of the **Horse Bell** 馬鈴 (*Homeogryllus japonica* – in Northern China known as the **Golden Bell** 金鐘), a most amicable and peaceful cricket that prefers to sing with the female present. ♀



Closeup of an Ink Bell. See my concordance of cricket names at bolingo.org/crickets_nametable.htm



Cricket sellers in Beijing offers a wide range of cricket paraphernalia.



Typical cages of plated straw used for selling katydids.

Why this Interest in Crickets and Chinese?

LIKE MANY CHILDREN I felt most at peace in nature, and from an early age I was especially fascinated by insects. During my own private excursions in brush and meadow I came across many creeping, jumping and flying little fellows. I could spend whole summers trying to figure out who they were and what special habitats they preferred. I reared eggs and larvae I found and hatched and watched the development and metamorphosis of many a species from egg to imago. Later in life, when I roamed through Europe and North Africa in the sixties, trying to find the preferred habitat of my own organism, I often met with other travellers consulting the Chinese divination classic, the *Yi Ching* 易經 (Book of Changes) for a more secure passage. I was fascinated by the cryptic, archaic language, and intrigued by the problems of translating such an old text into a modern European language. As the Chinese script and Chinese culture had also long fascinated me, I now got to the point where I seriously started studying the Chinese language in Tangiers in 1969.

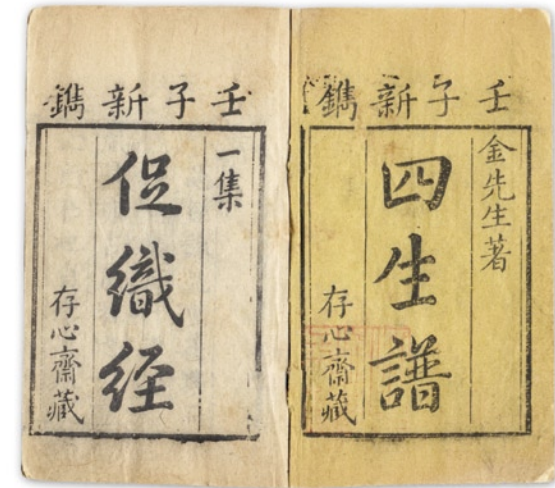
LATER, IN MY EARLY years as a librarian working with the Chinese collection of the Swedish Royal Library, cataloguing old books I came across a little blue book wrapper containing four small threadbound volumes called *Sishengpu* 四生譜, “Register of Four Lives”. It was a collection of four

individual works, three of which described how to rear and keep live birds like the quail, thrush and siskin (yellow finch) – but the fourth work I could not make head or tail of, most likely because I was mistakenly looking for yet another bird.

The name used in the title was the poetic form of cricket, *cuzhi* 促織. This I learned only after consulting several dictionaries, and I was also given a reference from the *Shijing* 詩經, The Book of Odes, the oldest collection of poetry with texts dating from the *Zhou Dynasty* 周 (1027–771 BC) to the *Spring & Autumn Period* 春秋 (770–476 BC). There it is said that in the beginning of fall, when the women hear the chirping of crickets as they are drawn closer to the warmth of the village – getting closer and closer until finally they come all the way in under the beds – it signals the coming of autumn and reminds them to start weaving warm clothes for winter.

THERE IS ALSO an entry mentioning crickets in the oldest Chinese thesaurus *Erya* 爾雅, dating from before the second century BC, in the *Shi Chong* 釋蟲 section (explaining scaly animals).

From that day on I frequently found new references to crickets, and I started collecting quotes and other material about them whenever I came across it. It now fills several bookshelves in my home. 𧈧



Title page of a Qing dynasty edition of the “Cricket Classic” *Sishengpu cuzhijing*, 四生譜 促織經. A handbook on how to keep and appreciate crickets.



Chinese Cricket Culture

THE TRADITION of keeping crickets for their singing skills is documented at least as far back as the Tang dynasty 唐 (618–907 AD). The ladies of the imperial court would collect them and keep them in their private quarters in more and more elaborate cages, to have some company through the long, lonely autumn nights. The moon, the wind and the crickets.

During the Song dynasty 宋 (960–1279 AD), we find more and more mentions of this pastime, and general Jia Sidao 賈似道 (1213–1275 AD), in charge of the security of the country's borders, is severely reprimanded in history for being so obsessed with crickets that he neglected his duties in a most reprehensible manner and failed to defend the borders from the onslaught of the northern barbarians because he refused to leave a cricket fight.

From the reign of Xuan De 宣德 (1426–1435 AD), in a period considered the most brilliant of the whole Ming dynasty (1368–1644 AD), the Emperor Xuanzong 宣宗 (actual name Zhu Zhanji 朱瞻基) is remembered as a keeper of the peace and a great promoter of culture, despite his short reign of only nine years and seven months – and despite the fact that he was so occupied by his favorite pastime of cricket fighting that he made wild crickets from different regions one of the most important tributes to the court. Magistrates were ordered to send out

farmers and troops to comb the fields for the best specimens instead of enforcing law and overseeing production. Even cultivating the fields was sometimes neglected – something that can still be felt today in parts of Shandong and Anhui provinces, where peasants are able to get a better income from catching crickets than from farming.

PASSING ONES TIME with crickets can be both elegant and simple in all walks of society. There are two main schools of “cricketeers” in China, the first being the large and noisy group who keep crickets mostly for hazard and gambling, which must by all standards be considered a vice.

The second certainly is a more peaceful group, who keep the crickets only for listening, and for the beneficial effects their singing has on one's mental well-being. It is a measurable stress reliever, and we may consider the natural circumstance when we would enjoy the sound in the wild: typically after a heavy thunderstorm, when the sun comes out again to dry the leaves and grass, we hear the reassuring sound of crickets proclaiming that all is again calm and peaceful. I have confirmed this emotion with representatives from many different cultural backgrounds, and there seems to be a universal consensus that crickets singing equals safety and peace. The trade in crickets as pets was already quite wide-



spread in China in the Song and Ming dynasties, and in the Qing dynasty 清 (1644–1911) it is mentioned increasingly more often in literature. In the “Records of a Year's Events in Beijing”, *Yanjing Suishiji* 燕京歲時記, by Fucha Dunchong 富察敦崇, there is a record of how Golden Bell crickets from Yizhou 易州 are considered the most elegant. They are most fitting for lofty halls and high mansions as their refined melodious singing fills the night in a most pleasing way. Traditionally the sellers who bring these crickets to the city markets claim they come from the dry fields of the Ming tombs. Wang Shixiang 王世襄, among many other things a specialist on gourds and crickets, claims that they are actually everywhere to be found. He also remarks that even though they, unlike other crickets, like to stay in groups, they are very hard to catch. They hide among rubble and in the brush of the thorny creepers. To catch them, you cut a melon in halves and scrape out most of the fruit flesh, place the halves open side down on small pebbles of equal size and wait until the second watch. When you turn the melon halves over they will be full of crickets much resembling the rounded, elongated, black melon seeds.

The Chinese not only caught crickets in the wild, but also learned to hatch and breed them so they could keep them out of season. There is a deep un-

derstanding of the differences in timbre between various species and between crickets hatched at different times of the year. For instance, katydids of the summer sound so piercing they can only be enjoyed at a distance and are best given to a neighbour's child so one can listen from a safe place, whereas the same species hatched in winter sounds much more mellow; what was shrill is now much more sonorous and pleasing to the ear of a refined person, and more enjoyable up close. It was and still is indeed a very costly pastime – not to mention in detail all the daily chores involved with cricket breeding, like cleaning the poplar bark and large stoneglazed urns, and all the feeding. And if for instance we just consider the heating necessary to bring up melodiously singing crickets from eggs in the freezing cold environment of Beijing in the wintertime: one old cricket breeder I know spends a fortune on coal each winter to keep the hatching room at a constant temperature of 33°C, while his and his family's living quarters are kept at only 14–16°C. This is of course reflected in the high prices one has to pay per individual cricket in February–March. In the old days it was common for wealthy people to put up the money for heating, and in return they got the first pick of the best crickets: the so called “sixteen valuables” 十六太寶, i.e. the crickets that not only sang well but had antennae and all six legs intact, wide wings, a good colour and so on. 樂



In Lanmingxuan 蘭鳴軒, the cricket shop of a fourth generation cricket vendor Lan San'r 蘭三兒 here together with the composer in Beijing 2005.

作曲家馮遼，生於1951年10月瑞典。

樂隊成員：竹鈴，紫竹鈴，墨鈴，大黃鈴，小黃鈴，金鈴，天鈴，綠琵琶，金鐘。

唱片錄音簡介。好多年來我分了多種蟋蟀，跟幾千只蟋蟀生活在一起，同時錄了好幾百個小時的蟋蟀聲。這張唱片上的音樂是最近兩年的大收穫。從一百多小時質量較好的錄音里我選擇了最有特色的79分17秒。我用了一個仿人頭和人耳效果的麥克風來錄音，全環境的聲音就象在你身邊縈繞。唱片錄於般若湯堂和聽秋軒。

欣賞這個唱片至少有兩種方法。調低音量聽讓你感覺仿佛置身大自然，用平常音量聽那就象洪亮的交響樂，宏偉的大曲。

在此感謝在鳴蟲界幫助我瞭解中國蟲文化的傳統的專家和好漢們。于崗，老劉(劉和寶)，老徐(徐中明)，小不點兒(陳崢昕)，王佩原，茹拍平，蘭玉春和他的三兒子蘭三兒(蘭陰棟)，王學成，王世襄，孟昭連，金杏寶，魏斯，杜克，鄭愛京，馮瑞聲，馮秋聲...

HOW TO LISTEN

(to this naturally minimalistic recording)

- As an ambient record of a possible soundscape in nature. Turn the volume down to resemble a barely audible distant sound of crickets surrounding your habitat.
- As a nature closeup adjust the knob to a slightly higher volume.
- As the cricket concerto that demands total awareness and attention, demanding all encompassing presence of the listener. Turn the volume up to normal for any classical composition or free-jazz concert.

RECORDING INFORMATION

108 members of the Chinese Cricket Rosary Ensemble Zhuling, cizhuling, da huangling, xiao huangling, jinling, moling, tianling.

Composed, conducted & recorded by Lars Fredriksson using microphones of a Sennheiser Kunstkopf with direct capture in 48 bits to the harddisk of a G5 Dual Processor Macintosh Computer at the Tingqixuan & Banruotang Tang Studios 2004–2006.

Produced by Lars Fredriksson of Bolingo Productions. www.bolingo.org/cricket/

Executive producer Bengt Berger

PHOTOGRAPHY & CREDITS

Margarita Solé cover & page 7

Jon Edergren back & page 2

Professor Emeritus Thomas J. Walker at University of Florida booklet cover

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ADDITIONAL CAPTIONS

Digipak front & back Old cricket box from Southern China, Shanghai region, 20th century. Part of the Lars Fredriksson collection of cricket cages.

Page 1 in digital booklet *Oecanthus quadripunctatus* singing from a hole in a leaf.

Below CD Chinese cashcoin from the Qing dynasty.

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