Northern Illinois University

THE HISTORY, USAGE, AND TECHNIQUE OF THE CHINESE CHENG

by

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Music 421: Independent Study
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Introduction

Throughout Chinese history, music has been an integral part of the lives of the Chinese people. It was very symbolic; it was considered part of the universe. The entertainment value of music was secondary to its use for religious purposes and for the education of gentlemen.

The instruments of China generally fall into one of two categories: metal and string. Among the major string instruments are the p'i-p'a (a four-stringed, lute-type instrument), the erhu (a two-stringed, bowed instrument), the sanxian (a three-stringed, banjo-like instrument), and the zither family.

The two main Chinese zithers are the ch'in and the cheng. The ch'in, a classical instrument with seven strings, was a symbol of learning for the Chinese people. The cheng, which was more an instrument for entertainment, will be discussed in great detail in the pages to follow.

The History and Construction of the Cheng

There are many differing views on the origin of the cheng. These views are an intermingling of legend and historical fact, found through archaeological reports, recorded history, and stories handed down from generation to generation.

One theory is that the cheng originated in the Ch'in period (221-207 B.C.) and, therefore, is sometimes known as the "Ch'in Cheng". (7, 1) However, according to Li (4, 36), this was not its origin, but merely when the instrument spread to certain Asiatic countries. He included
the time period of both the Ch'in and Han Dynasties (221 B.C.-220 A.D.).

Still another view is that

It was already popular in the 4th century B.C. in the State of Chin (today's Shensi province). After Emperor Chin Shih Huang (259-210 B.C.) unified China, its use gradually spread throughout the country. (6, 14)

Van Gulik (3, 13) agrees that the cheng originated during the Ch'in period, but goes further to state that

The most authoritative sources credit the famous Ch'in general Meng Tien with the invention of the cheng. One should not, however, attach too much importance to this statement. Ancient Chinese writers are accustomed to trace the invention of various musical instruments of antiquity to famous persons or mythical beings.

Ferguson (2, 18) added to this by saying that

It is highly unlikely ... that Meng Tien could have created an instrument that, during his own lifetime, became popular enough to be called the 'true music of Ch'in'. Communication and diffusion of culture during that period of time (ca 200 B.C.) simply could not take place so swiftly.

The legends vary greatly among sources, but the most popular one is that sometime during the Ch'in Dynasty, a man, Mr. Wan Wu-I, gave his two daughters a se (a large older zither with 25 strings). The girls quarreled over it and settled their argument by splitting the se into two halves, each with 12 strings. This story seems to be based on the fact that the phonetic element of the Chinese character meaning "cheng" also means "to quarrel".

Another popular theory (or legend) is that the name of the instrument was derived from the sound of the instrument (the plucked string sounds like "cheng, cheng ...")). This was stated by many sources including the Shih-ming, a dictionary of the Han period. (3, 13)

These legends are part of the tradition of the cheng, but have no
real value except that they all agree that the cheng originated in the Ch'in period.

It is generally thought that, in its original form, the cheng was made of bamboo. The Chinese character for cheng is comprised of two parts: the radical for 'bamboo' (chu in Chinese), and the phonetic element 'cheng', as stated above. (3, 14)

A commonly accepted explanation for the origin of the cheng is that it was derived from a combination of two previous zithers: the se (a plucked box zither) and the chu (a bamboo-tube, stick-beaten zither). (5, 263)

During the 2nd century B.C., when the cheng was popular in the Shensi province, it was described as an oblong box with a curved soundboard. It had tuning pegs at the left which were attached to the 12 red silk strings, and high, moveable narrow bridges. The number of strings increased to 13 during the T'ang dynasty (A.D. 618-907). Later, the number again increased to 14, then to 15. Today, the cheng has 16 strings. This has been its standard form since the late 18th century. (5, 263)

For many centuries, during the time of feudal society in China, there were no further developments in the construction of the cheng. It remained a rectangular wooden box with 16 silk strings, 16 moveable bridges, and a concave soundboard.

As recently as 1970, during the Cultural Revolution in China, a cheng player began working with musicians of the China Opera and Ballet Theatre and people at the Northeast Musical Instruments Factory in Yingkow, Liaoning province, to remodel the instrument. The reason for this was that the ancient instrument was not sufficient to keep up with
the changes taking place in the music of the time. The range of the ancient cheng was limited and it was difficult to change key. After two years of work, the new cheng was in use. This newer model had 21 steel strings, instead of 16 silk strings, which expanded its range, increased its volume, and enriched its tone. (6, 14) Modulation was made easier, but the new model was just as dulcet as the old one. (4, 36)

The Usage of the Cheng

In ancient times, the cheng was traditionally used for personal and popular entertainment, not for rituals as were many of the other instruments. It is associated in literature with romance, the beauty of nature, and sad memories. (5, 262)

In the state of Ch'in, the cheng was used in an ensemble along with the clay drum, earthen jar, singing, and thigh-slapping gestures. This was in the period 897-221 B.C.

From 206 B.C. to A.D. 581, there were two major uses for the cheng in an ensemble. The first was as part of a "... hsiang-ho-ko ('harmonious song'), a vocal ensemble accompanied by six wind and string instruments ..." (5, 263) Second was the wu-sheng-ko. This ensemble performed folksongs and was comprised of a vocal ensemble, the cheng, as well as other string and wind instruments.

Another distinct period in the usage of the cheng was from A.D. 581-907. During this time, the cheng was important in court ensemble music, yen-yüeh and ch'ing-shang-yüeh. (5, 263)

During the T'ang and Ming periods, 618-907 and 1368-1644, respectively, the cheng was played in the Court and among the nobility. (3, 16)
The cheng was used mostly to accompany singing, but also as a solo instrument. The pieces performed on the cheng were mostly semi-classical with literary elegance. (3, 16)

The cheng was used for "light" music only, never as part of a classical orchestra. (3, 15)

In Chinese culture, the cheng was considered a ladies' instrument. "It was played chiefly by Court ladies, by the female members of noble households, and by high-class courtesans." (3, 16-17) It also "...suggested intimate gatherings in the harem, and gay informal parties enlivened by the presence of female entertainers." (3, 17)

Ancient painters very often portrayed a young girl playing the cheng. The cheng was often connected with beautiful maidens and love. (3, 17)

The reason for the prominence of the cheng for use in accompanying popular music was because it was more suited for the purpose than either of the other string instruments. The se was too large and cumbersome to handle; the ch'in did not have a strong enough sound. (3, 15)

In the 18th century, the popularity of the cheng declined. Other string instruments rose in prominence to gradually take its place. This decline lasted for about a century.

Since the mid-19th century the cheng has been used more and more as a solo instrument, rather than as part of an ensemble. In the years since the cheng was remodeled, its usage has greatly expanded. It can now be used for many more occasions than previously possible, with only the ancient cheng in use.

The new cheng is used to accompany modern revolutionary Peking
operas and other revolutionary songs. It is also widely used in the performance of Chinese Classical music. Many of these performances take place at factory or communal gatherings, and are very well received. (4, 36)

The Playing Technique and Musical Notation of the Cheng

When playing the cheng, the instrument should be placed on a table or on two firm stands, one towards each end of the instrument. The player should be sitting perpendicular to the instrument with the moveable bridge of the closest string just in front of him. (7, 1)

The row of moveable bridges, aside from their tuning function, serve as a divider for the positioning of the hands. The right hand, when starting to play, is placed about four centimeters to the left of the far right bridge, where the strings are fastened. The thumb and middle finger rest on the strings an octave apart. (7, 1) The left hand is placed at about half the distance between the moveable bridges and the tuning pegs at the left. The index, middle, and ring fingers rest on the strings, forming a 90 degree angle with the palm of the hand. The left hand, unless otherwise specified, follows the movement of the thumb of the right hand to produce variations in the sound.

When playing the cheng, the first two fingers and the thumb of the right hand pluck the strings. The Chinese word for this type of playing technique is t'an, which means "... to play or pluck a stringed instrument." (2, 54) Either the fingernail only or a combination of the fingernail and the cushion of the thumb or finger specified may be used.
to produce a slightly varied sound.

The plucking position on the string may also be used for variations in sound. (5, 263) Subtle changes in dynamics occur when the right hand is moved along the strings. The sound is slightly louder at the far right end, since the strings are "tighter", and gets softer as the hand is moved to the left, toward the moveable bridges.

Throughout the centuries, various types of notation have been used for cheng music. The first of these on record is a type of mensural notation. "The notation ... is arranged in vertical rows of numbers and characters representing the particular strings to be played, with symbols representing the techniques ..." (2, 58) This form was probably used in the ninth or tenth century.

From the time of the T'ang dynasty until early in the twentieth century, the type of notation used was probably similar to that of the Japanese koto, a derivation of the cheng, although little is definitely known about the notation of that period. (2, 60)

The next known type of notation, kung-che, which developed during the Sung dynasty, used simple Chinese characters to denote the steps of the scale. This system was the standard for the first part of the twentieth century. This form of notation is written in vertical columns and from right to left, which is the traditional form of Chinese writing. However, the kung-che system had many inadequacies and was soon replaced by the cipher notation.

The cipher notation (2, 65) uses numbers to denote the different tones of the scale, one through seven. Since the cheng is based on the pentatonic scale (common to Chinese music), however, only the num-
bers one, two, three, five, and six actually have corresponding strings. In addition, dots are used above and below the numbers to denote the octave in which the pitch is to be played. The labels of the 16 strings, in order from lowest to highest, are as follows: (2, 67)

\[
\begin{array}{cccccccc}
5 & 6 & 1 & 2 & 3 & 5 & 6 & 1 \hat{2} 3 \hat{5}
\end{array}
\]

The lowest pitch (5) is the farthest string from the player; the highest pitch (5) is the closest. The number one corresponds to "C", two to "D", three to "E", five to "G", and six to "A", "F" and "B" (four and seven, respectively) may be produced by bending strings three and six.

In this notation, the numbers are arranged horizontally with vertical lines placed at intervals to establish measures. Rhythm is indicated by lines underneath the numbers and dots in between, similar to the western usage of stems, flags, and dots. As might be expected, the number zero (0) stands for a "rest".

Playing techniques, in the cipher notation, are indicated by various symbols, usually above the number. A description of some of the basic symbols follows.

The symbol "\( \wedge \)" means to pluck the string away from the body with the thumbnail. The inverted symbol "\( \check{\wedge} \)" means to pluck the string towards the body with the thumbnail. "\( \backslash \)" tells the player to pluck the string towards the body with the nail of the middle finger. A combination of these, denoted by "\( \backslash \check{\wedge} \)" means to simultaneously pluck with the nails of the thumb and middle finger, towards each other, at a distance of an octave (with four intervening strings). This symbol
appears above the number of the string which the thumb is to pluck, while the middle finger simply plucks the corresponding string an octave lower. The symbol which means to pluck towards the body with the nail of the index finger is "\( \uparrow \)". An arrow pointing up "\( \uparrow \)" placed to the left and above the number, means to quickly strum, in sequence from high to low, a few strings above the number, and stop with the string which corresponds to that number.

Some of the more complex techniques are done by using a combination of the left and right hand to alter the sound. The symbol "\( \underline{-} \)" means to add a slight vibrato to the pitch. This is accomplished by using the left hand to, quickly and repeatedly, press down on and release the string. However, the fingers of the left hand should never leave the string when releasing. Also, the pushing motion should come from the wrist, not the arm or the fingers. The wrist must be relaxed to enable it to move rapidly. A more exaggerated vibrato is denoted by "\( \hat{\uparrow} \). In this case, the player simply presses farther down on the string than with a light vibrato.

The left hand may be used to bend the string to produce the next highest pitch (or an incidental). As a beginning player it is sometimes difficult to know how far down to bend the string to produce the desired pitch, but accuracy comes with practice and experience.

This kind of technique is notated in various ways. The most common of which is with both pitches written down with an arc connecting them above the numbers, for instance: "\( \hat{1} \hat{2} \). Both of these pitches are produced from the "1" string. Another way to notate the same technique is with an arrow. The above example can also be written as "\( \hat{1}^\uparrow \)."
The string should not be released until the next note is played.

The same technique can be done in reverse. In this case the string is already bent by the left hand at the time it is plucked by the right hand. The string is then released by the left hand to produce its original tone. There are also two ways to notate this technique. It can be done either by writing the higher note first and connecting them with an arc or by an arrow going down: "\( \overbrace{2\,\frac{1}{1}} \)" or "\( \downarrow\frac{1}{1} \). This technique, done in either direction, produces a "sliding" effect. It can be used either in rhythm or very quickly as a grace note.

An extension of this technique is to pluck the string, bend it, then release it, producing three consecutive pitches with the same string. The two different notations of this are "\( \overbrace{1\,2\,1} \)" and "\( \frac{1}{1} \). These represent the technique done in rhythm, but it can also be utilized as an ornamentation on a single note. In this case, the player would very quickly bend the string and release it after it has been plucked. The cipher notation for this is as such: "\( \frac{1}{1} \).

Two main styles of performance technique for the cheng have been prevalent since the mid-19th century. These are the northern branch and the southern branch.

The northern branch consists of the Shantung and Honan schools. (5, 263) This branch concentrates on the preservation of the simple, unornamented styles of the ancient melodies. It has revived the technique of plucking octaves in double stops from the more ancient times, when the cheng was used mainly in ensembles.

The main school out of the southern branch is the Tsao-chou school. (5, 263) Representative of this style are fast melodic lines, which
employ frequent single stops, vibrato, and much embellishment. Also, a plectra is used for plucking to produce subtle changes in timbre.

Two more schools developed in the mid-20th century, which have helped bring the art of playing the cheng to its present state. These two schools are the Fu-ku and the Wei-hsin, the renaissance and renovation schools, respectively. (5, 263) The first has concentrated on restoring old cheng pieces, the second on rearranging old pieces and developing new compositions, both in ancient and modern styles. The Fu-ku and the Wei-hsin schools are still in existence today.

The Music of the Cheng

Literally thousands of pieces have been composed for the cheng. A few works, representative of the major styles, will be discussed here.

One of the oldest melodies on record for the cheng dates back to the 10th century. It is a solo piece entitled "Han Ya Hsi Shui", which means "Winter Ravens Playing Over the Water". This piece remains one of the most popular pieces for the cheng. (2, 125) This piece is said to have originated in the Chao-chou area of Kwangtung province. There is some doubt, however, that the present piece which carries this title is actually the original Han Ya Hsi Shui, since the Chinese often use the same title for different pieces in different time periods. In its present form, the piece "... is meant to express the melancholy atmosphere of a bleak winter morning." (3, 20)

There are many existing pieces that were primarily played by lady performers for Palace festivities and important visitors. One, which
dates from the 16th century, is "Chin-shang hua" or, translated, "The flower of melodies". (3, 20) Another, which is a Honan melody from the 17th century, is "Pai-niao-chao-feng", which means, "All birds honouring the Phoenix".

There were many melodies, not originally composed for the cheng, which were rearranged to form solo pieces for the cheng. "K'un-chiang-lung" is one of these pieces. Translated it means "Sporting Dragons". Dating back to North China in the 17-18th century, this piece was originally sung with the accompaniment of the transverse flute. (3, 21) Another piece, originally for the p'i-p'a, is "Shih-mien-mai-fu", "Song of the Han battle".

From the time of the Ming dynasty until the Ch'ing period, Palace entertainment was done primarily by an orchestra, known as yen-yüeh ... "elegant music", (which) was composed of cheng, the mouth-organ sheng ..., the moon-shaped mandoline yüeh-ch'in, the p'i-p'a, the two- and three-stringed violin, and small drums and gongs. (3, 21)

Some pieces from this orchestra have been preserved. "Tao-ch'un-lai", or "The advent of spring", is a Cantonese melody from the 15th century. "Chiang-hu-shui", which means "Flowing water", is a melody from Peking out of the 18th century.

The melody of the song "Kuan-shan-yüeh", which means "Sad solitude", was an original cheng piece. It was then changed for performance on the seven-stringed lute, at which time it was very popular. It was again transformed into a piece for the cheng in the 19th century.

"T'ien-hsai-ta t'ung" or "Universal Harmony" was a famous Honan melody from the 12th century. It has since been preserved by a student of the new Fu-ku school.
Some new melodies have been composed by Liang Tsai-p'ing, leader of the new wei-hsin school. One of the major works from this group is a piece consisting of four parts called "Ku-tu-feng-kuang", meaning "Peking Scenes". (3, 24) In his new pieces, Liang develops the techniques of the instrument to its greatest capabilities, but, at the same time, he preserves the traditional characteristics of Chinese music.

One of the newest pieces for the cheng, "Fighting the Typhoon", was composed especially for the recently remodelled instrument. It is about "... the selflessness of Chinese longshoremen who protect state property in a storm." (6, 14) The piece is written in three parts: men working on the dock, fighting the violent storm, and returning to normal work with eagerness. "Fighting the Typhoon" uses many new techniques, developed from old, but never before possible with only the ancient form of the instrument.

Finally, a concerto was written for the remodelled instrument. "The Red Flag Canal" is about the efforts of the people of Linhsien county in Honan province to cut a canal through the steep mountains. This is part of a concerted effort to adapt the cheng for use with an orchestra.

My Experiences in Learning to Play the Cheng

While researching a topic such as this provided a great theoretical understanding, my experience would not have been complete without a practical understanding, also. Thus, concurrent with my research of the cheng came a far more thorough integration of knowledge and art through practicing and playing the instrument itself.
The process of learning to play the cheng, as with any instrument, must begin with the basics. Learning the symbols for each technique and the numbers for each string was comparatively simple. What was difficult, at first, was maintaining the correct position of my right hand while plucking the strings. During my first few lessons, I was constantly corrected in this by my instructor. My tendency was to keep in constant contact with the strings for security because, without experience, it is easy to get lost among the strings. With more practice, however, it became easier to maintain correct positioning, and it eventually became quite natural.

My instructor introduced the various techniques to me one at a time. I practiced each until it was correct without hesitation. I was then given a piece to play which utilized that technique and the ones I had previously learned. We moved quickly, yet carefully, through the beginning pieces and techniques.

The pieces I played gradually grew more difficult. The rhythms became more complex and the different techniques, such as sliding and vibrato, were closer together, which meant less time to contemplate what to do next. I greatly enjoyed the challenge of the harder pieces.

At times during my playing, I was concerned that the sound I was producing did not much resemble true Chinese music. My instructor, however, was very encouraging and very patient. My greatest complement came when a professor, visiting from China, was listening to me practice. He told me I had captured the spirit of Chinese music.

The beautiful melodies which can be produced on the cheng are far different from anything I had heard before beginning my instruction. To describe them does not do them justice. Cheng music must be exper-
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The cheng has greatly developed since ancient times, and its usage is still expanding. It can produce over 100 different sounds, which are exemplified by the pieces composed for it, old and new.

Just as popular in the present as it was in ancient times, the cheng will remain an important part of Chinese history, culture, and music. It will play a role in preserving and popularizing ancient Chinese melodies, as well as developing modern Chinese music.

The cheng is still an integral part of the lives of the Chinese people, and, as I have found, a very enjoyable part.
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