

THE KANTELE TRADITIONS OF FINLAND

by

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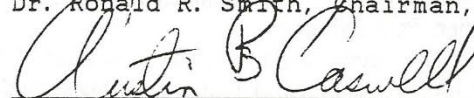
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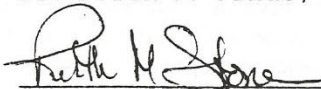
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ABSTRACT

The present study deals with the basic problems of what the kantele is and how it is played, and the more complex problem of the meaning of tradition in our modern world. Among the Finns, the kantele manifests itself as a musical instrument, a motif of folklore, and a symbol of identity.

The structure of the instrument has changed radically over the course of its history, so that today there are many different kinds of kanteles falling into three broad categories: those which have bodies carved from a single piece of wood, those built from separate pieces of wood, and those using a reverse-curve shape to improve the tonal qualities across a wider range. Kantele builders were and are influenced by matters of function, fashion and tradition in developing its structure.

The kantele is played in folk music, art music and popular music, in a wide variety of styles appropriate to these contexts. Various groups, and various geographic areas of Finland, maintain different playing traditions which exist simultaneously in the music culture.

The concept of tradition is as central to folkloristics as the concept of culture is to anthropology. Folklorists and ethnomusicologists may study tradition as the materials, the symbols, and the learning processes of a culture, which produce a dynamic balance of stability and change.

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INTRODUCTION

People have asked me occasionally "Why are you doing a dissertation on the kantele?" My interest in the kantele goes to the time I was in junior high school and I became familiar with the sound of the kantele from a record called "A Visit to Finland" which belonged to my parents. There were only three kantele selections on the record, played by the master Urpo Pylvänäinen. The back cover had a picture of the instrument and player. Although there were many other types of music from Finland on the record, something about the kantele selections stayed with me and had a profound effect upon me. Of all the music I had studied and heard, this was the first truly Finnish music.

The melodies stayed with me as I listened to them over and over again. I worked at a piano to figure out what the kantele was playing and in high school I transcribed all three pieces for string orchestra. My orchestra teacher, Dennis Hansen, allowed me to conduct the pieces. They were beautiful, but not as satisfying as when played on the kantele.

I entered college and became interested in music and human behavior, which led me to do an undergraduate degree in both music and psychology and to do graduate work in musicology. When I was about to complete my master's thesis on music therapy in 1977, my advisor, Professor Joyce Newman, asked me what topic I would like to study for my doctoral dissertation. Without any hesitation, I replied, "The Finnish Kantele." I could find so little written about this beautiful sounding instrument and I wanted to find more. At that point she suggested that I apply to study at Indiana University because of their outstanding program in ethnomusicology. So, it is true that my interest in doing research on the kantele led me to Indiana University to do doctoral work.

At Indiana University, in addition to studying folklore and ethnomusicology, which made it possible to combine my interests in music and human behavior, I had the benefit of an outstanding library and the opportunity to study Finnish. For several years, I read and studied everything I could find written about the kantele, which was still a very limited body of information. The goals I set for my dissertation were simple ones; I only wanted to answer two questions: "What is the kantele?" and "How is it played?" In my quest to answer these two questions, I encountered a third and more complex question: "What is tradition in our modern world?" The answers to these questions are the focus of the present work.

With the award of an A.S.L.A.-Fulbright Grant to study in Finland, my long-term dreams became a reality. Before arriving in Finland, I had never seen a kantele, except in photographs, and had never heard one played except on recordings. After arriving, I was very surprised to find so many different types of kanteles and many different styles of playing which today co-exist in the Finnish music culture. The kantele is known to all Finns, but actual kantele building and playing is not as widespread as expected. To most Finns, the kantele is merely a motif of folklore and a symbol of Finnish identity.

I was interviewed several times for newspaper articles and on the radio while conducting fieldwork in Finland and was frequently asked the question: Is there really enough information on the kantele to write a doctoral dissertation? I would reply that there is enough material for ten dissertations! This is still my belief. The present work is just a general overview of kantele building and playing; it only begins to explore some of the more interesting questions concerning the kantele. It is my hope that many further studies will be done on the kantele traditions of Finland.

Some Practical Matters

Most of the interviews and quoted texts were originally in Finnish. I placed the English translations in brackets. The translations are my own, unless otherwise indicated. Written transcripts of the interviews in Finnish are available at the Tampere University Institute of Folk Traditions and the Indiana University Archives of Traditional Music.

I. THE KANTELE AS FOLKLORE, SYMBOL AND MUSICAL INSTRUMENT

To the Finnish people the kantele manifests itself in three separate ways. First, it is a musical instrument, a type of zither which has been known among the Finns and neighboring cultures for hundreds of years. Second, the kantele is a significant motif of Finnish folklore. It is portrayed as having a supernatural beginning and as an object of magic and power, but it is also referred to as an object in normal reality. Third, the kantele is a symbol of Finnish identity which evokes feelings of pride and solidarity among Finns. These three different ways of viewing the kantele are closely interrelated and together they comprise a concept of what kantele means to the Finnish people.

Perhaps the most significant body of Finnish folklore is the collection entitled Suomen kansan vanhat runot or SKVR [The Ancient Runes of the Finnish People]. These runes relate epic tales which were transmitted for centuries in singing rituals before being collected and transcribed by folklorists in the eighteenth and nineteenth centuries. The great eighteenth century scholar, Henrich Gabriel Porthan, describes rune singing in the fourth part of his Dissertatio de Poesi Fennica (1778) and includes the following passage:

Whenever our fellow-countrymen entertain themselves with ceremonial singing, they most usually like to do it to the music of a harp or kantele. If a competent player is available, he accompanies the singers on a harp. If only one person is singing, then the harp player assumes the function of a supporting singer and repeats on the harp the melody which ordinarily is the charge of the supporting singer, the main singer meanwhile keeping silent... (Lönnrot 1963:381-82).

This short passage provides one of the earliest indications that the kantele was intimately tied to the art of rune singing.¹

The kantele was tied to the art of rune singing in two ways: as an instrument used to accompany rune singing and as a significant motif of the runes. The descriptions of eighteenth and nineteenth century travelers and explorers, among them Joseph Acerbi, Carl Axel Gottlund and Elias Lönnrot, paint a picture that the kantele was a typical artifact in the lives of the rune singers. The runes frequently contained motifs which reflected the reality of life, so it is not surprising that the kantele became a motif.

The runes which contain the kantele as a motif tell two distinct but related tales: The first tells the story of how Väinämöinen, the eternal sage, created the original kantele and the second tells about his kantele playing. The "creation of the kantele" runes are of two types: Some of the runes relate how Väinämöinen created the original kantele from the body parts of living things, such as its body from the jawbone of a great pike, its strings

¹The use of the kantele to accompany rune singing was also mentioned by Jacob Tengström in a talk entitled "Om de fornda Finnars Sällikaps-Nöjen och Tidsfördrif" [Ancient Finnish Group Entertainments and Pastimes] presented at the Royal Academy of Literature, History and Antiquities in Åbo (Turku) on July 15th, 1795. The talk is mentioned by Väisänen (1916) and has been translated into Finnish from the original Swedish by Heikki Laitinen (Tengström 1986).

from the hair of a maiden, and nails from the teeth of a great salmon. In other runes Väinämöinen created a kantele from wood.

The runes dealing with Väinämöinen's kantele playing portray Väinämöinen as a rune singer himself and the kantele as one source of his magic and power. The story of Väinämöinen's kantele playing has two parts: After Väinämöinen created the kantele, many people tried to play it and fail. Then Väinämöinen played and enchanted all the world's creatures with his playing.

Shamanism

The interpretation of these runes should be viewed in light of the purpose for which they were sung. It is believed that rune singing was connected with shamanistic practices.

Ancient Finnish-Karelian songs had a mythical basis; they existed in association with cult practices and ritual ceremonies. In former times, singing them was not a leisurely pastime or art for art's sake, but an act of magical significance. These songs contained the most sacred and powerful knowledge that could be used to influence a man's life. The song of Väinämöinen's kantele music was used as a kind of incantation, now for fishing, now for hunting. Chr. Ganander wrote in 1789: 'Fowlers, hunters, and woodsmen asked Väinämöinen to play his harp, so that its sweet music would call forth all the game...' (Oinas 1978:296).

The actual manner of singing the runes is also believed to be connected with shamanism (ibid:300). Two men, who represented the shaman and his apprentice, would clasp right hands and alternate in singing lines. The shaman sang a line, and the apprentice joined him in singing the last two syllables. The apprentice repeated the line, with the shaman joining in again on the last two syllables before going on to the next line. By repeating each line, the apprentice would learn the rune and the shaman was allowed time to recreate the next line. The singing may or may not have been performed to the accompaniment of a kantele, but if a kantele was used, it was usually played by a third person in unison with the singing. During the singing of runes the shaman entered a trance state in which it was believed that his soul would assume the form of a spirit animal and would travel to other realms. It was the duty of the apprentice to bring the soul of the shaman back to the normal world.

Lapp and Northern Eurasian shamans used a drum in their sacred ceremonies. The frame was carved from wood usually in an oval or round shape, over which was stretched the skin of a reindeer, elk or horse. The Lapps added a great deal of ornamentation to the skin of the drum and to the "T"-shaped drumsticks which were carved from reindeer antlers. There are several interesting parallels between the kantele and the shaman's drum.

Martti Haavio has pointed out a parallel in the names of the instruments. "[Another name for the Lapp shaman's drum is keure. Notice that the word keure corresponds to the Finnish narrative rune word käyrä which means 'kannel' [i.e. kantele],...]" (1967:300). He later adds, "[The Kirghiz shaman (baqca) accompanies the calling song with a string instrument (kobuz), an eastern Ostjakien shaman kantele-type of instrument -- this shaman is a 'kannel-hand shaman' the same as the Lapp shaman is a 'käsi-kannus'. The kannel brings Väinämöinen to mind, who, with his 'fisherman's words' or 'hunter's words', plays the

kantele and sings, until the animals of the forest and water, birds and fishes, arrive to listen to him;...]" (ibid:302).

Among certain shamanistic groups, there was a ceremony to "animate" the drum. Mircea Eliade describes this ceremony as follows:

The ceremony for 'animating the drum' is of the highest interest. When the Altaic shaman sprinkles it with beer, the shell of the drum 'comes to life' and, through the shaman, relates how the tree of which it was part grew in the forest, how it was cut, brought to the village, and so on. The shaman then sprinkles the skin of the drum and, 'coming to life,' it too narrates its past. Through the shaman's voice, the animal whose skin has been used for the drum tells of its birth, its parents, its childhood, and its whole life to the moment it was brought down by the hunter (1964:170).

Vilmos Dioszegi describes the reviving ceremony among Siberian shamans in reverse order. "The shaman must look for the spirit of the animal which gave its skin to be stretched over the drum. He must follow the path where the animal had wandered, right back to its birthplace, because only there can its spirit be caught" (1960:74).

From these descriptions we see the first essential element of the reviving ceremony: the capture of the animal spirit in order to give the drum life, which takes place by reciting the past history of the animal. It is not certain whether the kantele, when it was used in a shamanistic context, has a similar reviving ceremony. But, there is a seeming parallel in the "origin of the kantele" runes, because they describe the mythical animals from which the first kantele was believed to have been made.

Dioszegi adds a significant detail to the description of the previous ceremony. "Although the drum might be finished, it is still unusable, first it must be given to a small child to play with for a few days and then the so-called 'reviving' ceremony must be performed" (ibid:74). He reiterates:

This last information was of an extraordinary value, because there is no mention of such a procedure in the scientific literature. -- As soon as the drum is ready, the shaman revives it. The drum before its revival, must be given to a child to play with before falling asleep, for three days. (ibid).

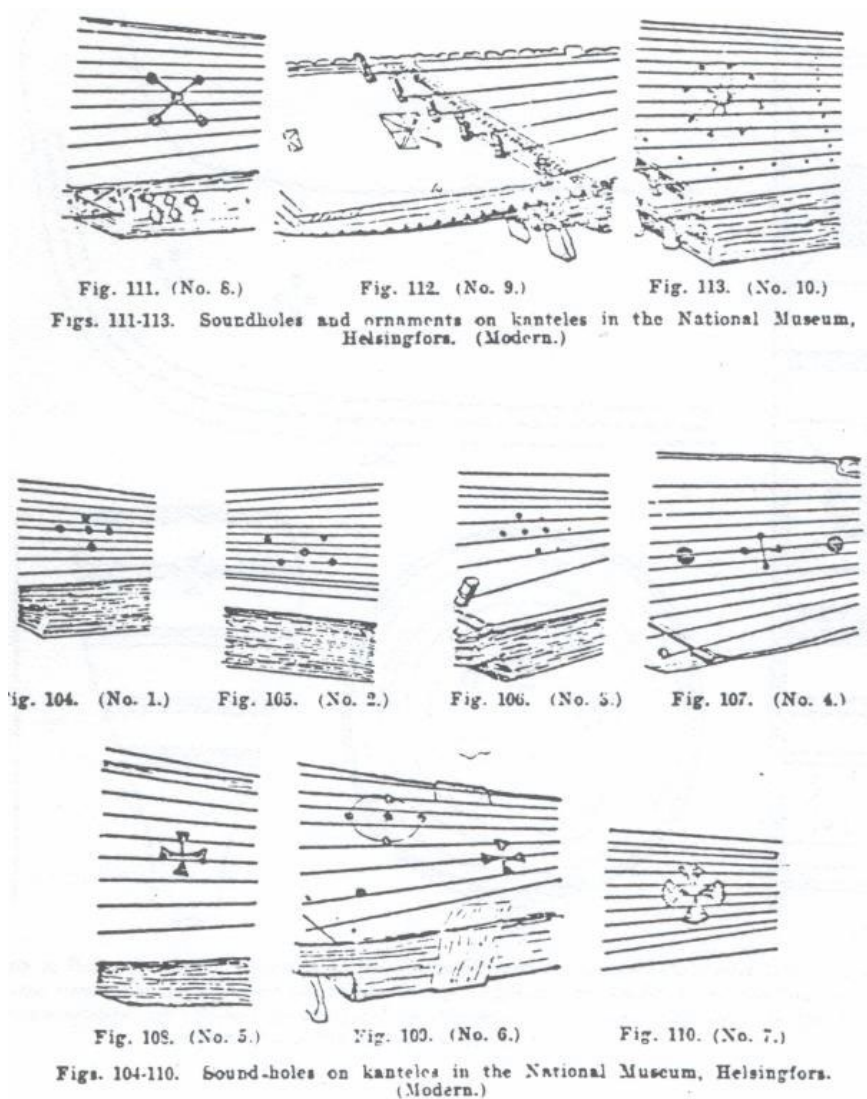
The practice of allowing a child to play with the magical instrument has a seeming parallel with the second part of the kantele rune sequence. "Now the kantele was ready; the young played it, the old played it, the maidens, the young boys, the unmarried men, the married men; the joy did not feel like joy, nor the music like music" (Haavio 1952:154). Eventually Väinämöinen played the kantele producing music which enchanted all who heard. Since Väinämöinen was the "eternal sage" every other person who tried to play the kantele in the rune was inexperienced, like a child.

Another interesting parallel comes to light when comparing the sound holes of the kantele and the decorations of the Lapp shaman's drum. The Swedish-speaking Finnish ethnomusicologist, Otto Andersson, in his dissertation *Stråkharp* (1923) (English translation: *The Bowed Harp* (1930)) includes an appendix on the topic of kantele sound holes. He says that the cruciform- and cross-shaped sound-holes served no acoustical function and were there merely as ornamentation, but their purpose was more than mere

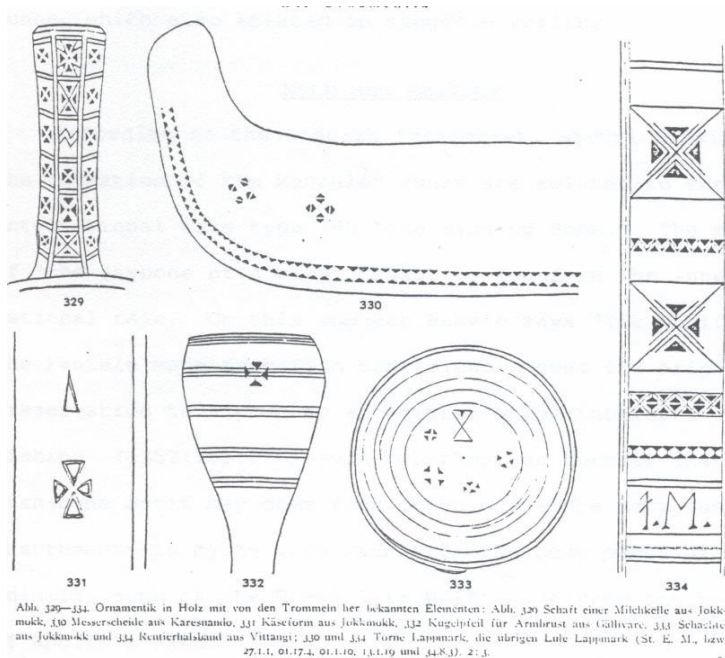
embellishment and "there is complete justification for interpreting the cross-shaped sound holes both as symbolic signs and as magical protective marks" (1930: 288, 300). These sound holes match many of the decorations painted on the skins and carved on the drumsticks of the Lapp shaman's drum (Illus. 1 and 2).

Little is known about the role of the kantele in the actual production of trance. While the kantele is mentioned prominently in runes as a source of power by which people are put to sleep or animals are enchanted, there is very little evidence outside the runes themselves.

The kantele may have served a function similar to that of the Lapp shaman's drum, as a source of sound upon which the shaman could focus to help achieve a trance state. Undoubtedly, the kantele held special symbolic significance to the shaman, as the magical object mentioned in the runes, which also existed in tangible reality.



Illus. 1. Kantele sound holes (from Andersson 1930:280,284).



Illus. 2. Decorations on Lapp shamans' drums (from Manker 1938:239).

Myth and Reality

According to the Finnish folklorist, Martti Haavio, the "creation of the kantele" runes are related to the international tale type 780 "The Singing Bone." The motif of "the jawbone of a pike" cannot be found in the international tale. On this subject Haavio says "The motif of the kantele made from fish bone clearly owes its origin and preservation to a poet or an adapter whose interests lay in fishing" (1952:152). Haavio hypothesizes further that the fish-bone motif may come from mythology since many musical instruments in myths were made from the body parts of animals, such as the Greek lyre being made from the horns of Apollo's oxen.

A similar approach to the kantele runes has been taken by Matti Salo: "The big pike, formerly sturgeon, of the poetry is the mythical world-supporter fish, which has played such a prominent part in the cosmological beliefs of the Mordvin and of which many traces remain in the SKVR [Ancient Runes of the Finnish People]." (1967:38).

Mythological theories provide only a partial explanation of the "creation of the kantele" runes, since many of the variants refer to the creation of a wooden kantele. The two following passages are typical of variants found in the SKVR.

| | |
|-------------------------------|---|
| Vaka vanha Väinämöinen | Steadfast old Väinämöinen |
| Itse tuon sanoiksi virkki | Himself brought words to life |
| Mistä kanteleh puut on saaha? | Where does one get the wood for the kantele? |
| Poropetran perseluista | From the tailbone of a reindeer |
| Mistä kanteleh naulat saaha? | Where does one get the nails for the kantele? |
| Hau'in suuren hampahista | From the large teeth of a pike |
| Mistä kanteleh kielet saaha? | Where does one get the strings for the kantele? |
| Hiiin immen hivuksista | From the hair of the Demon's virgin. |

SKVR I:579 (p.775)

| | |
|-----------------------------|---|
| Itte vanha Väinämöinen | Old Väinämöinen himself |
| Teki kalliolla kanteletta | Made a kantele upon the rocks |
| Kust' on koppa kantelessa? | From what is the body of the kantele? |
| Koivusta visa-perästä | From the curly end of a birch |
| Kust' on naulat kantelessa? | From what are the nails of the kantele? |
| Tammesta tasaiset oxat | From the even branches of an oak |
| Kust' on kielet kantelessa? | From what are the strings of the kantele? |
| Jouhista hyvän orihin | From the hair of a good stallion. |
| SKVR XII:80 (p. 51) | |

The structure of these two passages is identical, only the contents are changed. By comparing the contents, a general principle concerning the kantele runes becomes evident: they contain a mixture of myth and reality. They describe both the mythical kantele of Väinämöinen as well as kanteles found in tangible reality.

Otto Andersson (1930:70-85) hypothesizes that many of the kantele runes may have originally referred to the jouhikko (also called jouhikantele, a type of bowed lyre), rather than the five string plucked kantele. As part of his argument, Andersson relied on a view taken by C. A. Gottlund that the jouhikko was an older instrument since it had horsehair strings and the kantele had metal strings.

Andersson's views caused a sensation in Finland at the time because there was an ongoing struggle for national identity. The Swedish-speaking element of Finnish society did all it could to promote those aspects of the culture believed to come from the west, from a Swedish influence, such as the jouhikko. It had always been assumed that "Väinämöinen's kantele" was the plucked psaltery known among all the Eastern Baltic peoples. But Andersson's research showed that bowed instruments, probably the jouhikko, played a role in at least some of the kantele runes. More recent archeological finds in Gdansk and Novgorod seem to show a possible early connection between the bowed lyre and the Baltic psalteries (see Simon 1957; Emsheimer 1961; Tönurist 1977a; Povetkin 1982).

The Finnish ethnomusicologist, Armas Otto Väisänen, wrote a significant article (1928b, 1938) in reply to Andersson in which he emphasized that much of the folklore concerning the kantele had a basis in reality. Väisänen reviewed the known variants of the kantele runes, Estonian as well as Finnish, and came to the conclusion that most referred to the plucked kantele. Only some referred to a bowed instrument and those most likely come from a later date. The "wooden kantele" runes give an accurate picture of the materials and building methods. The runes which portray how Väinämöinen played the kantele provide a realistic account of kantele playing, as Väisänen himself observed in the field. For example, the following passage accurately describes the playing position:

| | |
|---------------------------|------------------------------------|
| Sitte vanha Väinämöinen | Then old Väinämöinen |
| Istuxen itek ripahan | Sat himself upon a handle |
| Otti soiton sormillehen | Took the instrument in his fingers |
| käänsi käyrän polvillehen | turned the curve to his knee |
| kantele kätensä alle | The kantele under his hands |
| SKVR XII:74 (pp. 46-7) | |

Kantele players generally played in a sitting position with the kantele held by the pressure of the hands in the lap or across the knees. The word käyrä [curve] most likely refers to the curved end of the kantele, the ponsi, which is believed to have functioned on older kanteles as a support on the leg or knee.

Other runes accurately mention the use of five fingers, presumably to play the five strings of the oldest form of the kantele.

| | |
|-----------------------------|-------------------------------|
| Tuopa oli vanha Väinämöinen | There was old Väinämöinen |
| Otti kantelon käsillä | Took the kantele in his hands |
| Poikin puolin polvillahe | Across the knees |
| Viisin sormin soittamahe | Playing with five fingers |
| SKVR VI:155 | |

Even certain details about playing, such as the important use of the thumb on the highest pitched string come to light.

| | |
|-----------------------------|------------------------------------|
| Soitteleepi Väinämöinen | Väinämöinen played |
| Käsin pienin, hoikin sormin | With small hands, and thin fingers |
| Peukalo ylös keveni | The thumb up lightly |
| SKVR XII:75 (p. 49) | |

On Väisänen's interpretations of these passages, Martti Haavio has remarked, "The description of the kantele players movements is realistic, actually ethnographic. The kantele now being played is not a mythical kantele but an ordinary, Finnish, five-stringed finger instrument." (1952:158). Väisänen later published an article showing that the kantele was also spoken of in realistic terms in Finnish riddles (1933), such as the often-quoted riddle:

| | |
|-------------------------|--------------------|
| Metsässä syntyy | Born in the forest |
| Metsässä kasvaa | Grows in the woods |
| Seinällä seisoo, | Stands on the wall |
| Polvella laulaa | Sings on the knee |
| [What is it? A kantele] | |

The lines "born in the forest" and "grows in the woods" allude to the fact that the kantele is carved from wood and may have been made while in the forest. "Stands on the wall" refers to the practice of storing the kantele by hanging it on a wall, something which is still widely practiced in Finland today. "Sings on the knee" refers to the playing position of the kantele.

Väisänen's article included a lengthy chart comparing a large number of variants of this riddle which show that most variants described the kantele in realistic terms. For example, some variants of the first two lines are kotona syntyy [born at home] or kotona tehtyy [made at home] referring to the place where the kantele is made. The third line has variants such as naulalla nukkuu [sleeps on a nail], presumably the nail from which the kantele hangs. The fourth line has variants such as pöydällä pörää [buzzes on the table] because the Finnish kantele, besides being played across the knees, was frequently played on top of a table.

Symbolisms

The kantele runes became widely known among Finnish upper classes at a time of growing nationalism. This nationalistic movement focused upon folk traditions, most significantly rune singing. Rune singing was believed by Porthan and subsequent scholars to date from antiquity. They believed that the contents of runes represented a pure and uncorrupted reflection of the Finnish national spirit. The runes, as well as other folklore such as proverbs and riddles, began to be collected and studied and used to argue against the political domination of Finland by Sweden and Russia, and to raise the Finnish language and culture to its proper worth (see Wilson 1976).

Because of the close connection of the kantele with rune singing, both as a musical instrument which accompanied the act of rune singing and as a motif within the runes, it became a strong symbol of Finnish national identity. As one contemporary source put it: "Since the early nineteenth century rune singing and kantele playing have together been a concept, symbolizing for the Finns all that is intrinsically Finnish, something unique that has distinguished them from their neighbours and also made them aware of their own national identity" (Asplund 1983b:79).

There are at least four major symbols connected with Finnish folk runes. The first three are inseparably connected, while the fourth is somewhat different.

The first symbol is Väinämöinen himself. Väinämöinen is described in the runes as an old, bearded and powerful sage, the spiritual leader of the people and the one who possessed the greatest knowledge. Väinämöinen practiced his magic and power through rune singing, so even though he did not exist in present reality, he existed to some extent in every practicing rune singer. Many rune singers, as well as scholars who believed in the historicity of the folk runes, believed that Väinämöinen might have actually existed at some time in the past. These singers saw themselves in a direct line of tradition back to Väinämöinen.

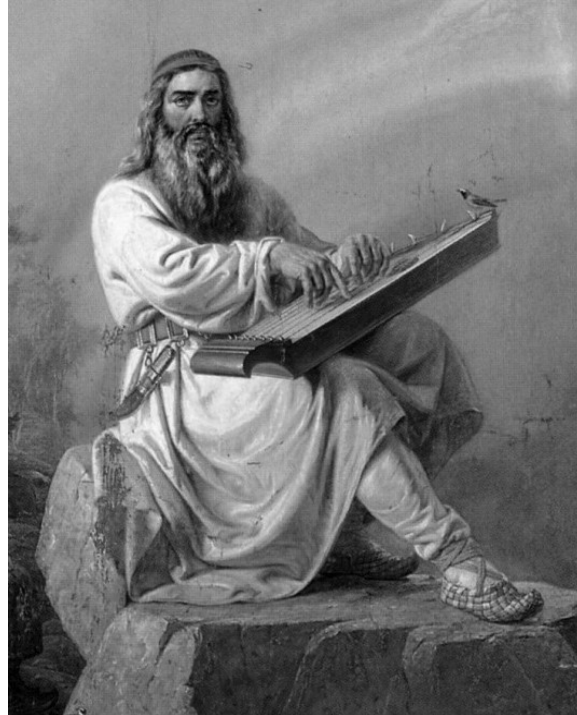
The second symbol is the kantele, which is almost always associated with Väinämöinen, as one source of his magic and power. The kantele was also a common artifact in the lives of rune singers. Everyone knew what the kantele looked like. In eastern and northern areas of Finland, it was practically in every home. In the cities, it quickly became popular museum artifact. So, of the four most significant symbols of Finnish folk runes, the kantele was the most accessible and the easiest to depict visually.

The third symbol is the act of rune singing itself. Rune singing, like the kantele, is something which existed in reality and also is a significant motif of the runes. Many of the runes relate stories of supernatural feats performed by rune singing or of competition through rune singing. Rune singing has always been an implied part of the Väinämöinen/kantele symbolism.

The fourth symbol is the Sampo, the magic mill which produces endless supply. According to scholars Uno Harva and Felix J. Oinas, the Sampo represents the pillar of the world around which the dome of the sky seems to turn endlessly, thus evoking the idea of a gigantic mill which produces anything wanted by its owner (Oinas 1978:291). Although we know what the Sampo is and what it does, no one knows exactly what the Sampo looks like, so it has rarely been depicted in visual form.

The various symbols from folk runes had a profound influence on the literature and fine arts of the Finnish upper classes, because reference to these symbols was believed to instill the essence of Finnishness in any creative work. A. O. Väisänen, in a slightly

humorous article (1925), has shown how Väinämöinen's kantele was depicted in the fine arts. Väisänen discussed the works of great artists of the era, such as Akseli Gallen-Kallela, R. W. Ekman, S. A. Keinänen and others, who were inspired by the Väinämöinen/kantele symbolism. Some paintings were quite accurate in the depiction of the real Finnish kantele, while others attempted to picture Väinämöinen's mythical kantele or some other instrument. The paintings show the combination of Väinämöinen, the kantele and implied rune singing as a kind of metasympol (Illus. 3).



Illus. 3. Detail of painting by R. W. Ekman "Väinämöinen's Song" which shows the combination of the old sage, kantele and rune singing (Väisänen 1925:200).

Art music was also influenced by folklore-centered nationalism, especially after the publication of the Kalevala, the national epic of Finland. Various Finnish composers used themes from the Kalevala as bases for their compositions, the most famous being Jean Sibelius, of whom the Finnish musicologist Eero Tarasti has said:

... characters from the Kalevala became the heros of literature, painting and music. They were often taken to symbolize various aspects of the Finnish character at a time when nationalism, the Finns' awareness of themselves as a nation, was gaining strength.

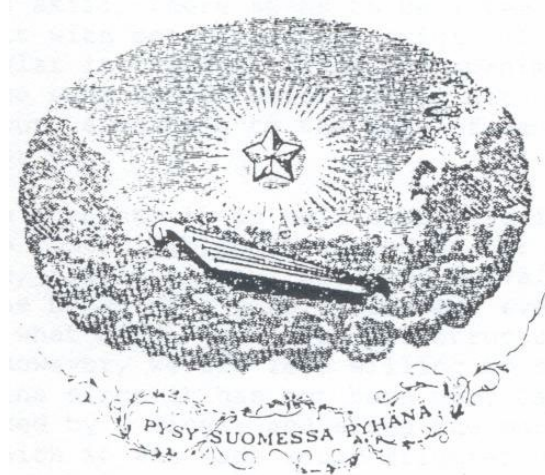
Sibelius was the first Finnish composer to capture in music the spirit of the original folk song and to depict the characters by purely musical devices -- just as realistically as Akseli Gallen-Kallela in his paintings. Seldom have different artistic genres been in such close contact with one another as in the atmosphere of Karelianism and symbolism in Finland in the 1890s (Tarasti 1985:15).

The kantele, however, was spurned by most composers since it was considered too limited an instrument to play art music. Jean Sibelius did not write any compositions for the kantele nor did he allude to it. [Correction: It was later found the Sibelius wrote at least three pieces for the kantele, one of which was for five string kantele and violin].

A significant work describing the influence of the kantele runes on Finnish literature is an article by Martti Haavio (1970). Haavio describes how the kantele runes had a profound influence on the writings of the late eighteenth century Fennophiles and the early nineteenth century Turku Romantics. Many major Finnish literary figures used the kantele symbolism in their works, such as Jaakko Juteini (1781-1855) in his poem Arvon mekin ansaitsemme, which was later set to music and is still a popular national song today. A portion of the lyrics read:

| | |
|------------------------|----------------------------------|
| Opin teillä oppineita | Scholars on the path of learning |
| Suomessa on suuria | In Finland there are great ones |
| Väinämöisen kanteleita | Väinämöinen's kanteles |
| täällä tehdään uusia | are made here anew |
| Valistus on viritetty | The light is ignited |
| Järkihyvä herätetty | Minds well awakened |

Among many other famous literary figures influenced by kantele symbolism were Sakari Topelius, Arvi Jannes, and Aleksis Kivi (ibid:101-102). The kantele became such an important symbol that it was chosen as the central feature of the seal of the Finnish Literature Society (Illus. 4).



Illus. 4. Seal of the Finnish Literature Society.

The nationalistic movement which increased the symbolic significance of the kantele culminated in the activities of Elias Lönnrot. While still a student Lönnrot was aware of the kantele's importance as a motif within Finnish folk runes. In his dissertation of 1827, he devotes an entire section to the analysis of the "creation of the kantele" and "Väinämöinen's kantele playing" runes. A portion of the section is given below:

For no other accomplishment ... is Väinämöinen more famous than for the art of playing music, to which he seems chiefly to have owed his immortality

and divine honors after death. Before we treat of the praise which he obtained by this skill, there seems to be a few matters to be dealt with concerning the origin of the particular instrument to the accompaniment of which he sang and of which he was not only the maker but, according to the view of many, the inventor too.

In some accounts it is said that this instrument or harp [Latin nablium], called by our people kantele, rarely harppu, was made by Väinämöinen from the bones of a pike, elsewhere even of a duck; what might have been its structure or form, however, we are less willing to struggle to determine since it has not been very carefully described by a singer and since the materials from which it was made would frighten us away from so arduous an undertaking! Another type of harp ... also called kantele and perhaps not unlike the harp still used by our people, he made belly-shaped from a very tough kind of birch, fitting to it pegs made of very smooth oak twigs and strings from horsehairs, or, according to others, from the hairs of a virgin sprung of the family of the divinity Hiisi, 'Demon'... (Lönnrot 1969:284-85).

These passages show that Lönnrot was thoroughly familiar with the kantele as depicted in the folk runes. It is not as widely known that he also became acquainted with the kantele as a musical instrument. It is traditional practice, up to the present day, that Finns hang their musical instruments on the walls of their homes. So it is significant that Lönnrot, on his first rune collecting journey to Karelia in 1828, made the observation in his memoirs: "Kanteles on the walls of every home" (Haavio 1970:85). Lönnrot played the kantele and was involved in developing its form to facilitate the playing of western music (see Grot 1847, 1983:106; Anttila 1931:205; Laitinen 1982c:45).

The significance of the kantele to Lönnrot may be seen in the fact that he named his earliest published rune collection, "[Kantele or Old and Newer Poems and Songs of the Finnish People]" (see Kaukonen 1979:33-7). In 1840, Lönnrot published a collection of lyrical runes which he entitled "Kanteletar". In the preface he explains:

[In Karelia, Savo and Ostrobothnia, where especially in Karelia the old kanteles are still kept and kantele playing is loved, they sing these songs occasionally with the help of the kantele's sound, in other words, the singer sings and plays simultaneously. The kantele previously had its own Muse [haltianeitsensa], which was called Kanteletar, or Kantele-hettar...] (Lönnrot 1840: LXXXII-LXXXIII; Kaukonen 1984:CVIII-CIIX).

According to Väinö Kaukonen (ibid:21) Lönnrot invented the term Kanteletar as a counterpart to the folk term Kalevatar. Martti Haavio has said on the same subject that a Kanteletar Muse is not known in Finnish mythology. It was created by Lönnrot as a Finnish counterpart to the Greek Muse of epic poetry who was the mother of Orpheus and who would sing lyrical runes to the lyre (1970:121).

In the original preface of Lönnrot's most famous work, the Kalevala, he writes that among the various titles he was considering for the work was "Väinämöinen's Kantele" (Lönnrot 1963:364). Both the Old and the New Kalevala include the kantele prominently.

The Kalevala includes the stories of Väinämöinen creating the first kantele from the jawbone of a great fish and enchanting all the world's creatures with his playing. Alas, in the battle over the Sampo, the mythical kantele is lost in the sea and Väinämöinen is forced to make a new kantele out of wood. In the final section of the Kalevala, immediately before Väinämöinen leaves in a copper boat to go to the area between the earth and the sky, he "leaves the [wooden] kantele behind, the fine instrument for Finland, the eternal source of joyous music for the people, the great songs for his children" (Lönnrot 1963:337). In the Kalevala, Lönnrot raises the kantele to the height of its symbolic significance, as the object most immediately connected with Väinämöinen and his parting gift to the Finnish people.

In creating his epic, Lönnrot used the folk runes as raw material. He broke the variants into their component parts, made changes and modifications, and then combined variants when he felt it was appropriate. It would have been a simple task to have combined the creations of the fish-bone kantele and the birch-wood kantele into a single story, but Lönnrot included both these two distinct types of kanteles in his epic.

The Finnish writer J. L. Runeberg has addressed the symbolic significance of Lönnrot's two kanteles. He believed that the first kantele, the mythical kantele which Väinämöinen loses in the sea, represented the loss of a past great age. The second kantele, which Väinämöinen fashions from wood, represents an attempt to recapture that age, though it is never fully successful. Runeberg felt that the second kantele symbolically pictures how the spirit needs to draw from the diversity of forms in nature in order to discover its true expression. Thus, the second kantele is made up of parts found in nature (Haavio 1970:111-112).

Perhaps a simpler explanation of why Lönnrot included the creation of both kinds of kanteles in his epic lies in his understanding of the folk runes themselves. Lönnrot was keenly aware of the symbolic significance of the kantele as well as its existence as an object in reality, and that the folk runes contained references to both kinds of kanteles. He therefore included the creation of a mythical kantele in one section of the Kalevala and the representation of actual kanteles in another. This reflects well the Finnish concept of the kantele as being both symbol and musical instrument.

II. A BRIEF HISTORY OF THE KANTELE

Invariably the first questions concerning the kantele, asked by scholars and laymen alike, concern its age and early history. These topics have been the focus of most of the scholarly research for the past one hundred years, but they are still quite debatable and controversial. Research has been influenced by the symbolic significance of the instrument to nationalistic-romantic movements in all the countries where it appears.

The history of the kantele is directly tied to that of other psalteries played by peoples living around the eastern half of the Baltic Sea, which have been collectively called the "Baltic psalteries." The various names of the instruments are etymologically related (see Eero Nieminen, 1963; Leisiö 1978:363). In Finland they are called kantele or kannel, in Estonia kannel, in Karelia kandele, in Latvia kokle or kuokle and in Lithuania kankles. Similar names are also known among the Livonians, Vepsians, and Setus. One form of the Russian gusli, the gusli krilovidnye [wing shaped gusli] or gusli zvonchatye [bright-sounding gusli] is related to the Baltic psalteries. It is uncertain whether the gusli shlemovidnye [helmet-shaped gusli] is also related. A third type of gusli, gusli prjamougoljnye [straight-sided gusli] is not related to the Baltic psalteries (see Vertkov 1969; Dahlblom 1979, 1980).

Perhaps the foremost authority on the scholarly literature pertaining to the Baltic psalteries was a Professor of Religious Studies at the University of Oregon, Stephen Reynolds, who began collecting and studying these materials as a hobby. Two of his papers (Reynolds 1973; 1984) presented an outstanding analysis of this literature. I can do no better here than to summarize his observations. Reynolds suggests that there have been at least three different competing theories on the origins of Baltic psalteries, which he calls the Slavic theory, the Finnic theory and the Oriental theory (Reynolds 1984).

The Slavic theory can be traced to the Russian scholar A. S. Famincyn, who published a monograph on the Russian gusli in 1890. Famincyn argued that Baltic psalteries were known to the Russians in the middle ages and may be among the gusli mentioned in the old Russian epic poetry, the byliny. He believed the instrument originated in Byzantium and was carried by the Slavs to the Finns and Estonians, and from them to the Lithuanians and Latvians. For some reason, the Slavs forgot their instrument, but borrowed it back again at a later time from the Setus of southern Estonia. As part of his argument, Famincyn used linguistic evidence. He believed the original name of the instrument came from primitive Slavic gandtli, which became gosli among the Slavs, gusli among the Russians and kantlis, kantle, kantele, and its cognates among the Balto-Finns. Famincyn also believed that the helmet-shaped gusli was directly related to Baltic psalteries, as a more advanced form of the instrument.

The Finnic theory originated in pre-revolutionary Russia among several scholars, the most important of whom were Mikhail Petukhov (1892) and N. I. Privalov (1908). This theory took into account the fact that the kantele was mentioned prominently in the Kalevala runes and held that the kantele originated in Uralic-Altaic antiquity. Privalov believed that the Slavs borrowed the instrument from the Balto-Finns, since the wing-shaped gusli was only found in adjacent areas. The theory also proposed a Finnic etymology for the names of the instruments and held that there was no genetic relationship between the Baltic psalteries and the helmet-shaped gusli.

The Oriental theory was developed by Curt Sachs (1916), who claimed an Asian origin for the Baltic psalteries, but did not discuss the route by which they arrived in the

Baltic region nor their path of diffusion. He too used linguistic evidence to argue that the word kantele and its cognates were derived from the Georgian word kankula, which is related to the middle High German cannale, coming from the Arabic q_n_n and Greek kanon. Like Famin cyn, he grouped the helmet-shaped gusli and Baltic psalteries together. Sachs's theory had an influence on western scholars, who propose a relationship between the kantele and q_n_n (for example see Marcuse 1975:221 and Falvy 1981).

The three theories mentioned by Stephen Reynolds were each developed somewhat in isolation. No one set of adherents to a theory had a complete knowledge of the research and literature of the others. The same is true of the Finnish scholarship; it developed in relative isolation and was influenced by nationalism and the symbolic importance of the kantele. The predominant Finnish view, though not always stated explicitly, has been this: since the kantele is mentioned prominently in folk runes, its age must be at least the same as that of the runes. This has led to the generally held belief that the kantele dates to the Proto-Finnic era, approximately two thousand years ago.

The kantele was the subject of intensive study by A. O. Väisänen. He intended to write a doctoral dissertation on the subject, but instead defended on the topic of Ob-Ugrian Melodies (1939). Väisänen did, however, publish many articles and a book on the kantele, which may be considered the foundation of the Finnish scholarly literature on the subject. In his writings, Väisänen generally did not emphasize the origin or early history of the kantele. Occasionally, he cautiously stated the standard belief of an age of two thousand years, but in his most significant work on the kantele (1928a), he does not mention these issues.

Väisänen did, however, deal extensively with the diffusion of the instrument. In a major article (1928b), he argues that the kantele and the helmet-shaped gusli had separate histories and that the kantele could not have been borrowed from the Slavs, as Famin cyn believed. Väisänen left open the question of diffusion between the Balts and the Finns. Stephen Reynolds has thus called the second phase of the Finnic theory the Finnic-Baltic theory. In an earlier article (1927), which was written as a response to an article of Tobias Norlind (1923), Väisänen provides the most accurate picture of the diffusion of the kantele within Finland. Based on a very careful study of where the existing museum specimens were obtained, he believed that the kantele was originally known in all areas north and east of a line approximately from Helsinki to Oulu.

In a small but revealing article (1935), the Finnish musicologist Toivo Haapanen, a contemporary of Väisänen, states the standard Finnish position. Contrary to Väisänen, Haapanen believed that the kantele was originally known in all of Finland but with the spread of civilization was relegated only to the border areas. He attributes great antiquity to the kantele, because of its primitive design and its connection to rune singing. The oldest existing Finnish kanteles have five strings, which correspond to the five pitches of runes melodies. He believed that the kantele originally came from central Asia and dates to the time when the Finnic and Baltic peoples lived as neighbors, before they moved to the Baltic region, or approximately two thousand years ago.

Väisänen's successor as Professor of Folk Music in Finland, Erkki Ala-Könni, has also done a great deal of research on the kantele. He, likewise, has been cautious about dealing with the problem of its age and early history and has concentrated the major portion of his excellent work on documenting the kantele building and playing practices of the late nineteenth and early twentieth centuries. He has also been actively involved in the revival movement of carved kantele building and playing. In a book on carved kantele playing, co-

authored with Martti Pokela, he cautiously states the standard belief that the kantele is two thousand years old (1971:7), but in a more recent work he estimates its age at a thousand years (1985:97).

The current Finnish Professor of Ethnomusicology, Timo Leisiö, is an expert on musical instruments who completed a comprehensive study of the Ancient Aerophones of the Finns and Karelians as his doctoral dissertation (1983). He has also published widely on the origin and history of the kantele. In an early article (1975), Leisiö states that the kantele is just as old or older than the folk runes, or perhaps three thousand years old. In subsequent work, Leisiö has written that the kantele is perhaps only a thousand years old (1985:6.1). This prompted another Finnish folk music scholar, Ilkka Kolehmainen, to comment, half in jest, that the kantele has become two thousand years newer in just a few years (1985:6).

Leisiö replied to Kolehmainen's remarks with a short article which summarizes and clarifies his earlier work (1986). He believes that the kantele was borrowed, not invented independently, and could not have existed before the time of other zither instruments. He carefully proposes a hypothesis that the concepts of building zithers were brought from central Asia to what is today southern Russia by the Scythian herdsmen. The Scythians lived in an area which partially overlapped the area of the Southern Balts. From the Southern Balts, the zither moved to the Northern Balts and from them to the Balto-Finns. It is impossible to say exactly what kind of instrument this was, but Leisiö believes that it may have been similar to the instruments dating from the 12th to 13th centuries found in the archeological excavations in Opol and Gdansk and in iconographic representations from Novgorod, Rjazani and Kiev (see Simon 1957; Emsheimer 1961; Tönurist 1977a; and Povetkin 1982).

Leisiö believes that the kantele was not adopted in Finland until the Karelians and Savos brought it there, which was not until perhaps the Middle Ages. He blasts the attribution of great antiquity to the kantele, since no melodic instruments have been found in Finland or Karelia dating before the Middle Ages. He asks why the kantele should be the only melodic instrument among the Finns for a thousand years and says:

[The picture of Väinämöinen has put us into a dreamlike trance, where the kantele is revered into its own position, which has no connection to anything else, [no] connection to reality] (1986:5-6).

Leisiö also summarizes several of the other theories concerning the history of the kantele and its connection with other instruments and shows that most are at least plausible.

So, the age and early history of the kantele still remain as they have been: matters of debate. The great amount of evidence which has been gathered is inconclusive to prove or disprove any of the many competing theories.

III. KANTELE BUILDING TRADITIONS

In addition to being a motif of folklore and a symbol of national identity, the kantele is a musical instrument, an object which exists in tangible reality. The kanteles which exist were made by people who had a concept of what the kantele should be and who then produced a physical realization of that concept. Kantele building is part of a system of culture in which all aspects of life are intertwined, thus the kantele cannot be understood apart from its cultural context.

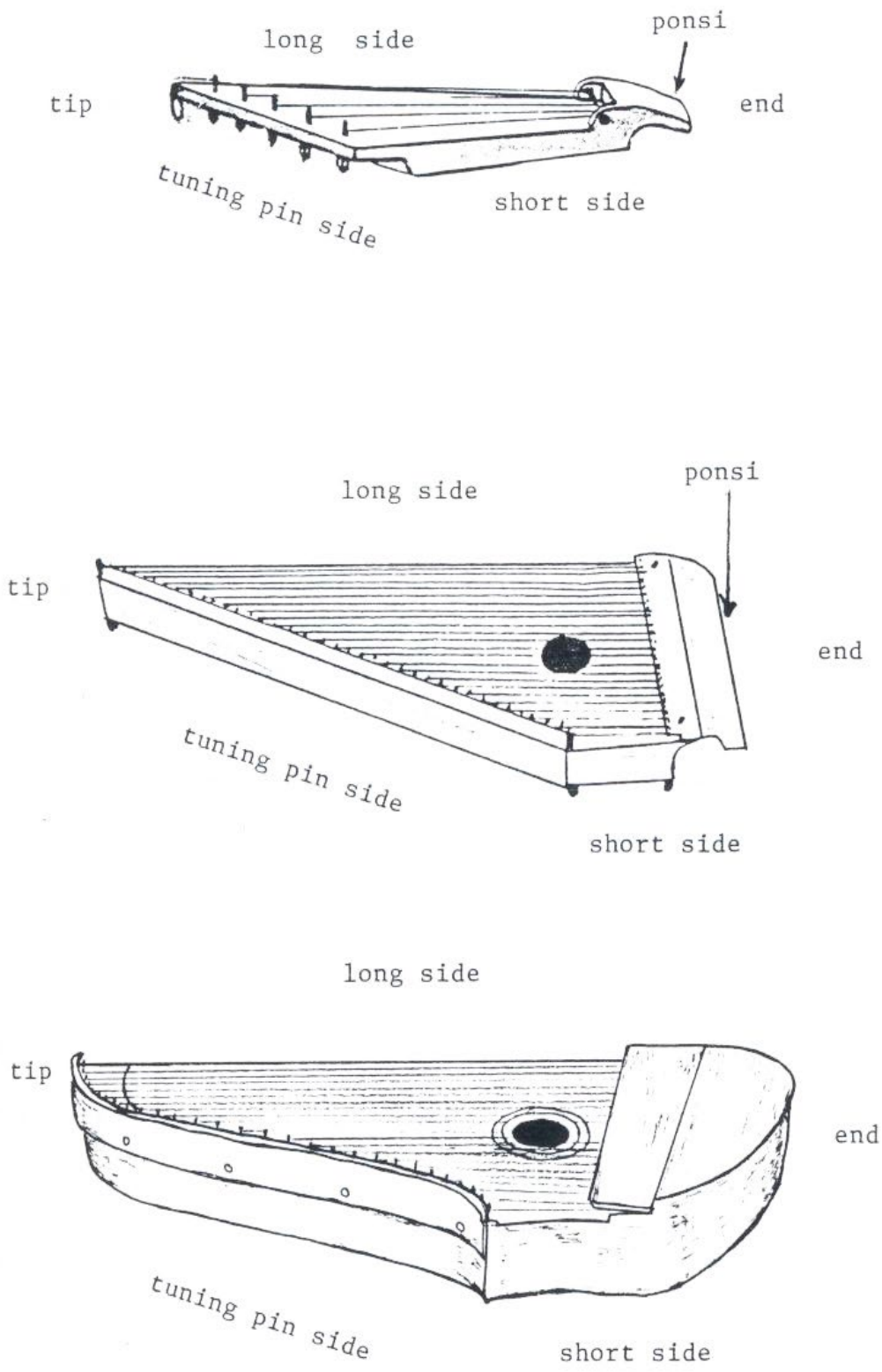
The paradigms of ethnomusicology and material culture folkloristics intersect with the study of musical instruments. The kantele is part of the material culture of the Finns, but it is a special part since its function is the production of music. The kantele is not an implement of work, necessary for survival, but an implement of play, which adds to the quality of life in some intangible way. The careful study of kanteles reveals insights into the cultural aesthetics of those who made them.

The kantele is a product which results from a dynamic process of tradition. This begins with a concept in the kantele builder's mind of what the kantele should look like, how it should sound, what kinds of music will be played on it and what kinds of symbolic or social significance it will have. The concept can be general or specific, depending on the experience and skill of the builder. The builder must then deal with specific questions related to the building process such as the types of materials that should be used and the techniques that should be employed in building. All these things are shaped by the norms and values of the culture. Builders borrow ideas from other builders or from older instruments. In addition, builders sometimes change things and create new things, thus "improving" upon the old or that which already exists. Builders create innovations through experimentation. Thus, a tradition is formed by the dynamic balance of stability and innovation.

The kantele is an ideal subject for studying the processes of tradition because it has retained a unique identity and place in Finnish culture in spite of radical changes in its structure over the past three centuries. It began strictly as a folk instrument, meaning that builders built the instrument for their own use. The skill of folk builders varied greatly, as they learned their craft through trial and error. Therefore, folk kanteles are not homogeneous in specific characteristics of structure. Each is unique, sharing only general characteristics with other folk kanteles.

The kantele also became a significant instrument among the upper classes, as a symbol of their national identity. This resulted in the desire among some to "improve" the kantele for the specific purpose of facilitating playing of western art music. Kanteles built for this purpose were much more standardized and homogeneous. They were generally built by "master builders" for others who would play them. The transition of the kantele from a folk to an art instrument took place over a period of approximately a hundred years (from the 1830's to the 1930's) and in some ways continues today.

Three factors influenced kantele builders in changing its structure: The first is function. Most of the various parts of the instrument serve some function in order to produce music of a specific type. The second is fashion, which takes into account what other builders in the area do and the perception of what makes a superior instrument. The final factor is tradition, which takes into account what has been done in the past and provides stability in the midst of change.



Illus. 5. Three varieties of kanteles: Carved, Box, and Modern, with their parts labeled.

I have divided all the various types of kanteles into three broad categories, which have been recognized by Finnish scholars. The carved kanteles [koverettukantelet] are those which are made by carving out a single piece of wood. They are the oldest form of the kantele. The box kanteles [laatikkokantelet], also called board kanteles [lautakantelet], are made by combining individual boards of wood to produce an enclosed box. An additional important characteristic is that the sides of the instrument, especially the tuning-pin side, are straight. The third category of kanteles, I call the modern kanteles. These are known among Finns by a wide variety of names, but they all have a commonality in that the tuning pin side employs the reverse-curve shape used by other large string instruments, such as the harp or concert grand piano.

In order to discuss the structure of existing kanteles accurately, it is necessary to have standard names for the basic parts. All kanteles are zithers, generally shaped as an irregular trapezoid with one narrow end. The side of the instrument holding the tuning pegs or tuning pins, I will call the tuning pin side. The other two sides, I will call the long side and the short side. The end of the instrument opposite the tuning pins, the Finns call perä, which means "rear," "butt," or "end." I simply call this the end of the instrument. The angle formed by the tuning pin side and long side, the Finns call kärki, which means "tip," so, likewise I call this the tip of the instrument. The top of the instrument is that which is closest to and runs in a plane parallel to the strings. It generally has a sound hole. The bottom is furthest from the strings. Illustration 5 on the previous page shows the three varieties of kanteles with the standard names for their parts.

3.1 CARVED KANTELES

Carved kanteles are the oldest form of the instrument. To guess what builders of the past had in mind, we can study and compare existing carved kanteles found in museums. These old kanteles are true folk artifacts, in that they were generally built by individuals for their own use. Because they are folk artifacts, virtually no two of these instruments are exactly alike. Any general statement about these instruments will have individual exceptions. At the same time, there are characteristics which unite all these instruments, otherwise they could not be recognized under a single concept of kantele.

The Carved Kantele Among the Baltic Psalteries

The older forms of Baltic psalteries have several characteristics in common. They are all relatively small instruments, which were typically made by carving a single piece of wood to form the body. The bodies may be described as irregular triangles, with the narrow end cut off, or as narrow irregular trapezoids. They could be carved from the top, side or bottom. If carved from the top, a separate sound board was added to make an enclosed resonating chamber. Typically, the sound board had some type of hole, which could be in a wide variety of shapes, the most usual being a round hole, a cross, or a flower. If the body was carved from the bottom, it was frequently left open, but sometimes also was closed with a separate board. Again, the top of the instrument may have had a sound hole. Some Baltic psalteries, particularly those built by Vepsians, were carved from the side, which was also left open.

The carved Baltic psalteries have a highly variable number of strings, with as few as five and as many as fifteen, or occasionally more. Perhaps the most significant characteristic of the strings is that they are usually not parallel. The strings typically are attached at the end of the instruments to a single rod which can be U-shaped coming up from the body of the instrument, or can be straight and held in place between the sides of a wide notch carved in the end of the instrument. This part of the instrument is called the varras in Finnish meaning "spit", a metal rod on which meat was turned over a fire. The strings fan out from the rod to the tuning pegs at the opposite end of the instrument. The tuning peg side almost always forms an oblique line in relation to the rod and the other sides of the instrument, thus giving the strings graduated lengths.

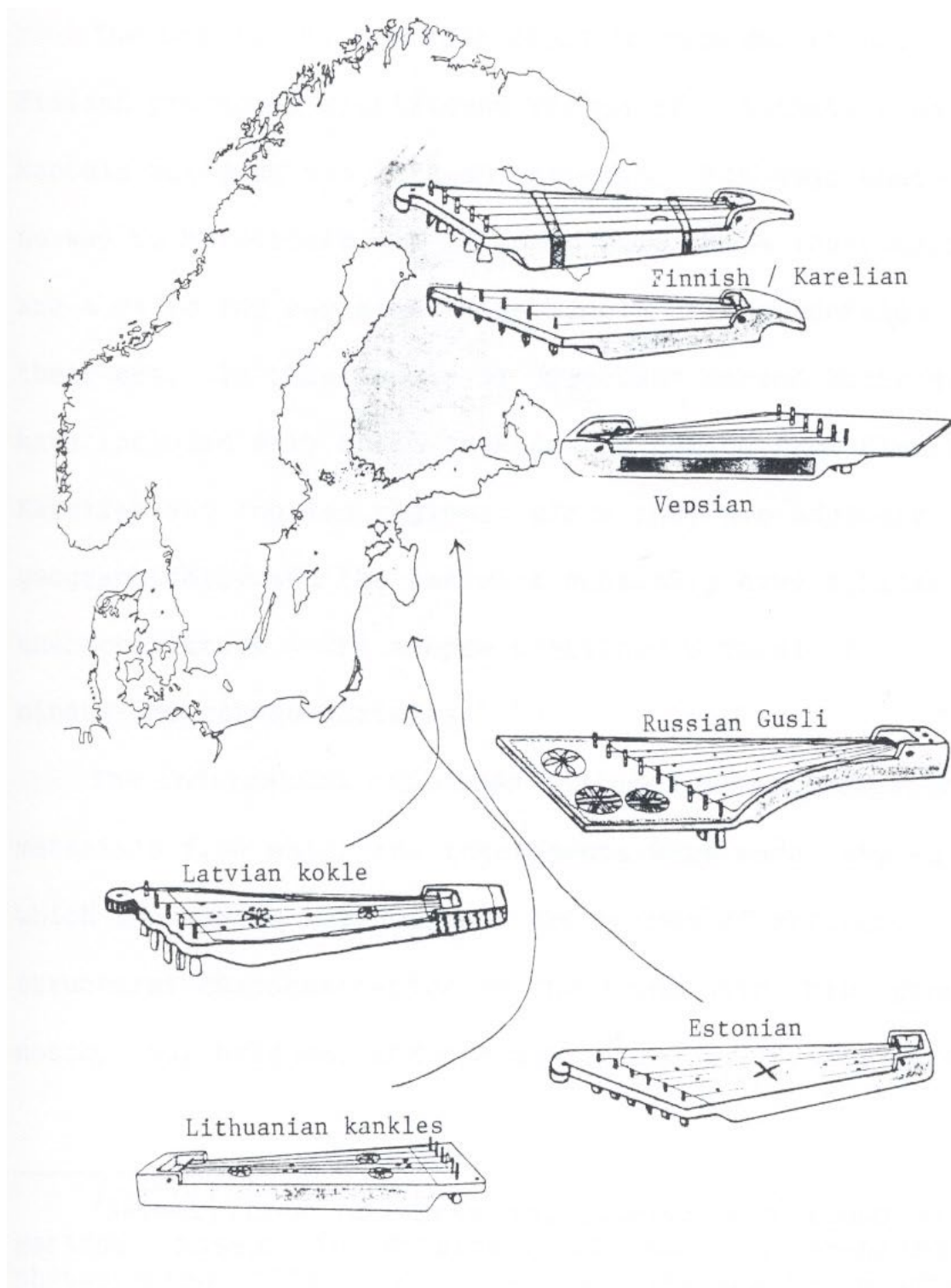
The general characteristics offer evidence that the various forms of the Baltic psalteries are related. But there are also characteristics which tend to distinguish the instruments by nationalities.

Almost all Finnish carved kanteles have an extension at the end of the instrument called a ponsi, which is curved down. This extension is much rarer on other Baltic psalteries. Some of the Vepsian instruments occasionally have a ponsi which is curved up. On Finnish instruments, the top of the ponsi has a wide notch carved in it, which the Finns call the ponnen lovi, meaning "the notch of the ponsi." The rod to which the strings are attached is held in place between two holes in the sides of the notch.

On the tuning pin side of the instruments the top is extended in order to allow space for the holes of the tuning pegs, which are usually inserted from the bottom. On some Baltic psalteries, particularly Vepsian, Setu, Russian and Estonian instruments, this extension may be quite large. It is called lapa meaning "blade" in Finnish, laba in Estonian meaning "blade" or "paddle", otkrylok in Russian meaning "stub-wing", and is frequently translated as Stutzbrett meaning "supporting board" in German, referring to its possible function as a support for one of the player's arms. Virtually none of the Finnish carved kanteles have a large blade, only one large enough to accommodate the tuning pegs.

The variations in structure between the instruments of the Finnish and Estonian regions may be the result of different playing positions. The Finnish instruments generally have been played in a horizontal position, with the sound board parallel to the ground, while many other Baltic psalteries are played in a more vertical position, with the sound board at an angle to the ground, the long side of the instrument in the lap and the short side against the body. Finnish folk runes say that the ponsi was placed on the knee, so it is believed that it originally had the function of securing the instrument more firmly in the player's lap. While this is quite likely true, it cannot be proven. The oldest descriptions of playing do not mention if the players placed the ponsi on the knee. Descriptions and photographs of carved kantele players taken around the turn of the century show little evidence that the ponsi was actually used this way (see Väisänen 1928a; Saha 1986). By the middle of the nineteenth century, builders made larger carved kanteles, which were generally played in a horizontal position on top of a table or other firm support.

The extended blade has been attributed to the playing style and music of the regions where it appears. In a significant article (1977a) the Estonian ethnomusicologist, Igor Tõnurist, argues that the extended blade was a relatively late characteristic which came about because of the influence of Russian dance music. This dance music required a rhythmic accompaniment generally made up of chords. The playing style for this music used the so-called "covering technique," where the fingers of the left hand would cover the strings not needed to produce a chord, while the right hand would strum out the rhythm.



Illus. 6. Baltic psalteries carved from a single piece of wood. Sketches by Ilkka Kolehmainen, published in Kantele 1985 (4):7 and Viisikielinen 1987 (4):5.

Originally kannels were played horizontally, but with the new dance music and accompanying playing style they began to be held in a more vertical position. Tõnurist believes that the primary purpose for the extended blade was as a support for the left arm, which would lie passively as the fingers covered the strings. It also had a secondary function of increasing the resonance of the instrument, hence the Setu name heluhand [sound tail?] for the blade. As Russian dance music culture spread to a larger area, bladed kannels took the place of older kannels without the blade.

The Existing Carved Kanteles in Finland

The old carved kanteles found in museums around Finland provide a significant source of information on what kantele building was like in the past. Although there is no way to be certain, it is hoped that these instruments are a valid and representative sample of the kanteles from their era. In this sample of "Finnish" carved kanteles, I have included only those instruments coming from Finnish, Karelian and Ingrian regions, since they are adjacent geographically and the kanteles generally have similar characteristics. The sample contained a total of ninety-one carved kanteles.²

The information collected included measurements; the materials from which the instruments were made; the way in which the bodies were carved; the number of strings; structural characteristics of the sound hole, tip, ponsi, notch, rod, bridges; and the age, place built, and other specific details, if known. Complete information was not available in every category, but the information which was available provided a way to compare and study the structure of the instruments. The information was organized in a database and used to generate the reports in Appendix 1.

All the kanteles in the sample were relatively small instruments. Because their bodies were carved from a single piece of wood, their size was limited by the size of the available trees. Finland, and nearby areas, being in a sub-arctic climate, generally have relatively thin trees. The narrowest kanteles were approximately 10 cm wide at the widest point; the widest ones were approximately 30 cm. The shortest ones were 46 cm and the longest were 80-110 cm. The thinnest ones were approximately 3 cm. thick, and the thickest ones 10 cm. The measurements of length, width and thickness were evenly distributed between these extremes.

The carved kanteles of the sample may be grouped according to whether they are carved from the bottom, side or top. This grouping follows a distinctive pattern of geographic distribution. Those carved from the side are the rarest. Väisänen's materials contain information on just two such instruments and the National Museum collection

²Seventy-five of these instruments are found in the National Museum in Helsinki, of which I examined and photographed fifty-six. A. O. Väisänen's manuscript collection at the Finnish Literature Society provided six additional examples from the Häme Museum in Tampere, as well as detailed descriptions, drawings and measurements of most of the carved kanteles in the National Museum collection. A series of articles by Ilkka Kolehmainen (1986-87) provided information for the remaining ten instruments.

contained three.³ Most of the kanteles in the sample were carved from either the top or the bottom. If they were carved from the top, a separate sound board was added to make an enclosed resonating chamber; if carved from the bottom, they were generally left open. With only a handful of exceptions, those which were carved from the bottom come from north of a line between Joensuu and Vaasa. Those carved from the top come from south of this line.

A second possible way to group the carved kanteles is to distinguish between those with narrow and those with wide bodies, which I have done basically as a subjective appraisal. Generally, the division came at around 15 cm in width, those over this amount being wide and those under being narrow. But if the width of a kantele was less than one third its length, I considered it narrow (Illus. 7). Most of the narrow kanteles had just five strings, but some had as many as ten strings.⁴ The wide bodied kanteles were noticeably larger and bulkier and were obviously built to accommodate a greater number of strings (Illus. 8).

There is a third category of carved kanteles which did not fit neatly into the narrow or wide categories. These kanteles were relatively large instruments, each with more than ten strings, a greater overall length and generally had parallel sides. The end which held the tuning pegs was quite long and at a steep angle in relation to the sides of the instrument which made it possible to include a larger number of strings (Illus. 9).

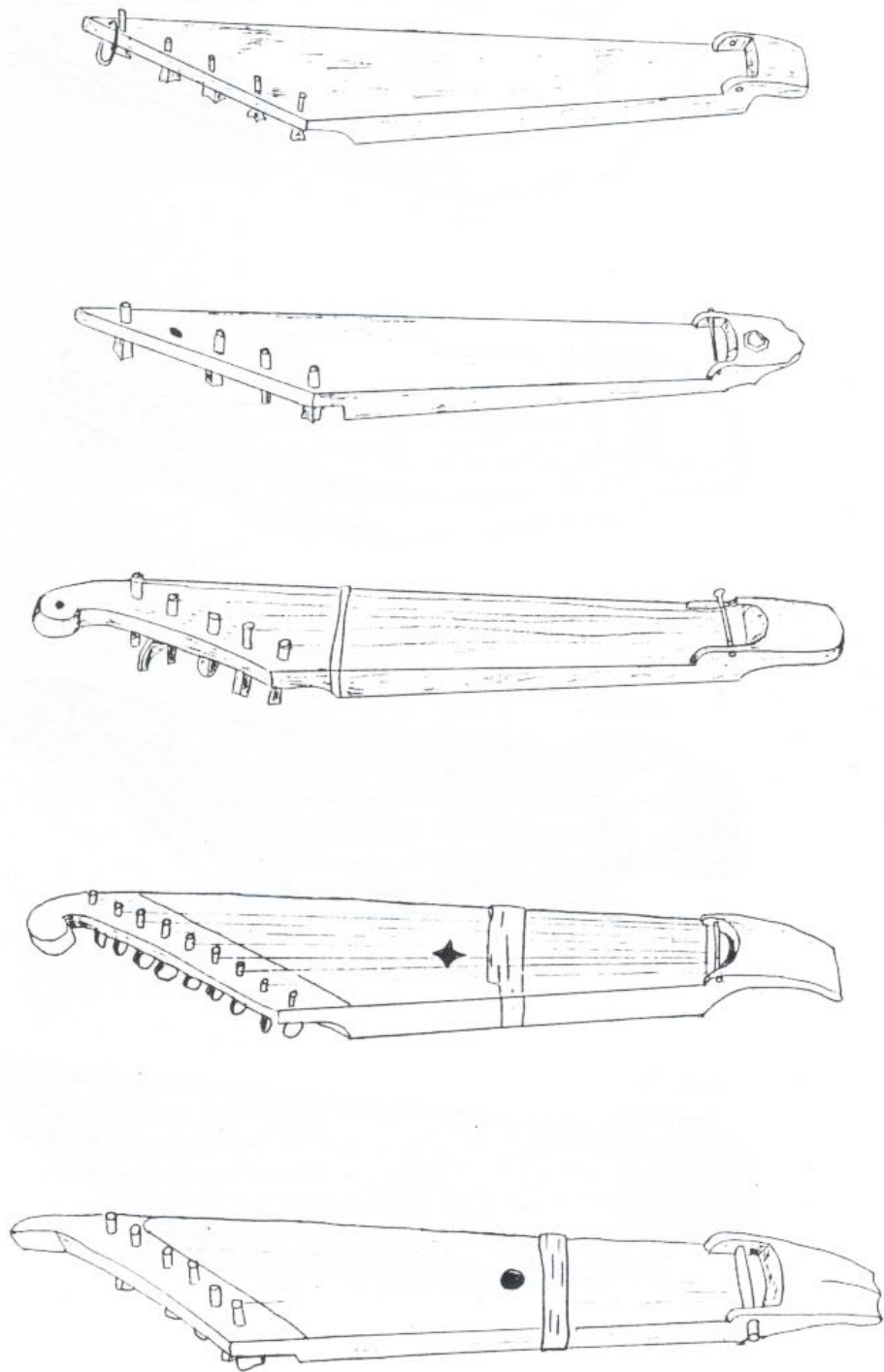
The bodies of kanteles in the sample were made from various kinds of wood, the most common being alder and spruce, followed by birch, pine or aspen. When a kantele was carved from the top it had a separate piece of wood for the soundboard, which was usually made of spruce, followed by pine, alder, or birch.

From Väisänen's papers on individual instruments in the sample:

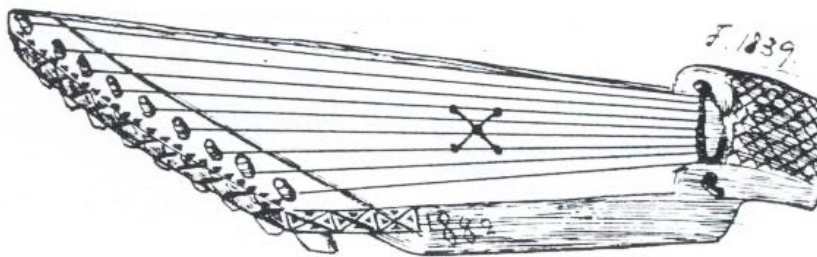
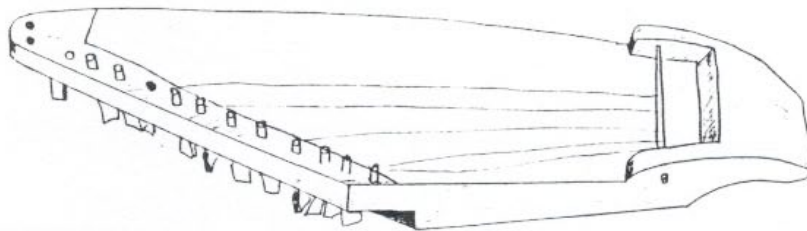
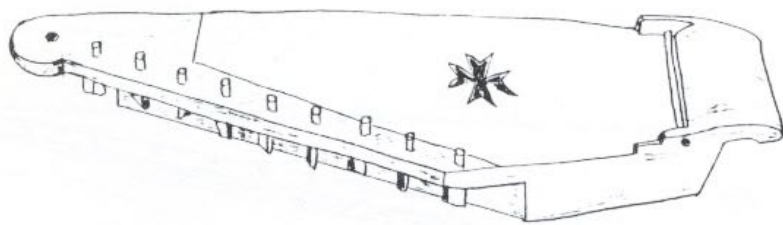
| Number of kanteles | | Number of kanteles | |
|--------------------|----|--------------------------------|----|
| Body wood | | Top wood (carved from the top) | |
| alder | 36 | spruce | 24 |
| spruce | 17 | pine | 4 |
| birch | 10 | alder | 3 |
| pine | 4 | birch | 1 |
| aspen | 1 | | |

³The kanteles carved from the side included in Väisänen's papers were both from Suojärvi, instrument numbers 188:49 and 188:50 from the Häme Museum in Tampere. The National Museum kanteles were from Ingria and one from Olonets Karelia. Most of the Vepsian instruments in the National Museum collection were also carved from the side, but they were not included in the present sample.

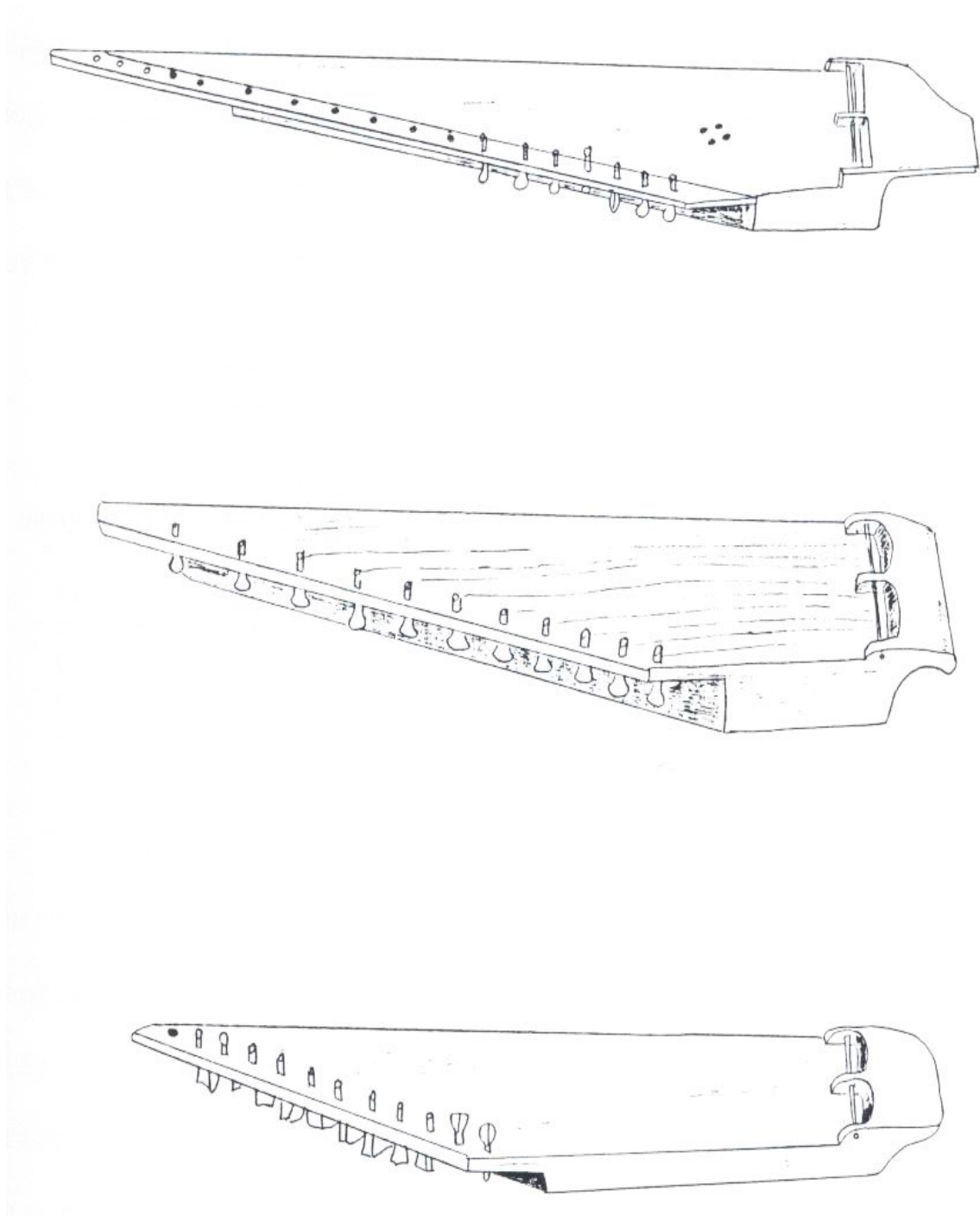
⁴For example, compare the National Museum instruments numbered 2218.218 and 1855.42, most likely made by the same builder from Juva. The first has five strings and the second nine strings, but is only 1 centimeter wider. Apparently some builders added more strings, but left the bodies essentially unchanged.



Illus. 7. Narrow carved kanteles from the National Museum, Helsinki. From top to bottom: instrument number F210 from Northern Savo; F212 from Nilsjä; 1855:11 from Liperi; 1855:42 from Juva; F1177 from Korpiselkä.



Illus. 8. Wide carved kanteles from the National Museum, Helsinki. From top to bottom: instrument number F2084 from Myrskylä; F1617 from Salmi; F1838 from Viipuri; F1839 from Karelia. Bottom two sketches from the papers of A. O. Väisänen at the Finnish Literature Society.



Illus. 9. Long carved kanteles from the National Museum, Helsinki. From top to bottom: instrument number F213 from Kuopio; F197 from Tohmajärvi; F208 from Iisalmi.

The shape of the bodies, when viewed from the end, was usually square or rectangular with the sides at 90° degree angles to the bottom. Only a few of the instruments had the sides at a greater angle or more rounded bottoms. The rectangular shape was probably most popular because it allowed the kantele to lie flat on top of a table. Those with rounded bottoms would have necessitated their being played in the lap.

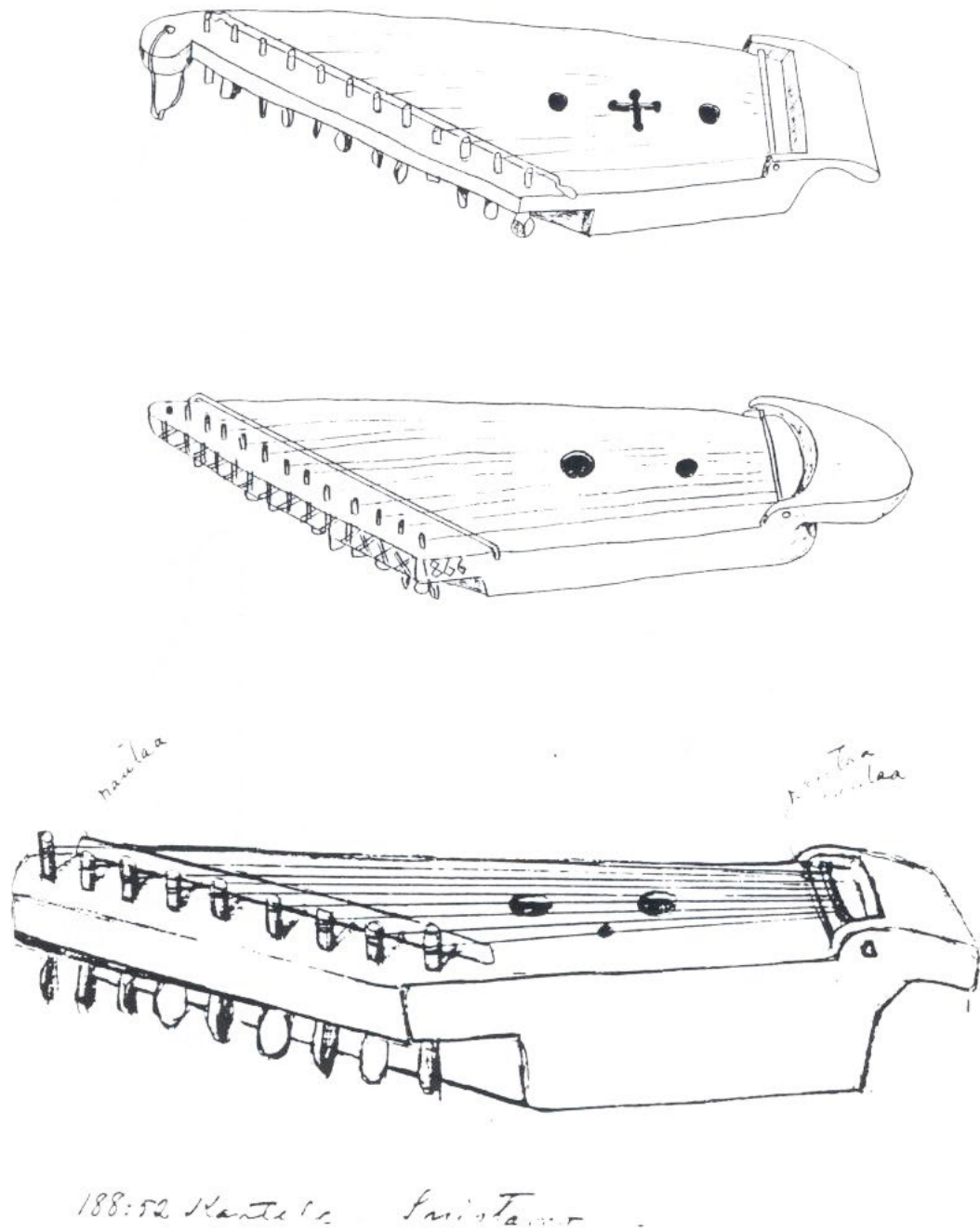
When counting the number of strings for which the kanteles of the sample were built, the most favored number was five (twenty-two examples); the next most favored number was twelve (eighteen examples). The other numbers of strings were more evenly distributed. This is not a count of the actual number of strings present, since most of the kanteles were not in playing condition and lacked some or all of their strings. The count reflects as well as could be determined the number of strings if the instruments were in playing condition (the chart below is based on the "Number of Strings" report in Appendix 1).

| Number of strings | Number of kanteles |
|-------------------|--------------------|
| 5 | 22 |
| 12 | 18 |
| 9 | 12 |
| 8 | 10 |
| 7 | 8 |
| 10 | 7 |
| 11 | 6 |

The strings were missing on many of the kanteles in the sample, but when present they were usually made of steel (some were quite rusty) or copper. According to folklore, strings were also made of twisted horsehair or human hair. Some modern day carved kantele builders have experimented with these types of strings and they do work quite well, although producing less volume and a different timbre than metal strings.

Almost all the carved kanteles of the sample had a ponsi, the curved extension at the end of the instrument. There was great variation in the size, shape and position of the ponsi, especially in its angle and the amount of curvature. On some of the narrow kanteles the ponsi could conceivably have been functional, to help support the instrument against the leg or knee. But on the majority of the kanteles the ponsi could not have been used in this way, since the size or curvature was inappropriate. Looking from above, the shape of the ponsi was usually square, but on some instruments, it was rounded off or semi-circular.

On most of the instruments the strings were attached at the end of the instrument to a rod which was held in place between the sides of a wide, carved-out notch at the top of the ponsi. The notch was either square or semi-circular in shape. Seven instruments, which came predominantly from the Northern Savo area, had a double notch. Ten instruments did not have a notch, but still used a rod to attach the strings, which was typically a U-shaped piece of metal attached to the sides or top of the instrument, or a



Illus. 10. Carved kanteles with bridges. From top to bottom: instrument number F1178 from Korpiselkä; F443 from Suojärvi, in the National Museum, Helsinki ; 188:52 from Suistamo, in the Häme Museum, Tampere. Bottom sketch from the papers of A. O. Väisänen at the Finnish Literature Society.

straight rod held in place by brackets. Väisänen's papers show at least some kanteles in which the strings pass through holes in the ponsi and are attached underneath.

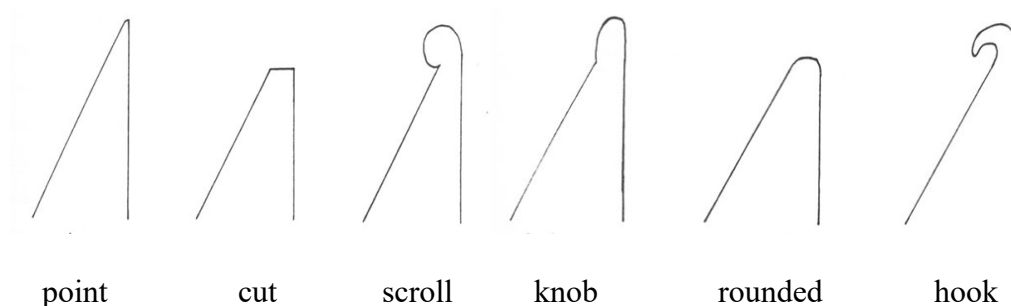
All the carved kanteles in the sample have tuning pegs and not tuning pins. The top of the instrument is extended just enough to allow the insertion of these pegs from below. None of the Finnish carved kanteles have a large, extended blade as seen on many of the Vepsian, Setu, Russian and Estonian Baltic psalteries.

Most studies of the carved kantele mention that they do not have bridges. The strings are stretched between two points, the rod and the tuning pegs, and are allowed to vibrate freely. The lack of a bridge produces a natural vibrato which the Finns prize. The vibrato may be caused by the knot at the end of the string which attaches it to the rod, or by the changing length of the string as it vibrates against the tuning peg.

There were no bridges on any of the narrow carved kanteles in the sample, but eighteen of the wide carved kanteles had bridges, most of which came from the Ladoga Karelia area. Twelve kanteles had bridges on the tuning pin side and four near the end of the instruments, which would presumably stop the vibrato. Two had bridges on both the tuning pin side and the end. The bridges were usually made from metal. Some were attached to the top of the kanteles and some were a flat U-shaped piece of metal the ends of which were fastened to the top or sides of the instruments. At first, I thought these metal pieces served as resting places for the arm, but in almost all cases where strings were present, the strings passed over the metal pieces, so they probably functioned as bridges (Illus. 10).

The "tip" [kärki] of the instrument is the corner formed between the side holding the tuning pins and the long side. In the sample there were six basic varieties of tips: First, just a normal point produced by the angle of the two sides; second, a cut off point; third, a simple round scroll; fourth, a hook; fifth, rounded; and sixth, a knob. The scroll, point and cut off tips were by far the most common; the other three were perhaps variations of these. The point and cut off tips were more common in the north, while the scroll was more common in the south. Most of the tips had a hole and on many instruments a loop of string was fastened through the hole, which apparently allowed the kantele to be hung on the wall when not in use.

| Type of tip | Number of kanteles |
|-------------|--------------------|
| scroll | 34 |
| point | 29 |
| cut | 9 |
| hook | 4 |
| rounded | 4 |
| knob | 3 |



Illus. 11. Kantele tips.

The shape and arrangement of the sound holes varied greatly. Round or cross-shaped sound holes were most common, followed by kanteles with no sound holes at all. Some of the instruments had arrangements of smaller holes which made up geometric patterns, the most typical being crosses. There were many individual examples of other sound hole shapes.

| Sound hole shape | Number of kanteles |
|---|--------------------|
| round | 24 |
| crosses (including cross patterns of smaller holes) | 23 |
| none | 12 |
| rectangle (or square) | 5 |
| flower | 3 |
| f holes | 1 |
| c holes | 1 |
| key hole | 1 |
| heart | 1 |
| pentagon | 1 |
| stars | 1 |
| swastika | 1 |

It is impossible to date with accuracy the majority of the kanteles in the sample. A significant number of them were acquired by the National Museum in the nineteenth century, so they date from at least that time. A few of the kanteles had what appear to be dates carved into the bodies. The oldest one of these "dates" is 1698, on the side of a five-string kantele from Kurkkijoki (instrument number 731 from the National Museum). Very few of the instruments show the effects of having been on the walls of a "smoke cabin," but those which do all have five-strings.

Change in the Carved Kantele Structure

It is generally assumed that the five-string kantele is the oldest form of the Finnish kantele, but the number of strings may not be the best way to determine age. The oldest known Baltic psalteries, which were found in archaeological excavations in Poland and in Novgorod, include a six-string instrument believed to be from the 12th century, a nine-string instrument believed to be from the 13th century and a five-string instrument believed to be from the 13th or 14th century (see Simon 1957; Emsheimer 1961; Tõnurist 1977a; Povetkin 1982).

The quality of having five strings appears more frequently among Finnish kanteles than among any other of the Baltic psalteries. Rune singing was done to five pitches and moved in a pattern of five beats. The kantele was believed to have been used in the accompaniment of rune singing.

If we assume that the five-string kantele is the oldest form, then at some time in the history of the kantele there came a significant change, in that builders began adding strings and began to increase the size of the instrument. It is generally believed that this took place because the Finnish folk music culture began to change. Until the nineteenth century, Finland was relatively isolated, but with the growth of an educated, upper class in Finland, this isolation began to disappear. Finnish folk music, especially dance music, began to incorporate outside influences, particularly from the West. One of the most important influences was the coming of the violin to Finland.

The violin was much better suited for playing western dance music. It was a louder instrument than the kantele and had a larger range. But most significantly, the violin was not limited to five pitches; it could play the entire range of diatonic and chromatic pitches called for in western tonal music. Thus, the violin began to be widely used in dance contexts and began to replace the carved kantele for this purpose (see Väisänen 1955).

Among the earliest transcriptions of Finnish folk tunes were those published by the Italian explorer Joseph Acerbi in his book Travels Through Sweden, Finland and Lapland to the North Cape in the Years 1798 and 1799 (1801). Beneath one of the transcribed dance tunes played on the kantele, he marked the following comment: "This is the tune of a dance of Finlanders played upon the Harpu; in such a limited compass of notes, it is interesting to see how they can vary their tunes" (ibid, Vol.II:327). Under another transcribed dance, he states:

It is to be observed in this Tune, that the whole of the first part, and four Bars of the second, are within the compass of the five Notes of the Harpu; but the three last are two Notes out of the compass; the Violin, or the introduction of the Fiddle, inspired this license. It is a timid step out of their limited circle, and for those who are fond of minute enquiries upon the subject, it may show how the introduction of a new Instrument, less limited than the first, introduces new ideas, and changes by degrees the character of the ancient Music (ibid:330).

As the Finnish music culture changed, kantele builders began to make kanteles which could play this new music. Thus, the number of strings was increased to expand its range. The size was increased to accommodate the larger number of strings and to increase its volume.

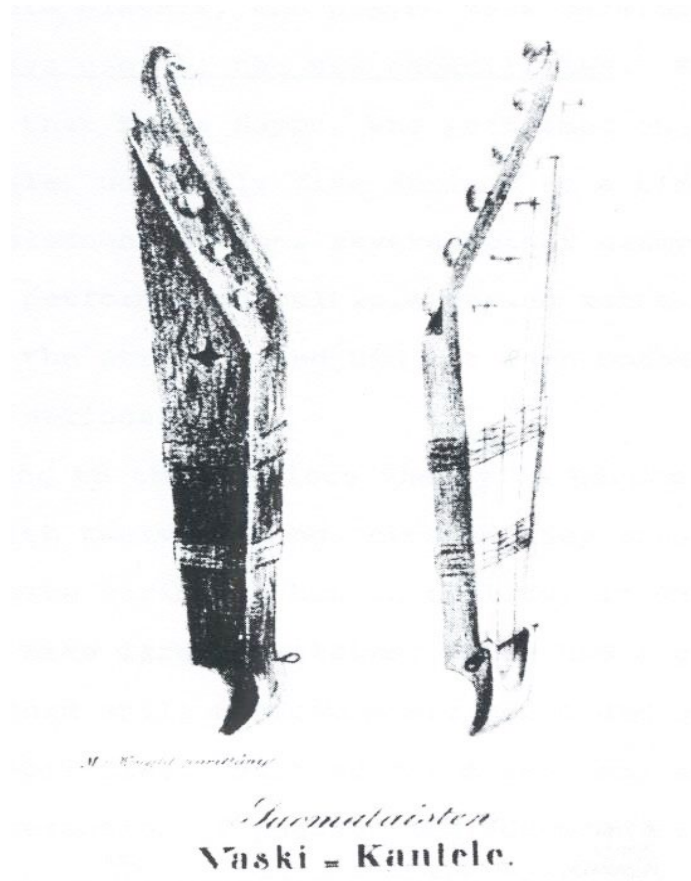
If the violin was such a superior instrument, why did it not replace the kantele entirely? Why did kantele builders build kanteles with more strings, rather than using the violin? Part of the answer lies in the interaction between Finnish educated and peasant classes.

The kantele was the musical instrument of the peasants. Far from being the mytho-poetic instrument mentioned in the Kalevala, the kantele was a typical part of everyday life. To the peasants, it had less symbolic than practical significance. On the other hand, most educated Finns did not play the kantele; many had never even seen or heard a kantele, but this peasant instrument was being promoted in literature and fine arts as the only true Finnish instrument. It became a symbol of Finnish identity among educated Finns. Eventually the symbolic value of the kantele was communicated to the peasants through their interaction with scholars who came to collect folklore. Perhaps because of the added symbolic importance placed on the kantele, the violin did not replace it, and it continued to survive.

The few educated Finns who did play the kantele wanted to "improve" the instrument to facilitate the playing of western music. They began building, or having others build, kanteles with a greater range than five pitches. The increased number of strings was necessary and functional in the performance of western music. Evidence of this activity is found in footnote #11 of a chapter named "Muistutuksia mejjän vanhoista kansallisista soitoistamme" [Reminiscences of our oldest national [folk music] performance] in the first part of C. A. Gottlund's work *Otava* (1831). Gottlund features an illustration of a five-string kantele from near his birth place in Savo and says, [...This is the appearance of all the kanteles which I have seen in Savo, except those which have multiple strings and which are only found among the upper class] (Gottlund 1831, 1987:23).

The theory that kantele structure changed solely for functional reasons to accommodate western music does not provide a complete explanation. It fails to take into account the performance practice of carved kantele players. A. O. Väisänen published a systematic study of carved kantele players during the first decades of this century (1928). He made the significant observation that often carved kantele players, who played more developed kanteles, did not always use all the new capabilities. For example, he mentions that Fedja Hoppo, who performed on a twelve-string kantele, used only five strings at a time while playing. Väisänen mentions several other examples of players who performed on multiple-string kanteles, but did not use all the strings, and did not even bother to tune many of the strings.

According to the previous theory, a person would build a kantele with twelve strings because they knew music which required twelve strings. But in reality, it was common for builders to make larger kanteles, which had a greater range, and then still perform music which did not require the new capabilities. Part of the answer may again come from the interaction of peasant and educated classes, an example of which is provided by Elias Lönnrot.



Illus. 12. Gottlund's kantele (from Otava I 1831, 1987:17).

Lönnrot had a lifelong interest in the kantele and not just as it was depicted in folklore. Lönnrot learned to play the instrument himself. It was reported that he played the kantele at his own wedding in 1849 and he frequently played for guests who visited his home. For example, he was visited in 1840 by a Russian language Professor J. Grot who made the comment:

[Immediately I noticed on the wall an unpainted harp, which the Finns have named kantele. Before I could talk about it, Lönnrot took it immediately from the wall, put it on his knees and began to play Finnish songs in a Finnish style on its steel and copper strings] (Grot 1847; quoted by Anttila 1931:205; Haavio 1970:103; and Laitinen 1982c:45).

As many other educated people of the time, Lönnrot viewed the kantele which existed among the folk as being musically limited, but unlike others, his approach was not to replace the kantele with another instrument, such as the violin, but to build new and more advanced kanteles.

Lönnrot is believed to have built perhaps twenty kanteles himself (Laitinen 1982:45). Also, it has been reported that he had several carpenters in Kajaani build kanteles according to his designs (Grot 1847:167).⁵ These were no longer the simple type of kanteles carved out from a single piece of wood and limited in the number of strings; they were advanced instruments. The bodies were larger and were fashioned from several pieces of wood, so the number of strings could be expanded. Another significant difference was that at least some of Lönnrot's kanteles were partially chromatic. They were clearly designed for playing western music.

Lönnrot wrote an instruction book for playing advanced kanteles with seventeen strings, to which a person could add eight chromatic strings if wanted. The book included a tuning guide and a notation system based on numbers. In it are transcribed 230 "Finnish and foreign" pieces for the kantele. The instruction book was written out in Lönnrot's own hand but was never published. It may be found today at the manuscript archive of the Finnish Literature Society. He was also actively involved in promoting the teaching of kantele playing in public schools. In the first issue of a literature magazine he published with J. W. Snellman in 1847, he wrote an article concerning "Folk Schools and Folk Education" where he says:

[Along with agricultural learning, we will place the learning of performance ... Certainly not all are inclined to performance, but hardly any, who when they learn it, don't get accustomed to it and favor it. A normal kantele with thirteen or fifteen strings would be a much more appropriate instrument for teaching than the virsikantele [a bowed monochord used to accompany hymns]: it has a sound which is sweeter and with its help one can gain a better understanding of matters pertaining to the knowledge of performance] (quoted in Laitinen 1982:46).

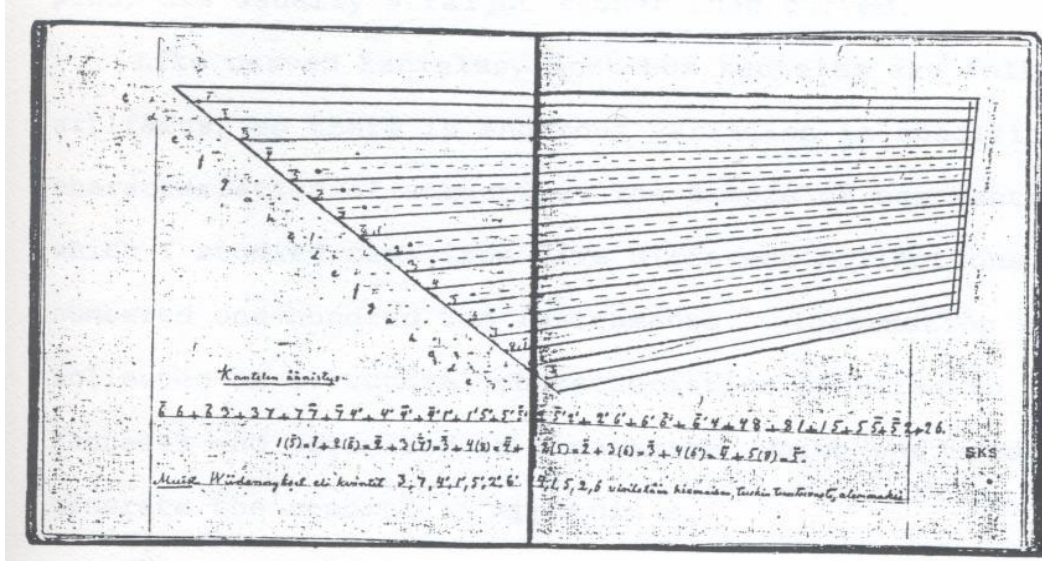
Most likely, Lönnrot and his contemporaries had an influence on the kantele as it existed among the peasants. Just as the idea of the kantele being a symbol of Finnish identity eventually found its way back to folk culture, so did the idea that a kantele with more strings was a superior kantele.⁶ Not that such an instrument is truly superior, but it was perceived by the folk as being superior.

When a builder makes an instrument with greater capabilities than the music he will perform requires, the new capabilities may not be added to serve a function, but because the builder has seen them elsewhere and believes, for whatever reason, that they produce a better instrument. Igor Tõnurist mentions the same phenomenon among the kannel builders of

⁵In a personal letter dated August 18, 1983, Stephen Reynolds writes that p. 167 of Grot (1847) "states that under Lönnrot's influence town craftsmen in Kajaani were making kantele-s commercially."

⁶The folk adopted the idea of increasing the number of strings, but they did not adopt the idea of chromatic tuning. Even the most technically advanced modern Finnish kantele, with a tuning machine, is still basically a diatonic instrument.

Estonia (1977a:158). In addition to function, builders are influenced by fashion, by what others are doing in the area and by what they perceive as being superior.



Illus. 13. Page from Elias Lönnrot's kantele instruction book, at the Finnish Literature Society.

3.2 BOX KANTELES

After the mid nineteenth century, there was a gradual shift away from carving the bodies of kanteles from a single piece of wood and builders began making larger kanteles which had bodies fashioned by combining individual pieces of wood to form an enclosed box. Box kanteles are distinguished from modern kanteles in that the sides of the instrument, particularly the side which holds the tuning pins, are usually straight rather than curved.

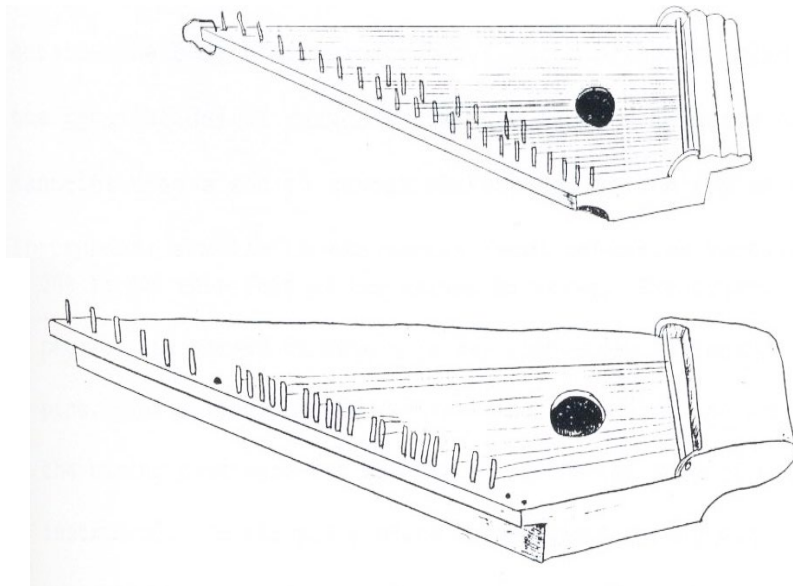
Like carved kanteles, most box kanteles are folk artifacts, so there is enormous variation in specific characteristics of structure. The sample of box kanteles which I studied came from five different collections and numbered one-hundred ten instruments.⁷ Information was collected on structural characteristics peculiar to box kanteles and organized in a database, which was used to generate the reports in Appendix 2.

There are four kanteles attributed to Elias Lönnrot in the sample which are believed to be among the oldest box kanteles. Two are relatively small box kanteles, similar to the

⁷Sixteen instruments came from the Folk Music Institute collection at Kaustinen, forty-eight from the Tampere University Institute for Folk Traditions collection, sixteen from the Sibelius Museum collection in Turku, sixteen from the National Museum collection in Helsinki and fourteen from a collection gathered for the 1983 Haapavesi Kantele Camp.

drawing found in Lönnrot's handwritten playing guide.⁸ They differ from other carved or box kanteles in that they have a set of chromatic strings positioned between and in a plane slightly lower than the normal diatonic strings of the central octave. The strings pass over the edge at the end of the instrument and are attached to pins set into the end, similar to string attachment on many Russian instruments. Both kanteles have a ponsi, which appears to have been added as a separate piece after the instruments were built.

The other two kanteles attributed to Lönnrot are much larger and substantially different from the two instruments described above.⁹ They appear similar to very large carved kanteles, with a large and pronounced ponsi which is an integral part of the instrument. The strings are attached to a rod held in place between two metal brackets on the sides of the instruments. Like the two smaller Lönnrot kanteles, both are partially chromatic, even though all the strings are in the same plane.



Illus. 14. Two kanteles attributed to Elias Lönnrot from the National Museum, Helsinki. Top instrument number 57046.120; bottom instrument number F455 from Kajaani.

⁸One is a twenty-five string instrument found at the Sibelius Museum in Turku (number 095). The other is a twenty-nine string instrument found at the National Museum in Helsinki (number 57046.120).

⁹One is a twenty-nine string instrument from the National Museum in Helsinki (number F455). The other is a thirty-four string instrument (number 5750) belonging to the National Museum, and is identical to one housed at the Kainu Museum in Kajaani. There is a metal rod coming up and over the tuning pins, most likely functioning as a place to rest the arm while playing, foreshadowing the tuning pin protecting board of later box kanteles.

Older box kanteles shared several structural characteristics with larger carved kanteles. They were generally the same size and had approximately the same number of strings. The strings were not parallel but radiated from the end of the instrument to the tuning pins like a fan. The tuning pins were placed into a board outside the body of the instrument, which brings to mind the lapa [blade] of carved kanteles. Also, many early box kanteles used a rod to attach the strings at the end of the instrument, similar to the varras [rod] of carved kanteles.

As box kanteles developed, structural changes resulted. The overall size became much larger. The average size of the sample of box kanteles is approximately 30% larger than that of the carved kanteles. The tuning pegs of the carved kantele gave way completely to tuning pins. The strings became parallel and the board into which the tuning pins were set was placed inside the body of the instrument. In the place where the previous tuning pin board had been, came a new "protecting board" which projected up from the body of the instrument the same height as the tuning pins. Its function was to protect the tuning pins from damage and to provide a place for one of the forearms to rest. Eventually, the rod system of fastening the strings gave way to screws and later to hitch pins for each string. The hitch pins were covered by another board, which I call a covering board, on which the player could rest the other forearm.

The changes in box kantele structure did not happen uniformly. The various characteristics cannot be used to determine the age of a given kantele, since individual builders may have retained certain characteristics, while changing others. The box kanteles of the sample show an interesting mixture of innovations and tradition.

The box kantele came about as a direct result of builders trying to increase the number of strings and the sample shows a substantial increase. Builders tended to favor using an even number of strings, rather than an odd number. The most frequently occurring number of strings were 30 (15 kanteles), 28 (12 kanteles), 24 (10 kanteles), and 32 (7 kanteles).

The box kanteles of the sample generally retained the characteristics of diatonic tuning and lack of bridges. Only six kanteles of the sample were tuned chromatically, four of which were attributed to Elias Lönnrot. Thirteen kanteles of the sample had bridges. Six had bridges on both sides, six had bridges only on the ponsi side, and one had a bridge on the tuning pin side of the instrument.

The wide variety of sound holes found among carved kanteles gives way almost completely to plain round holes with the box kanteles of the sample. Occasionally, these round holes may have a figure, such as a lyre or flower carved in them. Heart-shaped sound holes were also typical, particularly for secondary sound holes.

There are two general types of box kanteles: one type with a square end, which the Finns call "even-ended" [tasaperäinen] or "straight-ended" [suoraperäinen] and the other with a round end [pyöreäperäinen]. Approximately two thirds of the kanteles in the sample are square-ended, while one third are round-ended. These two different types cannot be separated into distinct classes because they often co-existed in the same areas and frequently individual builders would build both types (Illus. 15). To the folk, then, these two different types of box kanteles were both considered genuine kanteles and were interchangeable.

When a box kantele is square-ended, it typically has a ponsi. In this context, the ponsi is no longer able to serve the function originally attributed to it. Box kanteles are so large that they were usually played on top of a table, and if they were played in the lap, the ponsi of a

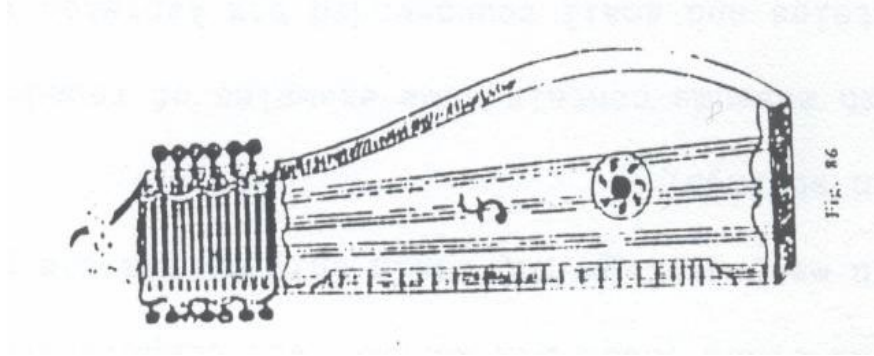
box kantele would be too long to be placed against the knee. There are many different sizes and shapes of ponsis. Some of the box kanteles of the sample have a very large and pronounced ponsi, others have a very small ponsi, and a few have no ponsi at all. The ponsi is a structural characteristic coming directly from carved kanteles which was retained in square-ended box kanteles. The general feeling of current builders is that "a kantele would not be a kantele without a ponsi." In its new context the ponsi no longer serves its original function, but acts as a kind of identification mark; it makes the instrument more than a plain zither -- it makes it a kantele. So in addition to function and fashion, an additional influence upon kantele builders is tradition. Tradition makes possible the retention of characteristics which may have served a function at one time, but no longer do.



Illus. 15. Round-ended and square-ended kanteles from Jooseppi Pohjola's workshop, near Hännilä, Finland, 1983.

Some believe that the round-ended kantele began to be built in Finland because of the influence of the Swedish hummel, partly because the instruments have some general characteristics in common and partly because the round-ended box kantele was very popular in Ostrobothnia, where the Swedish influence was the strongest. This theory is only one of a number of possible explanations. The hummel is a relatively small instrument with a limited

number of strings, which are fretted to obtain different pitches (Illus. 16). It is closely related to the Norwegian langleik and by extension to the American Appalachian dulcimer and to the Finnish virsikantele (see Walin 1952 and Boone 1976). The round-ended box kantele was comparatively large, with many strings and could only obtain the pitches of the open strings.

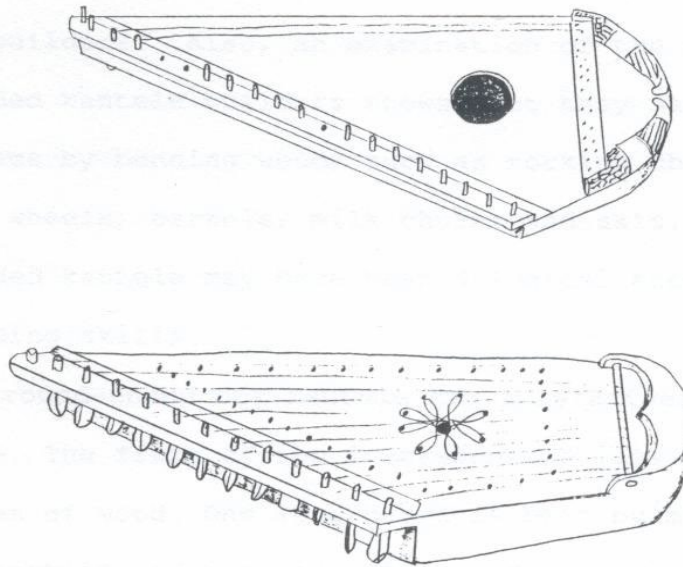


Illus. 16. Swedish hummel from (Walın 1952:153).

Finnish museums contain some examples of round-ended carved kanteles and small round-ended box kanteles from Eastern Finland and Karelia. These kinds of instruments may have played a role in the development of the Ostrobothnian round-ended kantele, or the Ostrobothnian round-ended kantele may have influenced the later Karelian kantele builders. Also, an examination of the workshops of round-ended kantele builders shows that they made many other items by bending wood, such as rocking chairs, spinning wheels, barrels, milk churns and skis. The round-ended kantele may have been a logical extension of wood-bending skills. The round-ended box kantele has a relatively simple structure. The frame of the instrument is made with just two pieces of wood. One long board is bent by moistening it in some fashion and pressing it around a mold, forming the short side, end and long side of the instrument. To this is added another straight board for the tuning-pin side. The instrument body is completed by adding a top and bottom to the frame. The round-ended box kantele is also called a "pressed-end" kantele [paineperäinen] because of the pressure required to bend the board forming the end and sides.

Fifty-five kanteles of the sample had a covering board while thirty-five did not. A hinged covering board or fully developed damping board was quite rare, being found on only six instruments of the sample.

There were an equal number of box kanteles where the long and short sides were parallel as those where the sides were not parallel. Likewise, the number of kanteles with the tuning pin board on the inside of the box was nearly the same as the number with it on the outside.



Illus. 17. Early round-ended box kanteles in the National Museum, Helsinki. Top to bottom: instrument number 1855:49; number F1210.

At the time when the carved kantele was disappearing in Eastern Finland, the box kantele became a normal part of everyday life in Ostrobothnia and Central Finland. This instrument was well suited to dance accompaniment. The fiddle was widely known and was the king of folk instruments, but the newer style of kantele was not far behind. In certain places from the mid-nineteenth century until the present day, such as the Perho River Valley, Haapavesi and Saarijärvi, box kanteles became nearly as common as the smaller kanteles were a century before in Karelia.

The box kantele also brought with it a new phenomenon: master builders, who produced kanteles commercially. They were generally folk builders who became so good at their craft that other players found it better to buy a kantele from them than to build one themselves. Master builders began to establish workshops which produced kanteles on a larger scale than ever before. Some of the more famous people who established workshops were Jaakko Östermark and Juho Sillanpää (Perho River Valley), Efraim Kilpinen (Kalajoki), Pasi Jääskeläinen (Haapavesi), Kustaa Lipponen (Oulu), Jooseppi Pohjola and Juho Tamminen (Saarijärvi), and in more recent years, Leander Laasanen (Veteli) and Oiva Heikkilä (Veteli and later Vantaa), Otto Koistinen (Joensuu) and Erkki Leskelä (Ylikiiminki). The structure of the kantele became more standardized and homogenized when it started to be made commercially on a larger scale.

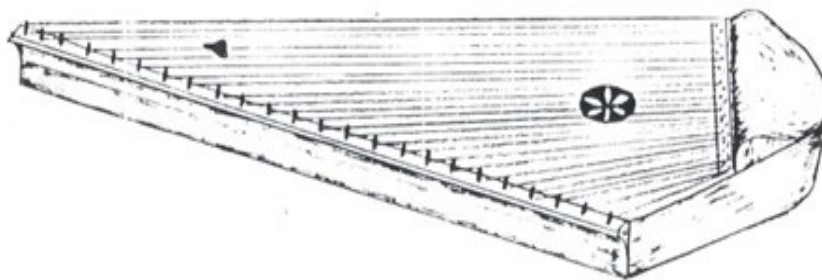
Even though master builders brought the box kantele to a new level of sophistication and uniformity, it never ceased being a folk instrument. The vast majority of the box kanteles in the sample are one-of-a-kind instruments. Some of the box kanteles incorporate the uniform conventions of the master builders, while others deviate greatly in their structure.

Box Kantele Builders of Ostrobothnia

In the past, and still today, making things from wood is a basic way of life for people in the Perho River Valley and kanteles were one of the things they made. Kreetta Haapasalo was a well-known early kantele player from the Perho River Valley. As a child, she played carved kanteles with six or seven strings which had been made in her home. She played a fourteen string kantele when she made her first kantele playing tour in 1853, but by July of the same year she, was playing a twenty string kantele (Ala-Könni 1961, 1986:90). These later instruments were round-ended box kanteles, which became the typical form of the kantele in the Perho River Valley during the second half of the nineteenth century.

A very well-known builder of this era was Jaakko Östermark (1836-1883). Östermark was related by marriage to Kreetta Haapasalo and it is known that he built some of her kanteles. All of Östermark's kanteles were round ended. He used spruce for the top and bottom of the instrument and birch for the sides and tuning pin board. Östermark was one of the first to increase the overall size and number of strings of his kanteles, which grew to as many as twenty eight. It is believed that he made many kanteles though few are still around today. His kanteles were played by many of the famous early players and were held in high regard for their fine sound. Undoubtedly, Östermark had an influence on other kantele builders of the area who began to make similar large round-ended box kanteles. Even though the instruments were made in greater quantities, builders continued to experiment with individual instruments (Tulikari 1976:54).

Another well-known builder was Juho Sillanpää (1855- 1923), a professional carpenter who made large round-ended kanteles which he sold to players of his era, such as Matti Karvonen and Oskari Tofferi. Sillanpää was not a musician and did not play the kantele himself. His kanteles varied in size and had from twenty-two to thirty strings. He chose his wood carefully and dried it thoroughly before he started to build. Some of his kanteles were decorated with a cross carved in the sound hole or with painted pictures (ibid: 55-6).

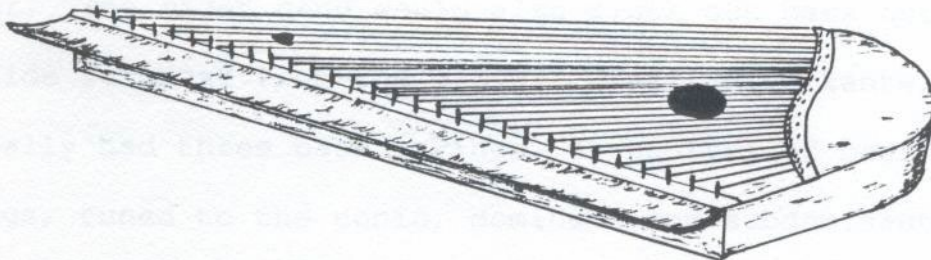


Illus. 18. Round-ended box kantele from the Perho River Valley, (Sketch based on an instrument at the Folk Music Institute, Kaustinen).

The kantele building traditions of Östermark and Sillanpää were continued by Viljam Heikkilä (b. 1883) from Veteli, who built fine round- as well as square-ended kanteles. He passed his craft on to his son, Oiva Heikkilä (1913-1979), who became one of the most prolific builders in Finland. Leander Laasanen (1892-1985) was another outstanding kantele builder from Veteli.

The tradition of building round-ended box kanteles was not confined just to the Perho River Valley. Kustaa Lipponen (1879-1975) of Oulu was another significant kantele builder. Lipponen built mostly round-ended kanteles which are characterized by their large size, an "S" curved metal piece to which the strings are attached at the end of the instrument, and a concave board attached to the tuning-pin side of the instrument. Lipponen's kanteles were known to have a good sound quality throughout the range, which was partly due to his use of strings of graduated thicknesses. Also, the large size of the instruments made them particularly resonant (Wirjakkala 1975).

The board along the tuning-pin side of Lipponen's kanteles is a particularly interesting and unique feature (Illus. 19). Most box kanteles have a tuning pin protecting board which projects vertically from the body of the instrument; the Lipponen kanteles have a relatively wide board which projects horizontally from the body of the instrument. Its function is uncertain since its position would prevent it from functioning like the protecting board. A possible explanation is that it was added because it was traditional to have some kind of board along that tuning-pin side of a kantele. It changes the appearance of the instrument, bringing it more in line with tradition.



Illus. 19. Round-ended box kantele by Kustaa Lipponen. (Sketch based on an instrument owned by Maija Pesu, Oulu).

Box Kantele Builders of Saarijärvi

The box kantele was also popular in the Saarijärvi area of Central Finland. In the late nineteenth century, kantele building began to increase and by the turn of the century, Saarijärvi was an important center for kantele building. The "Saarijärvi kantele" became known widely around Finland. These kanteles were typically round-ended, slightly smaller than the kanteles of Ostrobothnia and with not quite as many strings, eighteen to twenty-eight

strings being typical. They were noted for a particularly bright and vibrant timbre and were excellent dance instruments.

Most Saarijärvi kanteles were set up for playing using the so-called "covering technique" where the fingers of the left hand cover the strings not needed for a chord and the right hand strums across the strings with a plectrum or finger. The right hand would also pluck out bass notes on the side furthest from the player. Saarijärvi kanteles generally had three bass strings, or courses of bass strings, tuned to the tonic, dominant and subdominant which were spaced much further apart than the upper diatonic strings, thus providing an easier target for the player to hit.

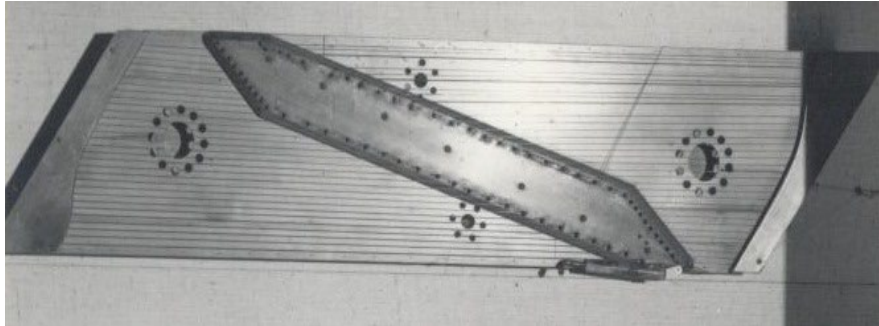
Saarijärvi kanteles had a distinguishing mark: a lyre carved into the center of a round sound hole. No one has been able to determine why the builders began to carve lyres in their sound holes. There are kanteles from other areas of Finland which have lyre sound holes, but not exactly like the ones from Saarijärvi. The amateur folklorist Uljas Hakala, a resident of the area, believes that Matti Lulli, a miner and carpenter, may have been the first to carve the lyre (Hakala 1975). Lulli's kantele has the characteristic lyre, but it is quite rustic, simply carved out with a knife. Perhaps Lulli was a folk builder who was influenced by the practice of the master builders of the area. The master builders may have used the lyre as a symbol of their craftsmanship, since it is difficult to produce. There were several master kantele builders near Saarijärvi. The two most famous ones were Jooseppi Pohjola and Juho Tamminen.

Jooseppi Pohjola (1873-1945) was a sharecropper born in the village of Hännilä near Saarijärvi, who also built kanteles, viirsikanteles and violins. His instruments were thought to be particularly good and were sold as far away as Helsinki (Ala-Könni 1963a:420, 1986:33). Pohjola's younger brother Otto (1870-1958) was also a fine kantele builder. They built both round-ended and square-ended kanteles. I was able to visit their workshop in rural Hännilä in the summer of 1983 which still contains many of the tools they used in making violins and kanteles, as well as many other items made by carving or bending wood (see Illus. 15, p. 46).

Juho Tamminen (1869-1929) worked as a carpenter and later as a teacher of carpentry. He was known as a particularly good kantele builder who received orders from all parts of Finland (ibid, 1986:34). He generally made round-ended kanteles but later also made some square ended models which had a ponsi. He continually experimented with the overall dimensions of his kanteles. Many well-known kantele players of the era used Tamminen kanteles. One recent example is the master player Arvi Pokela, who played a square-ended model set up for the covering technique.

Vihtori Honkanen (b. 1901) from Viitasaari may be considered a part of the Saarijärvi kantele building tradition, since he lived relatively close and many of his kanteles were set up to be played using the covering technique. Honkanen experimented greatly, making many kanteles which were unique in structure. He is perhaps best known for building double kanteles, designed to be played by two people. One half of the instrument was set up for playing using the covering technique, while the other half was a normal diatonic kantele (Illus. 20). The player on the diatonic side would play melodies, while the player using the covering technique would accompany. A photograph published by Ala-Könni (1963a:425, 1986:34) and Asplund (1983b:61) shows one of Honkanen's double kanteles being played. Both players are standing on the same side of the instrument, the player on the diatonic side with the longest

string closest, and the covering technique player with the shortest string closest. If the picture is accurate as far as actual performance practice, it suggests influence from the Haapavesi playing tradition where diatonic kanteles were played with the longest string closest.



Illus. 20. Double kantele built by Vihtori Honkanen, in the instrument collection of the Tampere University Institute of Folk Traditions.

Left-handed Box Kanteles

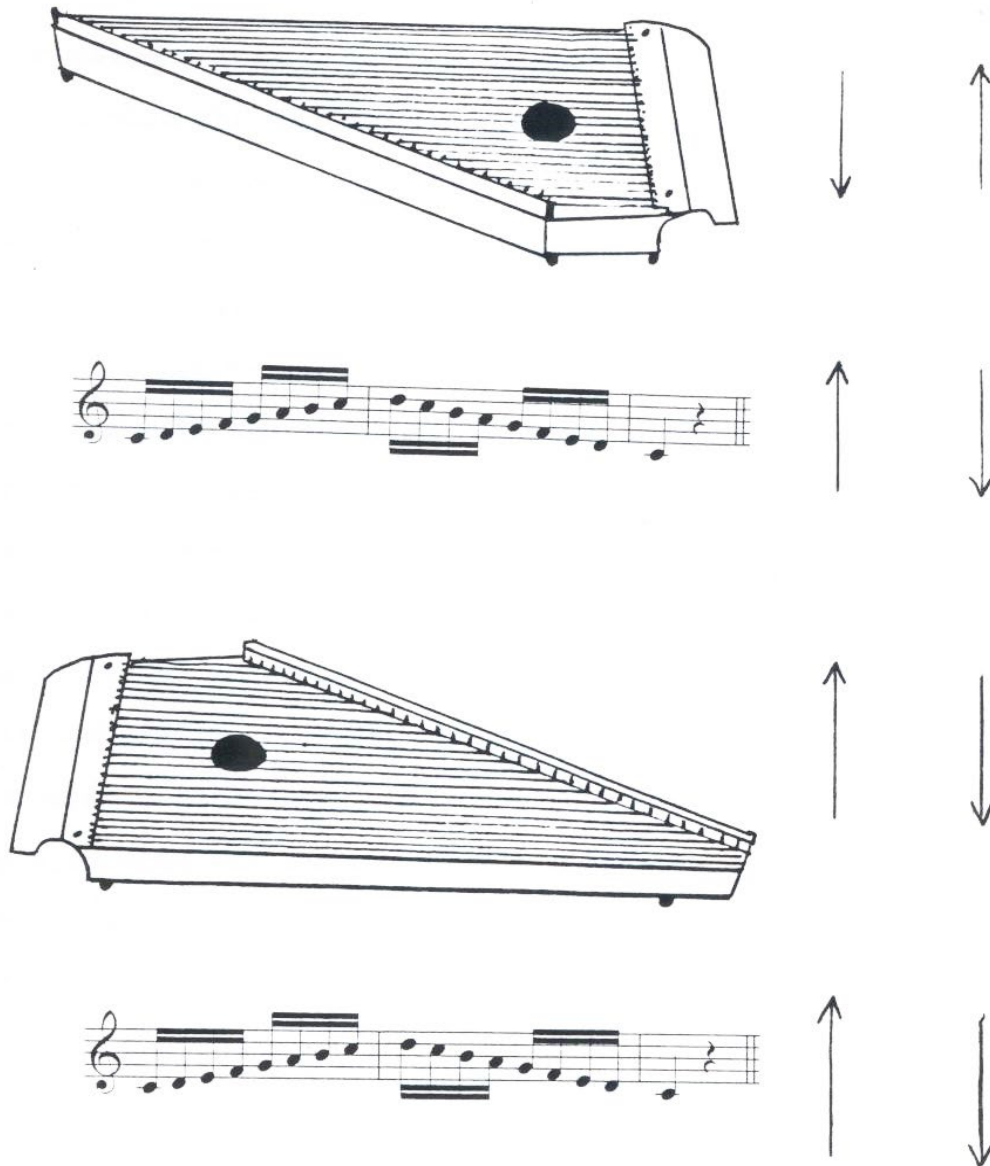
One interesting variation found among box-kanteles are those which are "mirror image" [peilikuva] or "left-handed" [vasenkätinen]. Both terms are used by Finns in describing these instruments. Virtually all early Finnish kanteles were made so that when played with the shortest strings closest, the end (ponsi) of the instrument was on the right while the tuning pins were on left. Left-handed kanteles were fashioned in a mirror image of this. Approximately one-fourth of the box kanteles in the sample were left-handed.

During the nineteenth century, the folk kantele culture was influenced by urban ideas. The most significant idea was learning and playing the kantele from written music. Kantele method books began to appear. The earliest, mentioned in the previous chapter, was written by Elias Lönnrot, but was never published. Among the earliest published kantele method books were those by Akilles Ockenström (1898) and Pasi Jääskeläinen (1903).

The use of written music caused a significant change in the kantele playing tradition. Previously all kantele players played the instrument from the short side, meaning that the shortest string of the instrument was closest to the player's body. The highest pitched string was closest and as the player would play the strings further away, they would descend in pitch. It was quite awkward to use written music with this kantele position because it appeared that the player would have to move in the opposite direction from the notes as they appeared on the staff. An example of this perceptual problem is shown in Illus. 21.

As a result of using written music, the kantele was turned around and played from the long side with the longest and lowest pitched strings closest to the player. By turning the kantele around, the player now had an awkward time reaching with the right hand over many strings and tuning pins to play the shorter, higher pitched strings which were used frequently in playing melodies.

Of course, the player could have played the upper strings with the left hand and the lower strings with the right, but this was unsatisfactory to most kantele players since it felt backwards, particularly for right handed individuals. The eventual solution then, among some builders, was to build the box kantele in a mirror image of what it had previously been. That way the instrument looked the same as before (with the ponsi on the right) when it was played with the longest string closest and the player could use the right hand for the upper strings and the left hand for the lower strings.



Illus. 21. The use of written music helped bring about playing from the long side of the instrument, since the motion on the kantele would match that of the music.

The Box Kantele Around Haapavesi

Nowhere was influence of the left-handed kantele felt more than around Haapavesi where an actor, comedian and entrepreneur, Pasi Jääskeläinen, is credited with "inventing" the left-handed kantele. He patented a box kantele in 1904 (Pat. No. 2144) which was specifically designed to be played from written music. Strangely, the patent application does not mention that the kantele was purposely made left-handed, even though the illustrations show a left-handed instrument (Illus. 22). The important features mentioned are that the kantele had a "middle bottom" positioned in a plane parallel to and halfway between the top and bottom. This middle bottom increased the resonance and decay of the instrument, making it more suitable for concert performance. A second important feature mentioned is the attachment of the strings to a rod, which was held in place by two metal brackets, which is actually a throwback to the rod system of attachment used by carved kanteles.

Jääskeläinen's kantele retained the protecting board along the tuning pin side of the instrument, even though his kantele was designed to be played with the longest string closest and thus the board would no longer serve its original function. The tuning pin protecting board had become a part of the box kantele tradition of some builders. The influence of tradition made it possible to retain a feature which no longer had a specific function as the playing position changed. This board is still retained on virtually all modern kanteles.¹⁰

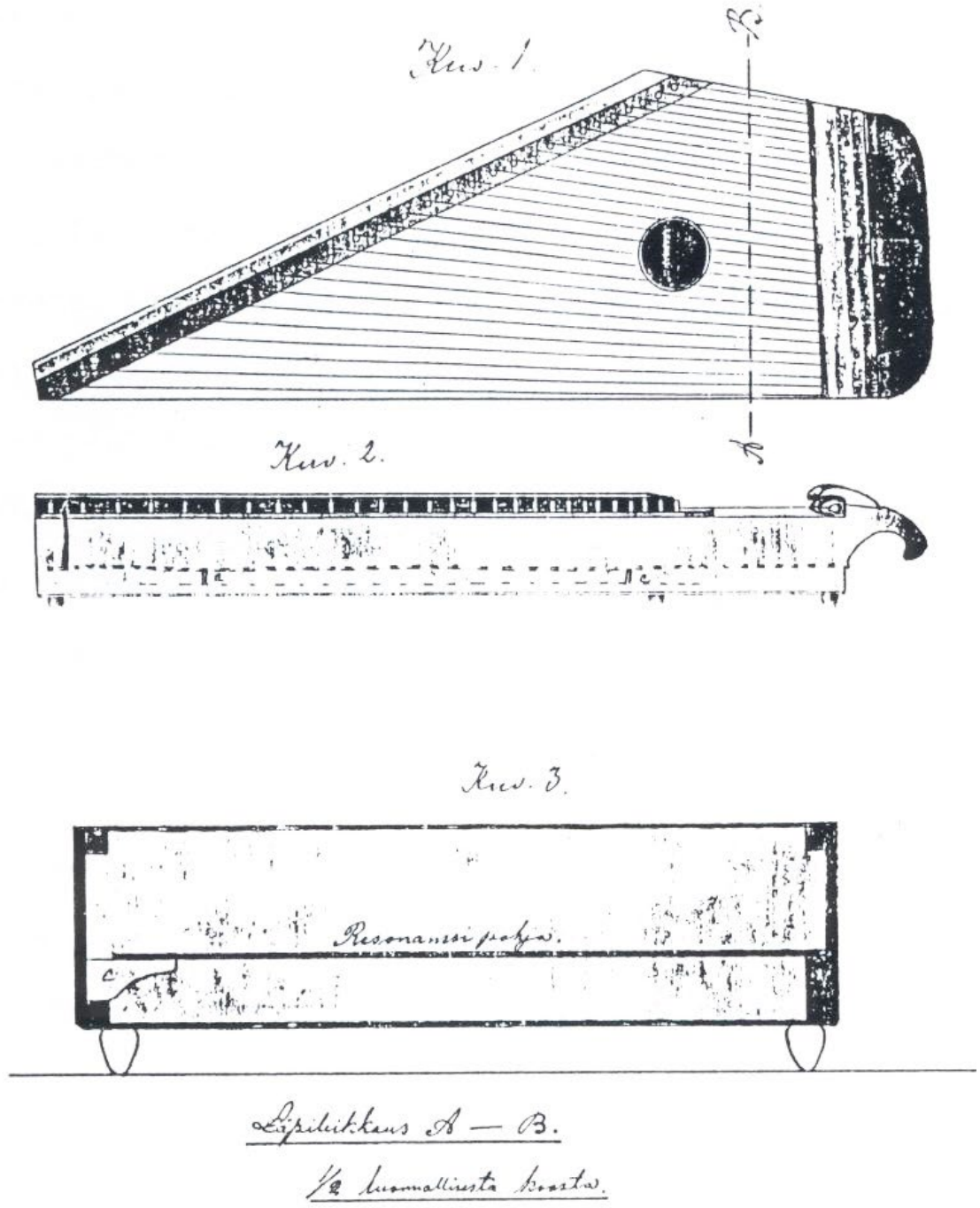
He played a significant role in the dissemination of his kantele model, especially in and around Haapavesi. He started a kantele shop and employed several gifted craftsmen in building left-handed kanteles and marketed these under his own label (Ala-Könni 1973:394, 1986:20). Even though the workshop produced kanteles for only a couple of years, apparently hundreds were built since they can still be found in significant numbers in museums and in private ownership around Finland today. They were known for having a particularly good sound.

Jääskeläinen's influence in Haapavesi was substantial. Boys in carpentry classes were encouraged to build left-handed kanteles, so they became extremely common. There was, according to some accounts, literally a kantele in every home. Some of Finland's earliest kantele ensembles were formed and began performing. Jääskeläinen himself was at the forefront of promoting the kantele by using it in his live performances and early sound recordings (Porma 1948b).

The left-handed kantele movement influenced other kantele shops in that some craftsmen began building left-handed as well as right-handed kanteles. The customer could choose his favorite type, presumably based on whether he would play the older, traditional way, from the short side of the instrument, or the new way, from the long side.

An additional factor here is the way the Haapavesi kantele players viewed themselves: first and foremost as folk musicians. Playing from the long side of the kantele became the tradition in Haapavesi. Not everyone in Haapavesi played kantele from written music. In

¹⁰According to Sulo Huotari (1986), the tuning pin protecting board influences the sound quality of modern kanteles, and is therefore retained.



Illus. 22. Drawings from Pasi Jääskeläinen's kantele patent of 1904 (No. 2144). From the Finnish National Patent Office, Helsinki.

fact, it was the exception rather than the rule, even though it was written music which was supposed to have caused kantele to be played from the long side. However, after Jääskeläinen's time, all kantele players from the Haapavesi area played from the long side on left-handed kanteles, whether they were playing from written music or not. It is another example of the influence of fashion on folk practices.

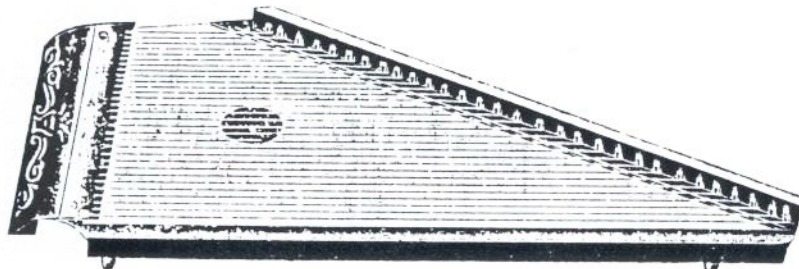


Illus. 23. Left and right-handed box kanteles built by "Jaakko Hissan Patentti Pulpetti harmooni, Kantele ja Sitratehdas ... Lapualla". Owned by the author.

Efraim Kilpinen (1862-1951) was born in Haapavesi, but later moved to the town of Kalajoki on the Gulf of Bothnia. He was a trained carpenter who had taught carpentry at the Kansanopisto [Adult Education School] in Haapavesi. He was also a noted ski maker, but from the influence of the Haapavesi tradition began to build kanteles and eventually became one of the most prolific master builders in Finland. His kanteles became particularly well known since he received a steady stream of orders from the Fazer Music Store in Helsinki, which advertised his kanteles in their catalog and sold them in all parts of Finland. In spite of the large number of orders he received, each kantele was made by hand.

Kanteleita.

Kauppaan laskemani Kanteleet ovat Efraim Kilpisen mainiota tekoa. Niillä on kaunis sointuva ääni. Ruuvit ovat huolellisesti kiinnitetyt, jotta pitävät hyvin virityksen. Nämä Kanteleet ovat ehdottomasti maassamme valmistetuista parhaimmat. Teollisuusnäyttelyissä saaneet palkinnon.



Illus. 24. Advertisement for Kilpinen's kanteles from the Fazer Music Store Catalog around 1915 (published in Kansanmusiikki 1975 (3):42).

Kilpinen built mostly square-ended, left-handed kanteles, but he also built some right-handed models. He believed the wood found in Finland was the best for making kanteles, so he generally used spruce for the tops and pine or birch for the sides and bottom. But the tuning pegs had to be set into a harder wood, for which he usually used white or red beech. The earlier models had the strings attached at the end to a metal plate with holes drilled at even intervals, which is a variation on the rod system of attachment. He brought the art of building up to a new level. Many of his kanteles had decorations carved in the ponsi or the sides, or they had a ring inlaid around the sound-hole, similar to that found on fine guitars.

Efraim had two sons who helped him build kanteles, but only one, Oskari Kilpinen (1895-1980), continued to build and develop the kantele on his own. Oskari originally followed his father's model, but during the 1950s began to experiment with the reverse curve shape of the modern kantele. The early ones were left-handed, but soon they became mostly right-handed instruments. The reverse curve shape tended to minimize the hand position problem of right-handed box kanteles when played with the longest strings closest, so virtually all modern kanteles are right-handed. The curved shape used by Oskari was not quite as pronounced as in other modern kanteles, so the bass strings did not work as well as they should. Oskari even did some experiments building kanteles with tuning machines, similar to the ones found on modern kanteles, but only with a few tuners for the strings most frequently retuned. At least one of these experimental kanteles had pedals rather than levers to produce the changes. It is estimated that the Kilpinens made over 4000 kanteles (Ala-Könni 1973:23, 1986:23; Kilpinen 1975:41).

Further Development of the Box Kantele

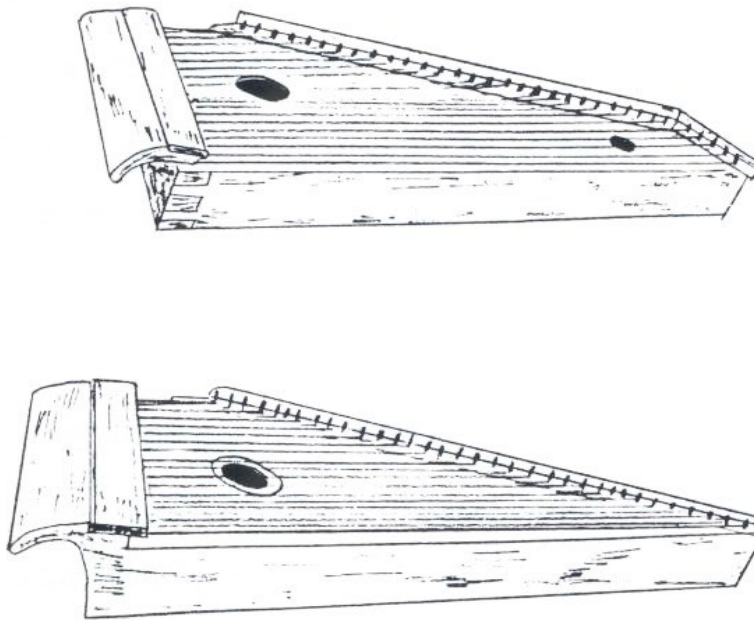
In the first decades of this century, box kantele builders continued to increase the range and the number of strings. At the same time, many people wanted to improve the tonal qualities of the kantele to make it more suitable for the performance of western art music.

Box kanteles were built on the mathematical premise that a longer string vibrates more slowly and thus has a lower pitch. The tuning pin side was in a straight line at an oblique angle to the strings, so the length of the strings increased at a constant rate. This works well as long as there is a limited range, usually up to about three octaves. But if a musician wanted an instrument with a greater range the system began to break down. As strings would get longer and longer for the bass notes, they no longer had the power, volume or projection of the upper strings. The lower strings were too loose to be effective. Thus, it was well known among players and builders alike that the majority of the larger box kanteles were fine in the upper registers, but very poor in the lower. Many players would simply avoid playing the lower registers, which was especially true in playing art music. So various attempts were made to improve the quality of the lower registers.

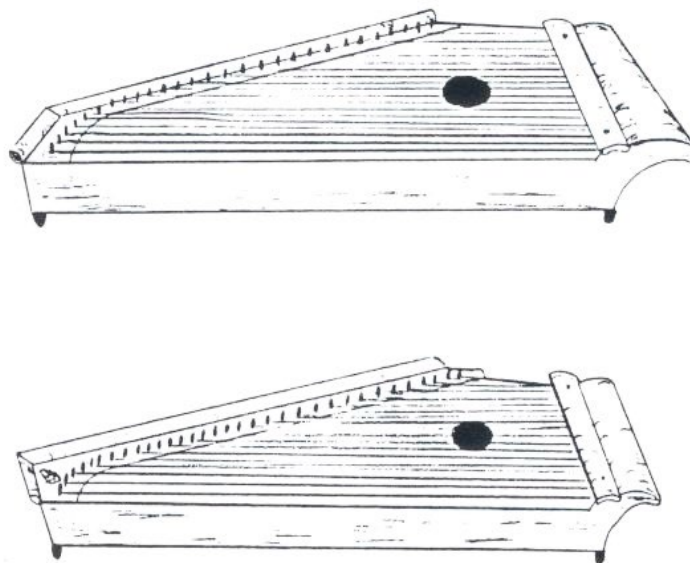
The first great improvement came in using bass strings with a greater thickness and weight. These strings were made by adding an outer wrapping to the normal string. By using thicker and heavier strings for the lower registers, the tension could be increased without changing the pitch, which improved the sound somewhat. But there was still the additional problem of timbre. The lower strings, even when tuned properly, would have a much more "twangy" sound, because their great length would make the pitch unstable. This was thought by many to be an unpleasant sound, particularly for art music.

The builders of box kanteles solved the problem of timbre by shortening the bass side of the instrument and using even thicker strings with even more tension. Many of the kanteles made in Pasi Jääskeläinen's workshop had the cut-off tip, with the six lowest strings being shortened, though his patent application shows a kantele with a normal pointed tip. Väinö Haapakangas of Pattijoki in northern Ostrobothnia described that kantele builders in school workshops also began to use the cut-off tip (Haapakangas 1983). The result was a much better sounding kantele in the lower range. The box kantele with a cut-off tip may have been the exception rather than the rule. Only eighteen kanteles of the sample had this feature.

Even with the improved sound quality, the box kantele still had significant shortcomings in playing western art music. It was strictly a diatonic instrument and thus was limited to playing in a single key. Of course, the player could retune to different keys, but this was a cumbersome process which took a great deal of time and was impossible to do in the middle of a piece. The kantele had reached the limits of its development and a qualitative or revolutionary change was in store, which came with the invention of the modern kantele.



Illus. 25. Square-ended box kanteles with a pointed and with a cut-off tip. (Sketches based on instruments at the Folk Music Institute, Kaustinen).



Illus. 26. Typical Haapavesi box kanteles based on the model patented by Pasi Jääskeläinen. Each is left-handed and has a cut-off tip. (Sketches based on instruments at the Haapavesi Kantele Camp, 1983).

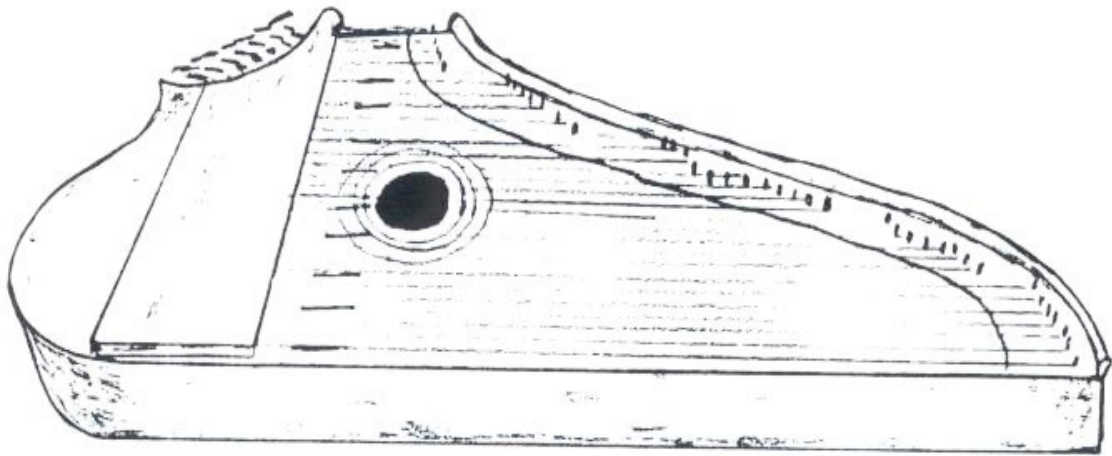
3.3 MODERN KANTELES

The modern form of the kantele incorporates the reverse-curve shape found in other large western string instruments, such as the piano or harp. Modern kanteles are in the same basic shape as concert grand pianos, only much smaller. A second important feature is that some modern kanteles have a quick tuning machine which makes it possible to change to different keys quickly. The Finns call modern kanteles by a number of different names. If it has no tuning machine, it may be called a "home kantele" [kotikantele] or "school kantele" [koulukantele]. With a tuning machine it may be called a "machine kantele" [koneistokantele] or "concert kantele" and some even call it a "chromatic kantele", though it is still basically a diatonic instrument, but one which can be retuned quickly. I use the term "modern kantele" to describe any kantele with the reverse-curve shape, and "machine kantele" for those with the additional quick tuning machine. The reverse-curve shape of the modern kantele was adopted gradually by builders beginning in the 1920s and today it is the standard shape for large kanteles. It can be traced to the influence of a single individual -- Paul Salminen.

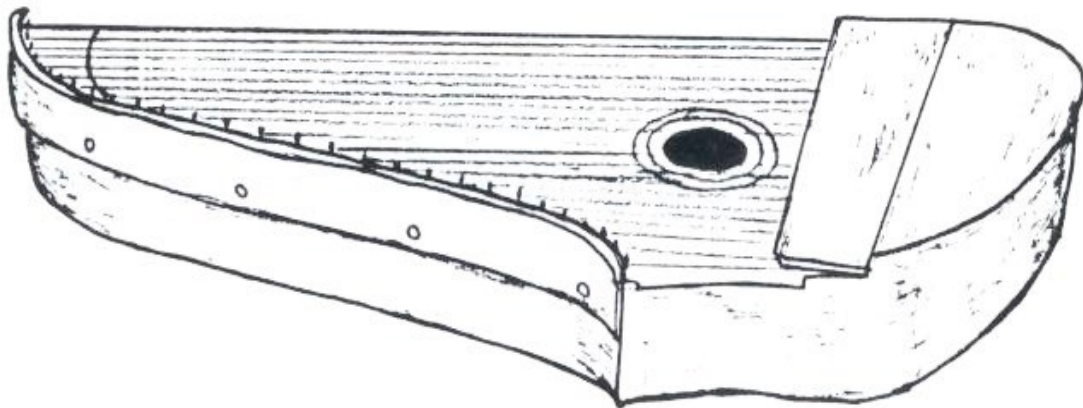
Paul Benjam Salminen (1887-1949) was born in St. Petersburg (Leningrad) of an Ingrian father and Finnish mother. He received formal training in music, becoming a professional trombone player. It is believed he saw Karelian or Ingrian kantele players in his youth and became interested in the instrument. He first came to Finland in 1913 to play trombone for a year in the Helsinki Philharmonic, during which time he met his wife, a professional singer, Ida Salmi. After returning to St. Petersburg he happened to read an article in a Finnish newspaper which described various ideas to improve the kantele and make it more suitable for western art music performance. This increased his interest in making his own experiments at "improving" the kantele. Salminen and his wife returned permanently to Finland shortly after the Bolshevik Revolution, where he again became a trombone player in the Helsinki Philharmonic and built kanteles in his spare time (Salminen 1984:5).

Salminen wanted his kantele to be the culmination of kantele form, designed specifically for playing art music. That meant, first of all, that it had to sound resonant and pure in its tone, but still have certain qualities which are unique to the kantele, so that it would be sufficiently different from piano, harp, or any other western art music instrument. It had to have an even timbre and volume throughout its range. This could only be achieved by controlling precisely the ratios between the length and the thickness or weight of the strings, which is believed to have led to the use of the reverse-curve shape.

A second aspect was that there had to be a way to damp (silence) the strings, serving the same function in art music performance as releasing the sustaining pedal on a piano. This was done by adding a hinged board over the strings with a padded felt piece underneath which, when pressed down, would damp all of the strings simultaneously. Most importantly of all, there had to be a way to overcome the greatest limitation of the box kantele, namely, that it was a strictly diatonic instrument. Box kanteles were not capable of playing music which changed in key or had accidentals.



Illus. 27. Modern kantele with a tuning machine. (Sketch based on an instrument built by Oiva Heikkilä, housed at the Sibelius Academy).



Illus. 28. Modern kantele without a tuning machine as adapted for folk use. (Sketch based on an instrument built by Jussi Ala-Kuha, housed at the Folk Music Institute, Kaustinen).

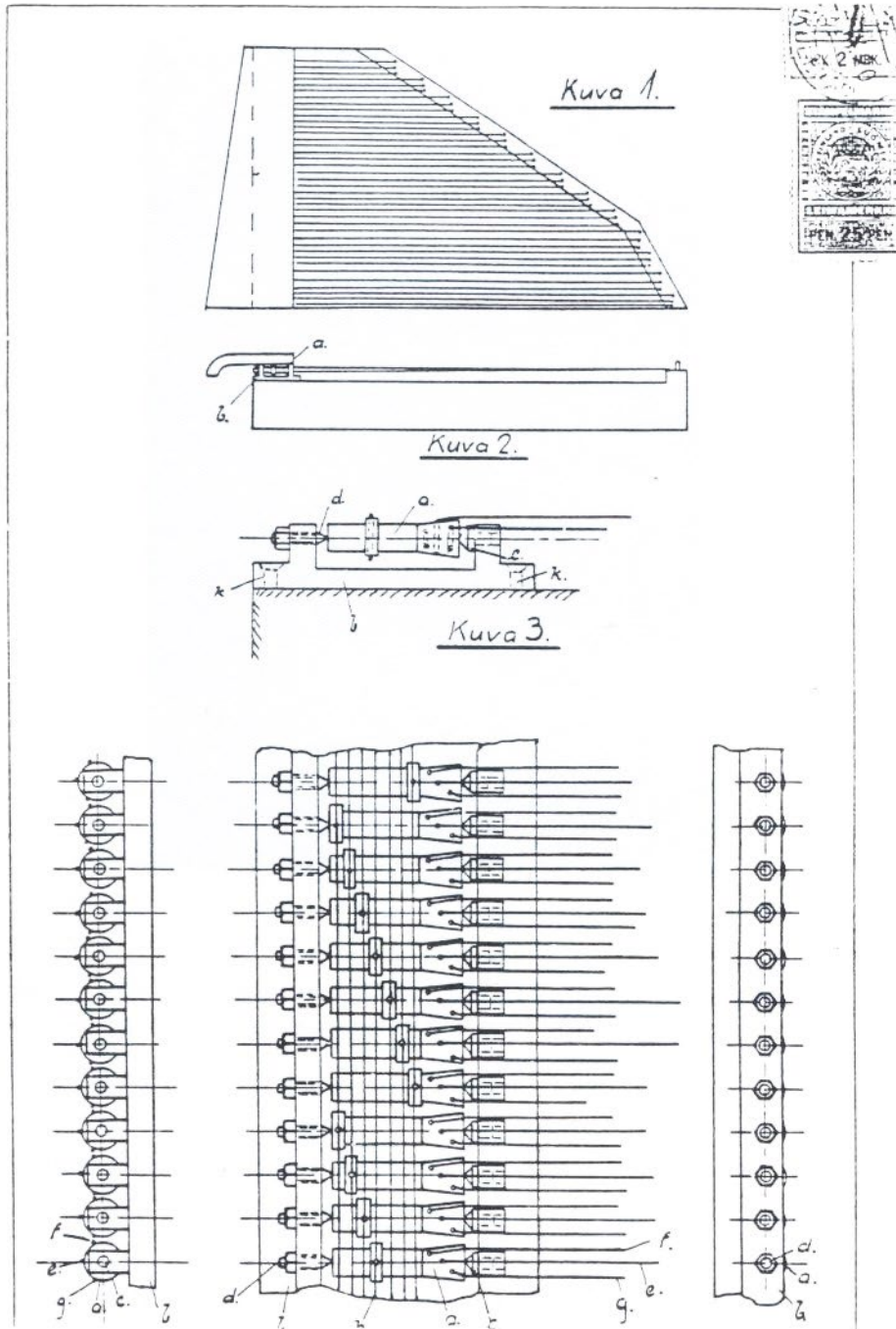
Salminen believed that the solution was to build a machine which would very quickly at the turn of a lever retune a given pitch up or down a half step. The machine would have eight levers; one for each of the diatonic scale degrees. By pushing a lever forward, all the strings of that diatonic pitch would be raised by a half-step. For example, if the first lever controlled the C pitches, when moved forward, all five of the C strings on the instrument would change to C#. The lever could be returned to the vertical position at any time to lower the pitch of all five C strings back to a C. Likewise the lever could be pulled back one position further, which would lower all the C strings to Cb (B). The tuning levers for each set of diatonic strings work the same way. The retuning, which could be done even during the act of playing, would account for most changes in key or accidentals, while generally leaving the tuning of the strings diatonic.

Salminen patented his first kantele with a tuning machine in August 1920, which has been called his "spindle kantele."¹¹ It worked on a system where three separate lengths of string were attached to spindles. One string was tuned to the natural, the second a half step higher and the third a half step lower. When the spindles were in normal position, the natural pitched strings were on top, forming a plane on which the instrument was played. If the player wished to raise a pitch, he pushed a lever forward, which rotated the spindles in all octaves for that pitch a quarter turn. This would bring the shorter length string, tuned a half step higher, into playing position. If a lever was pulled in the opposite direction, it would bring the lower pitched strings into playing position (Illus. 29).

The sketch for the patent application shows eighteen spindles, meaning that a total of 54 strings were used. But according to Sulo Huotari, who saw a prototype, the kantele was much larger, having 35 spindles, with 105 strings (35 sets of three string each).¹² The sketch shows a box kantele with the tip cut off, but a photograph of this kind of kantele shows that it had a reverse-curve shaped body (Illus. 30).

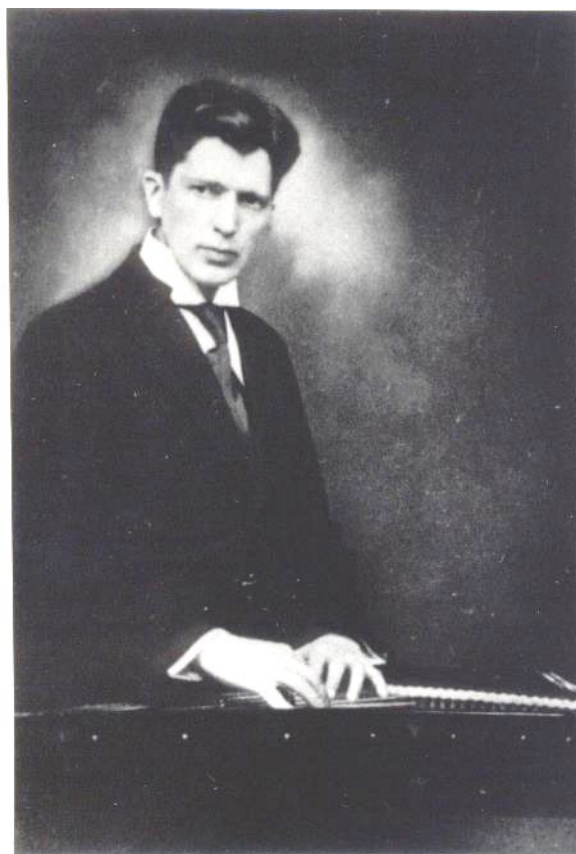
¹¹Salminen was not the first to patent a kantele. In 1904, Pasi Jääskeläinen patented one of the earliest kantele models designed for use with written music (Pat. No. 2144). Ferdinand Kangasniemi from Turku patented a chromatic "concert kantele" in 1910 (Pat. No. 4192), which used the same structure as hammer dulcimers and modern Estonian chromatic kannels. Otto Lampinen, also of Turku, patented a kantele tuning machine in 1918 (Pat. No. 7025). Since Salminen's time, Jaakko Anselm Noso of Järvenpää patented a machine kantele with the levers near the bottom of the instrument (September 30, 1954, Pat. No. 26839). This was the first patent application showing a reverse-curve shaped kantele in the patent application drawings. One of Noso's kanteles was given to Jean Sibelius as a gift (see Hintikka 1982). Martti Siira of Savonlinna patented a chromatic kantele where the strings are on two levels, similar to the system used in Soviet Karelia (August 22, 1979, Pat. No. 780562).

¹²In a more recent article Huotari described another spindle kantele, which had just two strings per spindle and was thus only half chromatic. It too had a reverse-curve shaped body (Huotari 1988).



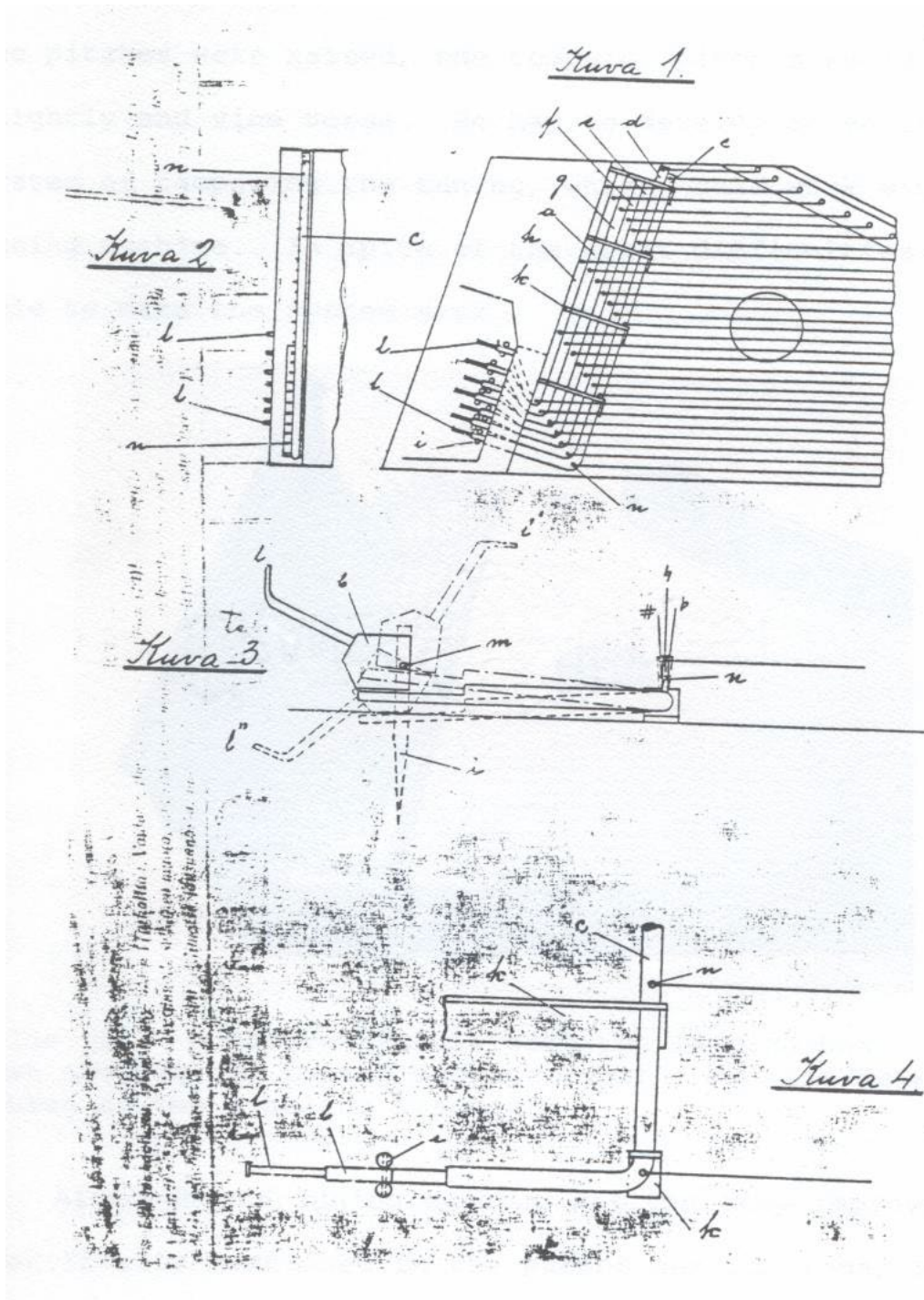
Illus. 29. Drawing from Paul Salminen's "spindle kantele" patent on August 24, 1920 (No. 8748). From the Finnish National Patent Office, Helsinki.

The spindle kantele was large and heavy in order to withstand the great tension of the strings and the tuning machine was awkward and difficult to use. Salminen sold the rights to the spindle kantele patent in December 1921 to the Hellas Piano Corporation, which apparently intended to manufacture the instrument. As part of the payment for his patent, Salminen received instruction in how to tune pianos. This was significant, since he again experimented with developing a tuning machine, but this time based on the principle of string tension.



Illus. 30. Photograph of Paul Salminen with his "spindle kantele" taken in the early 1920s, compliments of Jorma Salminen.

Salminen's second patent for a kantele tuning machine was filed in July 1925, which laid out the basic principles by which machine kanteles are still built today. The machine had seven spindles attached perpendicularly to the strings at the end of the instrument. To each spindle were attached the diatonic strings of a given pitch in all octaves. As a lever was pushed forward the spindle would rotate slightly, increasing the tension of all the strings attached to it and raising their pitch by a half step. Moving a lever in the opposite direction would reduce the tension and lower the pitch of all the strings.



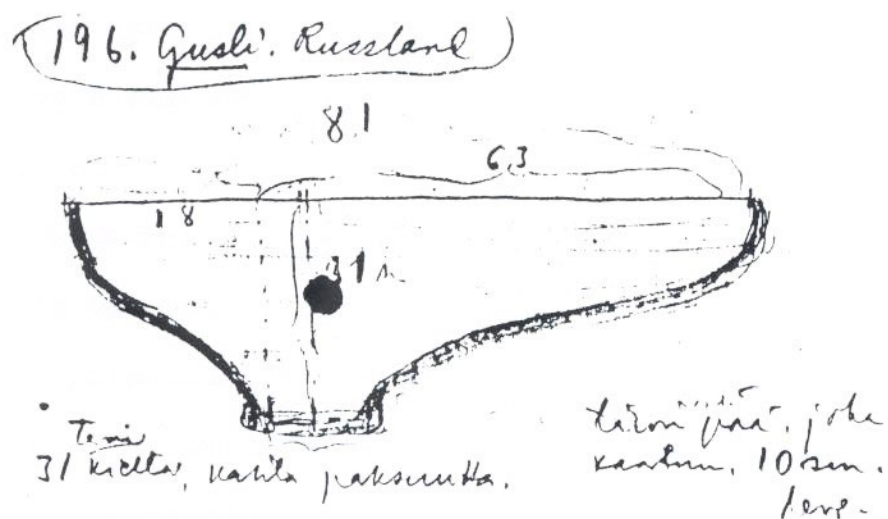
Illus. 31. Drawing from Paul Salminen's second kantele patent on July 11, 1925 (No. 11483).
 From the Finnish National Patent Office, Helsinki.

With this second tuning machine, Salminen had to solve an extremely complex technical problem -- that of keeping all the strings in tune with each other, while changing the tension on the instrument by retuning some of them. The solution required a great deal of study, experimentation and work. He had to take into account the changes in stress on the body of the instrument which would affect the overall tuning as a change in tension took place. An equal tempered tuning did not work, because when any of the pitches were raised, the tempered pitches would drop slightly and vice versa. He had to develop an entirely new system of tempering the tuning, which would work with the tuning machine. In spite of the great difficulties, he was able to make the system work.

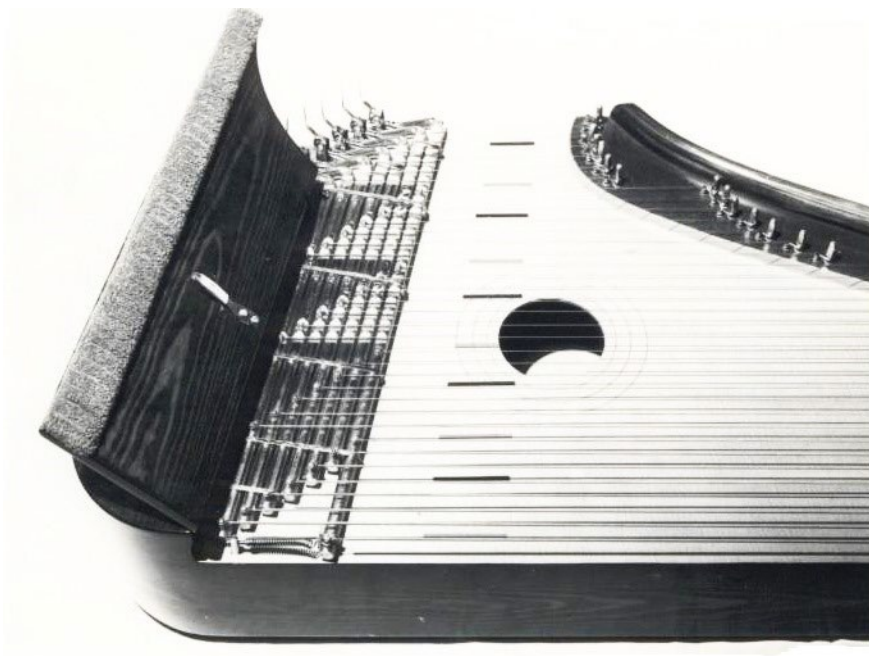
Although the tuning machine was the only improvement specifically mentioned in the patent applications, Salminen added several other structural and functional features to the kantele. All of Salminen's kanteles used the reverse-curve shape and were thus known for having an even timbre and tone quality across the entire range of the instrument. The biggest improvement over box kanteles was in the sound of the bass strings. Next to each tuning pin he added a second smaller pin around which the string ran, which helped make the sound clearer. He added marks on the sound board to show the position of the tonic and dominant strings, usually a red or white mark for the tonic and a black mark for the dominant. Finally, Salminen's kanteles were equipped with a damping board, which would silence all the strings simultaneously.

At the same time, Salminen retained specific characteristics dating all the way back to carved kanteles. The basic tuning of the strings was diatonic, though they could be retuned quickly enough to account for key changes and most accidentals. The strings were all arranged in a single plane. Most significantly, the strings passed from the tuning pins, around the positioning pins and to the hitch pins at the end of the instrument without passing over a bridge. This retained an important part of the kantele sound -- a natural vibrato -- which is praised by folk and art musicians alike. The vibrato is believed to be caused by the loop attaching a string to its hitch pin. Salminen experimented with various sizes and shapes of loops, settling on one which he felt provided a sufficient vibrato (Huotari 1984b).

It is not certain how Salminen came up with the idea for the reverse-curve shape. The drawings accompanying his patent applications all show straight-sided box kanteles, but even the oldest of Salminen's prototypes used the reverse-curve shape. Some believe that he borrowed this shape directly from the orchestral harp or grand piano. Erkki Ala-Könni has written that he made precise calculations of the lengths and thicknesses of the strings (1983:16). From these calculations he may have drawn the reverse-curve shape. Paul Salminen's son, Jorma, mentioned that Paul read in a Finnish newspaper about an advanced kantele and eventually received drawings of the instrument (Salminen, Jorma 1984:5), though it is not certain what shape this kantele had. A final possibility is that since Salminen was from St. Petersburg, he may have seen a variety of Russian gusli which used the reverse-curve shape. A drawing of this kind of gusli may be found among the papers of A. O. Väisänen (Illus. 32).



Illus. 32. Sketch of a Russian Gusli by A. O. Väisänen, from his papers at the Finnish Literature Society.



Illus. 33. A modern kantele with the damping board lifted open showing the tuning machine. (Built by Oiva Heikkilä, housed at the Sibelius Academy).

It is equally uncertain how Salminen developed the damping board. Most box kanteles have a board which covers the area where the strings are attached at the end of the instrument. The board was usually fastened down by two screws and it was removed in order to change a broken string. On square-ended box kanteles this board made a smooth transition from ponsi to strings, providing a place to rest one of the forearms. Perhaps this covering board provided a starting point for the damping board. It is a small step to extend this board slightly, attach it with hinges rather than screws, then add padding underneath and a spring to hold it at the proper height, thus forming a fully functioning damping board. I was not able to find any box kanteles which had a fully developed damping board, except a few special ones made after the time of the modern kantele.

Some believe that Salminen borrowed the idea for the tuning machine from the modern orchestral harp, since the basic principle is the same, however the actual technical means to accomplish the retuning is different. The machine of a harp retunes the strings by changing their length, while the kantele machine retunes by changing the tension of the strings. It is believed that Salminen repaired orchestral harps, but only after he had developed the kantele tuning machine. He was familiar with the harp mechanism but chose to keep the system he had developed.

The metal parts of the tuning machines were prepared by Salminen himself.¹³ He nickel plated each of the metal parts and assembled the machines which required great precision in order to operate correctly. He purchased raw steel string through the Fazer Music Store which he used to make his own strings. Among the specialized tools he acquired was a lathe and a machine for wrapping bass strings. The bass strings were made with a layer of silk between a central steel string and a fine silver wrapping. The weight and thickness of the bass strings was determined by the thicknesses of the outer layers. After turning in the tuning pins and attaching the strings, it took a great deal of time to make the fine adjustments necessary to be sure that the tuning machine worked properly (Salminen, Jorma 1983?:[2]; Huotari 1984a:9). The total time invested was between 220 and 500 hours for each instrument!

Salminen's tuning machines underwent some improvements over time. The earliest ones had the tuning levers on the bass side of the instrument and levers were harder to turn. In later models, he moved the levers to the treble side and added "helper springs" which made the operation of the tuning machine lighter and faster.

In addition to inventing and building the machine kantele, Paul Salminen played a central role in developing the techniques used in its playing and in promoting its use around Finland. The machine kantele required special training in moving the levers of the tuning machine while playing, use of the damping board and a finger technique more compatible with art music. Salminen and his wife Ida held recitals where she would sing and he would accompany on the kantele. He wrote method books and arranged a great deal of music for the machine kantele and taught dozens of private students, many of whom went on to become outstanding players and teachers themselves.

¹³According to Armas Koivisto (1962:4/10), Salminen had the metal parts made by someone in Riihimäki, then finished and assembled the machines at home.

That a design for a kantele was patented signifies something important. It was no longer a folk artifact, a one-of-a-kind instrument used by the builder himself, it has become a commercial product to be manufactured, distributed and sold. But Salminen's kanteles were never manufactured. They were still made by hand and not in great quantities. Paul Salminen assembled and sold only one hundred one machine kanteles from 1925 to 1949. He kept a detailed notebook which recorded the history of each instrument, when and to whom it was sold, the amount of time used in making it, the price, and any other distinctions. The notebook, together with detailed drawings, photographs and other important documentation, is in the possession of Paul's son, Jorma Salminen.

It is important to note that Salminen concentrated his work on the difficult tasks of assembling the tuning machines, adding the strings and adjusting the instruments. He commissioned various carpenters to build the bodies for the instruments from exact drawings he would provide. The first of these was Efraim Kilpinen in Kalajoki. Somehow, the dimensions were misunderstood and the kantele which resulted was many times larger than expected (Ala-Könni 1983:16; Salminen, Jorma 1984:5). The earlier Salminen kantele bodies (from 1925 to 1938) were built by a carpenter named Lepistö and another named Karvinen, both from around Helsinki. From 1938 until Salminen's death in 1949, most of the kantele bodies were built by the master craftsman Armas J. Koivisto (Ala-Könni 1983:16).

Armas Jaakko Koivisto (1885-1967) was born in Kuopio in the Savo area of Finland. Like Salminen, Koivisto's father was Ingrian and his mother Finnish. Koivisto attended trade school and became a master carpenter, building kanteles on the side. He made and sold some square-ended box kanteles, with 22 to 30 strings, through the Binneman Music Store in Helsinki. He experimented with various types of wood, making the bodies from pine, birch or alder, and the sounding boards from spruce or pine (Koivisto 1962:4/3-4)

Salminen contacted Koivisto around 1936 to build a body for a machine kantele. Salminen provided the drawings, but said he was not completely satisfied with the previous bodies. So Koivisto experimented, made some slight changes, and built one body out of pine. The kantele which resulted was particularly good, so Koivisto continued to receive orders until Salminen's death in 1949 (ibid:4/8-9). During those years Koivisto worked for the Heinola Saw Mill (Huotari 1986), where he was able to select the most ideal pieces of wood for kantele building. Koivisto was a particularly talented carpenter who took pride in accomplishing difficult tasks, such as circular inlays around the kantele sound hole. He was also well known for his artistic wood carvings and some of his kanteles feature carved pictures.

In addition to those kanteles made on commission, many individual builders had agreements with Salminen to acquire a machine kantele by building the body themselves according to specifications, then having Salminen add the tuning machine. Perhaps the most well-known of these was Leander Laasanen, who built the body for #83 in 1944. Another who wished to get a machine kantele this way was Sulo Huotari.

Sulo Huotari (b. 1920) is a master craftsman who became interested in the machine kantele, so in 1948 went to visit Paul Salminen at his home in Helsinki. Huotari asked about the possibility of building the body for the kantele himself and having Salminen add a tuning machine, but the cost at the time was prohibitive. Salminen did not want anyone else to

assemble or adjust the tuning machine, explaining that it was complex process and certainly would not turn out right on the first try. When Huotari again tried to contact Salminen in 1951, Ida Salminen informed him that Paul had passed away, but that there were five wooden bodies which had been built by Armas Koivisto and parts for one tuning machine left over. Huotari purchased the machine parts and one of the bodies from Salminen's widow (Huotari 1984a; 1986a).

The tuning machine had only the axles and the bearings on which the axles turned. All the small parts were missing. Huotari did not attempt to assemble it since he did not have the necessary measurements for the missing parts. Some time went by before one of Salminen's former students contacted Huotari about making some minor repairs and adjustments to her machine kantele. Ida Salminen had referred the girl to Huotari. He completed the necessary repairs and at the same time took the measurements for the missing parts. In this way he began a part-time career as a machine kantele builder.

At the time, Huotari was working as the foreman in a textile weaving factory. He had access to a good metal shop where he could prepare the metal parts and do experiments on machine kanteles. Even though he had the measurements, it was necessary to build many models before the machine worked properly. He particularly studied how changes in stress affected the overall tuning of the kantele. After a great deal of experimentation, he solved the problems and completed his own machine kantele.

After Paul Salminen's death there was a great need for someone to continue making machine kanteles. Ida Salminen still received requests for machine kanteles, which she now referred to Huotari. In return, Huotari paid a percentage of the kantele price to Ida. Just as Salminen, Huotari concentrated on making the tuning machines and commissioned other carpenters to build the bodies. The remaining bodies made by Armas Koivisto in Ida Salminen's possession were made into machine kanteles. Among others who built bodies for Huotari's machine kanteles was the master kantele builder from Veteli in the Perho River Valley, Oiva Heikkilä. Huotari built a total of thirty-one machine kanteles from 1952 until 1963, when illness forced him to stop. After Huotari stopped building machine kanteles, he sold the materials he had concerning the measurements, drawings, directions for building and adjusting the machines, and the way in which the kanteles should be tuned to Oiva Heikkilä, who began to make his own machine kanteles in 1968 (Huotari 1985:6). Huotari is still widely recognized in Finland as an expert, especially on the mechanics of building the tuning machine.

Oiva Heikkilä (1913-1979) became one of the few professional kantele builders ever seen in Finland. His father, Viljami Oskari Heikkilä, built both round-ended and square-ended box kanteles, some of which were decorated with a lyre in the sound hole. They ordered the strings and tuning pins from the Fazer Music Store Catalog, where they saw a picture of the kantele developed by Paul Salminen. Based on the picture, they started to build experimental kanteles with a reverse-curve shape (Heikkilä 1975:10).

Heikkilä received formal training as a carpenter, which included kantele building. Before World War II, he built and sold kanteles to the Westerlund Music Store and to individuals in the Perho River Valley. After the War, it was difficult to build kanteles since the metal parts, tuning pins and strings, were hard to get. In spite of this, he started building three varieties of kanteles. The first two varieties were straight-sided box kanteles, one with

28 strings and pointed tip, and the other a 32 string model with a cut-off tip. The third variety was a 36 string kantele with a reverse-curve tuning pin side and a round end, based on Paul Salminen's machine kantele (Ibid:11).

In the mid-1960s, Heikkilä moved to Nurmijärvi and soon thereafter to Tikkurila near Helsinki. He worked for a short time making kanteles for the Hellas Piano Corporation, but soon established his own shop and sold kanteles to music stores as well as individuals. By the late 1960s, he began building machine kanteles and was one of the first to build both the wooden bodies as well as assemble and adjust the tuning machines. For most of his machine and other large kanteles, Heikkilä adopted a feature invented by Pasi Jääskeläinen: that of having a "middle bottom" halfway between the top and bottom. This made his kanteles sound even and refined, making them particularly good for art music performance.

Oiva Heikkilä was helped throughout the years by his sons, especially Ossi, who today continues building kanteles under the Heikkilä name. Ossi builds the wooden bodies, and assembles and adjusts the machines. One of his brothers does the finishing work, staining and coloring of the bodies, and another brother does the metal work for the machines. Ossi estimates that the Heikkiläs have built approximately one hundred fifty machine kanteles, over three thousand other large kanteles (32 or 36 string models), seventy 25-string "school" kanteles, two-hundred 9-strings models and over a thousand 5-string models (Heikkilä 1986). Heikkilä kanteles are probably the most well-known and widely played kanteles in Finland today.

Another noted machine kantele builder is Otto Koistinen (b. 1925) of Joensuu in Finnish Karelia. He has been making kanteles since the mid 1950s and began building his own model of machine kantele in the mid 1960s. The machine he developed has a unique design in that the tuning levers are positioned at the end of the instrument, halfway between the long and short side. Koistinen has built some of the machines, but has generally contracted this work out to metal workers. He builds the bodies, and assembles and adjusts the machines. As of 1975, Koistinen estimated that he had built between three and four hundred large kanteles, most of which without the tuning machine (Koistinen 1975: 48-49). According to Sulo Huotari, Koistinen's machine kanteles are tuned closer to equal temperament and this brings about a difference in intonation when played with machine kanteles by other builders (Huotari 1985:5)

Koistinen's kanteles do not have a "middle bottom" and thus are noted for having a bright tone, which is favored by folk musicians and some art musicians, particularly those who come from around Joensuu. His kanteles have become well known throughout Finland, since they have been played by the Finn-Kantele group, which began in Joensuu and later moved to Lahti and by Koistinen's daughter, Ritva, who is a noted master kantele player.

In the 1980s several other craftsmen began building machine kanteles. Erkki Leskelä from Ylikiiminki in northern Ostrobothnia has become a successful professional builder. His machines feature a fourth position, which raises the pitch an additional half step beyond standard tuning machines. Jussi Ala-Kuha, who is employed by the Instrument Workshop at Kaustinen has developed his own model of machine kantele. Others who have built successful models are Arto Matto in Läppenranta, Keijo Planman in Vantaa and Pekka Lovikka in Ylitornio. The young master instrument builder Jyrkki Pölkki from Kintaus, an expert on the physics of vibrating strings (see Pölkki 1983), has experimented with a tuning

machine which shortens the length of the string, like a concert harp, rather than changing the tension.

Although machine kanteles represent an important development, they make up only a small percentage of the modern kanteles built in Finland. Machine kanteles are relatively difficult to build and are expensive. In order to have the tuning machine operate as it should, it requires extremely exact work followed by many hours of fine adjustments. A player typically will have to wait a year or more for it to be built and it will cost in the neighborhood of 10,000 FM (about \$2500). In many applications, such as for the beginner or in playing folk music, the machine is unnecessary. Most kantele players, both art and folk musicians, prefer the advantages of the reverse-curve shaped instrument, because its sound is even across the entire range. So there is a great demand for the modern kantele without the tuning machine, or with other less expensive and less complex kinds of tuners. A majority of modern kanteles fit into this category.

Paul Salminen is also credited with inventing a simple tuning mechanism, attached to individual strings between the tuning pin and positioning pin (Salminen, Jorma [1983]:[3]). This kind of tuner has a small lever which rotates on a shaft. The shaft has a cam which presses against the string itself. As the lever is moved in one direction, the cam increases the tension of the string enough to raise it approximately a half step. As the lever is moved back, it allows the string to return to its original tuning. While the lever of a machine kantele can change a given pitch in all octaves by as much as a full step, both up and down a half step, the individual string tuner can only change the pitch of one string by a half step, either up or down, but not both.

These kinds of individual string tuners are not found on each string since the space required for clearance will not allow it. They are typically found only on the strings which require the most retuning. For example, on a diatonic kantele tuned in C major, the most frequently found tuners will be on the G strings. This facilitates the tuning of G#, which provides the leading tone for the relative minor key of A minor. The next most frequent individual tuners will be on the F strings, to provide the F# necessary when playing in the dominant of the C major tuning, G major. The third most frequent tuners are on the C strings, providing the leading tone for D major or D minor, or on the D strings, providing the leading tone for E minor. I have not seen any kanteles with more than three sets of individual string tuners, though it is possible that some exist.

There are certain disadvantages which come with individual string tuners. First, they do not always work well. Often their use does not quite tune the string as accurately as would be needed for first rate concert performance. A second drawback is that they cause a great deal of wear on the strings, which causes more frequent string or tuning pin failure.

The advantages are that they can be easily installed (or removed) and they are relatively inexpensive. Such a kantele will cost in the neighborhood of 3000 FM (about \$750) or about one third the price of a machine kantele. The tone quality is virtually the same, only the convenience and the repertoire playable on such an instrument is limited. It therefore provides an alternative for the beginner or intermediate art musician.

Some kantele builders and players feel that the modern kantele has not completed its development, specifically for art music performance, since there are several problems to be overcome. The machine kantele is difficult to build and therefore relatively expensive. Even

with the advantages of a tuning machine, the modern kantele is still basically a diatonic instrument, which limits the repertoire some-what. In addition, many players have mentioned interference from noise, which comes when moving the levers to change keys or while using the damping board. This noise can have a devastating effect in the recording studio. In order to change keys or play an accidental, the player has to lift a hand from the strings to move a lever. Some players have suggested that the modern kantele be improved by substituting foot pedals for the levers, so that both hands can remain on the strings when a change takes place. Finally, the modern kantele still has a relatively weak carrying power and its sound frequently gets covered when played with other western instruments. Many players have begun using contact microphones and amplifiers, but then the original timbre of the kantele is changed.

The Modern Karelian Kantele

As a possible solution to some of the problems with the machine kantele, there has been a recent and significant movement in Finland to use chromatically tuned kanteles similar to those played in Soviet Karelia. This movement has been brought about largely through the efforts of a single individual, Kari Dahlblom (b. 1955), who lives in Tikkakoski in Central Finland. Kari is a master kantele player, who won the Finnish art style playing competition in 1982. By profession he works for the Finnish Army as, among other things, a translator of Russian. Kari has been interested for many years in Russian music and is also an outstanding dombra and gusli player, as well as a collector and player of various types of Finnish and Russian folk instruments. Dahlblom became interested in Soviet Karelian kanteles after hearing the professional kantele ensemble from Petrozavodsk perform in Finland.

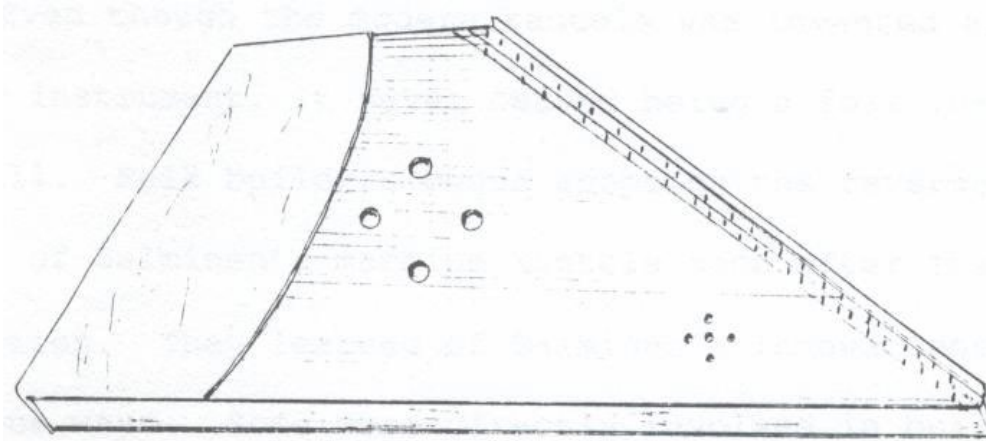
The kanteles they play are based on models first developed in the 1930s by Viktor Gudkov, with the playing of art music specifically in mind. They are fully chromatic instruments with the strings arranged in two separate planes, the upper plane having diatonic pitches and the lower plane, chromatic pitches. Gudkov established the first Karelian kantele ensembles and made the earliest arrangements of written music.

Dahlblom wanted to learn to play the instrument but was unable to acquire one. In 1983, Hanna Pirhonen, a former member of the Petrozavodsk kantele ensemble, immigrated to Finland from Soviet Karelia. She provided her alto kantele as a model and, at Kari Dahlblom's request, an instrument builder in Tikkakoski, Heikki Linjama, began building the first Finnish versions of the instrument. As of mid-1986, Linjama had built just over thirty Karelian kanteles. Dahlblom also commissioned the master instrument builder Jyrkki Pölkki to build this kind of kantele.

The Karelian kantele has certain advantages as well as disadvantages compared to the Finnish machine kantele. It is a comparatively simple instrument to build and is therefore relatively inexpensive. There are no problems with moving tuning levers or with their noise. Almost all western art music can be played on the Karelian kantele, since even highly chromatic passages, while difficult, are still possible. As part of its structure, the Karelian kantele has a bridge near the end of the instrument and thus has a louder sound than Finnish kanteles. It blends well with other instruments and can still be heard over instrumental accompaniment.

Because of the bridge, the Karelian kantele has a different timbre than Finnish kanteles. It lacks the brightness and the natural vibrato praised by Finnish players. The timbre is more "civilized"; closer to that of the concert harp.

Being fully chromatic instruments, Karelian kanteles have a more limited range than modern Finnish kanteles. To overcome this lack in range, they are normally played in ensembles with matched sets of different sizes. In the Petrozavodsk ensemble they play three different sizes: prima, alto and bass. So far, Heikki Linjama has developed his own soprano and alto models. Because the range of these instruments is only around three octaves, they do not need the reverse-curve shape and have straight sides.



Illus. 34. Modern Karelian style chromatic kantele built by Heikki Linjama, Tikkakoski.

Modern Finnish kanteles and Karelian kanteles are suited to different purposes. An analogy may be made in comparing the violin and piano. The violin is more of an ensemble instrument, even though it can be used in playing unaccompanied solos. The piano has the ability to play both the melody and accompaniment and is therefore more of a solo instrument. An ensemble made up of several pianos would sound muddled. The Karelian kanteles are more like the violin; the modern Finnish kanteles more like the piano in this regard. For this reason, the Karelian kantele would be a nice supplement, played together with and in addition to the modern Finnish kanteles.

The Modern Kantele and the Folk Builder

Even though the modern kantele was invented as an art music instrument, it never ceased being a folk instrument as well. Folk builders began adopting the reverse-curve shape of Salminen's machine kantele soon after its invention. They learned of Salminen's innovations in various ways. Some were directly involved in building kantele bodies for Salminen, such as Armas Koivisto. Others, like Oiva Heikkilä, saw Salminen's kantele pictured in the Fazer Music Store Catalog and began experimenting with the new shape. Whether or not the reverse-curve shape was absolutely necessary for the performance of folk

music, it was perceived as being superior, since it was associated with a "developed" kantele. By the 1950s, the box kantele passed into oblivion, as virtually all kantele builders used the reverse-curve shape.

Many folk builders began experimenting with the modern kantele due to the strong influence of fashion. The reverse-curve shape brought some acoustical advantages, in that the range of the instrument could be extended and still sound good, but many of the other conventions of the modern kantele were either unnecessary, or in some cases hindered folk music performance. Box kanteles differed from modern kanteles in several ways. Some of the differences were explained to me by the master instrument builder, Rauno Nieminen.

According to Nieminen, the history of all western string instruments has been characterized by an overall rise in pitch with a corresponding rise in string tension. New instruments had to be designed to withstand higher string tensions than the older instruments. The development of new instruments which could cope with greater string tension can be seen in the history of violin and piano, and a similar development affected the kantele.

Newer kanteles are tuned to a higher overall pitch level than older kanteles and are built to withstand far greater string tensions than the older ones. This was discovered when the instrument builders at Kaustinen wanted to build box kanteles according to shapes and patterns which had not been used for some sixty years. When they originally built some of these present day box kanteles, they were amazed to find that their tone and playing response was very similar to the modern kantele. They had built them with strong internal bracing, similar to that found in the modern kantele. It was not until they began taking old instruments apart, to repair and restore them, that they discovered the internal bracing of old box kantele was really quite minimal. If such instruments were tuned up to today's standard pitches, they would sound strained and might not be able to withstand the tension. When these instruments are tuned at a lower level, a truer picture begins to emerge as to how these instruments sounded and responded. The box kanteles had a bright, sharp attack followed by a rapid decay in volume. More modern kanteles, some of which have middle bottom and all of which have a great deal more bracing to drive the sound, have a smoother attack and the sound is sustained for a greater period of time.

These differences in the acoustical properties of the instruments actually favor one style of playing, art or folk, over the other. For example, in folk playing, overall damping is not used. With an old kantele damping was largely unnecessary because all strings would have a quick decay. Also, a bright, clear, sharp attack is favored by folk musicians because much of the music played is dance music and strong attack is necessary for the rhythmic accompaniment of the instrument to be heard. Folk playing is usually done on the hardest portion of the fingertip, just before the fingernail, which increases the attack even further.

Art music, on the other hand, favors a smooth, rounded tone. The instrument is played with the softest, fleshiest part of the fingers. Blending of the tones in chords is important with art music, therefore art musicians favor an instrument with a smooth attack and a long decay. At the same time, an instrument with a long decay requires some form of damping, otherwise an unacceptably muddy sound will result. Thus, the structure of the modern kantele included a damping board as an integral part.

When folk builders began making modern kanteles, they also included the damping board, even though it served no function in folk music performance. In some cases the it was

rendered non-functional by placing a screw beneath it, so that it could be lifted easily to change the strings if they broke, but it could not be pressed to damp the strings. In other cases the folk musicians would simply lift open the damping board and leave it open while playing. Many folk builders also included the marks under the strings showing the position of the tonic and dominant strings, even though folk playing is usually accomplished more by feel and by listening than looking for the marks.

While folk builders adopted the conventions of the reverse-curve shape, damping board, and marks under the strings, they shunned the use of mechanical tuners. Since most traditional kantele music can be played in a single diatonic tuning, folk musicians prefer to build and play modern kanteles with no mechanical tuners at all. It is generally believed that the skill of the folk musician lies in gaining the maximum potential from a strictly diatonic instrument.

The best folk builders, especially from the Perho River Valley, have been able to use the advantages of the reverse-curve shape to the fullest and still produce instruments specially suited for folk music performance. Such kanteles appear on the outside very much like typical modern art music kanteles, but there are differences. They have a brighter timbre, sharper attack and softer decay than art music kanteles. An additional feature on many of these kanteles is the so-called "lowered basses." The three lowest strings are tuned to contrabass dominant, subdominant and tonic pitches, and the three next lowest strings one octave higher. For example, if the kantele were tuned in C major, the six lowest strings would be tuned (in descending order) c, G, F, C, G₁, F₁. The six lowest strings provide a bass octave in three strings, and a contrabass octave in three strings, which are used to produce a bass rhythm in dance accompaniments. The overall range of these kanteles can be up to almost six octaves, depending on the number of diatonic strings, which is variable.

The most favored kanteles among folk musicians, especially those from the Perho River Valley, are those built by Leander Laasanen (1892-1985). Like the famous kantele builder from Kalajoki, Efraim Kilpinen, Laasanen began his professional career as a ski maker. Although he built more than four hundred kanteles, he considered it primarily a hobby. He had contact with many of the best players in the Perho River Valley and became a fine player himself. The Laasanen family playing tradition lives on with his children and grandchildren, all of whom play kanteles he built.

Laasanen began by building straight-sided box kanteles, but over the years he experimented greatly with the structure of the kantele and the types of woods used.

[In the beginning, I built those straight sided instruments. All the time I tried to build kanteles which satisfied their users. Improvements always came through experimentation and development, for example I eventually came upon the right kinds of wood] (Laasanen 1975:47).

In the late 1940s, he began building reverse-curve shaped kanteles based on Paul Salminen's machine kantele. He experimented with the shape, as evidenced by some existing models which look like round-ended box kanteles, but with a reverse-curve tuning pin side (Illus. 35).



Illus. 35. A round-ended box kantele with a reverse-curved tuning pin side built by Leander Laasanen. (Sketch by Rauno Nieminen, 1983).

Laasanen perfected and adapted the modern kantele shape specifically for folk music performance. From 1947 on, he numbered these kanteles which have the same basic size, shape and range as machine kanteles, but no tuning mechanisms. They are thought of as being among the very best kanteles ever built for playing folk music and are in great demand among folk performers. For example, the master folk kantele player Viljo Karvonen from Halsua has built at least thirty kanteles himself, which were all fine instruments, but the kantele he prizes the most was built by Laasanen.

Laasanen's kanteles are designed with the folk musician in mind. The workmanship is particularly good. When I asked various folk players and other kantele builders why Laasanen's kanteles are so good, several told me it was because the workmanship was "millin tarkka" [exact to within a millimeter]. His kanteles have a very bright tone, which is perfectly suited for the traditional dance music played in the Perho River Valley. Laasanen's kanteles also feature the "lowered bass" strings, with a particularly fine bass sound. As with all modern kanteles, he used strings of graduated thickness, with extra thick strings for the three contra bass strings.

In recent years, the Kaustinen Instrument Workshop has been able to provide particularly good kanteles for playing folk music. Their commercially built large kanteles can also be used for playing art music, though the tonal characteristics are more appropriate to folk music. The kanteles are built without the lowered bass strings, though they can be specially ordered with that feature. Recently they have produced their own model of machine kantele. Kaustinen also offers a fully equipped workshop, training, and materials for individuals to go and build their own kanteles and quite a few folk performers have done just that. The professional builders make a variety of instruments -- jouhikkos (bowed lyres), mandolins, even electric guitars -- in addition to various types of kanteles. The greatest number of instruments sold are carved kanteles, particularly five-string kanteles, which has been the result of a significant revival in carved kantele playing.

Revival of Carved Kantele Building

The revival in carved kantele building began in the early 1950s, around the time when Finland hosted the Olympics. During the same era when he was building bodies for the machine kanteles of Paul Salminen, the master craftsman Armas J. Koivisto was asked by the Fazer Music Store in Helsinki to build some small and inexpensive five-string kanteles so they could be sold to Olympic visitors as souvenirs. Koivisto began experimenting in making kanteles according to old models which were at that time only found in museums. He did not want his instruments to be mere souvenirs and tried to make them as fine as possible, thus building the first real carved kanteles in Finland since perhaps the turn of the century.

Martti Pokela, a popular folk musician, became acquainted with Koivisto's five-string kanteles through his dealings with the Fazer Music Store and wanted to add the instrument to his repertoire. He went to see Koivisto to ask him to build custom five-string kanteles with improvements. He had the tuning pins, strings and the size changed to improve its sound and ease of playing. Koivisto also built Pokela some prototypes of seven and nine-string kanteles. They met many times trying to develop the carved kantele up to the time of Koivisto's death, when the development work continued with another master kantele builder, Oiva Heikkilä.

A significant contributor to the revival movement was Finland's Professor of Folk Music, Erkki Ala-Könni, who wanted to promote the carved kantele in public schools for teaching the fundamentals of music. Pokela and Ala-Könni teamed up to develop what they felt would be standard models of the contemporary carved kantele and commissioned Oiva Heikkilä to build them. Martti Pokela's model of the five-string kantele marked the culmination of the developmental work begun with Armas Koivisto. Ala-Könni wanted to increase the capabilities somewhat, so he had Heikkilä build a nine-string "school kantele," with a steel bridge along the tuning pin side of the instrument. The bridge increased the amplifying power of the instrument, but at the same time left intact the characteristic vibrato of the Finnish kantele. The increased range made it possible to broaden the repertoire.

These instruments were developed over a period of time. In Pokela's and Ala-Könni's own personal kantele collections they have prototypes of various lengths. The correct length, width, sound quality and playing characteristics were worked out by trial and error until a "standard" emerged for both the five-string and nine-string models. Pokela also commissioned many other master craftsmen to build him carved kanteles. Some were custom-built models, with extensive decoration or Pokela's name carved into the sides. Other carved kanteles which he commissioned served as prototypes for a particular builder's own line of carved kanteles. Kantele builders were more than happy to make instruments for Martti Pokela, since he had gained national fame through extensive performances in concerts, on television, radio and records. The revival movement brought with it a great deal of experimentation and in some cases even competition among kantele builders for the best type of carved kanteles. Pokela amassed one of the largest carved kantele collections in Finland. Most of the collection is housed at the Sibelius Academy division of Folk Music, where it is used by the various folk music groups which Pokela directs.

During the past twenty years, the growth in the number of carved kantele players has been great, both among children and adults. As a result, there has been a great increase in the building of carved kanteles. Literally hundreds of Finns make five-string kanteles, in wood

shop classes, privately for their own use, or on a larger scale to sell to others. The Kaustinen Instrument Workshop alone prepares around one-hundred carved kanteles per month. In 1985, the Folk Music Institute sponsored a five-string kantele building contest, which had nearly one hundred entries. All ages of builders were represented, male as well as female, from all parts of the country. No two of the kanteles were alike!

Summary

The art of kantele building has changed drastically over its history. Originally kanteles were built by individuals for their own use. This tradition of folk builders has not ended, since many Finns still build their own kanteles. In addition to folk builders, there came a tradition of master builders, who made instruments of such high quality that others wanted to buy them. The kantele became a commercial item, but something which was still built by hand, one at a time. There are very few professional kantele builders in Finland, in the sense that the builder earns his entire livelihood from building kanteles. The kantele has never become a factory-built instrument. There are instrument factories, such as those connected with large music stores that build kanteles on a mass-production basis. These instruments are widely thought of among kantele players and builders as being inferior and have not really been accepted as a part of the kantele culture. As one builder put it, "Those people stack one instrument on top of another to the ceilings." Another said, "In the factory, a man stands with a calculator figuring out how long it takes for each worker to do a task. The factory is not geared towards craftsmanship, only towards profit." The professional kantele builder Erkki Leskelä put it best when he said, ["I don't get to punch the clock when the day is done like in a factory. I have to work on each kantele until it is just right, and it pleases the customer and pleases me"] (Leskelä 1983).

IV. KANTELE PLAYING TRADITIONS

There are as many different styles of kantele playing in Finland as there are types of kanteles. The kantele is used in folk music, art music and popular music, in a wide variety of styles appropriate to these contexts. Various groups and various geographic areas of Finland maintain different playing traditions which exist simultaneously in the music culture. On a basic level, all of the various playing styles can be divided into two categories: those appropriate to smaller kanteles carved from a single piece of wood and those appropriate to larger kanteles assembled from separate pieces of wood.

4.1 CARVED KANTELE PLAYING

Very little is known about the oldest playing styles of the carved kantele. Even though the carved kantele was a normal part of everyday life for Karelian rune singers, for some reason the early collectors of folk runes did not write about kantele playing in detail. Most of what we know about old styles of carved kantele playing has come from research done in the early decades of this century by A. O. Väisänen. Detailed descriptions of his work may be found in Asplund 1976, 1981, 1983b:63-66; and Laitinen 1980a.

A. O. Väisänen was interested in both music and folk traditions from an early age. He is reported to have made his earliest collections around his hometown of Savonranta while still a schoolboy. Shortly after graduating from compulsory school, he came to Helsinki and studied violin at the Helsinki Philharmonic Society Orchestra School and began playing professionally with the new Helsinki City Orchestra as a violist. He continued to be interested in folk traditions and for each summer between 1912 and 1917, he received stipends to conduct field work. During this period, he collected material from among the Karelians, Estonians, Vepsians, Ingrians and Mordvinians. He also studied the music transcription collections at the Finnish Literature Society (Suomalaisen Kirjallisuuden Seura or SKS) which resulted in the publication of Suomen kansan sävelmien keräys [The Collection of Finnish Folk Tunes] (1917a).

In studying the existing music transcriptions, Väisänen noticed that surprisingly few kantele tunes had been collected, only thirty-nine tunes out of 13,000 in the SKS collections and even fewer jouhikko tunes. In the summer of 1916, with the aid of a stipend from the SKS, he set out to the Karelian towns of Impilahti, Suistamo, Korpiselkä and Kitee with the express purpose of collecting tunes in these genres. He had fairly good results, collecting a total of 250 tunes, of which eighty-four were kantele tunes from fourteen informants. The next summer (1917) he returned again to the towns of Suistamo and Korpiselkä, this time on a Kalevala Society stipend and again had good results.

Väisänen took extensive field notes and made transcriptions in the field. He also made cylinder recordings of most of the pieces, but the volume of the kanteles was generally too weak to make good recordings on wax cylinders. Also, in their natural playing positions, it was difficult to get the instruments close enough to the horn. Still, he was able to hear enough from the recordings to complete and check the transcriptions which, at the time he did his work, were considered the primary source of information. The original cylinders are in the SKS sound archives.

Väisänen also credited his success in collecting kantele tunes at such a late date to the fact that he brought along a carved kantele and extra strings. He knew that most of the old players had long since stopped playing and had sold their instruments to various museums around Finland. Some of the players had switched to newer "store bought" models of kanteles. He gambled that they still knew music which was played on carved kanteles and how it was played. Väisänen was able to bring forth a great deal of information from passive tradition bearers.

Väisänen's field trips, together with other information he collected from kantele performers at song festivals and from his thorough archival research, culminated in the publication of Kantele- ja jouhikkosävelmiä [Kantele and Jouhikko Melodies] (1928a), which is the definitive work on the older styles of kantele playing. It contains all the transcriptions of kantele pieces from other sources known to Väisänen at the time, as well as his own transcriptions. There were only some fifty pieces previously collected from fourteen informants. Väisänen collected 182 pieces from thirty-three informants. He describes the playing style and contextual information for each of his own informants and any information available on the previous informants. The book concentrates on older styles of playing, but includes some examples of newer styles. Several informants were able to perform in both older and the newer styles.

According to Väisänen's descriptions, carved kanteles were always played from a sitting position. Usually the kantele was placed on top of a table, but if that was inconvenient it was played in the lap. It was generally in a horizontal position, meaning that the sound board of the instrument was horizontal to the ground. This was different than most other Baltic psalteries, which were played more vertically with the long side of the instrument in the lap and the short side against the stomach or chest. Väisänen's book and some of his other articles include pictures showing the kantele being played in the horizontal position, but some of the pictures show the players holding the kantele in the vertical position. Väisänen explains that in the photograph of Miinan Domi (1928a:XXVII) he held the kantele in the vertical position because it was unusually large and therefore cumbersome to play in the horizontal position (ibid:XXXII). Tsertin Miiikkula played the kantele in a horizontal position on a table while indoors, but when outdoors for the photograph (ibid:XXX), he placed the kantele in the vertical position (ibid:XLVI) perhaps so it could be seen better.

In all cases, whether or not the kantele was held vertically or horizontally, the shortest side of the instrument, in other words the shortest string, was always held closest to the player. Virtually all Finnish carved kanteles were right-handed instruments, which means that when the shortest string was held closest to the player, the end of the instrument with the ponsi was on the player's right.

The way the hands and fingers were placed on the instrument varied almost with each player. Generally the right wrist or palm would be placed across the ponsi, while the left wrist or palm was placed across the side of the instrument with the tuning pegs, with the left palm or fingers curved over the tops of the tuning pegs.

A general principle in carved kantele playing was that a given string was always played by the same finger. On five string kanteles each string had its own finger, which would pluck only that string. Another general principle was that the finger arrangement was

crossed, alternating at some point from one hand to the other. The player alternated back and forth from the fingers of one hand to the fingers of the other while playing. This basic finger arrangement has been called the together position by Väisänen and subsequent Finnish scholars (Väisänen 1928a:X; Laitinen 1980a:49; Leisiö 1978:365; Asplund 1983b:17-8).

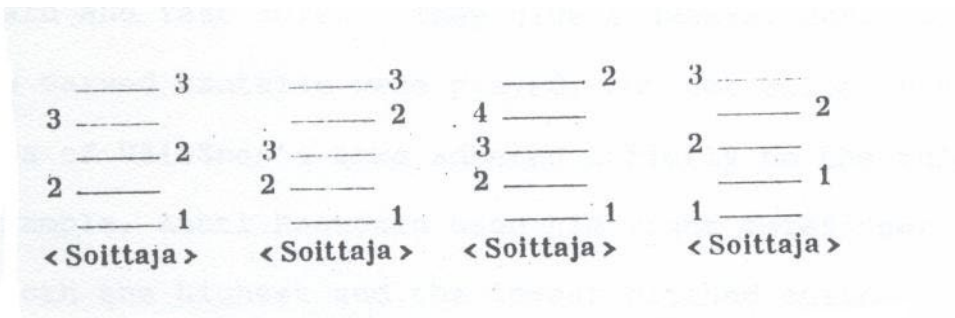
The general principles of carved kantele playing were preserved even when the number of strings increased. The additional strings were taken care of by fingers in the vicinity. For example, the right thumb would pluck additional upper strings, while additional bottom strings were plucked by the right middle or ring fingers. The finger patterns used in playing carved kanteles with more than five strings were a logical extension of the patterns used in five-string playing. Each finger would play a given string or set of strings as required. The central range of the instrument, where most of the playing activity took place, still preserved the general together position principle, where the playing alternated back and forth between the hands.

Väisänen (1928a:X,LXV) shows four different finger arrangements. The first three have in common in that the right thumb plucks the shortest string and left forefinger the next shortest; the fourth shows that the left thumb was used for the shortest string and the right thumb for the next one. The basic finger arrangements shown by Väisänen have been reproduced in subsequent carved kantele playing method books. Ala-Könni and Pokela (1971) mention just the first arrangement, while Laitinen and Saha (1982) mention the first three (Illus. 36).

The general principles and finger arrangements were not hard and fast rules. They give a general description of how carved kanteles were played, but not all of the players of Väisänen's time adhered strictly to the rules. For example, Antti Rantonen used his right forefinger to play both the highest and the lowest pitched string. This violates the one finger to a string principle, but still keeps the together position principle generally intact. Väisänen tells that Lukkani Huotari in Vienna Karelia played the top, middle and bottom strings with his right forefinger, while still alternating to his left fore and middle fingers for the other two strings. Ontreini Jyrki from the same area played in a mirror image to Huotari's playing, with the left forefinger playing top, middle and bottom strings. Pekka Komulainen from East Ostrobothnia had an unusual position, playing the top string with his right thumb and the remaining four strings with left thumb, fore, middle and ring fingers.

Väisänen believed that the playing of larger carved kanteles developed from five-string kantele playing. One clue here is the fact that even though most of Väisänen's informants played larger kanteles, they frequently did not use all the strings in their playing. For example, Fedja Happo played a twelve string kantele, but only used five strings at a time and the same finger position as on a five-string kantele. This finger position, however, could be used on any five adjacent strings and thus could be moved around the instrument. Although the intervals would vary, Happo would still insist that it was the same piece.

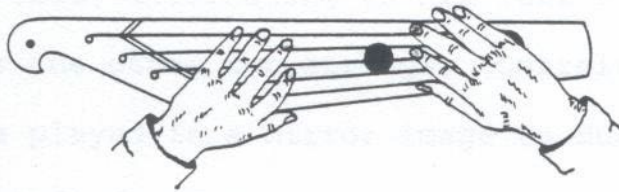
Another clue is provided by the way the players would tune their instruments. The younger players would tune the strings in sequence, to a major or minor scale, but the older players would tune using perfect intervals: the fourth, fifth and octave. On a five string kantele, the outer strings (#1 and #5) were tuned first to a fifth, then each of the next inner strings (#2 and #4) were tuned to their opposite outer strings in fourths. The result sounded



<Soittaja> = [player] ; 1 = thumb ; 2 = forefinger ;
 3 = middle finger ; 4 = ring finger

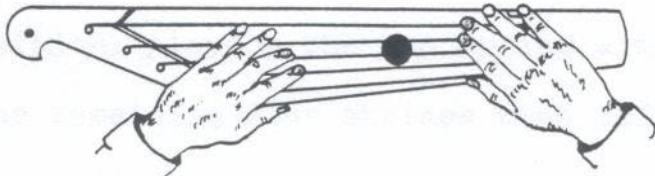
Fingering I:

- string 5 – right thumb
- 4 – left fore finger
- 3 – right fore finger
- 2 – left middle finger
- 1 – right middle finger



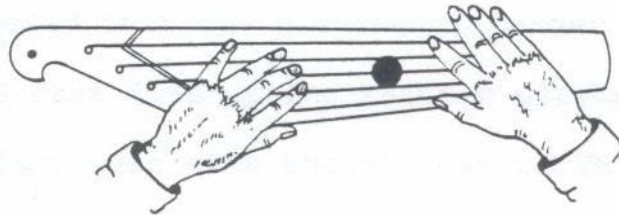
Fingering II:

- string 5 – right thumb
- 4 – left fore finger
- 3 – left middle finger
- 2 – right fore finger
- 1 – right middle finger



Fingering III:

- string 5 – right thumb
- 4 – left fore finger
- 3 – left middle finger
- 2 – left ring finger
- 1 – right fore finger



Illus. 36. Top: Four finger positions for playing the carved kantele shown by Väisänen 1928:X. Bottom: Three finger positions reproduced in Laitinen-Saha (1982, 1988):4.

basically like the first five notes of a diatonic scale. The middle string (#3), which held the third scale degree and determined major or minor in western music, was quite variable. It could be tuned either major or minor, or sometimes it was even tuned somewhere between, being a "neutral" third. The same basic tuning method was used on larger carved kanteles, except that the octave was also used, and the fourth, sixth and seventh scale degrees were variable. Heikki Laitinen, a scholar and current carved kantele player who completed a detailed study of Väisänen's transcriptions has said:

[Although we can easily understand in our own minds the old kantele players' scales by comparing them with major and minor, it is important to remember that major and minor were never in these players' consciousness, and it had not yet come even up to the beginning of this century. For this reason, as far as we know, the tuning of the scale degrees which produce major and minor (3rd, 6th and 7th degrees) was something which did not matter to the old players. Even though the pitches of these scale degrees moved, which happened quite often, in the players minds' the character of the music did not change] (Laitinen 1980a:46).

Väisänen transposed the actual pitch levels of his transcriptions to make them comparable and so that they would fit well on the G staff, so the majority of the pieces are written with g' as the pitch center. He mentions that the actual pitch center was usually closest to d' (1928:LX).

Improvisation was another significant aspect of the carved kantele playing. It was not enough simply to pluck out a melody on the instrument. A good player had to "blend in" additional sounds well. It could almost be said that at no time was a single string played alone, there had to always be some other string played along with it. Rather than a simple melodic style, carved kantele playing featured a complex interweaving of sounds. According to Heikki Laitinen, the old carved kantele players probably did not think in terms of melody and accompaniment. Playing in the together position automatically produced a type of music where "melody" and "accompaniment" blended into such a whole that their separation would be almost impossible (1986). The challenge in the past, and still today, was to get the most out of a limited instrument. Each time a piece was performed, it was a little different. This variability added variety and interest to the playing. Carved kantele playing was an act of creating something new each time out of something familiar.

Two additional playing styles were mentioned by Väisänen. The first employs the so-called covering technique and was seen in Antti Rantonen's playing. Sometimes Rantonen would play accompaniment on a five string kantele by covering two or more strings with the fingers of his left hand, while strumming the instrument with his right forefinger or occasionally a plectrum. The strings left uncovered would ring together in a chord. Between the strums, Rantonen could also pluck strings with the fingers of his left hand.

The second style of playing Väisänen saw as a new style, encroaching on the older style. The new style of playing used the apart position, where the right-hand plays melodies and the left hand plays bass and accompaniment. The hands were kept apart because each hand had a separate role, in a different range of the instrument. This style of playing is almost impossible to use on a five string kantele but is quite possible if the number of strings is

increased to the point of having a sufficient range for descant and bass. Some carved kanteles had a great enough range, but the apart position did not become a significant aspect of kantele playing until the advent of the box kantele. At the time of Väisänen's research, the box kantele was already well established in Ostrobothnia. Undoubtedly the box kantele with its apart position playing style influenced to some degree those players still playing carved kanteles. Some of Väisänen's informants could play in either position.

The apart position arose as a result of western folk music influence. The new style of music, which had a separate melody and accompaniment, came to Finland sometime during the eighteenth century. This new music from Western Europe also brought with it new musical instruments, the most important being the violin and perhaps the next most important the accordion. The music played on these new instruments was also adopted for use on the kantele. Folk styles of playing using the apart position gradually took hold and replaced the previous carved kantele playing style.

Väisänen arranged his collection of kantele melodies into improvisations, rune melodies, songs, and dances. He further broke down these categories by the meter in which the pieces were performed and whether they are in the together or apart positions. The improvised pieces were of two varieties: those pieces used to tune the instrument, or to check the tuning, and those which were imitations of church bells. The rune melodies are not those to which Kalevala rune singing was performed; they are merely those which Väisänen felt were related to Kalevala rune melodies. The song and dance sections contain a large number of Russian pieces. This is understandable considering the area in which Väisänen was collecting and considering the Russian surnames of many of Väisänen's informants. Particularly common among the dances is the ripatska (also called ribatska, rissakka, tripatska and brisahka), a fast dance in double time, and the maanitus a dance closely related to the ripatska. Väisänen's collection also contains more typically Western European dances, such as polkas, waltzes, mazurkas and polskas (a Polish dance in three beats, quite common around the Baltic). The largest portion of the collection are dances, so it may be assumed that at the time Väisänen did his fieldwork, the carved kantele was primarily a dance instrument.

In the early decades of this century, carved kantele playing came very near extinction in Finland, but it never died out completely. There has always been someone in Finland who played carved kanteles, such as Antti Rantonen and his niece Ilona Porma from Haapavesi. Nevertheless, carved kantele playing became a rare phenomenon, in part because the instrument lacked the resources for playing art music. As the music culture changed, so did the structure and use of the kantele.

In recent years, however, the carved kantele has had a very strong revival in Finland. Today there are literally hundreds of five-string kantele players and the number of players is increasing all the time. How has such a drastic turnabout taken place? One person who has had a significant impact on this revival is Martti Pokela.¹⁴

¹⁴The information on Martti Pokela comes from my interviews with him in March and November of 1983 and the published interviews he had with Hannu Saha (Pokela 1982b) and Ismo Sopenen (Pokela 1984a).

Martti Pokela's Five-String Kantele Playing

Martti Pokela was born January 23, 1924, not far from Haapavesi, where kantele building and playing was a thriving tradition. He was born into a musical family, which was active in the musical life of the community. Martti's father built a twenty-nine string, left-handed kantele, which became Martti's first kantele. He learned to play it at quite a young age, remembering his first playing experience at perhaps the age of six or seven. He learned from his father and later from Anni Kääriäinen, his father's cousin. Martti had an uncle who played fiddle, so he also learned to play violin and read music.

Martti graduated from compulsory school at the height of the Second World War and served in the Finnish army. After the War he decided to study agronomy at Helsinki University, moving to Helsinki in 1945, and becoming very involved in the musical life of the university fraternities. At the time, Martti was living with his cousin, Jorma Tolonen, a guitar player who accompanied singers. Martti also began playing the guitar and, with his cousin and a third guitar player, Aapeli Vuoristo, formed a singing group called Hilpeat trubaduurit [The Merry Troubadours]. They performed almost exclusively at fraternity activities.

During the university years, Martti also met his wife-to-be, Marjatta Nikula. She sang songs similar to those of Martti and had even composed some songs. They were married in 1948, soon after she had graduated from the Athenium Art College. In 1949 the Hilpeat trubaduurit got a chance to audition for Finnish radio, but for some reason had to cancel. In their place went Martti and Marjatta Pokela, each playing guitars and singing. That first radio performance was in October or November of 1949. After that, they were invited back to do a Christmas program and soon they became a regular feature on Finnish radio called "Folksongs and Folk Ballads performed by Marjatta and Martti Pokela, playing Guitars." They became quite successful and well-known performers in Finland, in 1952 receiving the radio's most popular performers' award. They began touring widely giving evening concerts, in which they wore black formal wear. In spite of their popular success, they were criticized because they accompanied Finnish folk songs with guitars.

In the early 1950s, Martti Pokela became acquainted with the five-string kanteles made by Armas J. Koivisto for Fazer Music Store in Helsinki. This type of kantele fascinated Martti, particularly because as a boy in Haapavesi he had seen the same type of kantele played by Antti Rantonen. Martti wanted to see what kind of possibilities the instrument had, so he began to experiment and teach himself to play. He used those things he could remember from Rantonen's playing and then tried to develop the style further. In a relatively short period of time, he became a master five-string kantele player. He developed a virtuoso playing technique by adopting a free fingering which would allow the playing of very rapid and complex passages. He also developed the use of harmonics, by pressing the node of the string with the inside of his thumb, plucking with his forefinger and quickly lifting the thumb. He made his first radio programs with the five-string kantele late in 1952 or early in 1953.

The five-string kantele also proved to be a fine instrument for accompaniment. There began to be a gradual change in the Marjatta-Martti duo from guitars to kanteles, and from formal wear to folk costumes. A significant turning point came in 1954, when Marjatta and

Martti went to Belgium to play in a Finnish Festival. At that time the five-string kantele became an important part of their performances. As Martti said to me:

[In 1954 we took a trip to Belgium ... and we took the five-string kantele along. We arranged a program where Marjatta accompanied and I played solos and we sang to the accompaniment of a five-string kantele. I took along the kantele because a critic chided me since I sang Finnish folk songs with guitar accompaniment. It was a pretty radical fuss at that time. So I took along the most traditional of Finnish instruments. I also took along the large kantele, which is a real tradition for me since I have played it from the time my father made one for me ... We also had violin, accordion, guitars and other instruments along. Of course, the kantele was probably the most unusual and interesting of these instruments. Those songs we could not do with kantele accompaniment, we did with guitar accompaniment] (Pokela 1983b).

Martti believes that people were not used to hearing this type of music from the concert stage. It was truly a unique thing at the time and perhaps people were a little curious. The Pokelas continued to be popular, but now as kantele players clad in folk costumes. In the early sixties, the Pokelas added their daughter Eeva-Leena to the family group. They continued to tour Finland and the rest of Europe and also performed on radio and television up to the early seventies when, according to Martti, they tired of the performing life. The group recorded several records during the sixties.¹⁵ Eeva-Leena became a very accomplished kantele player and musician. Today she is a lecturer in music theory and composition at the Sibelius Academy.

Although it came at a late stage in his development as a performer, Martti Pokela's five-string kantele playing still had its roots in Haapavesi, going back to Antti Rantonen. As Martti explained in an interview with me:

[...I had heard [Antti Rantonen] play five-string kantele from the time I was very young. ... his five-string playing interested me the most since I heard so much of the large kantele at home and with relatives. This five-string kantele [playing] stayed with me as a mental picture. It was a kind of learning; symbolic, but without the instrument. I always thought about playing it and the first time I played it was when I got my own [five-string] kantele. I never played Uncle Antti's kantele. But when Antti was already very ill, half a year before he died, he was in Oulainen and I went to visit him. I had already started playing in Helsinki, so I asked if he would still play for me ... and he took his old kantele and played ... He went through his repertoire. I listened very carefully and memorized certain things, but I didn't play his kantele and

¹⁵These records include Kantele (Sävel SÄLP 623, 1969); Kantele of Finland (Scandia SLP 531, 1969); Keskiyön auringon lauluja (Finnlevy SFLP 8500, 1969); and Karjalan Kunnaila -- lauluja Karjalasta (Sävel SÄLP 703, 1972).

also my own wasn't along. But one time he did hear my playing and was surprised because I played harmonics and so on. I went through his traditional playing in my mind and developed it somewhat from there. I had a very good relationship with Antti, and he was happy that I continued playing [the five-string kantele]] (Pokela 1983b).

It can be said then that Martti was a passive tradition bearer of the Haapavesi five-string kantele playing style, who did not become an active player until it was expedient. He was not content playing in the old style; he had to develop it further to suit his own needs and gain the maximum potential from the instrument.

[...I experimented and played Uncle Antti's pieces in the traditional style at first. 'Brush, Sock in the Shoe,' 'the Bear Feast Polka' and those, I went completely through them in the traditional style. Anyway, I thought that certainly I have to get more shadings [gradations or subtleties]. Then those harmonics and [other] techniques just came, where I use more of the right hand] ...

[It could perhaps seem that these harmonics and so-forth are taken a little bit too far, but I say that certainly you have to get as much as possible out of the instrument....and I have gone through all these traditional styles. For example, with Teppo Repo I went through all these [styles] played in the lap, accompaniments, and those kinds of things] (Saha 1982:27-28).

Martti Pokela ensured that five-string kantele playing was widely heard again in Finland, not as a living part of everyday life, but on radio, television, and sound recordings. Still the five-string kantele was not a popular instrument, since it was not widely played. Martti was very well aware of this fact, so shortly after ending his full-time performing career he began another great task: that of promoting kantele playing. He joined forces with Finland's Professor of Folk Music, Erkki Ala-Könni, who was interested in promoting all Finnish folk music. They both felt that the best way to begin promoting Finnish folk music was to promote the carved kantele, the "most Finnish of all musical instruments" and resurrected an idea which had been proposed by Elias Lönnrot more than a century earlier: That the kantele should be used as a school instrument in Finland.

In some other European countries, small psalteries were also used. For example, in Germany they used Tischharfe [Table harps] which were very close to the kantele in structure. Ala-Könni argued that perhaps the kantele was known and favored more in foreign countries than in Finland and began an active campaign to have the kantele recognized in the Finnish school curriculum.

Pokela and Ala-Könni commissioned Oiva Heikkilä to develop the instruments, then they published a method book for these instruments called Pienoiskanteleen opas [Small Kantele Guide] (1971); the first book since Väisänen's (1928a) dealing with carved kantele playing. It contained a total of forty-four pieces; eighteen for five-string kantele and twenty-six for nine-string kantele. They differed from Väisänen's book in that they are

prescriptive, not descriptive, and were meant to be used as material for learning and performance. The book began with a short history of the kantele and its playing styles, followed by a description of the style developed by Pokela.



Illus. 37. Martti Pokela playing carved kanteles for a recording session at Radio Finland, 1983.

For the five-string kantele, basic directions are given, such as placing the instrument horizontally on a table or in the lap, with the shortest string closest to the player. The basic finger position is the same as the first one given by Väisänen, but there is no mention that the same finger should always play the same string. In fact, some of the pieces would be impossible to perform if this rule were strictly followed.¹⁶ The kantele is tuned in perfect

¹⁶When Martti Pokela adapted free fingering and other technical advances to five-string kantele playing, the old support system of the hands holding the instrument securely in the lap or on a table began to break down. Pokela tried various means of securing the kantele to the table on which it was played. The best of these methods proved to be a type of adhesive clay, sinitarra, which was applied to the four corners on the bottom of the kantele. When a kantele was attached to a table in this way, the table acted as a resonator and the sound was amplified. Many players still use this method of securing the carved kantele.

fourths and fifths, with a major or minor third in the middle. The lowest string can be anywhere from d' to g'.

Pokela shows that there are ten possible pitches and three possible timbres which can be obtained on a five-string kantele. The first five pitches are the basic open strings. Then for each of the strings there is a harmonic called huiluääni [literally "flute sound"] which is produced by touching the middle of the string lightly with the left forefinger, then plucking the string with the right forefinger. The third type of sound possible with each of the strings is another type of harmonic produced by touching the middle of the string with the inside edge of the right thumb, plucking the string with the right forefinger and quickly lifting the thumb. Pokela calls this the kaksois [double] sound. The flute sound is notated with a single diamond and the double sound with a double diamond over the pitch which is sounding. Both of these sound one octave above the open string pitch.

Little is mentioned about improvisation or adding additional sounds to the melodies, although these are evident from recordings of Pokela's own performances of the pieces. For some of the pieces there are notated accompaniments and some feature accompaniment by a second five-string kantele. The covering technique is also mentioned, where two strings are covered by fore and middle fingers of the left hand while the right forefinger strums the strings, making tonic or dominant chords for accompaniment. A backstroke strumming is also mentioned, where the nail of the right forefinger strums the strings backwards, away from the player, producing a brighter timbre.

The playing position of the nine-string school kantele has the longest string closest to the player. This change from the traditional playing position was done with the idea that students may eventually wish to study art music playing which would require the new position. The finger arrangement again follows Väisänen's descriptions and is basically in the together position. It is mentioned that perhaps the tuning should be done to a piano, harmonium, accordion or other tempered keyboard instrument, because it will not necessarily play well with these instruments in perfect tuning. The special harmonic sounds are not mentioned for this instrument and the techniques are not notated in any of the selections for this instrument.

The Carved Kantele as a School Instrument

The publication of Pienoiskanteleen opas marked the beginning of a renaissance in carved kantele playing, but the movement was slow to gain momentum. Although the Finnish Government provided a cultural grant to aid the publication of the playing guide, the kantele was still not recognized as a school instrument. Perhaps the resistance to the kantele then, as now, has come from schoolteachers, students and administrators who feel unsure about its use.

In discussions with recent secondary school graduates, I found surprising resistance to the carved kantele. They mentioned that the kantele is difficult to tune properly and, if there are many students in a class, getting all of the instruments in tune could take the major portion of the period. This is not a problem with the recorder or bells. Many had the perception that the kantele was severely limited in what it could play and that if one wanted to play really well, like Martti Pokela, it was too difficult. Also, the kantele was seen as being a relatively

expensive instrument compared to the recorder. Finally, the kantele's symbolic value as the national instrument of Finland seemed to be a detriment in some cases. It was seen as being "old" and "Väinämöinen's instrument," which had little to do with life in our day and age. One student even told me, "Other countries do not use their 'national' instruments in schools. Why should we?" Similar prejudices had to be overcome among teachers and administrators.

In spite of these prejudices, the carved kantele playing movement gained real momentum in the late 1970s when, for the first time, students could study folk music at the Sibelius Academy. All music education students take courses in Finnish folk music, so that when they go anywhere in the country to teach, they will be familiar with these Finnish styles of music. At the very foundation of the program is learning to play and to teach carved kantele playing. The influence of the Sibelius Academy program is beginning to be felt around the country as young music teachers begin using the carved kantele in their teaching.



Illus. 38. Anu Rummukainen teaching a five-string kantele class at the 1983 Lahti Kantele Camp.

The carved kantele movement has also been helped by the Folk Music Institute and annual Folk Music Festival at Kaustinen. The Festival had the kantele as its theme in 1975 and the Folk Music Institute's journal, Kansanmusiikki, published a special kantele issue. In 1982, they published a special issue on the five-string kantele with the express purpose of providing information, telling about past progress and setting goals for the future. In the main article, Heikki Laitinen makes these goals clear:

[The five-string kantele into every school! Why? Because every Finn already in early childhood should be able to see, hear and touch a Finnish instrument, that the knowledge and identification of this instrument would become a part of every Finn's general education, an instrument which for hundreds of years was his ancestors' only instrument. ...

The five-string kantele as a school instrument! Why? Because it is an instrument which is fun, versatile, easy to play, inspires creativity, gets the imagination going, forces you to invent melodies, develops your harmonic sense, frees rhythms, can be tuned in many ways, can be played in dozens of ways, which everyone should learn ... [to] enrich music learning in [our] schools ... [as] an instrument among other instruments] (Laitinen 1982:9).

An instructional guide called "Viisikielinen kantele soitto-opas" [A Guide to Five-String Kantele Playing] by Heikki Laitinen and Hannu Saha (1982) was originally published as a part of the five-string kantele issue of Kansanmusiikki.¹⁷ This guide has since become the standard starting point for teaching the five-string kantele in schools throughout Finland. It tries, as much as possible, to teach the old Karelian five-string playing style as described by Väisänen in his book of 1928. At the same time it does not prescribe what the ideal of the style should be; it teaches that each student should use improvisation and experimentation to develop their own unique styles of playing.

The guide reproduces the basic rules, tunings, and finger positions mentioned by Väisänen. The kantele is played in a horizontal position with the shortest string closest to the player and each string has its own finger. The students decide which finger positions and playing positions suit them best. They begin by playing scales and simple children's songs. The guide goes on to teach the very important additional concepts of polyphony and improvisation.

[In five string kantele playing it is characteristic that there be **polyphony** [**multiple sounds**] which come by plucking other strings at the same time. It can therefore be said that in pieces there are melodic pitches as well as accompanying pitches. In addition, this polyphony appears [because], during the playing time generally the strings **are not dampened**.] (Laitinen-Saha 1982:13).

The students practice this polyphony by plucking the highest pitched string together with each note of the scales and melodies they have learned thus far. All the exercises begin with a very slow tempo and gradually work up to fast tempos, so that the playing becomes automatic. The students are encouraged to try plucking some of the other strings together with the familiar melodies and to do this by experimentation and improvisation. They are also encouraged to make rhythmic changes and to add other notes to the basic melodies. The guide teaches improvisation as a fundamental aspect of five-string kantele playing.

[Also typical of five-string playing is a creative playing manner, [where] the same piece is not played exactly the same way twice, rather it receives small (or even large) rhythmic or melodic changes ...

¹⁷The Folk Music Institute has also published a playing guide for ten-string carved kanteles (Saha 1986).

Improvisational playing, or the creative playing manner, is difficult and it requires practice for a musical style. A large portion of ancient Finnish kantele music is founded upon creation and variation. The five-string kantele is an outstanding medium to practice the creative playing manner, because the usable pitches and harmonic foundation are sufficiently limited] (ibid:13-14).

The students participate in a kind of improvisational round, where the entire group plays a melody in unison, then in between the playing of the melody, each person in turn tries two measures of solo free improvisation.

The guide also teaches accompaniment with the five-string kantele, using the covering technique to get the dominant and tonic chords. The tonic is a full, three part chord produced by covering the second and fourth strings with the fore and middle fingers of the left hand, then strumming with the forefinger of the right hand. A backward strum using the fingernail will give a brighter tone. The dominant (minus the third) is obtained by moving the fore and middle fingers to the first and third strings. Once the students learn to produce chords, they learn to improvise over a harmonic foundation of I I V I. The subdominant is produced by covering the second, third and fifth string and allowing the first and fourth to ring.

The guide contains transcriptions of eight practice pieces, four in major and four in minor, in addition to the familiar children's melodies and scales. It also presents the well-known "Kalevala melody," and two short pieces for tuning and testing the tuning of the kantele.

The guide ends by describing many other possibilities, such as different tunings, harmonics, rapid playing using the fore fingers (as developed by Martti Pokela), using a plectrum, bow, or slide (like a pill bottle), and attaching a bridge to the center of the instrument just under string level. By pressing down on the string, half of it will sound an octave higher. It adds this statement at the end: "Assignment: Invent new playing methods and techniques! Creating the new is just as important as preserving the old!"

4.2 FOLK STYLES OF KANTELE PLAYING

The kantele was originally a folk music instrument and in spite of the great changes which have taken place in the role of the kantele in the Finnish music culture, it is still a folk music instrument in many parts of Finland today. Not surprisingly, the playing of folk music on the kantele is primarily a rural phenomenon. It is also not surprising that there are many different styles of playing folk music on the kantele. In a folk environment, where music is learned by listening and imitating, almost every person has created his own unique style of playing.

The old playing practices of Karelia, with the hands in the together position, did not survive in Finland as an unbroken tradition. It is generally practiced today in a revival movement of the oldest known playing styles. Most folk music performers on the kantele play in the apart position, which means that one hand, usually the right, plays melodies on the upper strings, while the other hand plays accompaniment on the lower strings. The type of music which is played on kanteles may also be heard performed by fiddles, accordions or other folk instruments. Occasionally, the kantele is used in ensembles with other folk instruments, but usually it is played as a solo instrument or in ensembles with other kanteles. This is perhaps because the kantele produces a complete texture without the aide of any other instrument. It is also due to the limitations of the kantele. Among folk musicians, the kantele is strictly a diatonic instrument, so it can not be used very effectively for accompaniment pieces which change key, as many fiddle pieces do.

Although each folk kantele player has his own style, there are areas of the country where strong similarities among individual players can be found, making up a style area. Finnish scholars recognize three such style areas: The Perho River Valley, Saarijärvi and Haapavesi. In addition to these areas, there are dozens of individual folk kantele players scattered throughout the country.

THE PERHO RIVER VALLEY STYLE

The Perho River Valley is located in central Ostrobothnia, some five hundred kilometers northwest of Helsinki, in an area noted for its agriculture, fur cultivation and horse breeding. The Perho River Valley is a very active place for folk music, especially in and around the three villages of Kaustinen, Veteli and Halsua. The folk music traditions have flourished there for decades, especially in association with wedding festivities. The so-called "Crown Wedding" had ceremonial music and dancing, called the purppuri, as an essential part. In addition, these weddings included all kinds of additional music and dancing, which often lasted for days. The music was performed by a special pelimanni ensemble. Pelimanni, taken from the Swedish spelman, is like the German spielmann meaning a "playing man" or fiddler. The term is used in Finland to identify most instrumental folk musicians, except kantele players, even though there are many kantele players who have the title of mestaripelimanni, meaning "master folk musician." The basic pelimanni ensemble today consists of fiddles, string bass and a foot pumped harmonium.

The practice of folk music in the area has also been stimulated by other events. From the mid 1950s, a pelimanni ensemble from Kaustinen, the Purpuripelimannit, led by the

master fiddler Konsta Jylhä, made some recordings for Finnish radio. Their popularity steadily increased and by the late 1960s were well known all around Finland and were touring extensively. The popularity of the group made the Perho River Valley better known for its folk music. Largely through the efforts of Viljo S. Määttä, a producer for the radio of the area, a folk music festival was established at Kaustinen in 1968. In a few years the Festival grew to large proportions, attracting hundreds of performers and thousands of spectators from around the world. A Folk Music Institute was established at Kaustinen in 1974, with its primary purpose the study and promotion of Finnish folk music, but particularly folk music of the Perho River Valley. All of these things stimulated the growth of folk music in the valley. Previously, folk music was a widely practiced hobby, a normal part of everyday life. After the Festival and Folk Music Institute became established, folk musicians received a place to perform and be recognized. Each year the Festival names several mestaripelimannit who have come from all parts of the country.

The kantele has also been an important part of the folk music life of the Perho River Valley. It has a long history which has been well documented. The most significant works of historical research have been articles by Erkki Ala-Könni (1961; 1963), Eino Tulikari (1976) and Heikki Laitinen (1975; 1980b).

Historical Perho River Valley Kantele Players

Kreeta Haapasalo (b. approximately 1813, d. 1893) was the most famous kantele player of the area. She was believed to have learned carved kantele playing as a child from a neighbor, Juho Vähätalo, and probably from others (Ala-Könni 1961, 1986:90; 1963:301). Later, she played box kanteles and also sang to her own kantele accompaniment. Haapasalo became widely known around Finland because of the many concert tours she took throughout her life. It is said that she played the kantele with a beautiful sound and she had a natural singing voice. She originally performed for family and friends, and from their encouragement began her first concert trips to Kokkola, the largest town of the region, in the early 1850s. It is also believed that she began her performing career to help support her children, since her husband was unable to secure steady employment and perhaps also because of her desire to perform (Ala-Könni 1963:305). At the height of her career she received a very good income from her concert tours (idem 1986:85).

Haapasalo performed for the first time in Helsinki in 1853, where the great literary figure Zachris Topelius heard her perform. Topelius wrote about her in his Swedish language newspaper Helsingfors Tidningar and she soon became a well-known figure among educated Finns. The newspapers of the time followed Kreeta's concert tours, which went as far away as Stockholm and St. Petersburg. The articles mentioned where and when she had traveled and pictured her "joys and sorrows" (Laitinen 1980b:3). Erkki Ala-Könni has used these articles to document her concerts between 1851 and 1890 (Ala-Könni 1963:306; 1986:85-6).

Haapasalo's enormous success was largely the result of living during a time of great nationalism. The Kalevala, folk runes and the kantele had become important symbols of Finnish nationalism and what better way could be found to promote these symbols than to

have a living kantele artist perform. Heikki Laitinen (1980b) has written how Haapasalo became a Kansallislaulajatar [national female folk singer], meaning that she also became a symbol of nationalism. She was a peasant who performed in the halls of the upper classes. Her songs and music were no longer the ancient rune singing, but western folk songs, which were much closer to the musical aesthetics of the upper classes. At the same time, she was of the rural, peasant class in Finland, which was romanticized by Finnish Nationalists.

One unusual aspect was that Haapasalo had a successful concert career in spite of being a woman and a peasant. It was very unusual at the time for women to travel, especially the great distances necessary for concert life. Also, between her concert tours, she gave birth to eleven children. Her daughter, Kreeta-Sofia, became a fine kantele player and accompanied her mother on later tours. Sofia married and lived in Varkaus (in the Savo region) where the entire family moved in 1873. After Sofia's husband died, she and her mother moved to Jyväskylä, where they held their final concerts. Also along at this time was Kreeta's great-niece, Susanna, nicknamed "Soitto-Sanna" [playing Sanna].

Haapasalo is credited with composing many pieces during her career, both texts and melodies. Her most famous piece, "My Beautiful Kantele", is in the style of a hymn and is still widely performed. The folk music collector, Ilmari Krohn, studied Haapasalo in her later years and transcribed some of her compositions. She died in Jyväskylä in 1893. It is perhaps a good indication of the quality of her performance that she remained a popular and sought-after performer for forty years.

Kreeta Haapasalo's niece, Priita Liisa Purola (1820-1893), was a well-known kantele player in Halsua. She also made concert tours, including one to Helsinki in 1859. Her daughters, Sanna and Kreeta, became fine kantele players. Sanna, the same one who played concerts with Kreeta Haapasalo in later years, married Jaakko Östermark, a well-known kantele builder. Sanna's playing was described as self-confident and rhythmic.

Sven Perander (1825-1902), also known by the surnames of Huntus or Jarvilä, was said to have played so much that he grew calluses on his fingers. He had a particularly good technique, and like Kreeta Haapasalo was considered a professional who traveled around giving concerts. He lived for a time in Central Finland, so he may have influenced the Saarijärvi kantele tradition. His repertoire was mostly dances and marches. He also sang while he played and is credited with composing pieces used by the community (Tulikari 1976:32-33).

Liisa [Virkkala] Juoperi (1819-1916) was thought to be a more artful and talented player than Kreeta Haapasalo and almost as good a singer. She also made concert tours. Her son, Juho Siltala (1852-1926), became a fine kantele player who, around the turn of the century, won a kantele playing competition in Turku and became one of the best known players of the valley. He played well to an old age, mostly songs in a major key and not as many fast (dance) pieces. Reino Siltala (1880-1942), son of Juho, played kantele from a young age, frequently with his father. He participated in various festivals and competitions in Southern Ostrobothnia, Vaasa, Ilmajoki and Isokyrö. He played mostly dances and marches when young, but mostly folk songs and hymns when older. He also is credited with composing dance pieces which have come into use by the community (ibid:33-35).

Eino Tulikari's Era

In the first decades of this century, the kantele was a featured instrument at celebrations and evening programs. The kantele was also used to accompany violins at dances and occasionally to accompany solo singing. In the 1910s, the Youth Leagues in Finland arranged many folk music competitions which included kantele sections. Around this time, three brothers, Oskar, Viljam and Eino, from the Tofferi family from Halsua became very significant kantele players, as did their cousin Matti Karvonen (1892-1944).

Oskar Tofferi (1891-1967) was a well-known player who traveled the valley playing for many dances and weddings. He won some local competitions. In 1921, there was a general competition in association with a song festival arranged by A. O. Väisänen. There were a total of sixty performers; the twelve finalists performed in the National Museum. Oskar won a first place medal, as did Antti Rantonen from Haapavesi. He was particularly noted for his technique, clarity and strength, which came because he had a good sense of rhythm, fast fingers and because he practiced profusely when he was younger.

Eino Tulikari (1905-1977) was the youngest of the Tofferi brothers. (He changed his name from Tofferi to Tulikari in 1935.) Eino began playing kantele as a boy and was largely self-taught using the numerous examples around him. He played at many celebrations, evening dances and competitions. He also learned to play the violin and would sometimes play kantele as solo or accompaniment, or sometimes play violin while being accompanied by someone else playing the kantele, frequently his cousin Matti Karvonen.

In 1925, Tulikari went to Helsinki to study violin and music theory at the Helsinki Music School. He also played kantele in Helsinki, for example, at a coffee house called "Helga". In the fall of 1926, he went to Jyväskylä Teachers College, from which he graduated in 1931. He played kantele frequently in Jyväskylä for various functions at the college and other celebrations in the area. Tulikari became an elementary school teacher by profession and lived in Jyväskylä for the rest of his life.

By the 1935 Centennial Celebration of the Kalevala, Tulikari's brothers had left for North America. A. O. Väisänen remembered the Tofferi brothers from the 1921 song festival, so Tulikari was asked to perform at the Kalevala festival and on Väisänen's radio program "A Half Hour of Folk Music". He performed both on the violin and kantele and was invited several times to return to the program. He also played at the Centennial Celebration of the New Kalevala in 1949, together with Väinö Hannikainen, Antti Rantonen and the Haapavesi Kantele Ensemble. During the 1930s, Tulikari played violin and kantele as a member of a Finnish music group which toured Germany and Hungary.

Tulikari was asked to judge some of the Youth Society Folk Music Competitions in the 1940s and from this came the idea to gather folk musicians together for a special course to help develop their performance skills. In 1949 such a course was arranged, with Tulikari as the teacher for both kantele and violin. It was the first course of its kind, a precursor to the folk music courses offered today all over Finland (Tulikari 1976:48-9). He also taught kantele and violin lessons privately.

Perhaps Tulikari's last private kantele student was an American, Daryl Gibb, who was living in Jyväskylä in the late 1960s as an exchange scholar. One day, Gibb happened to see a

kantele in a local music shop. He offered to buy it if the store owner could suggest a teacher. The owner mentioned that the master kantele player, Eino Tulikari, lived there in Jyväskylä. At first he was reluctant to take Gibb as a student, since he generally only taught children and his playing was a folk style and not the art style generally taught. Gibb persisted and promised to practice faithfully, so Tulikari agreed to teach him (Gibb 1986).

According to Gibb, Tulikari preserved most of the traditional aspects of the Perho River Valley style. He played and taught kantele with the shortest string closest to the player, believing that the kantele's sound was more bright and vibrant in this position.¹⁸ His basic timbre, hand positions and repertoire were unmistakably a part of the tradition.

Tulikari did not just continue the style he had learned as a boy; he actively tried to develop it by using more complex bass accompaniments and adding virtuoso ornaments based on the violin playing of the area. He used and taught finger damping, similar to that used by art style players, but did not use the damping board, although his kantele was equipped with one. He taught that not every pitch was damped, only those which would muddy the sound. The pitches which were part of the harmony at any given point were allowed to ring, which he believed gave life to the playing. He played a machine kantele which had levers to change the tuning of three different pitches up or down a half step in all octaves. His kantele was thicker than most played in the Perho River Valley because it had a double bottom. It was diatonic across the full five octaves and did not have the bass and contrabass short octaves used by other players (*ibid.*). Tulikari was noted as one of the finest players of the kantele in the Perho River Valley style. Many of the Valley's best kantele players still use Tulikari's playing as a measure of high technical achievement.

Elements of the Current Perho River Valley Style

Kanteles in the Perho River Valley are played with the shortest string closest to the player, the same way the old carved kanteles were played. The hands are placed in the apart position, with one hand playing melody and the other accompaniment. Usually the right hand plays melody and the left accompaniment, but there are some left-handed players who reverse this order. The kanteles are all right-handed instruments. The older box kanteles have been replaced by modern kanteles, but usually without tuning mechanisms.

Some players own several kanteles, which may be tuned to different keys, so when the key changes between pieces they can quickly switch to a kantele tuned to the proper key. Minor tuning of kanteles is usually done by raising the fifth scale degree a half step, going to the relative minor (for example, D major will be changed to B minor by adding an A sharp). Some players have taken to lowering the third and sixth scale degrees to produce the parallel minor (D major going to D minor by adding an F natural and B flat) (Tulikari 1976:51-52). The kanteles in the Perho River Valley are generally tuned with a bass and a contrabass short octave, covering the lowest six strings.

¹⁸According to Heikki Laitinen (1986), players mention many reasons for playing with the shortest strings closest, but one important reason is that the hands can lie relaxed on the kantele and the playing position is therefore comfortable.

The playing position of the hands is with the fingers generally perpendicular to the strings. The kantele is played with the hard tips of the fingers, the same part of the finger used in playing the violin, so the sound produced is quite strong and appropriate for dance accompaniment. Use of the fingernails is discouraged. The players do not "pull" or "pluck" the strings with the right hand, they merely "stroke" them by pressing down and letting them quickly release. These strokes are made towards the player and the players say they never make a backstroke with the nail. But sometimes, though very rarely, they do make a backstroke with the nail, perhaps to add variety to the timbre. Scale runs in the music are always ascending in pitch (because of the kantele's position) and players say that the finger slides or glides across the strings. The left hand occasionally plucks, with the fingers pulling and coming up off the strings.

The wrist of the right (melody) hand is placed on the board covering the hitch pins. On modern kanteles this is the damping board. Although most of the kanteles currently used in the Perho River Valley have a completely developed damping board, including the padded, felt strip underneath, the board's normal function is stopped by a screw. The wrist of the left (accompanying) hand is placed across the tuning pins and tuning pin protecting board.

The right hand plays the melody with the fore finger and usually the middle finger adds an accompanying pitch a third lower. Sometimes the middle finger will carry the melody, in which case the fore finger adds a softer accompanying pitch a third higher. In fast pieces, the thumb of the right hand is brought down against the strings, but only to measure where the fore and middle fingers are going to play. The left hand plays an ostinato or chordal accompaniment and bass notes, which can be with three or four fingers, usually thumb, fore and middle fingers, or with the ring finger added.

The bass and accompaniment are not mechanical. They can be varied at will, adding bass and contrabass notes as the player feels appropriate, which produces a flexible bass rhythm. The accompaniment generally uses only the tonic, dominant and subdominant chords in root position, but this has been expanded with experimentation. For example, Eino Tulikari used inversions, occasionally added the seventh, and experimented with other chords.

In slow pieces, which are usually folk songs or hymns, the thumb and ring finger of the right hand may be added to produce an arpeggio accompaniment. The melody is usually played in octaves with the right thumb and fore finger. These pieces may be performed in a much freer rhythm than dance pieces and may have some dynamic contrasts.

There is no overall damping done in this style of playing. Although found on most kanteles, the damping board is not used, and the strings are allowed to decay by themselves. Due to several factors, there is less muddiness than one would expect. Plucking with the hard part of the fingertips produces a much sharper and louder attack. The players believe that playing from the short side also adds to a bright and vibrant attack, well suited for dance music. The kanteles played in the Perho River Valley are typically lighter, thinner and have a brighter timbre and softer decay. Also, it may be true that the older players do use finger damping, but instinctively, especially in descending figurations where the finger is brought down against the string just played. Those players who have taught this style, such as Eino Tulikari and Jaakko Laasanen, have had to codify and explain it in detail and they teach finger damping as an element of the style. In certain pieces the strings are completely dampened with the hands, for example to decorate a polka's or mazurka's rhythm.

The repertoire of the Perho River Valley kantele players may be divided into two large categories: dance pieces and song pieces. The dance pieces are all characterized by a fast or driving rhythm and they follow closely dances played by the fiddle players of the valley. Many of the dance pieces played on the kantele are adapted fiddle pieces. The fiddle also brought a greater use of technique, as kantele players began using fiddle ornaments in their playing. It should be noted that many of the best kantele players were also fine fiddlers. A given sequence of dances are played as a part of the "Crown Wedding" festivities, which are an important part of the kantele players' repertoire in the valley. The song pieces are characterized by a slow tempo and are either folk songs or spiritual songs (hymns). Many of the better kantele players have composed pieces for the kantele, which have also come into the traditional repertoire of the valley.

The playing contexts and ensembles have changed over the years. The kantele was originally a personal instrument for home use, going all the way back to the days of the carved kantele. Only later did it become a public instrument used in concerts, celebrations, competitions and dances. The kantele was used to accompany violins, but it was not the most ideal instrument because it had to be retuned between pieces every time there was a change in key, and it was impossible to change keys during a piece. Kanteles were also played together in ensembles at concerts and festivals. These ensembles had a variable number of players, but two or three kanteles was typical. Usually, at least one player would play only the accompaniment.

As with other folk traditions, there is a great deal of variation among individuals in specific aspects of their playing styles. This variation has been preserved better among kantele players than among fiddle players of the area, because fiddle players have come to rely more on written music (Saha 1985). This variation takes place in the patterns used for accompaniment and in ornamentation which is added to the melody. Also, each individual may have several accompanying patterns which are used with different pieces. A comparison of these patterns may be seen in the transcriptions made by Laitinen (1975) and Saha (1985).

The image displays four staves of musical notation, each representing a different kantele accompaniment pattern. The first two staves are in bass clef with a key signature of one sharp (F#). The first staff is labeled "KARYONEN" and has a Roman numeral "I" above it. The second staff is labeled "ALASPÄÄT" and has a Roman numeral "V" above it. The third staff is also in bass clef with a key signature of one sharp and is labeled "VENETJOKI". The fourth staff is in treble clef with a key signature of one sharp and is labeled "TULIKARI". Each staff shows a sequence of notes and rests, with some notes marked with small circles or dots, likely indicating fingerings or specific playing techniques.

Illus. 39. Kantele accompaniment patterns used by four different players from the Perho River Valley, from Saha 1985:2.

Viljo Karvonen

Viljo Karvonen (b. 1906) is considered one of the finest living kantele players of the Perho River Valley style. He was a significant informant in my own fieldwork in 1983 and had also been studied in detail by Heikki Laitinen (1975) and Hannu Saha (1985). Karvonen was born in Halsua, where he still lives today. He was a bus driver who drove a route between Halsua and Kokkola for nearly forty years until his retirement. He described the beginning of his kantele playing as follows:

[My father played kantele with the neighbor and I became interested in the instrument because it had such a beautiful sound, but it was difficult to get one into my hands. I was then about ten years old. Dad put the kantele up on the wall so high that a young boy couldn't get it down from there. But boys always find a way and I got the kantele from the wall and started playing. It was difficult because Dad didn't want to teach me. So, I took [examples] from Dad's playing half in secret. Then I was able to begin a little ... Also, I received some instruction from Eino Tulikari on the side] (Karvonen 1983).

Karvonen began playing violin around the age of sixteen and was in a violin ensemble directed by the cantor in Halsua, where he learned to read music. He was in the ensemble only a year and after that never used written music again, forgetting what he had learned. Later, he hurt his fingers, so he could not play violin easily any more and his main instrument became the kantele. In addition to his father and Eino Tulikari, undoubtedly his cousin Matti Karvonen also had an influence on his playing style and repertoire (Laitinen 1975:18).

As with several other current folk kantele players I interviewed, Karvonen stopped playing for a time and then later began again.

[I was around the age of fourteen when I built my first kantele. The outside wasn't such tidy work, but at any rate it still played. Then I could use it freely because it was my own instrument. I played on it until I was twenty years old, when the time came that I left my playing alone because I started [driving] cars. We bought a delivery van and I liked to drive it, [so] I let my playing go for a time...

Only after the war did my playing begin to be restored. There were these local playing competitions and then came the Youth League competitions in Helsinki. I won a kantele playing competition [in 1955] and this gave new support to my playing. I developed it so that I received the Master Folk Musician's title in kantele playing at the [1971] Kaustinen Festival ... and this way my playing has developed] (Karvonen 1983).

Karvonen described the general aspects of his playing style by comparing them with the art style of playing, noting that he plays with the shortest strings closest and in the art style

they play with the other way around, because they read from music. He also noted that in his style of playing the damping board is not used.



Illus. 40. Viljo Karvonen at his home in Halsua, 1983.

With his right hand, Karvonen plays the melody and a third, either above or below the melody. Usually he plays the melody with his forefinger and adds a third below with his middle finger, but if he plays the melody with his middle finger, he will add the third above, but not quite as loudly. When playing slow pieces such as hymns, he will use his right thumb to double the melody an octave higher.

Karvonen uses his left thumb, fore- and middle fingers for accompaniment and sometimes uses his left ring finger to play a contrabass note. He mentioned that he does not always play the bass figures exactly the same way, which gives more color to the accompaniment. He also remarked how small rhythmic changes in the flow of the melody and accompaniment bring "life" to his playing.

Karvonen has performed with many of the other folk musicians of the area. Long ago, he accompanied fiddle players at dances.

[I have played at dances, accompanying violins with the kantele and when there were as many as four violins playing with kantele accompaniment. Listen, I had to change the tunings between various pieces, since they weren't all in the same key. I was there changing tunings in the middle of everything, so it would fit with certain pieces. It was very difficult and also for my fingers. The shortest dance was at least an hour and I was playing kantele the whole time ... [Later] there were no dances at all. The kantele ensemble played at [social] functions, celebrations and then at festivals...] (Karvonen 1983).

In the 1960s, Karvonen was a member of a group made up of twelve kantele players. In more recent years, he has played in a kantele trio with his friends Onni Kauppinen and Niilo Meriläinen. On occasion, he has also accompanied the master fiddler Otto Hottokainen.

Because it was necessary when playing in groups, Karvonen learned to tune his kantele quickly and accurately. He tunes the tonic, dominant and subdominant strings in octaves, then the rest of the strings by playing scales. He checks the tuning by playing triads. His kanteles generally have six lowered bass strings, tuned to the tonic, dominant and subdominant in descending order of pitch. His favorite kantele, one made by the master builder Leander Laasanen, was tuned close to D major in my recordings. The tuning of Viljo Karvonen's kantele has been studied in depth by Ilkka Kolehmainen (1983).

Jaakko and Tytti-Leena Laasanen

The Perho River Valley style is not confined just to the Valley. It may also be found to some extent in areas north and south of the Valley and also in a very lively kantele movement in and around the city of Iisalmi in the East-Central Finnish province of Savo. Jaakko Laasanen (b. 1930) is the son of Leander Laasanen, the famous kantele builder from Veteli. Jaakko moved to Iisalmi to direct the organized youth activities sponsored by the town. His influence had been great in teaching the Perho River Valley style. He organized a kantele group during the seventies called Jaakon Kanteletytöt [Jaakko's Kantele Girls] and began a "Traditional Style Kantele Camp." At the 1983 camp I met and interviewed Jaakko and his daughter Tytti-Leena as they taught approximately twenty students.

Jaakko learned his playing from his father, who was the first in their family to begin playing the kantele. A neighbor, who was a shoe maker and kantele player, helped spark his father's interest, which continued to be sustained by his work as a kantele builder. All seven of Leander Laasanen's children learned to play the kantele.

As with all other Perho River Valley players, Jaakko learned to play the kantele with the short string closest. He explained that this is because it is better for playing fast pieces. The hand positions and use of the fingers is basically the same as other players. Jaakko plays and teaches the use of finger damping in the same way as Eino Tulikari and art style players, but does not use the damping board. He plays ascending scale runs with the right forefinger and trails his middle finger one string behind to dampen only those pitches which would muddy the sound. He plays descending figurations by "walking" the fore- and middle fingers, damping the unwanted pitches by bringing the finger down against the previously played string.

Jaakko mentioned that perhaps the main difference in his playing is the use of his left ring finger always to add contrabass notes to the accompaniment. Rather than being basically a three finger accompaniment with the occasional use of the fourth finger for bass notes, as Viljo Karvonen plays, Jaakko says he plays a four finger accompaniment, producing a constant bass rhythm. He says the four finger accompaniment was prevalent in Veteli, where his father learned it and taught to his children. He also mentioned that it was a significant part of Eino Tulikari's playing.

Jaakko's daughter, Tytti-Leena Laasanen (b. 1965), is perhaps the best young player of the Perho River Valley style. She learned kantele playing from her father and grandfather at a very young age and soon began winning numerous kantele playing competitions in the traditional playing category of her age group. Today, she is acknowledged as a true virtuoso player. Her playing is particularly fast and nimble, even when adding difficult ornaments. The sound is exceptionally clear, because of her expert use of finger damping. Her timbre is noticeably lighter and less harsh than that of the older Perho River Valley players, which she attributes to not having as much overall strength in her fingers. She holds the fingers of her left hand perpendicular to the strings, as do the older players, but her right hand is noticeably more parallel to the strings. When I asked her about this, she said that she was unaware of it. She believes her playing skill has come from a strong desire to develop a good technique and persistent practicing.



Illus. 41. Tytti-Leena Laasanen, teaching the Perho River Valley Style at Kaustinen, 1985.

She estimated (in 1983) that she had composed perhaps thirty pieces in the Perho River Valley style. Most of these pieces are strictly for her own use, but she has transcribed a

few and taught them to her students. Some older players have likewise shown an interest in her compositions. She has also made numerous arrangements, from popular music or any other music which she likes and which will fit the instrument.

Tytti-Leena has studied piano since the age of six and reads music well. In 1985, she began studying at the Sibelius Academy and hopes to become a music teacher. She has already been teaching kantele students for several years and recently her students have begun winning kantele competitions in the traditional style category. In the summer of 1985, she premiered a kantele concerto written by the Hungarian composer Andras Fekete. In spite of all these activities and like many other folk players, Tytti-Leena keeps her kantele playing separate from her other musical activities. She plays a kantele which was made by her grandfather and has learned to play only from instructions from her family and by practicing. She is a fine example of the folk kantele player's concept of "gaining the maximum potential from a purely diatonic instrument." At the same time, she is a part of the modern world and has broadened the limits of the tradition to suit her needs. She and her students represent one future direction of the Perho River Valley style.

SAARIJÄRVI PLAYING STYLE

Saarijärvi is a small town in central Finland, approximately three hundred thirty kilometers north and slightly west of Helsinki. Being centrally located, Saarijärvi is somewhat of a crossroads for traffic between Ostrobothnia and the larger towns of Southern and Central Finland. The kantele tradition in Saarijärvi has been documented from about the 1880s, by Erkki Ala-Könni (1963a). Ala-Könni believes that the Saarijärvi tradition was influenced by the many kantele players who travelled through the area on concert tours. For example, Kreetta Haapasalo, the famous kantele player from the Perho River Valley, was known to have travelled through Saarijärvi on several of her tours. She was mentioned in Saarijärvi's newspapers as playing concerts in Jyväskylä, only sixty kilometers away, as late as 1887 and 1890. Also, Akilles Ockenström, a famous blind kantele player from Oulu was known to have played a concert in Saarijärvi in 1888. Undoubtedly the kantele players who visited Saarijärvi had an influence on the growth of the tradition.

In 1883, two brothers, Frans and Fredrik Krank moved to Saarijärvi from Lehtimäki in Southern Ostrobothnia. Frans was a lumberjack who built and played kanteles and his younger brother, Fredrik, played as well. Unlike Frans, Fredrik was known in the area for being "slothful" and for not being able to keep a job. Fredrik was also remembered for being a particularly gifted kantele player, who traveled the area in the 1880s and 90s playing many engagements. In 1983, when I interviewed kantele players in Saarijärvi, they all knew and played the piece "Resu-Rankan Polkka," attributed to Fredrik Krank.

The Covering Technique

Just as in the Perho River Valley, the kantele in Saarijärvi is played with the shortest string closest to the player and there is no overall damping of the strings. While most Finnish kanteles were played by plucking the strings with the fingers, in the Saarijärvi area the players

employed a different technique of playing which they called sulkutyyli [blocking style]. I will call this the "covering technique" since the fingers of the left hand cover the strings not needed for a chord, blocking them from sounding, while the right hand strums the strings with the nail of the forefinger, or some other plectrum such as a matchstick or stiff piece of leather. The covering technique is used more frequently in the playing of other Baltic psalteries, for example, in Latvia and Lithuania (see Niles 1980) and in Estonia (Tõnurist 1977a), but the technique is rarer in Finland. Antti Rantonen used it in playing the five-string kantele and the Ingrian Teppo Repo used it in playing a twelve-string kantele. It is taught today as a technique for carved kantele playing.

According to Hannu Saha (1983), the covering technique was more widely used in Finland in the past. There are still quite a few individual folk kantele players outside of the Saarijärvi area who employ it. For example, around Lake Vimpeli in Southern Ostrobothnia there are two players, Joel Elgland and Antti Viitaniemi. In Kauhava, Albin Saari played using this technique, as does the Aarnio family in Humppila and the old player Toivo Liukkonen from Kaavi. Saha mentioned that even Viljo Karvonen experimented with this technique as a boy. The covering technique, then, is not idiomatic to Saarijärvi, but it was developed and preserved there better than in other areas of Finland.

It is not certain if the covering technique came to Saarijärvi from elsewhere or if it was independently discovered. The informants I interviewed there believed that the technique may have come from the Krank brothers, who moved to the Saarijärvi area from Southern Ostrobothnia, where many of the other current covering technique players are found. On the other hand, the covering technique is something which can be easily discovered through experimentation, especially if there is some necessity for a louder and more rhythmic playing style. Veikko Manninen, a current Saarijärvi kantele player, believes that the covering technique was developed so that the rhythmic accompaniment of the kantele "could be heard over the sound of twenty dancing shoes on a wooden floor" (Manninen 1983).

In 1983, I was able to interview two players of the Saarijärvi style, Veikko Manninen (b. 1904) and Arvi Pokela (1914-1984) (no relation to Martti Pokela). These gentlemen together with the violinist Pauli Hiekkavirta (b. 1918) made up an ensemble called the "Saarijärvi Folk Players," which had been performing at various events for around ten years.

Veikko Manninen

Veikko Manninen was a particularly valuable informant who had a fine basic understanding of the Saarijärvi tradition. His father, Robert Manninen, was a kantele player but did not use the covering technique; he played the kantele with his fingers. Veikko's brother, Eino (1903-1981), was an expert kantele player using the covering technique. He played at dances and at movie houses for silent films. Eino learned the covering technique from Eino Nyrönen and Aati Tarviainen, who learned it from a well-known Saarijärvi kantele player, Taavetti Häkkinen. According to Veikko, his brother Eino could play in a "melodic style", using his right forefinger to strum the strings, as well as an "accompanying style" in which he used a hard plectrum, such as a matchstick. Veikko said that Taavetti Häkkinen also

used the softer sound of his fore finger for playing solos and a harder plectrum for ensemble accompaniment.

In earlier times, the typical Saarijärvi dance ensemble was made up of one kantele, playing in the accompanying style, and one violin, playing melodies. Veikko mentioned that the dances in those days were lighter and more frivolous than today, so the kantele and violin fit particularly well. Eventually, as the dance styles changed, the ensemble also incorporated a pimpparauta [triangle], which was used to keep the beat, and a two-row [button] accordion to fill out the melody and accompaniment. This kind of ensemble had a much stronger sound and sometimes the sound of the kantele would be lost, especially in the old days, when kantele strings were not as good as they are today. The kantele eventually began to be left out of the ensemble. The Saarijärvi Folk Players performed pieces in several different combinations of these instruments, since Veikko also played pimpparauta and Arvi Pokela also played two-row accordion.



Illus. 42. Veikko Manninen at his home in Saarijärvi, with fiddle player Pauli Hiekkavirta, 1983.

Veikko Manninen learned to play kantele only in the accompanying style using the covering technique. Consequently, he rarely plays alone and usually accompanies some other melodic instrument, such as violin, another kantele, or accordion. Veikko learned to play as a boy, but left his kantele playing when he became a lumberjack and travelled around Finland. He returned again to Saarijärvi to retire, where he again took up kantele playing, first with his brother Eino, who played fiddle or a second melody kantele, and later, after Eino died, with the Saarijärvi Folk Players.

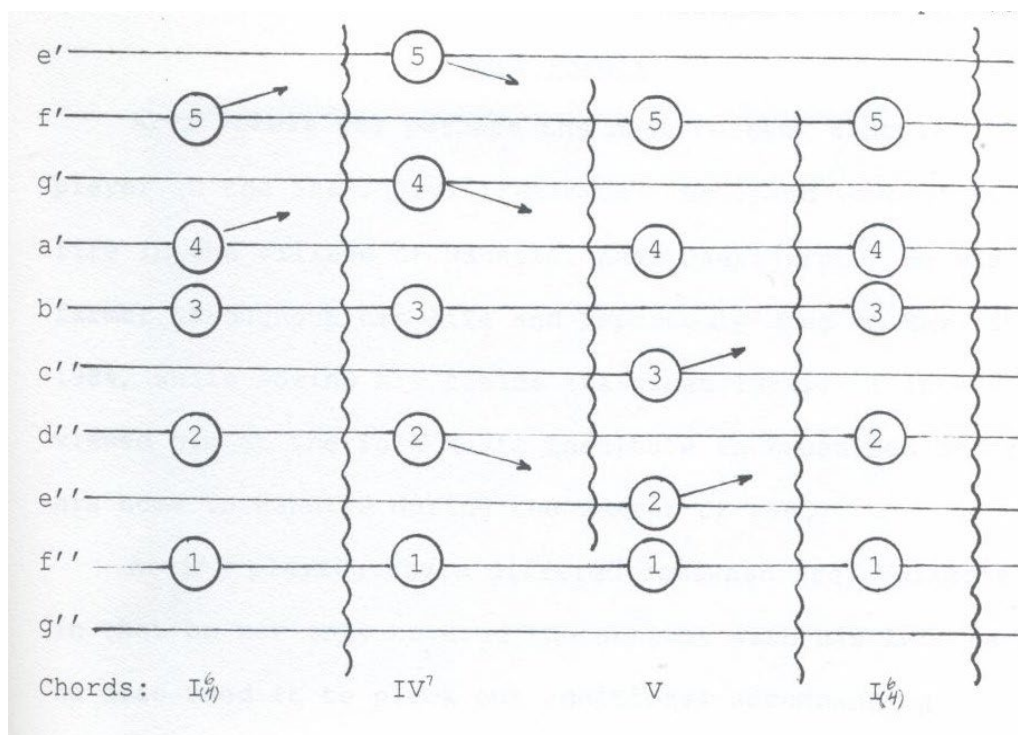
Veikko's kantele is set up a little differently than typical Finnish kanteles. He has a thirty-two string instrument, where the top twenty strings are tuned diatonically but the bottom twelve strings are tuned in three courses of four strings each, to the tonic, dominant


and subdominant, in descending order of pitch. The twelfth string, the fourth string of the tonic course, is tuned one octave lower. The overall tuning of the kantele is in C major. The pitches of the lowest strings were as follows:

F F F F G G G G c c c C d e f g a b c' d' e' f' ...

Veikko explained that the courses of bass strings are necessary because the player has to reach quickly all the way across the instrument to play a bass note and having a course of bass strings makes a more certain target to hit. Most Saarijärvi kanteles are set up like Veikko's for playing bass notes while using the covering technique. The number of bass strings in each course may vary. Some Saarijärvi kanteles had just single bass strings, or courses of two bass strings, but with a large space between them.

Veikko owns a second kantele which he called his puoliääni [half sound] kantele. The name refers to the tuning which is in C minor, rather than C major. It has thirty-six strings and is set up the same as his C major kantele, except that the thirteenth string (the fifth string of the tonic course) is tuned to the contrabass tonic, followed by twenty-three diatonic strings in C minor up to e^{'''}.



Illus. 43. Veikko Manninen's covering patterns. 1 = thumb 2 = forefinger 3 = middle finger 4 = ring finger 5 = little finger  = strumming distance.

The actual covering of the strings is done according to various patterns. Veikko's patterns come by anchoring the thumb of his left hand on the f' string throughout all the

patterns. Using the thumb to anchor and measure is a common feature between this style and the Perho River Valley style. The basic pattern for the tonic chord is to have a string between each finger, except the middle and ring fingers. The tonic string (c") is in the middle of the chord, so the chord is always in inversion. It may be either in first or second inversion depending on the width of Veikko's strumming, which is variable. The subdominant chord comes by moving the ring and small fingers down one string, so there is a string between each finger. The subdominant chord is in root position. By strumming completely across the width of the hand, the seventh (e") of the chord is sometimes added. To move to the dominant chord, Veikko brings all the fingers, except the thumb, up one string, so that the thumb and forefinger are next to each other and there is a string between each of the other fingers. Again, the chord is in root position. The change between the dominant and tonic comes by moving the fore and middle fingers down a string. Veikko has memorized these patterns and they come quickly and automatically while he is playing (Illus. 43).

Veikko strummed the strings with a match stick in his right hand. While strumming the chord, he also emphasizes the string carrying the melody at any given point. He will lift the appropriate finger if the melody happens to cross one of the covered strings, including the thumb, if the melody requires an f. In this way, he not only accompanies the melody instrument, but also augments its melody. He always strums toward himself, from the lower to higher pitched strings. The strumming is done to a fast rhythm to fit the melody. If the piece is in three beats, he will strum a bass course on the down beat and the fingered treble chord on the off beats. For four beats, he will strum a bass course on the first beat and sometimes on the third beat as well, with the treble chord on the off beats.

Arvi Pokela

Arvi Pokela was perhaps the best current kantele player in the Saarijärvi tradition. He lived most of his life in the village of Hännilä, near Saarijärvi. He was a farmer throughout his life and reportedly died on May 24th 1984, while sowing his fields (Laitinen 1984). I interviewed him at the Folk Music Institute in Kaustinen and at his home in Hännilä during the summer of 1983.

Arvi's playing style differed somewhat from Veikko's in that he not only covered the strings with his left hand, he also used it to pluck out additional accompanying pitches. Arvi's kantele playing was frequently done as a solo because it had a full texture which could stand on its own. Erkki Ala-Könni has called the Saarijärvi style a mixed style (1963a:423, 1986:37), because in practice the fingers of the left hand may also be used to pluck the strings, in addition to covering the strings of unwanted pitches. It may be less of a mixed style than a single unified style using two techniques. This, according to Arvi, was the "genuine Saarijärvi kantele playing style" used by the best players when he was a boy.

Arvi's father, Otto Pokela, was a master of the Saarijärvi style. When Arvi was eleven years old his father began to teach him to play, on a kantele made by the master builder Juho Tamminen. Arvi still played the same kantele in 1983, almost sixty years later! He said it was a real celebration when his father brought that kantele home. It was placed on a special table, which could not have any kind of dust or table cloth on it, so the kantele would lie freely and play beautifully.

Arvi learned to play the kantele at a time of its waning popularity when it was beginning to be replaced by the two-row accordion in dance ensembles. In his later teens, Arvi also switched to the two-row accordion. As he described it, there was a demand for accordion players and after he bought an accordion and practiced on it for only a couple of weeks, he was playing in an ensemble. He felt that he rushed into it too quickly and never became a good accordion player. But in 1983, he was a very accomplished player and would occasionally play accordion with the Saarijärvi Folk Players. He also played fiddle and mandolin, though I did not get a chance to hear him perform on those instruments, and he was quite a good singer.

The kantele was still Arvi's first and probably favorite instrument. He began kantele playing in earnest again in the early 1970s as the Folk Music Festival at Kaustinen got underway and the kantele again became a more popular instrument. As folk music researchers became interested in what he knew about the Saarijärvi style, he became motivated to practice kantele again. He also became interested and wanted to learn other traditional styles of kantele playing and became somewhat of an amateur folklorist, collecting information on other traditional aspects of life in the rural Saarijärvi area.



Illus. 44. Arvi Pokela at Kaustinen, 1983.

Arvi's style of playing is quite complex and technically demanding. It undoubtedly took a great deal of practice to become an accomplished player, which can be seen by comparing earlier and later recordings. In 1978, the Finnish Literature Society and Folk Music Institute recorded and videotaped Arvi's playing. Later, two of his pieces were published on a record (Asplund 1983a). Arvi played these same pieces for me in 1983 and a

comparison of the 1978 and 1983 recordings shows that he developed and improved his technique substantially in just five years. Also, as he continued to practice, he kept raising the overall pitch of his kantele, perhaps coming closer to the memory of brighter and more vibrant sound he knew as a boy. During the final years of his life, Arvi began teaching his style of playing in courses arranged by the Folk Music Institute and at the Sibelius Academy. He had a great desire to pass on his playing style to a younger generation.

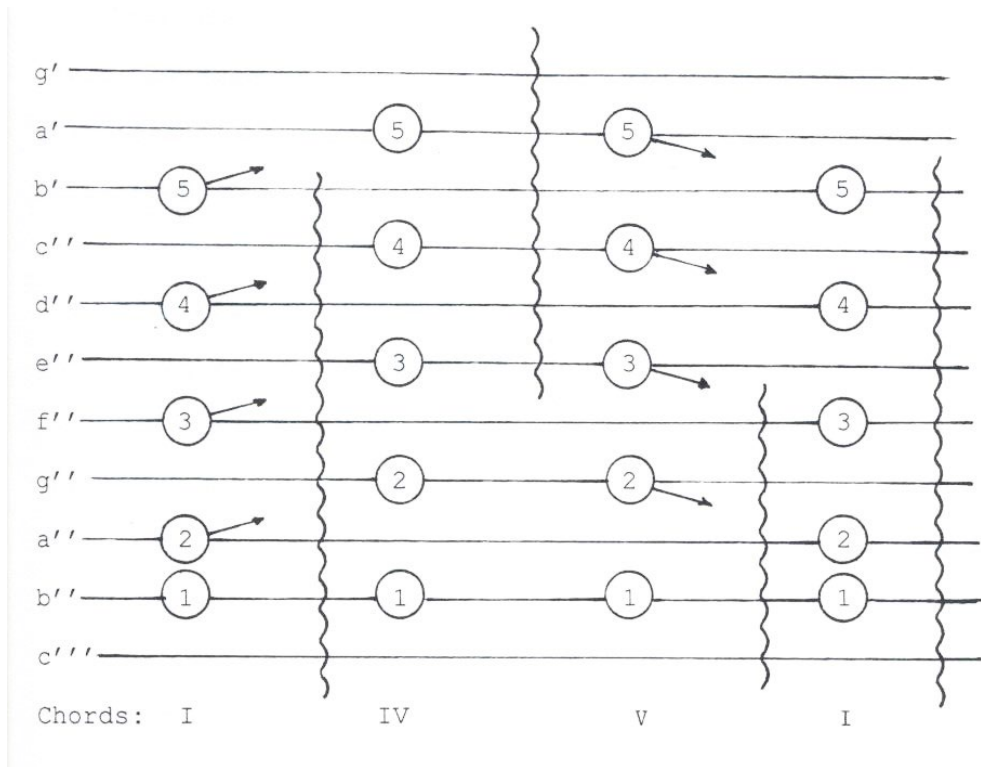
Arvi found it difficult to describe his playing style, probably because it was innate and only in the later part of his life did he talk about it or teach it to others. He said it was special because the pieces are all in a major key. They are happy, free and easy, with none of the poignancy found in a lot of kantele playing. Even people who had never heard this style before tended to like it, as did many people at the Kaustinen Folk Music Festivals. A majority of the pieces he played were lively dances, but he also sang songs to kantele accompaniment. These were likewise very light and lively, with clever words. He owned a second kantele, which he kept at a lower pitch, and used strictly for song accompaniment since the lower pitch was better suited for his voice range.

Arvi's first kantele (built by Juho Tamminen) was diatonic across its full range and had places for twenty-eight strings. But the actual number of strings was fewer, since Arvi set it up for using the covering technique. It had three courses of two bass strings each tuned to the subdominant (F), tonic (C), dominant (G), in descending order of pitch. There were spaces of approximately two inches between each of the bass courses. The other strings were tuned diatonically and covered a range from g^1 to e''' .

The covering patterns used by Arvi were different than those used by Veikko and in some ways were simpler. He anchored his left thumb on the b'' string. The tonic chord pattern had the thumb and forefinger next to each other and a string between each of the other fingers (Illus. 45). For the dominant and subdominant chords, he left the thumb on the b'' string and moved all the other fingers down one string, so there was a string between each of the fingers. If he wanted to play a dominant chord, he strummed the lower half of this pattern, from the other side of the little finger, to the middle finger. If he wanted a subdominant chord, he strummed the upper half of this pattern, from the middle finger to the other side of the thumb. Using just two simple finger patterns, he got three chords, which were all in root position. The basic finger patterns were also used to test the intonation of the kantele, by making sure the chords were in tune.

Arvi used the forefinger nail of his right hand to pluck the strings. He used a match stick in the past, but felt it was uncertain because the match stick would break or perhaps it would break a string. He also experimented using pieces of leather, but had a hard time finding any that were stiff enough. When the nail of the forefinger was strong enough, he felt it was best. Also, his finger was more accurate than a plectrum in hitting specific strings. Arvi always strummed the kantele towards himself, from the lower to the higher pitched strings, never the other way.

His right hand, which strummed out the chords, also had the primary role in playing the melody. It was difficult to pinpoint the exact melody, because the strumming was variable. Sometimes Arvi would strum only one string, sometimes two, and sometimes three or more. This produced a randomness and mixing of melody and accompaniment similar to that found in the old carved kantele playing style.



Illus. 45. Arvi Pokela's covering patterns. 1 = thumb 2 = forefinger 3 = middle finger
4 = ring finger 5 = little finger ~~~~~ = strumming distance.

An important technical aspect of Arvi's playing style were the extra pitches he added with his left hand. He generally used only the fore and middle fingers to pluck these pitches. When I asked him about this, he used the word höystää, which means to add some seasoning, spice or flavor, and said it was the hardest part to teach others. He played these extra pitches very quickly, producing a full and moving texture.

Arvi's innate sense of rhythm was the most important part of his playing style. His right hand stroking was not always even with the beat; it could be syncopated or delayed. The bass notes were also rhythmically variable and were added on the beat, immediately after the beat, or occasionally on the off beat. Part of the rhythmic variability in the right hand came from the physical necessity of reaching all the way across the instrument to play bass notes, thus there was always some compromise in the rhythm between the bass and treble. Also, the pitches played by the fingers of his left hand were added strictly by feel and in a different rhythm than that of his right hand stroking. The combination of these elements produced a constantly shifting rhythmic variation in the overall texture. He was truly a virtuoso folk kantele player and received the Master Folk Musician's title at the Kaustinen Folk Music Festival in 1983.

Possible Origin of the Saarijärvi Style

Heikki Laitinen, who has studied Arvi Pokela's playing style in depth, believes that his style may have developed from the five-string kantele playing tradition. A. O. Väisänen's article Kantele ja hyppivä puuhevonen [Kantele and a Jumping Wooden Horse] (1931) mentions that Aapraham Nekkeli, an old man from Sumiainen (in Central Finland not far from Saarijärvi), played a five string kantele with a plectrum tied to a long string with a small wooden horse at the other end. As he would play, the horse would appear to be jumping to the music. Nekkeli played with his left wrist on top of the ponsi and the fingers of the left hand plucked the strings, playing a soft accompaniment. The right hand played the melody with a plectrum, which had a louder and sharper sound. Väisänen also mentions that Matti Kirjava from Haapavesi, in a similar manner, attached a string to his fore finger and would make "an Estonian horse dance" when he played the outer most strings. Antti Rantonen learned at least a portion of his playing style from Kirjava, who gave Rantonen a five-string kantele.

Originally, in the five string kantele playing, each string had its own finger. This system began to break down in Ostrobothnia by a process of the right hand being removed from the strings and plucking various strings with the forefinger. The left hand remained on the strings, each finger plucking its own string as before. The best example of this was Antti Rantonen's five string playing technique. His left hand covered the strings not used in a chord, while his right forefinger stroked the uncovered strings. At the same time, he also continued to pluck strings with his left hand. It is possible that the techniques which originally grew out of carved kantele playing formed the basis of the Saarijärvi style (Laitinen 1985).

HAAPAVESI PLAYING STYLE

Haapavesi is located in northern Ostrobothnia some five hundred ten kilometers north of Helsinki in a remote farm area, not on any main highway or railroad. As with the Perho River Valley and Saarijärvi traditions, the Haapavesi area, which includes the villages of Pulkkila, Piippola and Leskelä, has had an active folk music life going back many decades. Ilona Porma (1948a) mentions the names of dozens of fiddle players, accordion players, singers and kantele players who participated in local musical activities. Many of these activities were in connection with weddings, dances and evening programs, particularly those sponsored by the local Youth Society. The Youth Society also sponsored song festivals and contests which drew musicians from throughout the area and it helped in the organization of choirs and brass ensembles.

Haapavesi has the distinction of being the place where five-string kantele playing continued as an unbroken tradition well into the twentieth century. Erkki Ala-Könni (1973:396-401, 1986:23-25) mentions names and details through oral history of more than eighteen five-string players from around the turn of the century.

The Haapavesi area also had a distinctive large kantele tradition. Little is known about large kantele players in the area before the turn of the century, but larger carved kanteles were known at the time. For example, Antti Rantonen owned a sixteen-string kantele as a boy and the local cantor, August Jääskeläinen, owned a bottomless ten-string carved kantele, which he

probably made himself (Ala-Könni 1973:392, 1986:20). There may have been some players of box kanteles, particularly since by the late nineteenth century they were being made in greater numbers by master builders in the Perho River Valley and Saarijärvi areas and were being distributed widely around the country. There was some interest in kantele building in Haapavesi at the time. Keränen (1973:162) has written that starting in 1896, boys were building kanteles at the Kansanopisto [Adult Education School] and at a 1906 industrial exhibition in Kuopio there were four kanteles displayed from Haapavesi builders.

Pasi Jääskeläinen

More than anyone else, the large kantele playing tradition in Haapavesi was influenced by Pasi Jääskeläinen, who was born in 1869, the son of the cantor. In his earlier years, Pasi was familiar with carved kantele playing of family and friends. He was sent by his father to secondary school in Oulu, but was more interested in music, so he soon began attending cantor and organ school in Oulu. Pasi did not, however, become a cantor, but an actor and comedian. Eventually, he played in the Kansanteatteri [Folk Theatre] and Uusiteatteri [New Theatre] in Helsinki. He also studied voice in Helsinki with Abraham Ojanperä and met the pianist Emil Kauppi, the music director of the Kansanteatteri, who became Pasi's lifelong friend (Porma 1948b:289).

Pasi began a career as a singer of comic songs in 1895, touring extensively in all parts of Finland, in Scandinavia and even making two tours to the United States. He dressed in an old Karelian-style folk costume, like Väinämöinen, and sang folk songs and comic songs while playing a kantele. There must have been a combination of interesting and humorous things in his performances, because he described them as "[musical -- dramatic -- acrobatic programs (before educated urban audiences, kings, etc.)]" (ibid:290). He became one of the most popular entertainers of his day.

Pasi used a carved kantele during his early tours, but later switched to playing box kanteles, originally made by builders from Saarijärvi and Viitasaari (Ala-Könni 1973:392, 1986:20) and later those made in his own kantele shop. According to a letter which was published in an article by Martti Pokela (1982a:5), Pasi may have learned a portion of his large kantele playing style from Hjalmar Räisänen, the grandson of Kreeta Haapasalo. The letter was written in 1900 by Räisänen and reads as follows:

[I was at Pasi's concert... where he sang old Kalevala and Kanteletar songs. He accompanied his songs with a kouru [channel] carved from aspen, to which were attached five brass strings (the writer of the letter means naturally a five-string kantele) which he now and then strummed with strength. He conquered the audience with comedy. I lived at the time in the parish with the precentor. After the concert, Pasi came to our home to greet the precentor, who was previously his school chum. My kantele was stored on top of the piano. Pasi's eyes flew to it. I played for him. Pasi screamed and jumped: 'Now I know my life's calling.' I began to teach him and for the entire winter he travelled between Haapavesi and Raahe a couple of times a week. He learned what one

with short, thick fingers could learn. But he didn't have to. The rest he did with his outstanding comedy and a Karelian homespun outfit] (ibid.).

If the story can be counted on as being accurate, Pasi Jääskeläinen's playing technique on the large kantele may have been influenced by the Perho River Valley tradition. Räisänen's tutoring was certainly not the only influence on Pasi's playing, because rather than playing the kantele with the shortest strings closest to the player, as is done in the Perho River Valley and Saarijärvi styles, he played the kantele with the longest string closest. Pasi had lifelong friendships with famous art musicians of the time, such as the composers and pianists Oskar Merikanto and Emil Kauppi, and the violinist Eino Rautavaara. He also organized the first mixed choir and men's choir in Haapavesi and acted as music director. His friend, Emil Kauppi, made arrangements for the choirs and accompanied Pasi on some of his concert tours. The two also collaborated on several of Finland's first operettas and musical plays (Porma 1948b:293).

Pasi may have begun playing from the long side of the instrument because he was a trained musician, who could read music. As mentioned earlier, if the player used written music for performance it was more natural to play from the long side, since perceptually the pitches on the staff were in the same direction as where those pitches were found on the instrument. Pasi was among the earliest documented performers to play from the long side of the instrument.

Akilles Ockenström published a method book with kantele arrangements in 1898, which describes the playing position from the long side and features a picture of a kantele player on the cover in this position. Pasi may have been influenced by Ockenström, because in 1903 he published his own method book, which mentioned Ockenström's book in the Preface and featured simple arrangements of folk songs and other melodies which would help beginners start playing from the long side of the instrument. Pasi is also credited with inventing the left-handed kantele, specially designed for being played with the long side closest.

Pasi's innovations had a significant impact on the kantele tradition in Haapavesi. Many of the folk kantele players began playing with the longest string closest, even if they played by ear without written music. They also began building and playing left-handed kanteles, using the kanteles from Pasi's workshop as models. Even Antti Rantonen began playing a Pasi Jääskeläinen model, thirty-string kantele from the long side, while continuing to play the five-string kantele in the old way, with the short string closest. Sometimes, he even played both types of kanteles simultaneously, plucking out melodies on the five-string kantele while accompanying himself with a large kantele (Illus. 47).

Pasi also organized the first kantele ensembles in Haapavesi. These early groups contained some of the seminal kantele players who would pass on the Haapavesi playing style, such as the four Haanpää sisters, Emmi, Katri, Anni and Riikka. The group also included Elli and Lauri Nummela, Antti Rantonen and Heikki Väänänen (Ala-Könni 1973:404) and possibly Sulo Esteri Rytky, who is included in a picture of the group (Porma 1948a:229). After Pasi Jääskeläinen's death in 1920, the most active players continued to be

Antti Rantonen, Sulo Rytky and Anni (Anna Haanpää) Kääriäinen (1895-1964), who was nick-named "Hatukankaan Anni," because she was a servant in the Hatukangas household.¹⁹

Antti Rantonen's extended family played a significant role in continuing the Haapavesi tradition. Antti's sister, Ruusu Merikallio, was also a kantele player, but was more famous in the area for starting a major enterprise, Haapaveden Kotimarjala Oy [The Haapavesi Home Berry Co.], in 1906, which was an important employer in the region (Keränen:173). Ruusu's two daughters, Hilikka (Merikallio) Hankonen (b.1908) and Ilona (Merikallio) Porma (b. 1910) both became fine kantele players. Hilikka established a family kantele ensemble, which had seven players in 1983. They played only pieces composed or played by Antti Rantonen (Luhtasela 1983a). Ilona Porma has been very active for most of her life in promoting the Haapavesi style of kantele playing, which she described for me in detail in two interviews (1983a, 1983b).



Illus. 46. Pasi Jääskeläinen. Photograph compliments of Ilona Porma.

¹⁹Anni Kääriäinen's sister, Katri (Katariina Haanpää) Oksanen (b. 1893), left for the United States, where she formed her own kantele ensemble (see photograph in Ala-Könni 1973:397, 1986:25). Riikka (Henriikka Haanpää) Pentti moved to Vehkälähti and continued to play both large and five-string kanteles. Many other families continued to pass on the tradition, which can still be found in the Haapavesi area today. For example, the Pitkälä brothers, Eero, Sauli and Heikki, formed a group called the Haapaveden Kantele-pojat, and recorded a commercial cassette in 1985 called Haapaveden kantele soi, which features folk songs played on three kanteles and sung.



Illus. 47. Antti Rantonen playing a five-string and a box kantele simultaneously. Photograph compliments of Ilona Porma.

Ilona Porma

Ilona cannot remember a time when she did not play the kantele. She remembers that when she was a girl, Anni Kääriäinen played kantele and sang for her. Later Ilona played duets with Anni. Ilona was always involved with the kantele activities of her family. However, she told me that her primary instrument is the piano. Ilona began learning to read music and play the piano at the age of eight, from Saima Davidsson in Haapavesi. She became quite a good piano player, eventually accompanying the Haapavesi choirs and playing piano recitals.

Ilona says that she keeps her kantele playing separate from her piano playing. Her kantele playing is a part of the tradition which existed in Haapavesi when she was young. She owns several kanteles, which are left handed diatonic instruments, without tuning mechanisms, built by Efraim Kilpinen, the master builder who began his career in Haapavesi. She does not use written music while playing the kantele and she does not teach the kantele from written music. She does, however, have a notation system based on solfege syllables, only for teaching.

Like Pasi Jääskeläinen, Ilona not only performed on the kantele, but actively promoted it by organizing kantele ensembles, concerts, concert tours and teaching. She organized her first kantele ensemble just after the Second World War in 1946, which had seventeen members in a "kantele choir" playing in unison. Included in this group were members of her extended family, including her uncle, Antti Rantonen, several other original members of Pasi Jääskeläinen's kantele ensemble, as well as other fine kantele players in the area. The kantele

concerts also generally included singing, since Ilona became director of the Haapavesi mixed choir in 1946.

Haapavesi kantele ensembles gave concerts at various celebrations and events around Finland. In 1947, a group containing Ilona Porma, Antti Rantonen, Riikka Pentti and Anni Kääriäinen performed at the Finnish Youth Society's Sixty-Fifth Anniversary Celebration in Helsinki. Ilona directed a large kantele ensemble in connection with the 1952 Olympics in Helsinki, playing several concerts. She also directed various kantele ensembles which toured outside Finland. Over the years those tours have taken her to fifteen different countries. Her 1964 tour of the United States and Canada had a high point with a "forty-five minute concert on live color television" at the American Pavilion of the World's Fair in New York City (Porma 1983a).

Ilona has also influenced the growth of kantele playing in Finland by being a prolific kantele teacher. Dozens of fine kantele players began their instruction with her. In 1982 she was awarded the title of Musiikkineuvos [music "counselor" or "expert"] by the government of Finland. She was honored on her seventy-fifth birthday by the Kantele League, which noted that she was "[a kantele and piano teacher, choir director, folk music group director, and music critic among other things...]" (Sopanen 1985a:17). Since 1980, she has served as the artistic director of the Haapavesi kantele camp.



Illus. 48. Ilona Porma. Notice the hand positions. Photograph compliments of Ilona Porma.

The Haapavesi kantele camp started with planning between Martti Pokela, Oiva Luhtasela and Ilona Porma in 1978 and finally began in the summer of 1980. It has been held every summer since at the Kansanopisto [Adult Education School] in Haapavesi. Luhtasela is a newspaper editor from Ylivieska (a town on the main railroad junction 50 km southwest of Haapavesi) and has been very active in the planning of folk cultural events in the area. He has served as the organizational director of the camp, while Ilona Porma has served as the director of instruction.

From its beginnings, two different playing styles have been taught at the Haapavesi kantele camp, which Ilona calls the "old" or "traditional style" and the "new style." The old style of playing is that which Ilona learned as a girl. The new style is the same as the art style of kantele playing which is generally taught at kantele camps in Finland. Ilona objects to the term "art style," since she feels that traditional kantele playing is also an art. There were six kantele teachers at the camp in 1983. Ilona herself teaches the old style. Four other teachers, including Ilona's granddaughter, Merja Porma, teach the new style and one teacher, Marja Viskari, teaches both styles. In addition, there are classes in playing the five-string kantele as well as elementary music theory classes.

Ilona Porma's kantele playing style is based on learning the tonic, dominant and subdominant chords to accompany songs. In performance, she usually sings the melody to kantele accompaniment. Ilona plays the kantele with the longest string closest to herself. She strokes the strings with the soft parts of the fingers, never the nails. Her fingers are positioned at an angle to the strings, approximately halfway between the finger position used in the Perho River Valley style and the art style (Illus. 48). She plays chordal accompaniment with her right fore, middle and ring fingers, and plays bass notes (the tonic in two octaves and the dominant of the chord) with her left thumb, fore and middle fingers. The bass notes and chords are played as a quick arpeggio on strong beats, while the melody is sung and frequently doubled on the kantele between the strong beats by the right forefinger.

Ilona mentioned that damping the strings is an important part of her playing style, but that this is not the overall damping used in the art style. Most of Ilona's kanteles do not even have a damping board and when she plays one that does, she does not use it. Frequently she lifts it up in the open position, out of the way. The damping in Ilona's playing is done entirely with the hands and fingers. If there are just a few strings which need to be damped, she uses the inside portion of her hands. If she moves on to a new chord which would make a muddy sound, such as between a dominant and subdominant, overall damping may be done with the forearm. Just as in the art style she uses finger damping, trailing the middle finger one string behind when playing descending runs. But her concept of damping is somewhat different than in art style: she believes that the kantele should be allowed to ring as much as possible and that damping should be used only when necessary to avoid a muddy sound.

The pieces that Ilona performs do not change key in the middle, because she plays only diatonic kanteles without any tuning mechanisms. She is quite good at tuning kanteles, having had a great deal of practice; many times she has had to tune all the kanteles in her ensembles before a performance. She said that it is best to tune the kantele on the table where it is going to be played, two hours before the performance. For a large group of home-built kanteles to play well together, tuning is critical. Kanteles suffer if they have to be retuned to many different keys. Eventually, they do not stay in tune at all. For that reason, Ilona owns

several kanteles, each tuned to its own key. In addition, she also has a tuning trick, making it possible to play the relative major or minor key. For example, she has a thirty-six string kantele tuned in E minor, but the leading tone D# is only found on the twenty-first and thirty-fifth strings, in the third and fifth octaves. The second and fourth octaves can be used for natural minor or for playing passages in the relative key of G major.

Ilona teaches her style of playing with a method she has developed herself, using solfege syllables. For every important pitch in a melody, the students learn the appropriate tonic, dominant or subdominant triad, and bass notes in the inversion which happens to lie closest. She teaches the elementary patterns with a chart, showing the various finger positions necessary to harmonize each pitch of a scale (Illus. 49). The students originally learn to play just one bass note, with the left thumb. Later they are taught to add the fifth and octave higher pitches as well, played with the left fore and middle fingers.

After the students have learned and memorized the harmonization patterns, they learn individual pieces where the melody is written out in solfege syllables and the appropriate harmonization is marked as I = tonic, II = dominant and III = subdominant (Illus. 50). They are taught to play the chord as an arpeggio on the strong beat and sing the melody. More advanced students double the melody on the kantele. Since the melodies and harmonizations are usually quite simple, most students find the pieces easy to learn and memorize. The pieces are all performed from memory without any written aids. In ensemble playing, each student contributes at his or her own level of ability.

The kantele ensembles directed by Ilona Porma at the 1983 Haapavesi camp contained students of all ages and skill levels. Melodies were played by those who could; the others added accompaniment as they had learned. Generally, the playing was in unison, but Ilona mentioned that with certain advanced groups there may be two or three different parts, which are put together.

There were two separate kantele ensembles. This was necessary because some of the participants at the camp were members of the Laestadius faction of the Finnish Lutheran Church, which is very conservative and prohibits dance music. The large kantele ensemble, which included Laestadians, performed first on the camp's final concert, so that the Laestadians could leave if they wanted and not have to sit through selections of prohibited music. The Laestadius theology prohibits dance instruments, such as the accordion, but they approve of the kantele since it is mentioned as a holy instrument throughout the Finnish Bible.²⁰ They practice a different type of folk music, a spiritual folk music, based on the performance of religious songs in a variety of ways.

²⁰Each time there is a reference to "harp" in the Bible, it is rendered as "kantele" in the Finnish Bible. Some examples are Genesis 4:21; 1 Samuel 16:23; 2 Samuel 6:5; Psalms 137:2; Psalms 150:3.

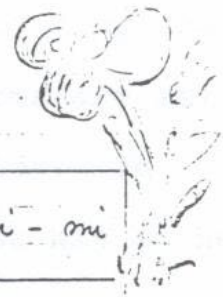
*Ilona Porman lauletaaksiksi.
Luhmorsq 16.10-82*

*Jisbauth
(aikeaa kääri)*

Dassot
II (G) do
III
IV
V (C)

Illus. 49. Chart which Ilona Porma uses to teach chordal accompaniment.

38/ Haapaveden valssi



| | | | |
|--------------------|--------------------|----------------------|--------------|
| I sol-sol | II fa-fa | I mi do sol | I mi-mi |
| II re si sol | II re-re | I mi do sol | I mi-fa |
| I sol-sol | II fa-fa | I mi do sol | I mi-mi |
| II re si sol | II re si sol | I do-do | I do sol |
| I do-do | II si-la | I sol mi do | I sol-sol |
| II la re mi | II fa fa | II la sol fa | I mi-sol |
| I do-do | II si-la | I sol do mi do | I sol-sol |
| I sol la sol | II fa mi re | I do-do | I do mi |

2 kerr. | do-

| | | | | | | | | |
|---|----|---|---|---|----|----|----|---|
| I | II | I | I | - | II | II | I | I |
| I | II | I | I | - | II | II | I | I |
| I | II | I | I | - | II | II | II | I |

Illus. 50. "Haapaveden valssi" written in a notation system invented by Ilona Porma.

Ilona sees her style of playing as something which is easily learned and preserved by the students for their own pleasure. It is immediately accessible to the beginner, who can join a kantele ensemble and make some contribution, unlike the art style which takes many years

of careful practicing before any results can be obtained. After the students have learned the basic principles, it is just a matter of learning new pieces to build their repertoires.

In an interview with Ilona Porma and Oiva Luhtasela (1983a) they expressed concern that the differences between the old style and new style (art style) are becoming less clear. They feel that if the old and new styles combine, the old style will disappear. In the old style, there is no one right way to play or teach. Each person's individuality must be expressed. There is a danger that when folk music is taught in a school context, that it will become progressively more rigid and will stifle individuality. Most of the students at the Haapavesi camp were learning kantele just as a hobby to enrich their lives, much the same as their forefathers did before them. The Haapavesi kantele camp was founded as a regional camp, for the express purpose of preserving and supporting the local style of kantele playing.

Martti Pokela's Large Kantele Playing

In addition to being a master five-string kantele player, Martti Pokela is also a tradition bearer of the Haapavesi style of large kantele playing. He actually started playing the large kantele as a boy, long before he took up five-string kantele playing. Martti described for me various aspects of his large kantele playing style in two interviews (Pokela 1983a; 1983b). He learned the style first with some basic directions from his father and then much more extensively from his father's cousin, Anna Kääriäinen, nicknamed "Hatukankaan Anni," the same person who influenced Ilona Porma's playing. Despite learning the basics of the style from the same person, Martti Pokela's and Ilona Porma's playing styles are quite different. Ilona's playing is more subdued, generally being lyrical and song-like, while Martti's playing is lively and stronger, favoring dance pieces with fast, technical passages.

According to Martti, Anni Kääriäinen was perhaps the most talented player of the large kantele in the Haapavesi tradition of his time. She came from a very artistic and talented family, which included the writer Pentti Haanpää as well as the songwriter, fiddle, and kantele player Mikko Haanpää. The Haanpää family lived in the Leskelä village outside of Haapavesi. Anni, together with her three sisters and Antti Rantonen, were original members of the kantele ensemble formed by Pasi Jääskeläinen in the first decades of this century.

Pokela considered Anni Kääriäinen and Antti Rantonen as piilosäveltäjät [hidden composers], who knew the traditional playing style, but also put in their own "tricks" and additions which enlivened the playing. He said they may be considered "natural composers" since they invented these new additions.

Pokela had a lifetime friendship with Anni Kääriäinen up to the time of her death in 1964 and systematically studied how she played the kantele. He has the only known sound recordings of Kääriäinen's playing. Once he asked her to describe in detail how to play in the Haapavesi style, but she could not because her own playing was so instinctive. She did have some folk terms to describe certain aspects of the style. The first of these is tikkaus, which is a grace note of one string higher just before the downbeat. The second is plurraus, which is a scale run, usually from an octave above, down to a note on the down beat. The third is jutkaus, (a term invented by Martti Pokela's wife, Marjatta, which has since come into folk use) which is a break from the regular rhythm. Anni Kääriäinen's playing was full of these subtle, stylistic features which a typical listener may not even consciously perceive. These

three stylistic characteristics affect the accent and rhythm of traditional playing and help it "to come alive."

In addition, Pokela has added that traditional playing had to have strength in order to live. He achieves this strength in part with nosto [lift] in which the fingers are placed more perpendicular to the strings and actually lift the strings as they are plucked and the hand itself lifts up from the strings. This creates a strong and lively sound in passages which should be emphasized. If the hand is held with the fingers nearly parallel to the strings, it is hard to get the sound to live. It makes the instrument too uniform. Folk players pull the sound with great strength. Some players with very thick fingers do not have to lift too much. It is always possible to get a nice pianissimo on the kantele, but in traditional playing the sound of the kantele should rise with power, so that it does not merely stay in the player's fingers on the surface of the instrument. Pokela promotes this strong style of playing with all of his students at the Sibelius Academy and teaches it by example, encouraging the students to do it by ear and by instinct.

Dynamic contrasts are another important aspect of the Haapavesi style. These are produced partially by nosto and partially by damping. The traditional style of Haapavesi kantele does not have a damping board, but that does not mean that damping is not important. Damping is done entirely with the hands, using the outside of the palms. During strong and loud sections of pieces, particularly when nosto is used, damping may not be needed at all. But during softer passages, damping must be used at strategic times; for example, in the soft section of Hatukankaan valssi.

Martti Pokela has also greatly developed the use of the bass strings in the Haapavesi style. In the old days, when the structure of the box kantele was still developing, the bass strings were not used much because they did not sound good. They were too long and could not be tuned up properly and were often left so loose that they shook into each other. On several of Ilona Porma's kanteles, the bass strings are simply left untuned because she never uses them. Martti typically uses modern kanteles which have good bass response. He has started adding more bass notes to the overall style, which has given his playing more fullness and a more pronounced underlying rhythm.

The basic elements of the Haapavesi style come from tikkaus, plurraus, jutkaus, nosto, and dynamic contrasts using hand damping. Pokela mentioned that just as with Anni Kääriäinen, originally his playing was entirely instinctive. It was only later that he began to think about it, study it, and codify it. He began to codify his playing mostly because he began to teach it to others. Pokela mentions that the subtle stylistic features of the Haapavesi style have been left out of many transcriptions of the pieces, probably because the transcriber did not even hear them. He believes that no composer can write these stylistic features. They can only come from knowing the style well and then adding them naturally, by instinct, giving a kind of "instinctive musicality" to folk pieces. These subtle stylistic elements are as valuable as gold and should be looked out for and preserved.

INDIVIDUAL FOLK MUSIC KANTELE PLAYERS

Outside the major folk music style areas, there are many individual folk kantele players who have their own unique styles. Generally these are people who have learned the kantele on their own through a process of experimentation, in order to discover playing techniques which work for them. Each of them had heard kantele music and thus had a concept of how the kantele was supposed to sound; each then tried to match that concept by trial and error. It is difficult to determine how such a player fit into tradition, since they are not continuing a particular style passed on to them; rather, they are creating their own idiosyncratic styles. The variation in their playing styles and techniques is far greater than is found in a style area. Also, in most cases, they do not pass on their style to a new generation. It remains with a single individual and usually ends with that individual's life.

Lauri Kahilainen

Lauri Kahilainen was born in 1916 in Viitasaari, approximately halfway between Saarijärvi and Haapavesi. Today he lives in Jyskä, just outside of Jyväskylä in central Finland, some two hundred seventy-five kilometers due north of Helsinki where he is a gardener by profession.

Lauri was born into a musical family, where his father played guitar and his brother played the violin. As a boy, Lauri became interested in the kantele, because he occasionally heard kantele music on the radio. He bought his first kantele, a central Finnish model of box kantele with twenty-eight strings, at the age of sixteen. He does not remember who the maker was, but it was a right-handed instrument, so it was unlikely that it came from Haapavesi. It probably came from one of the Saarijärvi builders.

As with most other folk kantele players, Lauri plays with the short string closest. He learned to play by plucking out melodies by ear. As he describes it, he uses only his right forefinger to play melodies, but sometimes he does use the middle and ring fingers as well in thirds. His right hand jumps all around to play the melodies. Originally he played only melodies, but then taught himself to add accompaniments with the left hand. The left hand does not play chords, or chordal figurations as in other traditional playing styles. He uses his left fore and middle fingers to play bass figures which, in many places, are similar to counter melody. On cadences he plays chords, usually the tonic and sometimes the dominant, by plucking each of the notes with his left forefinger in sequence, from the root. The hands share an almost equal role in Lauri's playing. It is not merely melody with chordal accompaniment, it is more like a melody and counter melody together, with occasional chords brought out at cadences. Sometimes the hands change ranges, the right playing melody on the lower strings and the left accompanying figures on the upper strings.

The overall texture is quite full, since Lauri does not damp the strings with the damping board, except at the very end of a piece. He will occasionally damp bass strings with his fingers.

Lauri served with the Finnish army in the Second World War and brought his kantele with him to the front. He played for his fellow soldiers and received notoriety by having his picture on the cover of Hakkapeliittä magazine in December 1941. After the war, Kahilainen acquired a twenty-eight string double bottomed kantele, which he believes to be

from Pasi Jääskeläinen's kantele shop. In 1954, he also purchased an early Paul Salminen kantele. Today he plays on two different kanteles made by Oiva Heikkilä. Both are thirty-six string "home kantele" models with tuning mechanisms on the G strings.

Lauri has a good ear for pitch and he checks the tuning frequently between selections. His two kanteles are tuned in the keys of C major (A minor) and G minor. Although he can tune to other keys, he would rather not since he believes that the instrument suffers and can never be gotten exactly in tune. Lauri does not use the individual string tuning mechanisms on his kanteles at all because he believes they never work properly and always have to be corrected with the tuning key anyway. Similar to Ilona Porma, Lauri uses a tuning trick, by tuning the G above middle E to a G#, so he can play in the relative minor key in that one octave. He correctly notes that this can be done only on a home kantele, not a machine kantele.



Illus. 51. Lauri Kahilainen at his home in Jyskä, 1983.

Unlike many other folk kantele players his age, Lauri has been active throughout his life in playing the kantele. He has played with such groups as the "Antti Vesterinen Pelimannit" and the "Jyväskylän Pelimannit", and performed with the Jyväskylä University Folk Dance Ensemble during several summers in the early 1970s, on their tours throughout Europe. He was a founding member of the Central Finland Folk Musicians. Lauri estimates that he played around two hundred concerts a year during the 1970s! These concerts were with various groups at schools, concert halls, private clubs, weddings, funerals and on radio and television.

Lauri has participated frequently in folk music playing contests and has won many medals, silver spoons and trophies at such contests over the years. In the 1960s many folk musicians began to avoid contests, since as many as three hundred contestants would participate. The number of contests was reduced and folk music festivals were held instead. Lauri still participates in many of those festivals all over Finland, such as the "Paavo kahtoo" festival in Viitasaari and Kaustinen Folk Music Festival, where he was named a Master Folk Musician in 1985.

Lauri's large repertoire is an important aspect of his playing. Since he has performed in such a wide variety of contexts, he plays many pieces outside of folk music. During my first interview with him he played movie themes, popular pieces, such as "Autumn Leaves", Tango dance pieces, Christmas carols, church hymns such as "Nearer My God to Thee", and even the "Battle Hymn of the Republic" and the National Anthem of the United States! Newspaper articles about him have said that he knows over two thousand tunes, but setting any figure would be meaningless since he is constantly learning new tunes and varying his repertoire. Lauri has a very good memory for melodies. He played some pieces for me which he had learned more than fifty years ago and whose titles he has long since forgotten. His repertoire is not limited to one genre since anything he hears and likes he is likely to try to play.

Lauri learned his playing through personal experimentation, which is evident today since he still likes to experiment with new playing techniques. For example, one time when he was making a tape for Finnish Radio, the engineer asked him if he could play two kanteles at the same time. He placed two kanteles at 90 degree angles and played melody on one and accompaniment on the other. He liked the fact that he was able to obtain two different timbres in the same performance and he could play melody and accompaniment in the same range. At the 1985 Kaustinen Festival, Lauri was experimenting with playing a portable synthesizer for accompaniment with his left hand while playing melodies on the kantele with his right. In spite of his penchant for experimentation and his extensive non-folk music repertoire, Lauri has left the impression in some of his interviews that he is a purist in regards to folk music and that it is still his favorite type of music.

As a result of a 1975 performance at the Finlandia Concert Hall, in 1976 Lauri was invited to tour the United States as a part of a folk group representing Finland in the United States' Bicentennial Celebration, Festival of American Folk Life. He played seventy official concerts and a number of unofficial ones during a tour of the United States. He was invited back by friends to the Seattle Area in 1981 to play a series of concerts and was recorded and interviewed by the University of Washington Ethnomusicology Division (Kahilainen 1976).

Although he has been asked many times, Lauri has said that he has never taught the kantele, because he does not read music and because he "plays from the wrong side" of the instrument. But at least one person, Kari Dahlblom, an excellent kantele player who currently lives in Tikkakoski, got his start with Lauri.

Onni Kuivalainen

Onni Kuivalainen was born in the early part of this century in the little village of Huhos near Ilomantsi in Finnish Karelia. He grew up in a farming family and lived and worked on his farm in Huhos until his retirement, when he and his wife moved to Joensuu.

Onni received his first kantele from his parents when he was a boy. He said that there were no kantele teachers around at the time, so he began to play by experimenting, first with just the fore finger of his right hand and later adding the middle and ring fingers. He began using the left hand on the bass side and eventually learned to use all five fingers to play chords.

As with many fellow Karelians his age, Onni was in the Second World War and had the misfortune of being injured. When he was in a war hospital in Tampere, he had a strong religious conversion and from then on has performed only spiritual music.

[At the front I had a kantele and we established a spiritual tour and toured a division's area ...holding spiritual events. The division pastor came along and there I played kantele for the soldiers and sang. [After the war] the Ilomantsi parish bought me a kantele...perhaps thirty years ago. Then I always played at celebrations and so on. I've given my time entirely to spiritual music. With my wife we would bring a spiritual program to Christian Clubs and old people ... [where] I play the kantele and with my wife we do readings with the kantele, solo songs, duets and so on. This is a beloved path for me. I have never wanted to perform and become [a performer], but I have wanted to play and sing to honor the Lord] (Kuivalainen 1983).

Most of the pieces Onni performed for me were hymns and spiritual songs, with the kantele used strictly for vocal accompaniment. All the pieces were in a slow tempo and were sad, melancholy or contemplative in nature. Onni sang with all the selections except one. When he plays, he places a sheet of paper with the text of the song under the kantele's strings. The words act as a mnemonic device to help him remember the melody and accompaniment. He begins by playing once all the way through the melody, then he sings the verses to kantele accompaniment. Frequently his wife also sings along.

Unlike most folk players, Onni plays with the longest string closest. His finger positions are unique among the kantele players I studied. He plays melodies primarily with his right fore finger, adding accompaniment a third below with his middle finger and sometimes a fifth below with his ring finger. The left hand plays bass notes with the thumb, and chordal accompaniment with the fore, middle and ring fingers and sometimes even the little finger. Or as Onni said, he uses all five fingers of his left hand, which is quite unusual. The fingers are generally perpendicular to the strings and are all lined up in a row, similar to other folk kantele players, but the timbre is soft and mellow, probably due to the type of music Onni performs. The right hand plays the melody in normal rhythm, but the left hand accompaniment is in an entirely free rhythm. The overall texture sounds like pure improvisation. Onni can also change the position of his hands, playing the melody on the lower strings with his right hand and the freely improvised accompaniment on the upper strings with his left hand.

Onni says that he does not know enough "theory" to play all the proper accompaniment chords, but he has sung in a church choir for many years and can read choir music. He is very good at retuning his kantele to different keys when needed and mentioned that he helped tune the kanteles in Tyyne Niikko's kantele ensemble when she lived in Joensuu. Onni plays a thirty-six string modern kantele made by Otto Koistinen. His kantele is marked under the strings in two different places, for playing in different keys. The second

set of markings act as a "movable C" so he can play the same finger patterns starting from a different string. In my recordings, his kantele was tuned to D harmonic minor, but he also mentioned that he frequently plays in F major, C major and A minor.



Illus. 52. Onni Kuivalainen at his home in Joensuu, 1983.

His kantele is equipped with a functioning damping board which he says he uses only when needed, such as at the end of a piece. He does not use finger damping, but sometimes will use his hands to damp, if he has played something incorrectly. Again he explains that he has developed his own system of damping and is not dependent on anyone else for anything.

Onni's kantele is totally diatonic, but he still performs some pieces where the melody has accidentals outside the diatonic scale. He handles this problem by leaving that portion of the melody unplayed and merely singing it. As he explains, "[If I play and sing, I leave unplayed that note which is not the right pitch. For example, if [the melody requires] a half step which is not there, I really don't need it. I just leave it out, so it doesn't come. Certainly you can tell from the singing where the half step is...]" (ibid.)

When I asked him about his improvisatory style of playing, he emphasized that he has learned to play only through experimentation and developing his own style. He said that he still likes to experiment and develop different techniques, because it is always interesting to try something new.

Väinö Valtteri Haapakangas

Väinö Haapakangas (b. 1916) is from the northern Ostrobothnian town of Pattijoki. He also began kantele playing as a boy when his older brother made a twenty-five string kantele in carpentry school. Väinö had five brothers and it was quite a competition to see who would get to play the kantele.

As Väinö grew a little older, the two-row accordion became a very appealing instrument, so he bought one and began practicing. Soon, he was good enough to be playing at dances and evening programs. However his parents did not approve of his accordion playing.

[[My parents did not approve] because it was mostly dance music and my mother was a little religious. She said all those instruments used to play dance music and on evening programs ... are worthy of hell and will never get into heaven. Father converted to the same religion and threw my accordion into the oven ... that's how fire destroyed my beloved instrument on a certain beautiful sabbath and my accordion playing ended there] (Haapakangas 1983).



Illus. 53. Väinö Haapakangas (on the left) and singers Sanni Peuhkurinen and Alpo Alakulju in Raahe, 1983.

In 1926, Väinö ordered a 32 string kantele from the master builder, Efraim Kilpinen, in Kalajoki.

[...I tried every possible way to collect money; I picked berries, collected pine cones, pulled bark, and everything possible. Slowly, I collected enough savings and ordered on the phone -- the first phone call ever from Pattijoki to Kalajoki -- ...the deluxe model. Efraim Kilpinen said that there were no knots and advertized it a lot that it was a beautiful instrument and I said let it come. It cost somewhere around 600 marks ... which was quite a bit of money at that time. I picked up the instrument, brought it home, opened it on the table and said to my parents 'Now throw this into the fire!', but they didn't do it. [Why not?] It was a beautiful instrument and the kantele is completely different. It is also played in heaven] (ibid.).

Today Väinö plays a 36 string modern kantele made by Oiva Heikkilä. Similar to Onni Kuivalainen, Väinö's kantele playing is mostly for song accompaniment. He performs with two friends, Alpo Alakulju and Sanni Peuhkurinen, mostly at retired persons' festivals, veterans' celebrations, Youth League activities and on the local radio. This group performs mainly melancholy, slow folk songs and hymns.

Väinö plays with the longest string closest. He uses his right fore finger to play the melody and occasionally uses his middle finger to add harmony a third below. His accompaniment with the left hand is quite sparse. At cadences, he plays a bass note with the thumb and adds two or three accompanying pitches in a fast arpeggio. He tunes his kantele in the key of A melodic minor, (with an F# and a G#), so he can play A major and E major chords in the same piece without retuning.

Väinö uses contact microphone and a small amplifier if he is playing in a large hall, or if he is accompanying a louder instrument, like accordion. When I asked him what kind of music he plays with accordion, he promptly lifted the kantele up, turned it around, and played several dance pieces from the short side of the instrument! His style of playing from the short side was very similar to that of the Perho River Valley. The right fore and middle fingers played melody and accompaniment in thirds. The left played bass notes and chordal accompaniment. He used no damping at all, allowing the strings to ring freely. He explained that dance pieces are always best played from the short side, because there is a different feel, volume and timbre. He is one of the few players who can play from either side depending on the type of music he is performing.

Lyydia Jakonen

Lyydia Jakonen was born in 1914 in the Karelian town of Kurkijoki and today lives in the Southern Ostrobothnian city of Seinäjoki. Her father, Matti Väisänen, was a fine kantele player and builder. He was a well-known folk musician in the early part of this century around Kurkijoki, where he also played violin and accordion. He taught each of his five daughters to play kantele and gave each of them a kantele as a wedding present.

Lyydia plays the kantele with the shortest string closest. A large portion of her repertoire consists of slower folk songs, spiritual songs and hymns, which she performs by singing to kantele accompaniment. For example, she performed her own arrangement of the Martin Luther hymn "A Mighty Fortress is our God." She mentioned that in Karelia around the turn of the century, the kantele was used to accompany hymns and Christmas songs. She

has sung in a church choir for more than twenty years and knows how to read music. Even though she had learned some new pieces from written music, she never uses it when playing kantele.

Her repertoire is not limited to spiritual songs. She also knows some lively dance pieces, many of which were the same as those of other folk players. She referred to these as play songs, dance tunes and folk songs taught in school. When she performed selections in a minor key, she retuned the entire kantele by lowering the third and sixth scale degrees, going to the parallel natural minor. Her overall tuning is slightly higher than C major, which is in a suitable range to accompany her singing.

Lydia plays a thirty-string modern kantele made by Oiva Heikkilä. One unusual aspect of her kantele is that she uses a short octave of bass notes, similar to that used in the Perho River Valley. The lowest four strings are tuned C, G, F, C. She says that this is exactly the sort of tuning that her father used around the turn of the century and that a Kurkijoki cantor had developed it.

She uses her right forefinger to play melodies and the right middle finger to play accompaniment a third below. Her left-hand plays bass notes with the middle finger, and triad accompaniment, which is usually not arpeggiated, with the fore finger and thumb. Her hand positions are similar to those in the Perho River Valley. She uses no damping.



Illus. 54. Lydia Jakonen at her home in Seinäjoki, 1983.

Lydia has taught kantele playing privately for several years at the Kansanopisto [Adult Education School] in Seinäjoki. She has developed her own notation system for teaching, which consists of paper charts placed under the strings, showing the proper finger positions for the tonic, dominant and subdominant chords. She has compiled a book of repertoire using this system which has at least thirty-four pieces (as of 1983). She explained that she developed her own method of notation because "[you can't teach others if you don't have some sort of system]" (Jakonen 1983).

She knows that many current kantele players play and teach from the long side of the instrument, but she feels it is important to preserve the original way as she learned it, especially since the kantele is Finland's national instrument. She said:

[Certainly many play from the other side, because they play from written music and when the notes rise up it is easier to follow. But I think that this is the kind of instrument that steadfast old Väinämöinen didn't put written music there and start to play. He put it on his knees and played and sang. It is so much further from the original [to play with the long side closest]] (ibid.).

Samppa Uimonen

Samppa Uimonen was born in 1927 on the island of Tulola in Lake Ladoga, not far from Sortavala in Ladoga Karelia. There were no kantele players on the island, but there was an active musical life, particularly with choir singing in the local churches. At around the age of seven, Samppa heard a traveling minister, Antti Naukkarinen, sing and play the kantele. Samppa wanted to sing and play the same way, so he tried to make a kantele from a wooden crate and some strings. His father saw this and got Samppa his first kantele for his seventh birthday, a thirty-two string instrument built by Naukkarinen. The builder showed Samppa how to find an octave and tune the instrument, how to position the fingers, and how to play just one piece, the children's song "Ukko Noah." From then on, Samppa experimented and developed his kantele playing style on his own (Uimonen 1986a).

Samppa positioned the kantele with the shortest string closest, as in the oldest playing styles. He played melodies with the right fore finger and found that the other fingers could play strings which sound good together. For example, leaving a string between each finger sounded good (making parallel thirds) and leaving two strings in certain places also sounded good (making fourths). In this way, he worked out patterns for accompaniment, which included root position and some inverted chords. His left hand originally doubled the right an octave lower. He found that the right thumb could be used to double the melody an octave higher and the left little finger could play bass notes when necessary. Samppa still uses the same basic playing style and fingering: the thumb, fore, middle and ring fingers of his right hand; and the fore, middle, ring and little fingers of his left hand. He arpeggiates the chords, moving from the bass to the higher pitched strings. His earliest kantele had no damping board. Originally he did not damp the strings, but later he taught himself to use finger and hand damping to avoid a muddy sound. His repertoire included all kinds of music which was known at the time: popular songs, folk songs and spiritual songs. He was performing publicly on the kantele by the age of ten and was also well known for his poetry recitation and dramatic talents.

During the Winter War (1939-40), Samppa and his family moved to the Northern Ostrobothnian town of Haapavesi, an area known for its kantele playing. There he played for the well-known kantele player Anni Kääriäinen, who encouraged him to switch and play from the long side of the instrument. He also became acquainted with Antti Rantonen's playing of the five-string kantele. The family returned home to Karelia during the Continuation War (1940-44), but near the end of the war again moved back to Haapavesi. Samppa was involved in the music and drama activities of the Youth League and participated in a kantele ensemble, playing from the long side of the instrument, though he always continued to play from the short side when performing alone.



Illus. 55. Samppa Uimonen, in a publicity photograph from the 1960s, compliments of Samppa Uimonen.

Samppa developed a unique style of playing the five-string kantele, which does not follow any of the current styles practiced in Finland and is an extension of the playing style he uses for the large kantele. He holds the kantele firmly in his lap by grabbing the sides and pressing down with his left hand and uses only the fingers of his right for plucking the strings. He primarily uses the right fore finger plucking towards himself to carry the melody and trails the middle and sometimes the ring finger in thirds behind. He calls this a "vuorosormi" system, meaning that the "fingers take turns." He knows a number of pieces, some of which

he composed for the five-string kantele. In some pieces he turns the kantele around and plays from the long side (!), since the quick scalar ornaments are descending in pitch rather than ascending (Uimonen 1986a).

Samppa became a teacher, first in elementary school and later at the Kansanopisto [Adult Education School]. During this era in his life a significant event occurred. At a Kalevala festival in 1962, he witnessed a performance of a Karelian rune singer, Juho Lipitsä, who was the son of a famous rune singer, Timo Lipitsä. Juho Lipitsä was blind and around eighty years old at the time. He was reluctant at first to perform, but when properly encouraged, went on to sing unaccompanied a long, improvised performance of the Kulervo cycle of runes.

Samppa had always had a fascination with his Karelian roots and was greatly moved by Lipitsä's performance. He saw it almost as a type of spiritual calling to continue the rune singing tradition which he had witnessed. He began to study the runes of the Kalevala and began to practice the technique of improvisatory rune singing. He practiced on his own for several years until he felt ready for public performance. He also began experimenting using both the modern and the five-string kantele as an accompaniment to his singing. To complete the symbolic picture, he grew a long beard and wore a rustic Karelian folk costume. In this way, Samppa was able to capture all the major symbolic elements of rune singers: long sung improvisation of Kalevala texts, kantele playing, and the outward appearance of Väinämöinen.

In 1972, Samppa appeared as the star of a program called Tuhatvuotinen Karjala [Millennial Karelia] which he had written himself and was directed by the opera director Yrjö Kosterman. He appeared as ten separate figures during the course of the program, singing runes, reciting incantations and playing the kantele. The program received good reviews from critics and had approximately 250 performances in Finland (Uimonen 1983).

"Millennial Karelia" represented a break-through for Samppa's performing career. He switched from teaching to full-time performing around 1980. Samppa has put together fifteen different productions, with almost 2000 performances. He has performed in fifteen countries in all parts of the world, on radio and television in eight countries, and has produced various records, cassettes and videos. In 1980, he founded a cultural center called "Kalevala Forum" which functions each summer from near his home in Parikkala on the Karelian border (Uimonen 1986b). He performed at the Sesquicentennial Kalevala Celebration at the Olympic Stadium in the summer of 1985.

In recent years, Samppa has become a strong advocate for all kantele players in Finland. He has served on the board of directors of the Kantele League and has spoken out in defense of the multiplicity of playing styles which are currently practiced in Finland, that all kantele players have in common that each has had to develop his own personal style of musical expression. He has wanted to experiment and try other playing styles, but feels that this might hinder the development of his own personal style. He believes players should never think that there is a right way and a wrong way to play the kantele, which has had a terribly divisive influence in the past. They should put their differences behind them and should find common ground for agreement (Uimonen 1986a).

Samppa considers himself a genuine tradition bearer of Karelian rune singing and kantele playing, as much of a tradition bearer as one can be in this day and age when everyone in Finland is literate and has the comforts of modern life. Samppa likens rune singing to

skiing through the woods: Most of the time you break your own trail, and sometimes you come across another person's trail and follow it for a while, but you eventually break away and return to your own trail. One must always have faith that they will find the right path out of the woods (Uimonen 1986a). In other words, each rune singer of the past had to create his own performance style, just as Samppa has had to create his. Samppa's performances are not far removed from the "new tradition" kinds of folk music performances by well-educated young people, for example, from the Sibelius Academy. His performance style may have nothing to do with what the rune singers of the past did in their performances, but Samppa says it is "in the same spirit" as their performances (Uimonen 1986b). Perhaps more than anything, he represents a living symbol of ancient kantele playing.

Other Individual Players

There are many other folk kantele players who have their own styles. For example, Kaleva Järvinen, a folk kantele builder and player from Vaasa in Southern Ostrobothnia; Martti Salo, a folk player who currently lives in Ivalo in Northern Lapland; Eeli Kivinen from Vimpeli, who is called "Vimpelin Väinämöinen"; and Lauri Hirvonen from Kitee in Finnish Karelia.

These older folk kantele players represent only a portion of the folk music performed on kanteles in Finland. A significant amount of folk music is performed by students in the context of folk music festivals, kantele camps and formal instruction at music academies. For example, students can major in folk music performance at the Sibelius Academy and receive instruction in folk kantele playing. Also, most of the other folk performers I have mentioned have been involved in teaching their own folk styles of kantele performance to young people. The next generation of folk music performers has learned by formal instruction, rather than informal hearing and imitation. In spite of this change from the original learning context, and perhaps because of it, the old styles of playing are being preserved.

THE ART STYLE OF KANTELE PLAYING

In my first kantele lesson at the Sibelius Academy, my teacher Anu Rummukainen (married name: Itäpelto) taught me that there were two basic "lines" or "styles" of kantele playing in Finland: the art style and the traditional style. She had to describe the situation to me at the most basic level possible, because I was a complete novice in kantele playing and was still learning Finnish. The dichotomy which she outlined is a general concept held by the many kantele players in Finland. They tend to make a distinction between those who play art music and those who play folk music. At competitions sponsored by the Kantele League, "art" and "traditional" players compete in separate categories.

Later I came to learn that the traditional style was not a single playing style, but actually a category of styles which includes all the various ways of playing folk music on the kantele. In contrast, the art style is homogeneous and standardized in the way it is performed and taught everywhere in the country. According to its players, the name taidetyyli [art style] refers to the type of music being played, so-called western "classical" art music. I also met folk musicians who resented the application of this name, because they thought it implied that

folk styles of playing were not artistic. I use the name here because it is what the performers of this style called it, and do not wish to imply that the art style of playing is better, or more artistic than folk styles.

Anu went on to describe that the art style is newer and is a "soft" playing style, while the traditional style is older and a "hard" style. Later, Ismo Sopenen, chairman of the Kantele League, clarified that the word "soft" [pehmoinen] refers to the timbre which is produced while playing in the art style and not necessarily soft [hilja] in volume. Traditional styles of kantele playing are likely to have a hard [kova] timbre. This is basically true, but it is also true that it is more difficult to produce a loud [voimakas literally "powerful"] sound using the art style of playing.

In the art style of playing, the kantele is held with the longest string closest to the player. The players say this is done because they learn pieces from written music. Perceptually, the way the pitches are written on the staff matches where the player will find that pitch on the instrument when the lowest pitch is the closest.

The art style of playing favors a soft, even tone. The the fingers are placed at an approximately 25° angle to the strings. The strings are never "plucked" or "pulled up." They are "stroked" by pressing down with the soft, fleshy part of the finger, never the fingernail, and letting the finger "glide" across the string, releasing it. The right hand is used to play melodies on the higher pitched strings, usually with the fore finger. The right middle finger, ring finger and thumb may also be used to play intervals in the melody or for accompaniment. The left hand plays bass notes with the thumb and chordal accompaniment with the fore, middle and ring fingers, which are usually arpeggiated. The left hand also operates the damping board, with the little finger and a portion of the palm always resting on this board.

The damping of the strings is particularly important in the art style. There are two basic types of damping: The first is done with the fingers. As the player plays an ascending passage, the finger is brought down against the string previously played to damp it. As the player plays a descending passage, the middle finger trails a string behind, to damp the unwanted pitches. The purpose of finger damping is to create a clear, melodic style of playing, avoiding the muddiness of the sonorities decaying at their own pace. The second style of damping is the general damping of all the strings by the damping board, which usually comes between chord changes and at the end of a piece. This serves the same function as letting up on the pedal of a piano.

History of the Art Style

The art style of kantele playing was not invented by any one person. It evolved over a period of time beginning in the mid-nineteenth century and reaching a high point with a playing method developed by Paul Salminen in the mid 1920s. In some ways, the art style is still evolving today, with the first degree programs in kantele teaching and performance being offered by Finnish conservatories and with the relatively recent use of fully chromatic Soviet Karelian kanteles in Finland.

Traditionally, the kantele was used for one's own personal entertainment or for dance accompaniment. As a dance instrument, the most important qualities of the kantele's sound were that it be loud and in a good rhythm for dancing. When the kantele began to be played in concert settings, the context changed from dancing to listening. The quality of the sound

became an important aesthetic criterion, because it was judged in comparison to other western musical instruments. Such things as precise intonation and finger damping became important to achieve this sound.

A history of the art style of playing is really a history of the written music and method books which exist for the kantele.²¹ Among the oldest kantele pieces in written form were those transcribed in the late 18th century and published in a book by the Italian explorer Joseph Acerbi (1802). Acerbi's pieces, as well as many later transcribed kantele pieces, were descriptive rather than prescriptive. During the nineteenth century people began arranging music and writing method books for kantele.

Carl Axel Gottlund's Suomalaisia Paimensoittoja: Kantelella ja Sarvella Soitettavia [Finnish Shepherd Pieces: Playable on the Kantele and Horn], published as part of his Otava (1831b), features some of the earliest written music for the kantele. Although the pieces are arrangements of folk music, they clearly show the influence of art music, since most include key signatures, time signatures, phrase markings, slurs, tempo markings and dynamics. A. O. Väisänen did not include these works in his collection of carved kantele pieces, since most have just a single line of music and none of the polyphony found among the kantele pieces he collected himself (Väisänen 1928a:XII).

Elias Lönnrot wrote a book for playing a type of kantele which he had developed himself. Lönnrot's kanteles had seventeen strings, to which eight chromatic strings could be added if desired. The book contains a short introduction, a tuning guide and transcriptions of 230 "Finnish and foreign" pieces written in number notation. In the introduction, Lönnrot says that the seventeen string kantele may also be played from hymn book notation or regular musical notation.

At the time the carved kantele was replaced by the box kantele and the playing style among the folk changed from the together position to the apart position, church hymns and other spiritual songs made up a portion of the box kantele repertoire. In Finnish Lutheran Church services, hymns are sung in unison to organ accompaniment from hymn books which usually contain only the text of a hymn, not any written music. At home, hymns were frequently accompanied by the virsikantele, which had special hymn books with the melodies written in numbered notation. The same melodies were also worked out by ear and played on the regular kantele and were among the earliest western, composed pieces played on the kantele.

Kanteles were played with the shortest string closest to the player throughout most of the nineteenth century. No one is certain who was the first to play with the longest strings closest. According to the available evidence, one of the earliest was Akilles Ockenström.

Adolf Akilles Ockenström (1867-1898) learned kantele playing from his father, Aleksander (1834-1882), who was said to have played kantele with Elias Lönnrot in earlier years. As a boy, Akilles also reportedly heard Kreeta Haapasalo play. He was blind from the age of eighteen and was trained as a piano tuner, but was also a fine kantele player who traveled around Finland giving recitals during the last two decades of the nineteenth century. He played at least one concert a year in Rauma between 1888 and 1897 and also played

²¹I am indebted to the scholars at the Folk Music Institute at Kaustinen, who provided copies of early kantele method books for my examination.

concerts in St. Petersburg, Estonia and Stockholm, where he played at the 1896 World's Fair. His programs included a mixture of folk music, marches and popular music of the day from Finland and abroad. He was probably well known among art musicians, since his funeral was attended by such figures as composer Oskar Merikanto (Kemppi 1984:6-7).

It is a general belief among players that the kantele was turned around and played with the longest strings closest only when players began using written music for learning and performing pieces. Ockenström, however, was blind and therefore could not read music. In spite of his blindness, he is credited as the author of one of the earliest published kantele music books, Säveleitä kanteleelle [Compositions for the Kantele] (1898). Ockenström's book was edited by the Finnish musicologist Ilmari Krohn, who must have played an important role in its production since it was published after Ockenström's death.

Säveleitä kanteleelle features a photo of a kantele player on the cover, presumably Ockenström, with the longest strings closest to the player.²² It contains instructions on how to tune a twenty-eight string kantele in C major with the range from G to f". If the player owned a thirty string kantele, they could add g" to the treble and F to the bass. The first nine compositions are in C major. It describes retuning the kantele to D minor, by lowering each of the three B strings to B-flat, and tuning the c" to c#". The last eleven pieces are in D minor. The author explains that the left hand plays the bass side and can rest partly on the covering board. The right hand lies freely on the treble strings. As a starting position, the left thumb is placed on the G string (the A string in D minor) and plays bass notes. Usually the left fore finger adds the third above the bass notes, and sometimes the middle finger adds the fifth. The right thumb is likewise placed on the g' string (or a' string). The right middle finger plays the melody and the fore finger adds accompaniment below in thirds. The right fore finger plays the melody if it goes below d". The method also describes the basics of an art style of playing -- using the soft part of fingers and not plucking the strings up, but sideways. The selections are written on a standard treble-bass piano staff and are arrangements of twenty folk songs. The second part of Säveleitä kanteleelle (1901), published under Ilmari Krohn's name, includes finger exercises for the right and left hands and arrangements of eighteen folk songs.

Simo Eemili Karjalainen, born in the town of Jaalanka on the banks of Lake Oulu in 1880, played kantele with the longest strings closest. Karjalainen was a carpenter who built his own kanteles. These were relatively large instruments with thirty or more strings and a unique feature which provided the playing of chromatic pitches. On the ponsi side there was a ridge attached to the soundboard. The player could press down on any given string against the ridge, which would shorten its length and raise its pitch a half step. Karjalainen was also a choir director and was able to read and write music. He made arrangements for kantele and even wrote arrangements for kantele ensemble, which featured different parts following choir voicing. Some of his arrangements were published as the third volume of Säveleitä kanteleelle, which were "checked" by Ilmari Krohn. In the preface, it mentioned a "transposing board," which was a piece of cardboard with the markings for the C strings. As

²²Tobias Norlind published a picture of Akilles Ockenström, whom he also calls Aatto Wirtta, taken in September 1896 which shows Ockenström playing with the shortest strings closest (1923:55). On the following page (ibid:56), he published another picture taken in 1905 of a kantele player, who now has the longest strings closest.

the kantele would be tuned to different keys, the board could be moved under the appropriate strings. It acted as a kind of movable "do" for the kantele player (Karjalainen 1984; Sopanen 1986b).

Ilmari Krohn also published a book entitled Walittuja psalmeja [Expressive psalms] (1903), which contained psalms with kantele accompaniment. The melodies and chordal accompaniment are written at the top of each page, and each chord is assigned a symbol. The psalm text is written underneath, together with the appropriate symbols for chordal accompaniment. Krohn mentions in the preface that the fingerings follow a system developed by Josef Binnemann.

Binnemann was a music store owner in Helsinki around the turn of the century. Apparently because no other books were available, he wrote a kantele instruction book in longhand, which was never published.²³ According to his book, the kantele should be played with the shortest string closest. Only the little fingers were not used in playing. The right hand played the highest pitched strings, closest to the player, the left hand played the lower pitched strings. Binnemann included many difficult technical exercises and fingerings which, according to Krohn (1903:[II]), are based on those for concert harp.

Pasi Jääskeläinen, the famous kantele performer from Haapavesi, published a kantele playing method entitled Kanteleen soiton alkeita [Introduction to Kantele Playing] in 1903. Jääskeläinen mentions Ockenström's method in the preface, but says that "a simple introduction is still lacking" and his method is meant to fill the void. The cover features a picture of Jääskeläinen playing a right handed kantele with the longest string closest, which is unexpected because he patented and marketed left handed kanteles. He includes illustrations showing diatonic tunings in C major and in C minor of a thirty string kantele, but he also suggests the use of a short octave bass, tuning the lowest three strings C, G, F, in descending order of pitch. He recommends playing with the longest string closest and plucking the strings sideways. The first few selections are finger exercises for the right and left hands. The right fore and middle fingers always play in thirds. The left hand plays bass notes and usually only one other note of accompaniment, but sometimes a complete triad, outlining the tonic, dominant and subdominant harmonies. The musical selections are arrangements of folk songs or pieces which Jääskeläinen composed in a folk style.

In spite of Jääskeläinen's published playing method, most of the kantele players in Haapavesi continued to play by ear without written music. They did, however, accept playing the kantele from the long side of the instrument, plucking sideways rather than perpendicularly and using left handed kanteles. These changes which Jääskeläinen brought to kantele playing were adapted into and became a part of the folk tradition.

Emil Kauppi, Pasi Jääskeläinen's lifelong friend, "[continued the work which Pasi had started]" (Porma 1948b:292) and published several books containing arrangements for the kantele and teaching its playing method. Kauppi was a well known pianist, conductor and composer, as well as a fine kantele player. He played the kantele, as well as the piano, in some of Jääskeläinen's concerts and even gave some solo recitals on the kantele (Härmä 1979:30). Kauppi wanted to develop the kantele as a true art music instrument.

²³A copy of the manuscript is located at the Folk Music Institute, Kaustinen.

[Emil Kauppi took the promotion of the kantele as his life's work. Where Kauppi had received instruction in kantele playing is a totally unknown matter. Kantele playing was not part of the program at the music school he attended. He spoke on behalf of the kantele and explained the character and playing technique of the instrument at the kantele concerts which he held. Emil Kauppi's greatest dream was that the Finnish kantele would be a true folk and orchestral instrument. He dreamed of an orchestra, whose core would be made up of 40-50 kanteles of different sizes] (ibid:36; from Tarpila 1952:15).

Kauppi's Oppikirja kanteleensoitossa [Teaching book for kantele playing] (1908) was written to be used with a 28 string kantele, with a range from F to g". It gives a basic description of kantele playing, mentioning that the bass side is closest to the player, the right hand plays the treble, the left hand the bass and accompaniment, and the strings are not plucked up, but stroked from the side. The students practice a number of scale and rhythmic exercises with each hand similar to those for piano or harp players. The book continues with three additional sections. The second section contains songs with kantele accompaniment; the third, five pieces for solo kantele; and the fourth, pieces for kantele duet.

The Oppikirja was the first in a series of kantele books produced by Kauppi. A second book (1909) contained "Songs and Dances" arranged for the kantele. A third (1911) featured "Songs Accompanied by the Kantele" composed and arranged by Kauppi. A fourth (1911) consisted of "Ten Oskar Merikanto Songs" accompanied by the kantele and arranged by Kauppi. The second and third books contained mostly folk song arrangements. The third and fourth books included some of the earliest genuine western art music arrangements and compositions written for the kantele.

All of Kauppi's kantele books were issued in new, larger and "improved" editions in 1922. The Oppikirja received the title Kantelekoulu itseoppimista varten [A Self-teaching Kantele School] and was now meant for a thirty-string kantele, with a range extended down to D. It features two photographs of Kauppi playing which show that he played a left handed, presumably a Pasi Jääskeläinen model of kantele. In the new editions, Kauppi briefly mentions experiments to make the kantele chromatic. He added two additional kantele books in 1922, the first with arrangements of thirty folk songs and the second with arrangements of forty folk songs.

In 1909, Olli Suolahti published a playing method called Käytännöllinen opas kanteleensoittajille [A practical guide for kantele players]. Suolahti is shown on the cover playing with the longest string closest, but with the interesting difference that his hands are reversed; the left hand is playing the treble strings and right hand the bass strings. He prescribes that the fingers of the left hand, mainly the thumb, should be used on the upper strings to play melodies, while the thumb and next three fingers of the right hand play accompaniment on the lower strings. In the preface, Suolahti explains that his intent was to produce a truly practical kantele guide, especially for those who had not taken to the "art of reading music." All the selections have just their melodies written out on a treble staff. The chordal accompaniments are given in complex system of roman numerals developed by Suolahti. The player is free to arpeggiate the chords or not. Suolahti's guide is one of the first to mention the use of dynamics in playing. He says there is no better instrument for quiet, beautiful playing than the kantele. To play softer, he recommends moving the hand closer to

the covering board; to play louder the hand should be moved to the middle of the strings. The music selections are primarily arrangements of folk songs

Kaksitoista kansanlauluja kanteleen säestyksellä [Twelve Folk Songs with kantele accompaniment] by Aapo Similä (1927) was meant to be used with the machine kantele invented by Paul Salminen, even though the cover features a picture of a box kantele. The arrangements are noticeably more difficult and complex, being similar to what piano arrangements would look like for the same pieces. Similä was a widely known kantele player in the 1930s and was reported to have played concerts in Karelia on a chromatic (i.e. Paul Salminen) kantele (Jakonen 1983).

Paul Salminen's first kantele book, Suurkanteleen soiton opas [Guide for large kantele playing], was published in 1927. The cover shows Salminen playing a modern kantele. This is significant since two years earlier Salminen's patent application pictured the tuning machine added to a straight-sided box kantele. The Guide describes the kantele as having either thirty or thirty-two strings. Salminen gives a basic description of playing in the art style, the only new information being that the side of the left hand rests lightly on the damping board. Nothing specific is mentioned about damping, except that the damping board will damp all the strings. The hand positions and finger damping are not mentioned. The Guide contains a number of advanced exercises to learn proper fingerings, such as the playing of scales and chords, which are similar to concert harp or piano exercises. The music selections are mostly arrangements of folk songs and are at a high technical level.

Salminen's Kantelekoulu [Kantele School] was published in February of 1949, in honor of the Hundredth Anniversary of the New Kalevala. In Kantelekoulu there is a full description of the art style of playing, which has not changed substantially since. Salminen includes instructions on the playing position, how the strings are stroked and proper fingerings. There is a detailed section on finger damping and use of the damping board and even a section on "Care of the Fingers." The preface explains:

... The practical instructions given here offer, in spite of their brevity, all that is essential to know about the technic [sic] of playing the kantele. The kantele, after all, is no virtuoso instrument, properly speaking, so advanced technical exercises are not needed. A substantial part of this volume consists of arrangements for the kantele of folk songs and some art songs, which undoubtedly are the kinds of pieces best suited to the kantele (Salminen, Paul 1949:2).

Kantelekirja (1950) provided additional arrangements and, together with the Kantelekoulu arrangements, still makes up an important core of machine kantele repertoire.²⁴

Salminen also gives instructions on how to tune the machine kantele, which has to be tempered by tuning the octaves exactly [perfect tuning], but contracting the fifths slightly. He then provides some tests of the tuning throughout the range and, as the tuning machine makes it possible to play in different keys, tests for each new key.

²⁴An additional book of Paul Salminen arrangements was collected and edited by Anneli Kuparinen (1986).

While the basics of the art style playing technique are rather straightforward and simple, their proper application comes only after a great deal of practice. It is similar to playing the violin or piano; the basic description of how the instrument is played is simple, but the achievement of playing skill is difficult. Salminen himself had dozens of students, most of whom took kantele only as a hobby (Salminen, Jorma 1984:6). Only a handful became truly outstanding players, who became widely known in Finland and among Finns elsewhere.

Another notable kantele player from the Salminen era was Väinö Hannikainen (1900-1960) who was a harp player in the Helsinki City Orchestra from 1923-1957. Paul Salminen, who played trombone in the same orchestra and also repaired concert harps, was a personal friend. In addition to playing the harp and kantele, Hannikainen was a composer and arranger who made numerous arrangements for the concert kantele. He collected approximately three hundred northern Karelian folk songs and dances. Hannikainen may have had a strong influence on Salminen in developing the art style of kantele playing.

Contemporary Art Style Players and Teachers

Perhaps the most well known art style kantele player of the post-Salminen era is Ulla Katajavuori. Her father was a kantele player, who learned to play "by ear" and was reported to have had a gift for rhythm. She became interested in the kantele in her early childhood. Later, she studied voice and piano at the Helsinki Conservatory and kantele playing with Paul Salminen and Väinö Hannikainen.

By the early 1930s, Katajavuori had already developed into a virtuoso player of the machine kantele and was performing concerts all around Finland and on Finnish radio, for example on A. O. Väisänen's radio program "A Half Hour of Folk Music." She has given hundreds of performances, both in Finland and on tours to Norway, Denmark, Estonia, Germany, Canada and the United States. She also became well known from her many sound recordings. In most of her performances she played the kantele as a solo instrument, but she has occasionally accompanied singers. She has not performed with orchestras because, as she puts it, "[the sound of the kantele is too small and quiet, and will not withstand orchestral accompaniment]" (Katajavuori 1986). She gave her last formal performances in 1980 and estimates the total number of performances in her career in the thousands (Katajavuori 1985).

Katajavuori has also been a prolific teacher of art kantele playing, teaching at the Helsinki and Hämeenlinna Music Conservatories, and in recent years to private students. She estimates the total number of students she has taught in the hundreds. Perhaps her best known student is Tellervo Haikonen, who is also recognized as a first rate concert artist. Katajavuori says that she has developed her own system of playing and teaching, based on Paul Salminen's method. She emphasizes clarity in kantele playing, which is achieved by precise finger damping. Her husband, Eero Koskimies, arranged most of her concert repertoire, a portion of which was published as Kanteleohjelmistoa I-II (1963), which has become an important part of the machine kantele repertoire.

Tyyne Niikko (b. 1903 in Sortavala) is also a well-known kantele player. Her father, Pekka Silvennoinen, was a kantele player and her mother, Anna, a piano and organ player and choir director. Tyyne began playing kantele and piano simultaneously while very young. Although she studied voice, choir direction and music theory, the kantele has remained her primary instrument. She did a great deal of concertizing, first in Sortavala and later in

Joensuu, where she moved at the time of the Second World War. She has played many concerts outside Finland as well, including the United States, Canada, Germany, Austria, Iceland, Hungary and the Soviet Union. She was also featured on local Joensuu radio and on Finnish general radio (Niikko 1979).



Illus. 56. Tyyne Niikko teaching Antti Vavuli at the 1983 Lahti Kantele Camp.

Tyyne Niikko's greatest impact has been in her teaching. In Joensuu beginning in the 1940s, she taught kantele privately as well as at the Vapaaopisto [Free School]. She believes that the total number of students she has taught over the years is in the hundreds. Perhaps her most important student was her own daughter, Anneli Kuparinen, who has continued her mother's work in Lahti. Tyyne also organized a kantele group in the 1940s called Karjalan Kantelet. In 1969 she moved to Lahti, where, with her daughter and son-in-law, Teuvo Kuparinen, she founded the Finn-Kantele group, which has approximately thirty members. The Finn-Kantele group has made sound recordings, played concerts and toured extensively, most recently touring in the United States with concerts in New York and Florida in January 1985.

The Kuparinen and Tyyne Niikko were also influential in starting the "kantele camp" movement in Finland by founding oldest annual kantele camp at Ilomantsi in Finnish Karelia, in the summer of 1971. The Kuparinen and Niikko directed this camp for its first five years. In the summer of 1975, they established another kantele camp at Lahti, which they have directed every summer since. In 1985 there were kantele camps in all parts of Finland and even one in Sweden, with a total enrollment of more than six hundred students (Sopanen 1985b:3).

Tyyne Niikko teaches kantele in the art style. Her students are taught to play from the long side of the instrument. She follows Paul Salminen's methods, emphasizing the hand positions, using the soft parts of the fingers, and the use of finger damping and the damping board.

Interestingly enough, when I asked her to play for me, she played the kantele with the short strings closest to herself! Her kantele is marked from both sides, long marks for playing from the short side and short marks for playing from the long side. She can play from either side but prefers the way she originally learned. Likewise, her playing technique is closer to that of folk players, even though she teaches the technique of art playing. She explained that her father could read music, but still played from the short side. She said, "[It is just a matter of tradition. I do not want to forget how Finns played in the past, and how I learned to play]." Then she repeated a saying heard often among kantele players, "[It really doesn't matter from which side the kantele is played, as long as it is played well!]" (Niikko 1983).

Anneli Kuparinen has taken the primary role in directing the Finn-Kantele group and Lahti Kantele Camp in recent years. Her husband, Teuvo, acts as the business manager of the group and camp and occasionally performs with the ensemble as a singer. Anneli has refined her kantele playing and teaching to a high degree. Many of her students have become the most outstanding young art style players, for example my own kantele teacher, Anu (Rummukainen) Itäpelto. For beginners, she emphasizes the technical aspects of playing, such as finger positions and damping. The students practice these technical aspects until they come automatically. Then the students are taught to read music in order to play exercises consisting of scales, arpeggios, and chords. These exercises develop the basic components which will be used in playing. The students are finally introduced to pieces of repertoire, which they practice and memorize for concert performance. Students usually work on a single piece until it is perfected. The teaching then emphasizes elements of interpretation, such as tempo, dynamics, and overall clarity.



Illus. 57. Anneli Kuparinen teaching a large kantele class at the 1983 Lahti Kantele Camp.

Kantele ensemble teaching follows a similar pattern. Since all the kanteles in a Finnish ensemble are generally of the same type, there are no set "sections" based on graded

sizes of instruments, as may be found in kantele ensembles in other Baltic countries. Usually, in a Finnish ensemble there are only two or three parts which are played simultaneously. Finnish kantele ensembles allow beginners to join with more advanced students, because the beginners may play just the bass, or the accompaniment of the piece, while the more advanced players play the melody as well as bass and accompaniment. Ensemble playing has an advantage in that the sound is more powerful when combined in numbers. A disadvantage is in trying to tune a group of kanteles, each of which covers a five octave range, so that they all play in tune with each other.

Anneli still recognizes the symbolic significance of the kantele as a folk instrument and the national instrument of Finland. She feels that tradition is still at the foundation of kantele playing and is valued by all kantele players. The art style players want to develop playing as far as it can go, to be able to play classical music or any other style of music, which can only come after years of practice. The dividing lines among kantele players are not entirely clear because many players who study art playing also perform folk music. She feels that "[the artistic possibilities are increased in a developed style of playing, which does an additional service to our most beautiful folk songs]" (Kuparinen 1983).

Partially as a result of the kantele camp movement and increasing prominence of kantele teaching in general, today there are literally dozens of first rate art style kantele players. This has been quite a dramatic turn around since the 1950s and 1960s, when there were relatively few concert artists of the kantele. Among the better known figures from this era were Ulla Katajavuori, Tyyne Niikko, Marjatta Puupponen (currently: Markkula), Urpo Pylvänäinen and Mauri Saikko. By the early 1970s a newer generation of first rate art style kantele players had appeared which included Anneli Kuparinen, Tellervo Haikkonen, Ismo Sopenan and Hannu Syrjälähti.

Ismo Sopenan (b. 1941) began studying kantele at the age of ten with Marjatta Puupponen. After learning the basics, he began to develop his playing skill on his own. Ismo has fit his playing technique to himself. He is left handed, so he plays the upper strings with his left hand and the lower strings with his right hand, although he teaches his right-handed students the standard hand positions. Ismo has served as the Chair of the Kantele League since its founding and is also an outstanding kantele teacher, teaching at the Tampere Conservatory of Music as well as private students, and previously directing the Ilomantsi and Haapavesi Kantele Camps. He and his three daughters, all of whom are first rate kantele players, frequently perform together as a family group.

Hannu Syrjälähti (b. 1950 in Kymi) received basic instruction in playing the kantele when, at the age of fourteen, he joined a group of Karelian immigrants near his home town who started a kantele ensemble, which was led by Mauri Saikko from Iitti. After a short while, he played on his own and continued to search for more repertoire. He received a small grant from a Karelian organization in the Kymi Valley to further his instruction, so he contacted Ulla Katajavuori. He was already playing at such a high technical level that he did not go for regular private lessons and was merely encouraged to continue on the same course. The refinements in his playing skill were largely self-taught.

Syrjälähti has given hundreds of performances, both in Finland and abroad, and has been featured on numerous sound recordings, most significantly two solo albums, Kanteleella (1982) and A Kantele Escapade (1986). He is one of the few kantele artists to have performed professionally in ensembles with other western musical instruments, such as in the work

"Equivocations for Kantele and String Trio" by the Finnish composer P. H. Nordgren (1981). In addition to his performances, he has made valuable contributions in composing and arranging pieces for the machine kantele, particularly mainstream art music, such as Bach and Chopin. He has also taught kantele privately and in recent years at the Espoo Music School and Sibelius Academy (Syrjälähti 1986).

Although many have attained a professional level in their playing ability, there are no current kantele players who earn their entire livelihoods from playing. Most of the best kantele artists have combined teaching with their playing careers, as have Ulla Katajavuori, Tyyne Niikko and Martti Pokela. Other outstanding soloists have had other professions. For example, Urpo Pylvänäinen was a policeman; Hannu Syrjälähti is a Lutheran minister. Ismo Sopenen was a fish resources planner and Martti Pokela earned his college degree in agronomy. The same holds true for most of the younger outstanding players. Many have begun careers in music teaching or other fields to augment their kantele playing careers. Part of the problem in establishing professionalism in kantele playing has been that in the past the kantele has not been an instrument which could be studied at music conservatories and thus it was not possible to earn a degree in kantele performance or teaching. But in more recent years this situation had started to change.

Promotion of the Kantele

A major vehicle for the promotion of the kantele has been the kantele camp movement. There are many kantele camps held each summer in various locations around Finland. Children, and some adults, go to a camp location, usually a school, for as short a time as a weekend or as long as two weeks to learn to play the kantele. Food and lodging is all arranged and is usually quite reasonably priced. Typically, a camp will include private lessons in large kantele playing, group work in kantele ensembles, group classes in five-string kantele playing, then perhaps some specialized classes, such as music theory or simple folk instrument building or playing. In the summer of 1983, I visited five such camps.

The Lahti kantele camp had nine kantele teachers, one music theory teacher and sixty students in the following age categories: 6-10 = 8, 11-15 = 27, 16-20 = 9, 20+ = 16. Among the students, there were four males and fifty-six females. The teachers were all female. The Ilomantsi kantele camp had fourteen kantele teachers (two male and twelve female) and eighty-one students. The students were divided in age and gender as follows:

| age: | number: | |
|---------|---------|-------------|
| 21+ | 13 | |
| 18-20 | 3 | males: 11 |
| 13-17 | 30 | |
| 7-12 | 35 | females: 70 |
| | ----- | ----- |
| Totals: | 81 | 81 |

The Haapavesi and Iisalmi camps were devoted to teaching folk styles of kantele playing. The demographics were very similar to the Ilomantsi and Lahti camps: mostly children and overwhelmingly female. The figures seemed to show a fall off in interest among teenage students. This figure was perhaps balanced out by the fact that a significant portion of

the teachers were older teenagers. The various directors of the camps offered several explanations for the lack of interest among males. Perhaps the kantele is not seen as masculine an instrument as, for example, electric guitar or drums. Also, some believed that young men did not have the patience to practice enough to learn to play well. Still others felt that it simply reflected the feminization of all fine arts in recent years.



Illus. 58. Participants at the 1983 Lahti kantele camp.

The Kanteleliitto [Kantele League, formerly called the Kantele Players' Association] was established in 1977 with the express purpose of promoting the kantele. One of the main goals of the Kantele League has been to make the kantele an equal among all other western musical instruments. This has been accomplished in part by lobbying the Finnish Parliament and Ministry of Education to have the kantele used as a school instrument and by developing kantele performance degree programs at several Finnish music schools and conservatories.

The image of the kantele as the national instrument is both an asset and a liability. It helps when arguing for funds from the Finnish government. If this instrument is not supported in Finland, it will not exist. At the same time, in the minds of average Finns, the kantele is a primarily a mytho-poetic symbol, so the actual instrument in tangible reality is not taken seriously enough. Thus, another major task of the Kantele League is overcoming prejudices.

The Kantele League has been working to overcome these prejudices by a concerted information campaign. The League publishes a quarterly journal, Kantele, which helps distribute information to all interested persons. The League also sponsors local and national kantele competitions in various parts of the country, which receive good press coverage. In addition, there is a large annual kantele concert, called the Kanteleparaati [Kantele Parade], which is held in various locations around the country and usually draws a good audience. The League has also been involved in giving special awards, such as honorary memberships to outstanding older players and builders for lifetime achievement. Recently, the league has begun awarding special medals to outstanding players of folk styles.

One would expect to find friction between those who promote the art style of playing and those who promote preservation of folk styles, but this has generally not been the case. These two groups have found it more beneficial to work together towards common goals. Originally there was some resistance among art players to the promotion of the five-string kantele. But today, the five-string kantele is widely used as an elementary school instrument, so that students will become acquainted with "the most Finnish of all musical instruments." The five string kantele is also taught at virtually every kantele camp. This is in the hope that the best players will move on to the larger kanteles and study the art style of playing or perhaps one of the many folk styles.

Only recently has it been possible to major in kantele performance at music conservatories in Finland. The Sibelius Academy offers kantele courses through its folk music program, but it is also possible to take lessons in the art style of playing. The music conservatory at Lahti, where Anneli Kuparinen teaches, awarded the first degrees ever in kantele performance to Aino Meisalmi and Susanna Heinonen in 1986 (Sopanen 1986a).

There have been problems in promoting the kantele to the level of other western instruments. The first of these involves the performance repertoire of the kantele and the second involves the kantele itself. Even the most advanced form of the kantele, the machine kantele, is still basically a diatonic instrument. The tuning mechanism allows it to play in all keys, to change keys quickly, and to play most accidentals, but highly chromatic passages are still impossible. This limits the repertoire which can be played. All published kantele music are arrangements or compositions made specifically for the kantele. Unfortunately, this repertoire is relatively small compared to the repertoire of other instruments. Also, until recently, there has been relatively little music which combines the kantele with other western instruments.

During the last few years, the Kantele League has actively promoted new compositions and arrangements. The attitude of many top kantele players is that composers should write with the kantele specifically in mind. Hannu Syrjälähti said, "[You can't play a Beethoven piano concerto on the violin]" (Syrjälähti 1986), meaning that new compositions should be tailored to the limitations of the kantele. Because it has an intimate and softer sound than many other western instruments, the kantele would be best suited as a chamber music instrument. There have only been limited experiments in this area. In 1985, the Kantele League sponsored a kantele concerto competition which resulted in three new concertos, by composers Andras Fekete, Ahti Karjalainen and P. H. Nordgren. Such efforts continue and an increasing amount of kantele music is published every year.

The Karelian Kantele Movement

In addition to the machine kantele, there is a growing movement in Finland to play art music on fully chromatic kanteles based on those used in Soviet Karelia. This movement has been started and led by Kari Dahlblom, a former champion machine kantele player who became interested in the Karelian instrument. Dahlblom received basic instruction in its playing style from Hanna Pirhonen, a former member of the professional Soviet Karelian kantele ensemble from Petrozavodsk, who currently lives in Raahe. He later received additional instruction from other members of the Soviet Karelian ensemble when they toured Finland. Dahlblom has, in a relatively short period of time, become a master player of the

Karelian kantele and has actively tried to promote it in Finland, not as a replacement for the standard modern Finnish kantele, but as a supplement to it. After all, he reasons, there are many different types of kanteles and many different playing styles which are currently used in Finland, so why not add another?

Some features from carved kantele playing are still preserved in the playing style of the modern Soviet Karelian kantele. For example, the kantele is held with the shortest string closest to the player's body and the fingers stroke the strings in the together position, meaning that they are basically crossed and the playing alternates back and forth from one hand to the other. There is no clearcut division between melody and accompaniment. Music is notated on a single staff, rather than the double "piano" staff used for the machine kantele. The lack of separate accompaniment is made up for by the fact that the Karelian kantele is typically played in ensembles of graded-sized instruments, each with its own range and part. The instrument has no damping board, so players have to practice precise finger and hand damping. The basic rule is that each finger returns to damp the same strings it has plucked.



Illus. 59. Hanna Pirhonen at Kaustinen, 1983.

Because this type of kantele originated in Eastern Karelia, the playing position is different than that typically practiced in Finland. The longest side of the instrument is placed across the lap and the shortest side against the chest, placing the soundboard in a vertical slant. This matches the "vertical position" used by carved kantele players in areas where the influence of Russian dance music was the strongest (Tönurist 1977a). Finnish kanteles are usually played in a horizontal position.

In the vertical position, it is difficult for the player to see the surface of the instrument. There are no markings for the pitches of the strings as on modern Finnish kanteles. Players find their place strictly by feel. Since the chromatic pitches are in a plane slightly lower than the diatonic pitches, the strings for the pitches B and C and the pitches E and F are together on the upper plane. The player can feel a gap between all the other strings except these and thus finds their location on the instrument.

Kari Dahlblom has written a playing guide for the Karelian kantele (1987), which is loosely based on the playing guide for the instrument published in Petrozavodsk. He has begun teaching some students privately and at the Mikkeli Music Conservatory and there are plans for him to teach some lessons in this type of kantele playing at the Sibelius Academy. In addition, Hanna Pirhonen has taught several students in the Raahe area. Kari has taken the playing style of the Karelian kantele one step further and has come up with a type of "free accompaniment" which can be used to accompany almost any kind of folk music. Free accompaniment has never been used by the players in Soviet Karelia and is a new technique taught only in Finland. Since the use of the Karelian kantele has only recently come to Finland, it remains to be seen what kind of impact it will eventually have on art music playing.



Illus. 60. Kari Dahlblom at his home in Tikkakoski, 1986.

Current State of the Art Style

The art style of kantele playing is basically an urban phenomenon. It is transmitted by the existing western art music teaching infrastructure. As degree programs in kantele performance have become established, various aspects of performance technique and repertoire have had to be codified. With the exception of the Karelian kantele movement, the art style of kantele playing has become more homogeneous. There is little variation in the way it is taught at various conservatories and kantele camps. As it becomes homogeneous, it

establishes a standard for kantele playing. Before, when everyone learned on their own, there was too great a variation in style among individuals to make valid comparative value judgments. Today, there are numerous concerts and competitions where these comparisons take place.

In spite of its connection with western art music, there are many things which the art style has in common with all other styles of kantele playing. Although it is slowly changing, a major portion of the repertoire for the machine kantele continues to be folk music, though in arrangements which have been made to fit the standards of art music. Paul Salminen in his Kantelekoulu preface tells that he did not conceive of the kantele as a "virtuoso instrument" and felt that folk music still best suited its character. The basic timbre and natural vibrato of the Finnish kantele has remained the same, and is valued by folk and art music players alike. It is very significant that until recently, even the best art music players learned a major portion of their skill on their own. Most of the kantele playing guides were geared for self instruction. After learning the basics, they merely played the instrument and worked out the details of their own individual styles, which is very similar to the learning process used by most folk players. Perhaps the most important thing uniting all kantele players is the strong symbolic value of the kantele. It is believed by many to be an ancient instrument -- a gift from the proto-Finns to our day -- so it symbolizes the roots of Finnishness.

POPULAR AND "NEW TRADITIONAL" MUSIC PLAYING

Just as the kantele is used in playing folk music and art music, it is also used in playing popular music. The boundaries between popular music, folk music and art music are unclear, because popular music borrows from all the music styles available in a culture and uses them to create new styles. Consequently, style is not always helpful in defining what constitutes the popular music of a given culture. In Western culture, some styles of music are almost always seen as a part of popular music, such as jazz, rock & roll and country-western.

Popular music can be defined better by its performance and learning context, mode of transmission and susceptibility to change. Popular music is usually learned in an informal atmosphere, using experimentation, and thus can be particularly innovative. It is frequently performed in a formal and public context. Popular music is generally transmitted by a commercial infrastructure. It has an immediate and pervasive impact because it is spread quickly and widely by sound recordings and the mass media. At the same time, popular music is quite ephemeral; a new style is created quickly and disappears just as quickly. Of all the style categories, it changes the fastest and has the greatest amount of change.

The use of the kantele in popular music has been limited, but is growing in significance. The kantele came to be used in popular music mostly through experiments on the fringes of folk music and art music. Many of the same kantele players who were or are tradition bearers of folk or art styles have also played a significant role in popularizing kantele music. For example, several of the historical figures performed in a popular context in their time, such as Pasi Jääskeläinen, Antti Rantonen, Akilles Okenström and even Kreetta Haapasalo.

Martti Pokela as a Popular Musician

Near the beginning of my field work, a Finnish ethnomusicologist asked me why I was studying Martti Pokela. He asked, "Don't you know that Martti Pokela is Finland's Johnny Cash?!", the implication being that Martti Pokela is more of a popular musician than a folk musician. Martti Pokela has had and continues to have perhaps the greatest influence of anyone in bringing the kantele to popular attention. He, together with his wife Marjatta, began their performing careers in the early 1950s playing guitar and singing folk songs. Many of these songs were those which they learned as children, from Ostrobothnia and Karelia, to which they added popular songs from the war years. They did not perform the songs exactly as they had learned them, but made arrangements which were suitable for stage performance. They also composed original songs following the same general style as the old songs.

[We then civilized [the folk songs] and I have to say we made many improvements. Marjatta had a strength in working with the words and she kind of liked shortened broadsides and ballads. We made arrangements so that they could truly be performed. We arranged both the words and the melodies. And we also made many of our own folksongs. This is clear -- when we put something down, we didn't know anymore what was ours and what was the original. ... These scholars and the like were certainly quite appalled] (Pokela 1982b:24).

Soon the Pokelas began to use kanteles in their performances and in a manner similar to their reworking of the folk songs. Martti began to study and expand the performance capabilities of the five-string kantele. A. O. Väisänen originally disapproved of the way Pokela played the five-string kantele, but later came to accept Pokela's innovations (ibid:36).

The kantele became more widely used in popular music groups during the folk music revival of the late 1960s and early 1970s. The revival brought about a backlash against foreign cultural influences and produced the emergence of large, popular folk music festivals, such as the annual festival at Kaustinen.

Popular Musicians and Groups Using the Kantele

The well-known Finnish jazz musician, baritone saxophone player Seppo "Paaroni" Paakunainen organized a band called Karelia in 1970 to play a blend of Finnish folk music and jazz. The original members included Paakunainen as well as Edward Vesala (percussion), Ilpo Saastamoinen (guitar), and Pekka Samanto (bass). The band recorded three long playing records, Suomi Pop (1970), Suomi Pop 2 (1971) and Nunnu (1972) and soon thereafter disbanded (Lehtonen 1983: 237-39). The band was again put together again in 1980, when Paakunainen discovered and began using birch bark flutes made by Rauno Nieminen. This time the band included a fine kantele player, Matti Kontio. They recorded two new long playing records, Tuohihuilu [Birch bark flute] (1981) and Maanitus (1983). The records included extensive playing by Kontio on various types of kanteles, from carved kanteles on up to the machine kantele, as well as acoustic guitar.

Matti Kontio (b. 1948 Helsinki) grew up spending nearly equal amounts of time in Germany and Finland, since his father was a Finnish newspaper correspondent in Germany. Although trained as a mathematics and physics teacher, today he is by profession an arranger and producer of sound recordings living in Cologne, West Germany.

Kontio began studying violin at a young age, but soon switched to guitar. In his teens and twenties, he played in numerous folk and rock groups, and was exposed to a wide variety of music. Major early influences were the Kingston Trio and Peter, Paul and Mary. There was also a substantial influence from Finnish folk music, which was popular at the time. In Germany he was a member of an ensemble which performed various international styles of folk music.



Illus. 61. Matti Kontio in rehearsal at Kaustinen, 1983.

One summer, when he was working as a mathematics teacher at the Kansanopisto [Adult Education School] in Kalvia (in the Perho River Valley), he bought a used thirty-two string kantele at a music store in Kokkola and began to play. Since he soon returned to live in Germany, he could not find anyone to teach him, so he learned to play on his own, by experimentation. He played the kantele with the German ensemble mentioned above.

Kontio moved back to Finland and met the kantele builder Oiva Heikkilä, who repaired his old kantele. He also met Martti Pokela through Martti's brother, Oiva, who was teaching at the Helsinki German School, as was Matti Kontio's wife. Pokela and Kontio began playing kantele together and soon performed at a Kalevala Festival. They, together

with Pokela's daughter Eeva-Leena Sariola, later made two outstanding long playing records together, Vanha ja Uusi Kantele = Old and New Kantele (1975) and Kanteleet (1983). Kontio, as well as kantele players Eeva-Leena Sariola and Hannu Syrjälähti, were also members of a modern folk song group called Laulupuu, which recorded one long playing record (1982).

Kontio received further training at the Popular and Jazz Music School in Oulunkylä (a borough of Helsinki) and classical music training at the Cologne Music College. Although he does not consider himself a jazz musician, jazz has been a major influence because "[it is the only [popular music style] which requires the musicians to read music and know [music] theory]" (Kontio 1983). Kontio has continued his love and study of folk music as well. He listens to a lot of current folk music, for example he mentioned an Estonian folk song choir Kolage. On long train journeys he "reads" the folk music transcriptions published by the Finnish Literature Society which contain pieces from Southern Karelia, Ingria, Estonia and Finland. The most important thing is that he does not try to imitate any of these various influences; rather, he uses them to develop a unique style.

[...all these influences mix in my mind to the point where I can't tell the differences and then when I play ... I try to avoid any one clear style ... I hope that these influences shape some type of personal development from the ... materials which I use.

... in August [1983] we have a one-week rehearsal camp with Karelia. Then there has to be some new pieces. We try in the group ... to make a kind of music which isn't jazz, isn't pop, isn't rock, but is something from our own heads developed as a continuation of folk music. We don't aspire [to perform] authentic [folk] music. ... In my opinion it is impossible, because authentic [folk] music isn't ever performed, but is just played for our own enjoyment with friends or perhaps family. When we go on stage ... we play at a technical level where the standards of classical music are in effect. ... Classical music defines currently all performed music because the concepts of clarity, form, structure, intonation, harmony and projection of sound all come from European classical music whether you like it or not] (Kontio 1983).

Kontio has a genuine knowledge and appreciation for the old Finnish, Karelian and Ingrian life styles and tries to portray a feeling in his music which pictures the old people and old ways of life. He tries to capture that feeling on the concert stage, so it may be felt and heard by people who are used to hearing disco or whatever else is in fashion at the moment.

Another group which successfully combines diverse musical influences is Tuulenkantajat [Carriers of the Wind]. Tuulenkantajat was formed in the fall of 1980 in Jyväskylä with Hannu Lehtoranta, Raimo Hiekkavirta, Jarmo Hovi and Hannu Tähtelä as members. They play an enormous variety of acoustic musical instruments and borrow styles from a wide variety of sources, but at the core of a majority of pieces is Finnish folk music, especially that performed on the five-string kantele. Their concerts are very light, entertaining and at times quite humorous. For example, they use a five-string kantele with the sound hole taped shut and beads inside as a rattle, or they play the violin between the knees like a cello. One selection on their record features a Massey-Ferguson tractor as an

instrument. While on the surface there may be humor, the aesthetic intent is serious. They have produced their own cassette tape, Toaton soittamia (1983), and have one commercial long playing record, Tuulenkantajat (1984). The group has appeared at numerous festivals and concerts, in Finland, Poland and Hungary. Perhaps their most significant appearance was at Finlandia Hall for the Sesquicentennial Kalevala Anniversary Celebration on Kalevala Day, February 28, 1985. Ilpo Saunio, a Finnish ethnomusicologist, has written about the group as follows:

[Every generation has its own concept of folk music. In the 50s folk music was Martti Pokela, in the 60s and 70s it was Konsta Jylhä and the Purpuripelimannit. In the 80s we talk about 'contemporary folk music.' ... contemporary folk music has revived the kalevala singing method, incantations, the five-string kantele and many other forgotten popular 'folksy' instruments from the birch bark horn to the cow's bell. These primitive instruments' possibilities of expression have developed wildly and with them have come the instruments of other cultures. Many different influences have blended surprisingly unscathed with one another, and whether the result is kantele rock or ancient Finnish jazz, the esteemed old tradition has been preserved] (Saunio 1984).



Illus. 62. Tuulenkantajat. Photograph from the back cover of their album © 1985 Tuulenkantajat.

Many of the researchers who study the older traditional styles of kantele playing are also the greatest innovators in using the kantele in a popular music context. These include members of the Perus Hämyt, Primo, Fedja Happo, and Salamakannel groups.

Rauno Nieminen (b. 1955) is by profession an instrument builder who specializes in smaller folk instruments such as carved kanteles, herdsmans' aerophones, jouhikko [bowed lyre] and mandolin. Nieminen learned from his mother to make all sorts of simple instruments by carving the natural materials which grow around the lakes and in the forests of Finland. He built upon these early skills to become a first-rate craftsman. He worked for

a time as an electrician, but since 1980 has built instruments and taught instrument building professionally. He also is a master player of all the instruments which he builds, believing that he cannot build an instrument properly unless he is able to play it as well.

Rauno Nieminen and Jouni Koskimäki formed the Perus Hämyt [Basic Twilight] group. In an interview for Finnish Radio (1980) they described their concepts about contemporary folk music. They collected performance materials from many sources and blended the various styles together, using a wide variety of instruments: accordion, acoustic guitar, mandolins, herdsmans' aerophones, jouhikko and kanteles. The instruments limited and defined to a certain degree what they played, but they tried to broaden their capabilities to play rock, jazz, or other styles of music which had never been played previously on these kinds of instruments. They recognized that contemporary folk music is performed in a formal context, on the concert stage, or in the media. The danger of this is that people may adopt the idea that there is a right way and a wrong way to play folk music. They felt that it was necessary to invent new things and to change things so that the folk music would be alive and develop. Because they grew up with rock and roll, tangos and other popular music in Finland, they held a concept of folk music in which they use the old material, but in a contemporary way.

Hannu Saha (b. 1956) is a musician and music scholar with a particular interest in folk and popular music. He performed in the mid 1970s with a rock ensemble Mummi Kutoo [Grandma Knits], playing guitar, mandolin, harmonica, block flute, piano and singing. The group recorded one record (1975) and received good reviews because, while being a rock ensemble, they played mostly acoustical instruments and had the feel of folk music (Lehtonen 1983:366). Also in the 1970s, Saha began studying folk music and ethnomusicology at Tampere University as a student of Professor Erkki Ala-Könni and started to play various kinds of kanteles, first the five- and nine-string models developed by Ala-Könni and soon thereafter larger kanteles. He graduated in 1982, writing a thesis on Teppo Repo, an Ingrian and last known traditional player of herdsmans' aerophones (Saha 1982).

The group Primo, which stands for PRimitive Music Orchestra, was begun in 1979 in Tampere by Hannu Saha and Rauno Nieminen and originally included Saha's wife, Johanna, and Armi Makelä. Both men came to work in Kaustinen in the early 1980s, Saha as a researcher and Nieminen as an instrument builder. At that time, the women did not wish to perform with the group any more, so Heikki Laitinen joined as a third member. For most of its existence Primo has been a trio, with Saha, Nieminen and Laitinen.

Heikki Laitinen (b. 1943) had already been at Kaustinen for several years as Director of the Folk Music Institute. He had performed with several other folk groups, such as the Kankan Pelimannit, a traditional Perho River Valley group with fiddles, harmonium, and string bass, in which he played the large kantele. He is also a member of Nelipolviset [Four Generations], a group which strives to perform Kalevala runes in an "authentic" style. The group also includes Anneli Asplund, folk music researcher for the Finnish Literature Society, Seppo Knuutila, a folklorist at Joensuu University and Pirkko-Liisa Rausmaa.

The Primo ensemble has as its goal the performance of ancient Finnish music according to what is known about its performance style. All the members of the group had studied the available sources extensively, Laitinen and Saha as scholars, and Nieminen to learn how to build instruments with the same qualities as the originals. For carved kantele

playing, the descriptions of A. O. Väisänen were particularly important. After studying these descriptions thoroughly, they taught themselves to play in this manner through a process of trial and error, at the same time experimenting with other possibilities. The basic idea was not necessarily to resurrect an old style, but to create something contemporary according to an old pattern.

A significant part of Primo's performance style rests on improvisation. The concerts usually feature several solo improvisations on the carved kantele, which are of indefinite lengths, as well as solos on the jouhikko, birch bark flutes and singing in the Kalevala style. Less frequently, there are improvisations using two or all three members. The apparent simplicity of the music hides the fact that it is not simple or easy to perform such fast and dexterous improvisations. These performance skills come only after many years of practice. As Laitinen has said about the old Karelian carved kantele playing style:

Playing a five-stringed instrument called for just as much creative skill as making music on an instrument covering a wider range. Using only five strings, players were able to conjure up a constantly changing world of sound. The result was not closed-form pieces of a specific length but music that flowed freely along with infinite variation (Laitinen 1982c:44; English translation in Asplund 1983b:83).



Illus. 63. Primo. Photograph from the back cover of their album Haltian opissa © 1984 Primo.

Laitinen has also mentioned to me how a different world view and a different aesthetic experience comes about from the repetition of a limited melody, as is done in Kalevala rune singing and five-string kantele playing, together with constant improvisation. For the performer and audience, this produces an aesthetic experience which is not often encountered in our contemporary world. We cannot know if it is the same aesthetic experience which the ancient performers had of this music, but is something which is experienced today from the performance of this music. Ironically, the aesthetic is understood

by many in terms of contemporary aleatoric art music, which was my own initial reaction to Primo's rehearsals and concerts.

There are some significant differences between Primo's music and aleatoric art music. The improvisation exists within narrow stylistic limits and within the structural limitations of the musical instruments employed. The core of the improvisation is a set of simple, repeated melodies which are constantly changed and varied. There is a beginning to a given piece, but not an ending. It is played as long as the performer desires.

Primo's music and performance style are very personal. Their musical instruments are the kind generally used for personal enjoyment, rather than public performance. The music is best when it is simply played for one's self, when it is performed in the company of others in an intimate setting, with a small group, and when kept simple. Usually just one solo instrument is brought to the limits of its capabilities, following the folk concept of "gaining the maximum potential from a limited instrument."

The Primo ensemble recorded a long playing record in 1984, which contains many of the pieces performed in their concerts. The record cover states that:

[[The goal of] the PRIMO ensemble from the start has been to make ancient Finnish music more popular, or at least better known in Finland... The general tendency of the group is to follow the ancient performance style as truly as possible, on the other hand they search for new ways and try to combine ancient elements with modern ones, as may be clearly heard on this record] (Primo 1984).

The record does not fully recreate the mood and aesthetics of the concerts. In their recorded form, the improvisations are of set lengths and the pieces are arrangements with additional instruments added. The style of the music is true to that heard in the concerts and having these pieces in recorded form makes possible their wider dissemination.

The members of the Primo ensemble, together with the other researchers at the Folk Music Institute in Kaustinen, Ilkka Kolehmainen and Simo Westerholm, made up the nucleus of another group called Fedja Hoppo, named after one of the last known Karelian players of the carved kantele who used only five strings. The group was formed specifically to perform at the EBU (European Broadcasting Union) Festival of Contemporary Folk Music, which was held at Kaustinen in 1982. The concept behind the EBU Festival was to provide radio listeners with a chance to hear traditional music performed in a new way. The Fedja Hoppo group gave only a dozen or so performances, but it led to the formation of the Fedja Hoppo Society, which promotes carved kantele playing. Prospective members have to pass an audition, where they show that they have mastered the skill of free improvisation on carved kanteles.

The kantele has had some limited experimental use in amplified music. In 1983 during my visits to Kaustinen, I was surprised to hear a group using electric kanteles. A master kantele builder employed at Kaustinen, Jussi Ala-Kuha, who has published a book on how to build modern kanteles (1982), began his career building electric guitars and is a fine electric guitar player. At the request of Hannu Saha, he built an electric kantele. The instrument looks like a typical twenty-nine string modern kantele, except that it has electrical pick-ups under the strings and the necessary tone and volume controls, switches and plugs. Rauno Nieminen became interested and built a pair of electric five-string kanteles.

The electric kantele band originally played together as a trio, with Ala-Kuha playing electric guitar, Nieminen playing electric bass or five-string electric kantele and Saha on the other electric five-string kantele or on the large electric kantele, tuned in D major so it would fit better with the other instruments. They performed mostly original pieces composed by Saha or Ala-Kuha. I became interested in their sound and began to play with them on viola, with an electric pick up. We played together on two programs at the Kaustinen Folk Music Festival in July and recorded several pieces in October of the same year. The group disbanded in December, when I returned to the United States, but a small record was released on the Finnish jazz label Bluebird, under the title Kalle Rahkonen ja Salamakannel [Carl Rahkonen and the Lightning Kantele] (1984).²⁵



Illus. 64. Salamakannel at Kaustinen, 1983.

The various popular ensembles which use the kantele as an integral part of their music have several factors in common. All the groups value and perform folk styles of the past and believe that these styles should be preserved, much the same way that art musicians still value and perform Bach, Mozart or Beethoven. At the same time, they have tried to produce something new and unique using old materials. They play music which is a blend of various styles, with the result being more than the sum of the individual styles. They have put a premium on being creative, innovative and in changing the old styles to fit the modern world. The tie to tradition is usually described as being a feeling or mood rather than specific stylistic characteristics or performance method. Finally, when the music is performed on

²⁵The group was later reorganized with Saha, Ala-Kuha, Arto Järvelä, violin, and Kimmo Käsälä, bass.

stage or in the recording studio it must be of high-performance quality, which means that it is measured by Western aesthetics and performance standards.

The Sibelius Academy Folk Music Program

Another important factor in the growth of folk music performance in Finland has been the folk music program at the Sibelius Academy. This program began in 1975, when Martti Pokela was invited to give several lectures on folk music. Soon he was invited to direct a specialization in folk music offered through the Department of Music Education. Today, students can major in folk music performance, earning the same degrees as art musicians or jazz performers.

From the beginning, the main goal of the folk music program has been to make active and living contact with tradition (Saha 1980:21). The students are required to take courses in folk music research and ethnomusicology, but the greatest emphasis is on learning to perform Finnish folk music. The performance courses are taught by Martti Pokela and other master folk musicians. The most important instrument has been the kantele, but other folk instruments used in Finland are taught as well. Even though the teaching is founded on tradition, the students are encouraged to experiment with new ways of performing folk music.

Almost every year since 1976, new folk music performance groups have been organized. The first of these was Jutkaus, then came Onko Niin?, Melkutus, Tilitulitallaa, Niin On, Niekku and Pirnales. Many Sibelius Academy students, some of them performance majors in western art music, participate in the folk music groups, learning to perform folk music "by ear." These groups have performed extensively all over Finland and other parts of Europe, on Finnish radio and television, and have produced folk music recordings for the International Radio Competition of Tape Recorded Folk Music in Bratislava (Czechoslovakia), winning two second place prizes and one sixth place prize. I studied the group Melkutus in 1983.

Melkutus was made up of eight members: Juha Saari (clarinet, jouhikko and bass), Juha Hilander (jouhikko, percussion and aerophones), Virpi Pitkänen (kanteles), Soili Perkiö (accordion, flutes and clarinet), Merja Rautio (violin and percussion), Reijo Kekkonen (violin and jouhikko), Jyrkki Immonen (accordion, string bass, and kanteles), and Anu Rummukainen (kanteles and percussion). In addition, all members sang. They held rehearsals on Monday evenings and played perhaps an average of one concert per week.

Although everyone in the group was very well educated in music and could read music well, new songs and playing styles were learned and practiced aurally. At the Monday night rehearsals, they would generally play through pieces which they had already learned and then talk about the the performance, criticize it and change things if necessary to make it better. A major portion of the time was taken up in selecting and arranging the order of the pieces for upcoming performances.

A good example of how new material was learned came in the preparation of the recording for the 1984 Bratislava Recorded Folk Music Competition. Martti Pokela had the basic form of a composition in mind, which made extensive use of the ruokopilli, a simple reed clarinet. He had prepared various sizes of ruokopillit and also brought kanteles with various tunings and many other instruments to first practice session. He presented the general ideas and musical themes to the group and everyone experimented with the instruments they

wanted to play. Through a series of these practice sessions, and a lot of give and take between the members of the group, an original composition was worked up and recorded in the studios of Radio Finland.



Illus. 65. Members of Melkutus receive instruction from Martti Pokela at the Sibelius Academy, 1983.



Illus. 66. Melkutus at the studios of Radio Finland, 1983.

I mentioned to Martti Pokela that he was the composer, since he had provided the themes, instrumentation and basic structure for the Bratislava piece. But he insisted that he

did not consider himself the composer. His purpose was simply to provide some ideas. He said, "[I merely give them some ideas, and let them develop it from there]." The piece recorded by Melkutus, as well as recordings by the other Sibelius Academy Folk Music Groups, was issued on a long-playing record (1985). Paavo Helistö, the Folk Music Producer for Radio Finland wrote as follows:

One of the fundamental principles of the Sibelius Academy's folk music instruction has been to stimulate creativity while still adhering to tradition. This is reflected in the range of instruments used - the kannel is the chief teaching tool. The music on the record, on the other hand, is enriched by a variety of 'non-orthodox' [instruments] such as rice bags, clay recorders, chanticleer whistles, deer bells, and so on. Some of the tunes keep strictly within the bounds of folk music; others transcend folk and move off into other musical fields ... There is also a great deal of improvisation and original arranging. ...the different groups of performers play the same piece in different ways. The feeling is sometimes different; different instruments are used, and the length of the pieces can vary as well.

...Experience has demonstrated that higher education must preserve folk music in the widest sense and seek to develop it. The very fact that the Sibelius Academy has now instigated a folk music training programme is due to the most encouraging results that the student school music teachers gave (Helistö 1985).

The most telling moment in my fieldwork came when I asked Martti Pokela if the activity at the Sibelius Academy could be considered "traditional". He thought a long while and replied that in the strictest sense it was not traditional, but that it may be considered as a "new tradition". He added that the roots of the new tradition may be found in the old tradition. The old tradition will always be there as a type of foundation. The students at the Sibelius Academy learn and perform folk music "by ear," they play traditional instruments and perform from memory the same music, in the same style as traditional performers. These things link the activities at the Sibelius Academy to the old tradition.

Pokela believes that the old tradition will continue to survive, as it does in many parts of Finland, but in our modern world it will probably not grow. Hopefully it will stay at a stable level and not totally disappear. The new tradition, however, will grow fantastically as new talented young people become exposed to folk music through Finland's music education system. Of course, the context has changed completely. The previous context of the old tradition is gone forever. The world has changed and it can never again be the same as it was.

Virtually all the "authentic" folk performers in the country are quite old. Twenty or thirty years from now, the young people who are able to perform these styles of music will be the folk performers for the country. Because the context in which these styles are learned and performed is completely different, the younger players are frequently seen as not being a part of tradition. Even in a new context the folk styles of performance will survive. The new tradition represents what has become of the old traditions.

V. ON THE CONCEPT OF TRADITION

The various kantele building and playing styles point out some of the problems encountered in research dealing with contemporary traditions. Many of the "traditions" which I have described may be rejected as not being traditions at all. Some fall outside of the standard theoretical realm of folkloristics, because they deal with elite or popular cultural phenomena. Also, some of the folk culture traditions may be argued as being folklorisms.

The term folklorism implies the notion of measuring the authenticity of a phenomenon. Folklore is authentic, while folklorism is not. Much has been said about the relationship of folklore and folklorisms. Perhaps the most frequently cited study is by Vilmos Voigt, where folklore and non-folklore are pictured at opposite ends of a continuum. Folklore turns into non-folklore through a process of folklorism and likewise non-folklore can turn back into folklore through a process of folklorization. Much of the material which folklorists study is not at either end of the continuum, but somewhere in between.

The problem with trying to find "authentic" folklore is that most of the materials we are likely to encounter and study will be a mixture of "authentic" and "inauthentic" elements. *A pure folklore simply does not exist in the modern world, if it ever did.* We should overcome our academic prejudices against phenomena which do not fit neatly into our theoretical molds as to what folklore should be. These prejudices blind us in many instances to what folklore has become in the contemporary world. At the heart of this problem is the concept of tradition.

The concept of tradition is as central to folkloristics, as the concept of culture is to anthropology. Folklorists study the processes of tradition and the materials which result. Much recent scholarly discussion has focused on trying to define "tradition." Perhaps it is a "sign of the times" that scholars in our field and related fields have begun to question this central theoretical concept.

My own interest in the concept of tradition originated in a course on western folk music taught by Professor George List. Professor List stressed the necessity of oral transmission in the definition of tradition. I wanted to test his assertion, so I collected definitions from standard reference sources. Webster's Third New International Unabridged Dictionary, which is widely used by librarians because it was the last edition to be prescriptive rather than descriptive, defines tradition as "the process of handing down information, opinions, beliefs, and customs by word of mouth or by example; transmission of knowledge and institutions through successive generations without written instruction." Professor List was shown correct in this source. But the Micropaedia of the Encyclopaedia Britannica defines tradition as "the aggregate of customs, beliefs and practices that give continuity to a culture, civilization, or social group and thus shape its views..." (1986), leaving out any mention of oral transmission. Perhaps older and more conservative definitions contained oral transmission as a necessary part, but newer views have moved away from this perspective.

We were required to study Charles Seeger's seminal article in the Standard Dictionary of Folklore entitled "Oral Tradition in Music" (1950). Seeger makes the following points. When speaking about music, we should replace the term oral with aural, meaning that tradition is transmission by hearing. He says that, "in the study of folklore in general the term 'oral tradition' is used a bit loosely. Three separate meanings in common use may be

distinguished: 1) an inherited accumulation of materials; 2) the process of inheritance, cultivation, and transmission thereof; 3) the technical means employed." Later he adds that "Music tradition ... is a function of culture -- a dynamic conception ... The repertoire as a whole and its relation to the culture of which it is an accumulation of traditions are in a constant state of flux." He points out that there is another category of traditions, which he calls traditions of control. This takes into account such things as politics, nationalism, and the influence of scholars upon the folk community they are studying. He sees the technique of tradition ranging over a continuum from purely oral to purely written. Seeger's views are perhaps the broadest available, but they have not led to any overall agreement among folklorists and ethnomusicologists. The concept of tradition is still vague in contemporary scholarship.

The sociologist Edward Shils has written a book on tradition (1981), in which he points out some central tenets. He says, "In its barest, most elementary sense, it means simply a traditum; it is anything which is handed down from the past to the present" (ibid:12). The word traditum refers to "the transmitted thing", the materials, whatever they are, which are handed down (ibid). To distinguish between fashion and tradition, the tradita should be handed down at least three generations (ibid:13). Traditions are constantly undergoing changes, but the changes are not total. Certain essential elements remain constant while other elements change (ibid:13-14). Traditional and untraditional elements are intertwined (ibid:27-33). In spite of change and reinterpretation by current tradition bearers, there is frequently a sense of identity and filiation with earlier tradition bearers (ibid:14). He also mentions the important role of folklorists in developing the concept of tradition (ibid:18).

Nordic folklorists have long called their discipline "tradition research," but not until the final discussion at their annual conference in 1983 did they attempt to find a precise definition of "tradition" (Final Discussion 1983). The wide variety of opinions expressed during the discussion show the many different ways that tradition may be defined and that there is no general agreement. Åke Daun argued that tradition is cultural continuity, (ibid:234) while Kurt Weinbust argued the opposite that tradition is change (ibid:236). Anna-Leena Siikala pointed out that tradition is symbolic communication and that "...tradition could be looked upon as changing systems" (ibid). Lauri Honko pointed out that "[tradition] is often an expression of identity, an identity game" (ibid:237). Aili Nelola-Kallio said "...the key to the whole of this discussion about tradition as continuity and change, is 'process'" (ibid:242).

As the opening paper to the 1984 conference on "Tradition and Identity" held at Indiana University, Dan Ben-Amos presented a paper entitled "The Seven Strands of Tradition" in which he surveyed how the word tradition has been used in American folkloristics (1984). He found at least seven separate uses of the term: as lore, as canon, as process, as mass, as culture, as langue and as performance. His presentation showed that, just as among the Nordic folklorists, the term has been defined and used in a wide variety of ways among American folklorists.

In trying to define tradition, one is reminded of the story of the five blind men and the elephant. Each of the blind men described the elephant accurately in terms of his own limited perceptions. Tradition has been used in scholarship as a tool in various limited contexts, all of

which may be valid within their prescribed limits. The concept of tradition is multifaceted. It consists of many separate elements which may never be found together as a whole in nature.

In light of these problems, I offer a multifaceted view of tradition based on what I observed among the kantele players and builders of Finland. I divide tradition into three large categories: tradition as materials, tradition as symbol and tradition as learning. These three categories are not mutually exclusive; there is quite a bit of overlap and interrelationships among them. Each category, however, provides a distinct perspective through which to organize, interpret and understand the kantele traditions of Finland.

Tradition as Materials

Tradition may be defined as the materials which folklorists and ethnomusicologists study. These materials are the products of human behavior and it is possible and valid for humans to view these products abstractly, as existing apart from the processes which produced them. A great deal of research has been devoted to the study of traditional materials: how they are created and preserved, how they are transmitted, and how they change.

Traditional materials are defined in scholarly literature using a combination of behavioral, social and stylistic characteristics. An example may be seen in the definition of "folk music" in the Encyclopaedia Britannica written by Bruno Nettl:

Typically, folk music, like folk literature, lives in oral tradition; it is learned through hearing rather than reading. It is functional in the sense that it is associated with other activities. Primarily rural in origin, it exists in cultures where there is also an urban, technically more sophisticated musical tradition.

Folk music is understood by broad segments of the population, while cultivated or classical music is essentially the art of a small social, economic, or intellectual elite. On the other hand, that widely accepted type of music called 'popular' depends mainly on the mass media -- records, radio, and television -- for dissemination while folk music is typically disseminated within families and restricted social networks (Nettl 1986).

Nettl's definition shows most of the standard beliefs regarding traditional materials. They are basically the same as those offered by Professor List in his course on western folk music. In examining these and other sources, I compiled a list of eight characteristics of tradition which seem to be most prominent in the literature. For purposes of simplicity, I apply these characteristics to traditional music, though they apply equally to artifacts of material culture, such as the kantele when taken as a musical instrument, as well as other forms of folklore.

1. Traditional music is performed and transmitted in limited social networks, such as families and communities. It must have continuity in both time and space, being transmitted from generation to generation and from person to person.

2. Traditional music is learned through hearing and imitating, rather than through formal schooling utilizing written music. A given piece is learned by trial and error, not necessarily to reproduce an exact duplicate of what has been heard, but to produce a personal rendition within a learned cultural aesthetic.
3. Traditional music exists in variant forms. A traditional piece will be performed differently by each individual who knows it. It still is recognized as being one composition, but in variant forms among individuals. Thus, traditional music has variation as well as continuity. The degree of variation permissible is often genre specific.
4. Traditional music is re-created with each new performance. It may be performed from memory, "by ear", or be improvised to a pre-existing set of rules or boundaries. Thus traditional music may not only vary among individuals, it may also vary with the same individual from performance to performance.
5. The ownership of traditional music cannot be traced; meaning that the composer of a traditional piece remains unknown. At the same time, scholars admit that an individual creates and thereafter the community adopts and changes. A traditional piece belongs to an entire community.
6. Traditional music is seen by some scholars as the art of rural, musically illiterate amateurs from a "peasant" culture. It exists in a society if, and only if, there exists in the same society some form of cultivated, written music.
7. Traditional music frequently performs a function in a culture. It may provide the bulk of that culture's entertainment or be part of other activities such as work, ritual or dance.
8. Traditional music is typically seen as something from the past; as being old or historical. To be "authentic" it must have somehow escaped the influences of modern mass media and urban popular culture.

These characteristics constitute a concept of tradition as presented in scholarly literature. But in the real world, they are seldom all present at any one time and are not all of equal value. Some may be more important than others to call a given music traditional. At the same time, some of these characteristics are present in almost any music. I, therefore, propose two solutions for applying the characteristics of tradition.

First, we should recognize folk music for what it is today. In the past, the terms "folk music" and "traditional music" were nearly synonymous. But today, folk music generally refers to a broad category of musical styles, as do art music or popular music, and to which the characteristics of tradition may or may not apply.

Second, the characteristics of tradition should be applied separately to individual phenomena to discover those elements which are and those which are not traditional. We should not describe any given phenomenon as wholly traditional or not traditional, because everything is a mixture of elements. Different levels of traditionality may be found in

virtually all humanly produced materials. We should try to find those elements in any given phenomenon which are traditional and thereby describe its degree of traditionality. The following are some examples of how these solutions helped me understand specific phenomena in the field.

Many of the folk kantele players I interviewed were also composers of pieces in folk styles. These pieces were frequently learned by other players around them and performed as "traditional" pieces, even though the composer was known to the entire community. When the composer or source of a piece is known, one characteristic of tradition is violated. This does not necessarily mean that the piece is not traditional since several other characteristics may still apply.

Every year in late July, hundreds of musicians from all parts of Finland and many parts of the world unite at Kaustinen, in the Perho River Valley, for one of the largest folk music festivals in Europe. A portion of the performers at the Kaustinen Festival come close to satisfying all the characteristics of tradition. They may have been "discovered" and brought to the festival, or they came out of curiosity, or to meet other folk performers.

Some of the performance contexts at the festival are vastly different than those in which they usually perform. Normally they perform at home for family or friends; here they perform on stage in front of hundreds of paying spectators. There is a tangible distinction between performer and audience and a far greater formality. They must play at a certain time and place, and for a certain length of time. They must also plan in advance the selections they will play. The normal verbal interchange between performer and listener, so much a part of traditional performance, is missing. In a certain sense, they are being judged and measured against other performers. When traditional performance takes place "on the stage", it simply does not have the same meaning to either performer or audience. Sometimes in a festival context traditional musicians receive recognition and great notoriety. They may be offered an opportunity to make commercial recordings and may become well-known and in great demand to play other concerts, festivals, and the like. In at least some of their performances, they become professionals.

Since festival performances take place outside the context of a limited social network, and include aspects of professionalism, two characteristics of tradition are violated. For many of these musicians, their participation in festivals constitute only a small part of their overall performances. The way in which they learned to perform, their repertoires, the styles in which they perform, and their abilities to improvise may not be influenced at all by their festival performances or the possible notoriety which it brings. Most of the other characteristics of tradition may apply.

The master instrument builder, Rauno Nieminen, described to me how he learned to build and play herdsmans' flutes. The last known builder and player of such flutes in Finland was Teppo Repo, who died in 1962. Nieminen was not fortunate enough to meet Repo, but was able eventually to acquire several of Repo's flutes. He learned to build herdsmans' flutes by using Repo's flutes as a model. Since these instruments are quite difficult to build, the process required a great deal of trial and error. He once showed me an entire box full of flutes which he had rejected for one reason or another. In the end, Nieminen learned to build herdsmans' flutes so well that they could not be distinguished from Repo's.

The problem remained of learning to play these flutes in the same style as Repo. Nieminen accomplished this task by acquiring copies of archive tapes of Repo's playing. He would put a tape into a portable cassette player and put on light headphones. As the tape played, he would play his flute along with it. In this manner he was able to learn almost the entire recorded repertoire of Teppo Repo and perform these works in a very authentic style.



Illus. 67. Rauno Nieminen playing herdsmans' flutes which he made, at Kaustinen, 1983.

The fact that Nieminen learned to build herdsmans' flutes by trial and error using a traditional artifact as a model and the fact that he learned to play these flutes by hearing and imitating an example of the traditional sound are things which fulfill at least one characteristic of tradition. But the other characteristics may not apply in this instance. It should be noted that Nieminen considers himself an authentic tradition bearer and hopes that the tradition will continue as he encourages and teaches others to build and play herdsmans' flutes by example and "by ear."

Tradition as symbol

Tradition frequently refers to the symbolic significance of a material. This point is made very strongly in recent articles by Linnekin (1983) and Handler and Linnekin (1984). Linnekin maintains that "tradition is a conscious model of past lifeways that people use in the

construction of their identity" and therefore "tradition is inevitably invented" (1983:241). Handler and Linnekin argue that "tradition is a wholly symbolic construction" because "the past is always constructed in the present" (1984:273,286). The point they make is a good one, because traditional materials frequently serve as symbols of cultural identity and the symbolic values are reconstructed by each new generation.

To argue that tradition can only be a symbolic construction is to deny the existence of tradition as a process of learning and the materials which result. The learning of traditions is something which people have been doing all along and will continue to do, whether or not there is conscious recognition by the participants or scholars that something is a tradition. Apparently Handler and Linnekin believe that traditions are only those phenomena which are consciously invented and called traditions. I believe that traditions can and do exist, which are not consciously called, or thought of, as traditions. An example could be the "traditions of control" spoken of by Charles Seeger (1950:826) which takes into account, for example, academic and political traditions that are not normally thought of as traditions. Not all traditional materials are intrinsically symbolic. It is an additional attribute which is found frequently, but not necessarily.

The kantele has two distinct types of symbolism in Finland. Among those who actually built and played kanteles, they were an integral part of their lives. The kantele could be said to define a part of who they were, where they lived and what kinds of lives they lived. The kantele was an important part of their identity. It was an extension of, or a symbol of, themselves.

For the vast majority of Finns, the kantele was primarily known as a symbol of Finnish nationalism. From their point of view, the kantele was a mytho-poetic, somewhat abstract concept -- a motif of folklore which, together with the other motifs of folklore and the national epic *Kalevala*, symbolizes Finnishness. They may know that the kantele exists in reality, but contemporary kantele players and builders could not be taken entirely seriously. After all, this was Väinämöinen's instrument. They could not comprehend what it had to do with modern life.

The symbolic nature of the kantele had the effect of both uniting and distinguishing groups of people. To the players and builders, the kantele was an important part of their lives and identities, so it was something which united them, even if they played or built kanteles in a wide variety of styles. At the same time, it distinguished them from those who knew little or nothing about the kantele. They made fun of those who saw the kantele only as a symbol of nationalism, since the outsiders had no idea what the kantele really was: a living tradition.

Those to whom the kantele was mainly a symbol of Finnish nationalism used its symbolic nature to represent a common heritage among all Finns and something which distinguished them from other peoples, in spite of the fact that many of the surrounding peoples in the Baltic had their own versions of the kantele, which acted as symbols of their own nationalism.

When a tradition becomes symbolic, it helps to insure its survival. To some, the tradition itself may not be as important as its symbolism. Even a dead tradition may be resurrected if there is some kind of symbolic significance which remains for the present or future generations.

Tradition as Learning

In its most basic meaning, tradition refers to the transmission of knowledge or information from one person to another, or one generation to another. In order for knowledge to be transmitted, learning has to take place. It is only through learning that any tradition survives. The emphasis, then, should be placed on learning, rather than the more nebulous concepts of "transmission" or "process" usually found in scholarly literature.

One common aspect of all the kantele traditions of Finland is that many practitioners learned their skill, whether it be kantele playing or building, largely on their own. In other words, while learning was accomplished, there frequently was no teacher involved. They learned their art and skill by teaching themselves.

Many older folk kantele players told me that when they were learning to play there were no teachers around, so they simply had to take the kantele into their hands and experiment in plucking the strings until they were able to play. They began with some kind of general concept of the type of music they wanted to play and the technique used in playing. Using these general concepts as a guide, they experimented and practiced until they were able to play.

A good example here is Viljo Karvonen, the master kantele player from Halsua. He described how as a boy he desired to play the kantele, but his father placed the kantele too high on the wall for him to reach it. He figured out a way to get it down and taught himself how to tune it and some aspects of playing. Not until he built his first kantele was he able to practice regularly. He took examples, half in secret, from the playing of friends and relatives around him. Most significantly, he learned the largest portion of his skill on his own, by practicing. His playing style is related to that of others, but it is unique in its specific characteristics.

Martti Pokela underwent a similar experience when he learned to play the five-string kantele. As a boy, he had seen Antti Rantonen play a five-string kantele. Pokela did not play one until he acquired his own in the 1950s. The memory of Rantonen's playing provided a starting point for the learning process, but the playing style which Pokela eventually developed went far beyond Rantonen's style. It came about through a great deal of experimentation and practice, with the goal of achieving the maximum potential from a limited instrument.

In art music, one would assume that skills are acquired only after many years of study with a "master teacher," and one can "trace the lineages" of current master players by those who taught them. But even art music kantele players have said that they developed their playing skills largely on their own. Hannu Syrjälähti received formal instruction only at the beginning for a short time, yet he is recognized as one of the finest art music kantele players in Finland today. He developed most of his playing skill through individual practice. Likewise, Ismo Sopanen took lessons only at the beginning and Urpo Pylvänäinen, one of the best players of the fifties and sixties, also had very limited formal training.

The principle of self-teaching is highly applicable to kantele builders. The majority of kantele builders in Finland have received no formal instruction at all and have learned their craft simply through trial and error. This applies equally to those who build art music kanteles and to those who build folk kanteles.

Rauno Nieminen mentioned that when he first began to build kanteles, he had only the most general ideas about how to go about it. He acquired knowledge simply by building and experimenting with the characteristics. A portion of the knowledge he has gained is applicable to all musical instrument building. After many years of experience he has "learned how instruments work," so building a new instrument is not as difficult now as in the beginning. Rauno also attributes a portion of his success in instrument building to the fact that he has taught himself to play all the instruments which he builds. Being able to perform on an instrument gives the builder a clear idea of what the end product should do, allowing them to make the adjustments necessary to achieve that goal.

As the individual teaches himself, a portion of the learning is accomplished by pure imitation of something which already exists. An additional part is the creation of something new, which is unique to the individual. The individual creates in order to fill in the gaps of memory, or to substitute in areas which may be beyond his skills and abilities. The quality of the created materials is entirely dependent on the individual's experience, talent and creativity.

My own experience in learning to play the kantele may be typical. I tried to learn to play in the Perho River Valley Style strictly from what I could remember about it. I started with some of the simplest melodies I could remember from the playing of Viljo Karvonen. I remembered general aspects of the style and technique of his playing. Beginning with this information, I was able to take a kantele and start to experiment, first plucking out the melodies with the right hand and later adding an accompaniment with the left.

In many instances, I simply did not have a precise memory of how a certain tune went, or what the harmonies were, or other similar details. At those times, I filled in the best I could by inventing something which, in my opinion, would fit. In the process of learning, I was drawing on what I had heard and remembered, but at the same time I was creating something new and individual. This seems to be the same pattern followed by most kantele players.

For example, I asked Onni Kuivalainen to play Karjalan Kunnaila, a very well-known Finnish melody, especially among Karelians. I knew that one pitch in the melody was outside the diatonic scale and wanted to see how he would handle it. When he came to that point he just left it out and remarked that he leaves out those pitches which do not fit, because usually he is singing with the kantele and the voice can cover the pitch which the kantele cannot play. Eino Tulikari has written that folk players frequently would not notice, or perhaps they did not care if an interval was a half-step or a whole step (1976:52-4). He was probably not describing a lack of ability or perception on the part of folk players, but this type of creative replacement in pieces which do not fit the kantele exactly.

Learning without the benefit of a teacher has been the norm of kantele players in the past, but things are now changing. Kantele traditions are beginning to be taught in schools, music conservatories, at kantele camps and through adult or continuing education courses. It was interesting to see the reactions of typical Finns to my own kantele playing. Most would ask "Who taught you to play?" which is a very logical question considering that one can learn almost anything in formal courses nowadays. The automatic assumption is that the best way to acquire skills is from a teacher. All styles of kantele playing are taught at one place or another, even folk styles of playing. The Folk Music Institute at Kaustinen sponsors summer courses, some of which are taught by master folk musicians who may have had only limited experience in teaching their styles of playing.

When a tradition changes from something which is self-taught to something which is taught formally in the classroom, certain changes take place: for the teacher, for the students and in the playing style.

As a player becomes a teacher, he has to find some kind of system to describe the playing technique. There is less room for variation and certain rules or boundaries of the style have to be formalized. All of a sudden there is a right and a wrong way. Students and other players are judged according to an emerging standard. Some play better than others within the rules of the style.

Arvi Pokela, who had only limited experience in teaching his style of playing to others, found it very difficult even to describe how he was playing. He had learned to play at a very high technical level mostly through self-teaching and he had never found it necessary to describe his playing in concrete terms. The same held true for other players with limited teaching experience. Viljo Karvonen, on the other hand, had been "studied" extensively by scholars and had taught his style. He described his playing to me initially by comparing it to the art style of playing, showing the influence which can come from teaching others.

When Lyydia Jakonen from Seinäjoki was asked to teach kantele at a local adult education center, she had to find a way of communicating her idiosyncratic playing style to others. She used a paper chart under the strings, with number notation, to convey her technique and repertoire to her students and remarked "You can't teach others if you don't have a system" (Jakonen 1983). Ilona Porma of Haapavesi likewise has developed her own system of kantele teaching based on solfège syllables. Even Martti Pokela described how his perception and understanding of the Haapavesi large kantele tradition changed when he began to teach it. Many aspects of his playing had been instinctive, but he had to codify, study and describe these elements of style when he began teaching others.

In a formal teaching context, the student's playing is measured against a concept which the teacher holds, rather than a concept which is self-developed. During lessons, the student gets constant feedback about what is right and wrong. The playing style itself becomes more rigid and more clearly defined. Differences among the playing styles of individuals do not come to light to the same degree. Teaching brings a far greater stability to a tradition.

A central trait of tradition is that it contains both elements of stability and innovation. A tradition must have stability and unity to a critical point in order to be seen as a tradition. A tradition must have stability in order to become established and survive. This stability may be brought about by a change in the way a tradition is learned. R. Anderson Sutton (1986) has described how certain "marginal traditions" of gamalan playing in Java have become established as the standard, because they are now being distributed on cassette tape recordings and are being taught by masters in music conservatories. He feels that this is a necessary part in the survival of a tradition. The Swedish ethnomusicologist Jan Ling has mentioned a similar occurrence in the folk music revivals of Sweden. As part of the growth of a tradition he says, "at a special moment, the development is crystallized into a 'tradition', where suddenly the revolutionaries turn into watchdogs for a bulk of melodies, a playing style, cemented as the classical tradition" (1986:7).

Even though a tradition may have stability, it never stops changing or evolving. Some innovation must be a part of tradition in order "to keep it alive" as Martti Pokela has said. Innovation is just as essential as stability to the survival of a tradition because it gives new

life, interest and variety to the tradition. Through innovation a tradition is made to adjust to a changing environment, where survival is dependent on change and adaptation, just as the structure of the kantele was changed in order to adapt it to a changing music culture (see Rahkonen 1983b). Tradition may be defined as the dynamic balance of stability and innovation.

The learning process has within it the seeds of both stability and innovation. When a tradition is self-taught it contains innovation, because a style is created by the individual according to his memory, skills and talents. But if the context changes where a tradition is taught by someone else to the individual, the tendency will be towards stability, since the teacher will be forced to verbalize and define the boundaries and rules of the style. Both self-teaching and teaching from others play a role in the survival of a tradition.

Even in formal instruction there are some elements of self-teaching. Another element common among all the kantele players I interviewed was that it took a great deal of individual practice to become a good player, regardless of the style. During practice, students have to work out individual problems according to methods which work for them. What is practice except self-teaching?

Beyond the universal aspect of practice, in some kantele instruction there has been a concerted effort to include elements of self-teaching. This is an essential part of the carved kantele playing methods which have been developed by the scholars at the Folk Music Institute and may also be observed in the Folk Music Program at the Sibelius Academy. Students are taught basic principles and techniques, not as hard and fast rules, but merely as suggestions, which give a place from which to start. Then students are encouraged to develop the direction of their individual playing styles on their own. Instruction in the classroom is only a beginning, not an end. Those who use this method hope it will ensure the continued survival and adaptability of the kantele playing traditions in Finland.

Conclusion

In the past, the concept of tradition has been used as a tool in limited contexts and in a wide variety of ways to explain and interpret human behavior. It should be used to broaden the area of valid inquiry in folkloristics and ethnomusicology, because elements of tradition may be found in virtually all humanly produced phenomenon. I have tried to show how materials, symbolisms, and learning processes each played a role in the development of the kantele traditions of Finland. I hope the reader has gained a better understanding of what the kantele is, how it is played, and the significance of tradition in the modern world.

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APPENDIX 1

CARVED KANTELE REPORTS

The following reports were generated with the PC-File[™] database program. The file number indicates the order in which the information for each instrument was entered in the database. The photo number gives the exposure number then roll number of my negatives. The museum numbers are those assigned by the National Museum in Helsinki, except if they are preceded by PK = Pohjois Karjala Museum ; HM = Häme Museum ; PP = Pohjois Pohjanmaa Museum ; T = Tampere University Institute of Folk Traditions ; Kuop = Kuopio Museum. All measurements are given in centimeters. The "Width" report also coordinates the number of strings and class for each instrument. The "Bridges" report indicates the side of the instrument on which a bridge was found. In the "Sound Holes" report, an asterisk indicates that the shape was made up of a number of smaller holes. Throughout all the reports, if data cells have been left blank, it means that data was not available in that category.

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| 03 | | F198 | 48 | 00.1 | 1855.48 |
| 04 | 15.1 | F201 | 49 | | 1855.74 |
| 05 | 19.1 | F208 | 50 | 16.1? | 684 |
| 06 | 17.1 | F210 | 51 | 01.2 | 731 |
| 07 | 36.1 | F211 | 52 | | 1762.5a |
| 08 | 11.1 | F212 | 53 | 25.2 | 1762.5c |
| 09 | 25.1 | F213 | 54 | | 1762.5e |
| 10 | 06.2 | F443 | 55 | 10.2 | 1763 |
| 11 | 18.1 | F1177 | 56 | 21.1 | 2218.218 |
| 12 | 02.2 | F1178 | 57 | | 2701 |
| 13 | G20 | F1201 | 58 | 20.1 | 3045.49 |
| 14 | 10.1 | F1616 | 59 | | 4043 |
| 15 | 28.2 | F1617 | 60 | | 4366 |
| 16 | 23.2 | F1626 | 61 | G44 | 4849.31 |
| 17 | 28.2 | F1692 | 62 | G51 | 4880 |
| 18 | 11.2 | F1838 | 63 | | 4972.1 |
| 19 | 09.2 | F1839 | 64 | | 4972.2 |
| 20 | | F1925 | 65 | | 4972.3 |
| 21 | | F2016 | 66 | 14.1 | 7114.2 |
| 22 | 26.2 | F2084 | 67 | 12.1 | 8419.1193 |
| 23 | 34.1 | F2142 | 68 | 07.2 | 8967.1453 |
| 24 | 31.2 | F2143 | 69 | 08.2 | 7419.18 |
| 25 | 12.2 | F2144 | 70 | 16.2 | 7581.2 |
| 26 | 20.2 | F2181 | 71 | 24.2 | 8174 |
| 27 | 09.1 | F2182 | 72 | 29.2 | 7507 |
| 28 | G45 | 1855.7 | 73 | 22.2 | 238 |
| 29 | ? | 1855.8 | 74 | 05.2 | 8340 |
| 30 | G00 | 1855.9 | 75 | | Kuop 607 |
| 31 | G52 | 1855.10 | 76 | | HM 188.49 |
| 32 | 15.2 | 1855.11 | 77 | | HM 188.50 |
| 33 | | 1855.13 | 78 | | HM 188.51 |
| 34 | 15.2 | 1855.14 | 79 | | HM 188.52 |
| 35 | | 1855.15 | 80 | | HM 188.53 |
| 36 | 06.1 | 1855.17 | 81 | | HM 47.405 |
| 37 | | 1855.36 | 82 | 19.2 | 1762.5 |
| 38 | 13.2 | 1855.37 | 83 | | PK LK502 |
| 39 | 04.1 | 1855.38 | 84 | | PK LK503 |
| 40 | 08.1 | 1855.39 | 85 | | PK LK521 |
| 41 | G24-7 | 1855.40 | 86 | | PK LK522 |
| 42 | | 1855.41 | 87 | | PK LK3232 |
| 43 | 00.2 | 1855.42 | 88 | | T229 |
| 44 | 02.1 | 1855.44 | 89 | | T2 |
| 45 | G36 | 1855.45 | 90 | | PP 4402.1 |
| | | | 91 | | PP SP |

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Length

| file | photo | museumnumb | length | file | photo | museumnumb | length |
|------|-------|------------|--------|------|-------|------------|--------|
| 84 | | PK LK503 | | 62 | G51 | 4880 | 64 |
| 15 | 28.2 | F1617 | | 21 | | F2016 | 65 |
| 22 | 26.2 | F2084 | | 25 | 12.2 | F2144 | 65 |
| 40 | 08.1 | 1855.39 | | 76 | | HM 188.49 | 65 |
| 83 | | PK LK502 | | 65 | | 4972.3 | 65.5 |
| 66 | 14.1 | 7114.2 | | 77 | | HM 188.50 | 65.5 |
| 67 | 12.1 | 8419.1193 | | 08 | 11.1 | F212 | 66 |
| 68 | 07.2 | 8967.1453 | | 27 | 09.1 | F2182 | 66.5 |
| 69 | 08.2 | 7419.18 | | 38 | 13.2 | 1855.37 | 66.5 |
| 71 | 24.2 | 8174 | | 50 | 16.1? | 684 | 67 |
| 72 | 29.2 | 7507 | | 70 | 16.2 | 7581.2 | 67? |
| 73 | 22.2 | 238 | | 11 | 18.1 | F1177 | 68 |
| 74 | 05.2 | 8340 | | 85 | | PK LK521 | 68 |
| 79 | | HM 188.52 | | 42 | | 1855.41 | 68 |
| 82 | 19.2 | 1762.5 | | 07 | 36.1 | F211 | 69 |
| 52 | | 1762.5a | 46 | 12 | 02.2 | F1178 | 69 |
| 78 | | HM 188.51 | 46.5 | 16 | 23.2 | F1626 | 69 |
| 31 | G52 | 1855.10 | 49 | 64 | | 4972.2 | 69 |
| 03 | | F198 | 50 | 10 | 06.2 | F443 | 70 |
| 81 | | HM 47.405 | 51 | 18 | 11.2 | F1838 | 70 |
| 17 | 28.2 | F1692 | 52 | 46 | 03.1 | 1855.46 | 70 |
| 29 | | 1855.8 | 52 | 26 | 20.2 | F2181 | 72 |
| 80 | | HM 188.53 | 52 | 61 | G44 | 4849.31 | 72 |
| 13 | G20 | F1201 | 54 | 54 | | 1762.5e | 73 |
| 87 | | PK LK3232 | 56 | 56 | 21.1 | 2218.218 | 73 |
| 41 | G24-7 | 1855.40 | 57 | 51 | 01.2 | 731 | 74 |
| 33 | | 1855.13 | 57.5 | 47 | 01.1 | 1855.47 | 75? |
| 14 | 10.1 | F1616 | 58 | 53 | 25.2 | 1762.5c | 75 |
| | | | | 24 | 31.2 | F2143 | 76 |
| 37 | | 1855.36 | 58 | 32 | 15.2 | 1855.11 | 77 |
| 48 | 00.1 | 1855.48 | 58? | 39 | 04.1 | 1855.38 | 77 |
| 28 | G45 | 1855.7 | 59 | 34 | 15.2 | 1855.14 | 78 |
| 45 | G36 | 1855.45 | 59.5 | | | | |
| 01 | G39 | F188 | 60 | 91 | | PP SP | 78 |
| 20 | | F1925 | 60 | 44 | 02.1 | 1855.44 | 79 |
| 36 | 06.1 | 1855.17 | 60 | 49 | | 1855.74 | 79 |
| 75 | | Kuop 607 | 60 | 02 | 21.2 | F197 | 80 |
| 30 | G00 | 1855.9 | 60.5 | 60 | | 4366 | 80 |
| 89 | | T2 | 61 | 57 | | 2701 | 81 |
| 90 | | PP 4402.1 | 61 | 58 | 20.1 | 3045.49 | 81 |
| 35 | | 1855.15 | 62 | 55 | 10.2 | 1763 | 82 |
| 59 | | 4043 | 62 | 43 | 00.2 | 1855.42 | 83? |
| 19 | 09.2 | F1839 | 63 | 05 | 19.1 | F208 | 84 |
| 86 | | PK LK522 | 63 | 23 | 34.1 | F2142 | 92 |
| 88 | | T229 | 63.5 | 63 | | 4972.1 | 98 |
| 04 | 15.1 | F201 | 64 | 09 | 25.1 | F213 | 109.5 |
| 06 | 17.1 | F210 | 64 | | | | |

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| | | | | Page 1 | |
|------|-------|------------|-------|--------|---------|
| file | photo | museumnumb | width | num | class |
| 40 | 08.1 | 1855.39 | | 5 | narrow |
| 84 | | PK LK503 | | 8 | narrow |
| 83 | | PK LK502 | | 8 | narrow |
| 73 | 22.2 | 238 | | 8 | wide |
| 67 | 12.1 | 8419.1193 | | 9 | wide |
| 79 | | HM 188.52 | | 9 | wide |
| 22 | 26.2 | F2084 | | 10 | wide |
| 74 | 05.2 | 8340 | | 10? | wide |
| 80 | | HM 188.53 | | 10 | wide |
| 69 | 08.2 | 7419.18 | | 11 | wide |
| 66 | 14.1 | 7114.2 | | 12 | wide |
| 68 | 07.2 | 8967.1453 | | 12 | wide |
| 71 | 24.2 | 8174 | | 12 | wide |
| 82 | 19.2 | 1762.5 | | 12 | wide |
| 15 | 28.2 | F1617 | | 14 | wide |
| 72 | 29.2 | 7507 | | 15 | wide |
| 37 | | 1855.36 | 9.5 | 5 | |
| 08 | 11.1 | F212 | 9.5 | 5 | narrow |
| 90 | | PP 4402.1 | 9.5 | 5 | narrow |
| 07 | 36.1 | F211 | 10 | 5 | narrow |
| 20 | | F1925 | 10 | 5 | narrow |
| 06 | 17.1 | F210 | 10.5 | 5 | narrow |
| 88 | | T229 | 10.5 | 5 | narrow |
| 51 | 01.2 | 731 | 11 | 5 | narrow |
| 89 | | T2 | 11 | 5 | narrow |
| 85 | | PK LK521 | 11.5 | 5 | narrow |
| 32 | 15.2 | 1855.11 | 12 | 5 | narrow |
| 38 | 13.2 | 1855.37 | 12 | 5 | narrow |
| 39 | 04.1 | 1855.38 | 12 | 5 | narrow |
| 50 | 16.1? | 684 | 12 | 5 | narrow |
| 86 | | PK LK522 | 12 | 5 | narrow |
| 21 | | F2016 | 12 | 5 | narrow? |
| 87 | | PK LK3232 | 12 | 5 | narrow? |
| 36 | 06.1 | 1855.17 | 12 | 8 | narrow |
| 70 | 16.2 | 7581.2 | 12? | 8 | narrow |
| 33 | | 1855.13 | 12 | 9 | narrow? |
| 17 | 28.2 | F1692 | 12.5 | 10 | narrow |
| 11 | 18.1 | F1177 | 13 | 6 | narrow |
| 34 | 15.2 | 1855.14 | 13 | 7 | long |
| 81 | | HM 47.405 | 13.5 | 7 | narrow |
| 78 | | HM 188.51 | 13.5 | 8 | wide |
| 59 | | 4043 | 14 | 6 | narrow |
| 60 | | 4366 | 14 | 10? | narrow |
| 57 | | 2701 | 14.5 | 5 | |
| 19 | 09.2 | F1839 | 14.5 | 9 | wide |
| 56 | 21.1 | 2218.218 | 15 | 5 | narrow |

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Width

| | | | | Page 2 | |
|------|-------|------------|-------|--------|--------|
| file | photo | museumnumb | width | num | class |
| ---- | ----- | ----- | ----- | ---- | ----- |
| 58 | 20.1 | 3045.49 | 15 | 5 | narrow |
| 30 | G00 | 1855.9 | 15 | 7 | narrow |
| 04 | 15.1 | F201 | 15 | 8 | long |
| 42 | | 1855.41 | 15 | 8 | narrow |
| 27 | 09.1 | F2182 | 15 | 9 | wide |
| 14 | 10.1 | F1616 | 15 | 11 | wide |
| 05 | 19.1 | F208 | 15 | 12 | long |
| 55 | 10.2 | 1763 | 15 | 12 | long? |
| 52 | | 1762.5a | 15 | 12 | wide |
| 03 | | F198 | 15.5 | 9 | wide? |
| 13 | G20 | F1201 | 15.5 | 12 | wide |
| 45 | G36 | 1855.45 | 15.5 | 12 | wide |
| 31 | G52 | 1855.10 | 16 | 7 | wide |
| 43 | 00.2 | 1855.42 | 16? | 9 | narrow |
| 18 | 11.2 | F1838 | 16 | 9 | wide |
| 02 | 21.2 | F197 | 16 | 11 | long |
| 25 | 12.2 | F2144 | 16 | 12 | wide |
| 29 | | 1855.8 | 16.5 | 7 | wide |
| 35 | | 1855.15 | 16.5 | 7 | wide |
| 09 | 25.1 | F213 | 16.5 | 16 | long |
| 91 | | PP SP | 17 | 5 | narrow |
| 75 | | Kuop 607 | 17 | 12 | long |
| 26 | 20.2 | F2181 | 17.5 | 10 | wide |
| 76 | | HM 188.49 | 17.5 | 10 | wide |
| 28 | G45 | 1855.7 | 18 | 8 | wide |
| 10 | 06.2 | F443 | 19 | 12 | wide |
| 48 | 00.1 | 1855.48 | 19? | 15 | wide |
| 61 | G44 | 4849.31 | 19.5 | 9 | wide |
| 77 | | HM 188.50 | 19.5 | 9 | wide |
| 62 | G51 | 4880 | 20.5 | 7 | wide |
| 41 | G24-7 | 1855.40 | 20.5 | 7 | wide? |
| 01 | G39 | F188 | 20.5 | 8 | wide |
| 46 | 03.1 | 1855.46 | 20.5 | 12 | wide |
| 16 | 23.2 | F1626 | 21 | 11 | wide |
| 12 | 02.2 | F1178 | 21 | 12 | wide |
| 65 | | 4972.3 | 21 | 12 | wide |
| 54 | | 1762.5e | 21.5 | 11 | wide? |
| 63 | | 4972.1 | 22 | 12 | wide |
| 64 | | 4972.2 | 22 | 12 | wide |
| 49 | | 1855.74 | 22 | 12 | wide? |
| 44 | 02.1 | 1855.44 | 23 | 11 | wide |
| 24 | 31.2 | F2143 | 23 | 13 | wide |
| 47 | 01.1 | 1855.47 | 25? | 13 | wide |
| 53 | 25.2 | 1762.5c | 27.5 | 18 | wide |
| 23 | 34.1 | F2142 | 32 | 15 | wide |

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Thickness

| file | photo | museumnumb | thick | file | photo | museumnumb | thick |
|------|-------|------------|-------|------|-------|------------|-------|
| 84 | | PK LK503 | | 89 | | T2 | 5.5 |
| 15 | 28.2 | F1617 | | 04 | 15.1 | F201 | 6 |
| 22 | 26.2 | F2084 | | 11 | 18.1 | F1177 | 6 |
| 85 | | PK LK521 | | 17 | 28.2 | F1692 | 6 |
| 40 | 08.1 | 1855.39 | | 36 | 06.1 | 1855.17 | 6 |
| 83 | | PK LK502 | | 43 | 00.2 | 1855.42 | 6? |
| 48 | 00.1 | 1855.48 | | 61 | G44 | 4849.31 | 6 |
| 66 | 14.1 | 7114.2 | | 62 | G51 | 4880 | 6 |
| 67 | 12.1 | 8419.1193 | | 75 | | Kuop 607 | 6 |
| 68 | 07.2 | 8967.1453 | | 78 | | HM 188.51 | 6 |
| 69 | 08.2 | 7419.18 | | 10 | 06.2 | F443 | 6.5 |
| 71 | 24.2 | 8174 | | 12 | 02.2 | F1178 | 6.5 |
| 72 | 29.2 | 7507 | | 13 | G20 | F1201 | 6.5 |
| 73 | 22.2 | 238 | | 37 | | 1855.36 | 6.5 |
| 74 | 05.2 | 8340 | | 53 | 25.2 | 1762.5c | 6.5 |
| 79 | | HM 188.52 | | 55 | 10.2 | 1763 | 6.5 |
| 80 | | HM 188.53 | | 87 | | PK LK3232 | 6.5 |
| 81 | | HM 47.405 | | 14 | 10.1 | F1616 | 7 |
| 82 | 19.2 | 1762.5 | | 34 | 15.2 | 1855.14 | 7 |
| 32 | 15.2 | 1855.11 | 3 | 38 | 13.2 | 1855.37 | 7 |
| 06 | 17.1 | F210 | 3.5 | 39 | 04.1 | 1855.38 | 7 |
| 08 | 11.1 | F212 | 4 | 47 | 01.1 | 1855.47 | 7? |
| 28 | G45 | 1855.7 | 4 | 51 | 01.2 | 731 | 7 |
| 31 | G52 | 1855.10 | 4 | 54 | | 1762.5e | 7 |
| 42 | | 1855.41 | 4 | 57 | | 2701 | 7 |
| 45 | G36 | 1855.45 | 4 | 23 | 34.1 | F2142 | 7.5 |
| 86 | | PK LK522 | 4 | 44 | 02.1 | 1855.44 | 7.5 |
| 01 | G39 | F188 | 4.5 | 49 | | 1855.74 | 7.5 |
| 03 | | F198 | 4.5 | 52 | | 1762.5a | 7.5 |
| 27 | 09.1 | F2182 | 4.5 | 58 | 20.1 | 3045.49 | 7.5 |
| 33 | | 1855.13 | 4.5 | 91 | | PP SP | 7.9 |
| 50 | 16.1? | 684 | 4.5 | 02 | 21.2 | F197 | 8 |
| 05 | 19.1 | F208 | 5 | 25 | 12.2 | F2144 | 8 |
| 18 | 11.2 | F1838 | 5 | 29 | | 1855.8 | 8 |
| 20 | | F1925 | 5 | 46 | 03.1 | 1855.46 | 8 |
| 30 | G00 | 1855.9 | 5 | 16 | 23.2 | F1626 | 8.5 |
| 35 | | 1855.15 | 5 | 63 | | 4972.1 | 8.5 |
| 41 | G24-7 | 1855.40 | 5 | 64 | | 4972.2 | 8.5 |
| 60 | | 4366 | 5 | 26 | 20.2 | F2181 | 9 |
| 70 | 16.2 | 7581.2 | 5? | 65 | | 4972.3 | 9 |
| 88 | | T229 | 5 | 09 | 25.1 | F213 | 10 |
| 90 | | PP 4402.1 | 5.3 | 19 | 09.2 | F1839 | 10 |
| 07 | 36.1 | F211 | 5.5 | 76 | | HM 188.49 | 10? |
| 21 | | F2016 | 5.5 | 77 | | HM 188.50 | 10 |
| 56 | 21.1 | 2218.218 | 5.5 | 24 | 31.2 | F2143 | 11 |
| 59 | | 4043 | 5.5 | | | | |

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Carved From:

Page 1

| file | photo | museumnumb | carved | place |
|------|-------|------------|---------|----------------------|
| 49 | | 1855.74 | | |
| 72 | 29.2 | 7507 | | Jyväskylän lahisto |
| 67 | 12.1 | 8419.1193 | | Karjala, Ladoga |
| 74 | 05.2 | 8340 | | Karjala |
| 33 | | 1855.13 | | Polvijärvi |
| 57 | | 2701 | bottom | |
| 59 | | 4043 | bottom | |
| 89 | | T2 | bottom | |
| 90 | | PP 4402.1 | bottom | |
| 91 | | PP SP | bottom | |
| 05 | 19.1 | F208 | bottom | Iisalmi |
| 39 | 04.1 | 1855.38 | bottom | Inkeri |
| 40 | 08.1 | 1855.39 | bottom | Inkeri |
| 28 | G45 | 1855.7 | bottom | Inkeri Soikkola |
| 09 | 25.1 | F213 | bottom | Kuopio |
| 34 | 15.2 | 1855.14 | bottom | Maaninka |
| 13 | G20 | F1201 | bottom | Myrskylä |
| 07 | 36.1 | F211 | bottom | Nilsinä |
| 08 | 11.1 | F212 | bottom | Nilsinä |
| 04 | 15.1 | F201 | bottom | Pielisjärvi |
| 55 | 10.2 | 1763 | bottom | Pielisjärvi |
| 88 | | T229 | bottom | Pohanmaa Pohjois |
| 58 | 20.1 | 3045.49 | bottom | Pohjanmaa Muhos |
| 17 | 28.2 | F1692 | bottom | Pohjanmaa, Lehtimäki |
| 06 | 17.1 | F210 | bottom | Savo Pohjois |
| 37 | | 1855.36 | bottom | Savo Pohjois? |
| 50 | 16.1? | 684 | bottom | Savo Pohjois |
| 70 | 16.2 | 7581.2 | bottom | Suojärvi |
| 38 | 13.2 | 1855.37 | bottom | Suomi Marta? |
| 02 | 21.2 | F197 | bottom | Tohmajärvi |
| 79 | | HM 188.52 | bottom? | Suistamo |
| 83 | | PK LK502 | side | Aunus Vieljärvi |
| 30 | G00 | 1855.9 | side | Inkeri Soikkola |
| 61 | G44 | 4849.31 | side | Inkeri Soikkola |
| 76 | | HM 188.49 | side | Suojärvi |
| 77 | | HM 188.50 | side | Suojärvi |
| 31 | G52 | 1855.10 | side? | Inkeri Vatja |
| 42 | | 1855.41 | top | |
| 75 | | Kuop 607 | top | |
| 87 | | PK LK3232 | top | |
| 45 | G36 | 1855.45 | top | |
| 65 | | 4972.3 | top | Aunus Suurenniemi |
| 84 | | PK LK503 | top | Aunus Tulonijärvi |
| 63 | | 4972.1 | top | Aunus Videle |
| 64 | | 4972.2 | top | Aunus Videle |
| 21 | | F2016 | top | Heinävesi |

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Carved from:

Page 2

| file | photo | museumnumb | carved | place |
|------|-------|------------|--------|----------------------|
| 03 | | F198 | top | Ilomantsi |
| 23 | 34.1 | F2142 | top | Impilahti |
| 41 | G24-7 | 1855.40 | top | Inkeri |
| 44 | 02.1 | 1855.44 | top | Inkeri |
| 46 | 03.1 | 1855.46 | top | Inkeri |
| 47 | 01.1 | 1855.47 | top | Inkeri |
| 48 | 00.1 | 1855.48 | top | Inkeri |
| 29 | | 1855.8 | top | Inkeri, Soikkola |
| 35 | | 1855.15 | top | Inkeri, Soikkola |
| 36 | 06.1 | 1855.17 | top | Inkeri, Vatja |
| 43 | 00.2 | 1855.42 | top | Juva |
| 56 | 21.1 | 2218.218 | top | Juva |
| 66 | 14.1 | 7114.2 | top | Karjala |
| 19 | 09.2 | F1839 | top | Karjala |
| 53 | 25.2 | 1762.5c | top | Karjala |
| 54 | | 1762.5e | top | Karjala |
| 52 | | 1762.5a | top | Karjala, Impilahti? |
| 18 | 11.2 | F1838 | top | Karjala, Viipuri |
| 82 | 19.2 | 1762.5 | top | Karjala? |
| 81 | | HM 47.405 | top | Karstula |
| 27 | 09.1 | F2182 | top | Keski Suomi |
| 11 | 18.1 | F1177 | top | Korpiselkä |
| 12 | 02.2 | F1178 | top | Korpiselkä |
| 51 | 01.2 | 731 | top | Kurkijoki |
| 20 | | F1925 | top | Leppävirta |
| 32 | 15.2 | 1855.11 | top | Liperi |
| 01 | G39 | F188 | top | Muolaa |
| 22 | 26.2 | F2084 | top | Myrskylä |
| 62 | G51 | 4880 | top | Pietarin lääni |
| 14 | 10.1 | F1616 | top | Salmi |
| 15 | 28.2 | F1617 | top | Salmi |
| 24 | 31.2 | F2143 | top | Salmi |
| 71 | 24.2 | 8174 | top | Salmi |
| 80 | | HM 188.53 | top | Sununen, Tulomajärvi |
| 10 | 06.2 | F443 | top | Suojärvi |
| 85 | | PK LK521 | top | Suojärvi |
| 69 | 08.2 | 7419.18 | top | Suojärvi |
| 86 | | PK LK522 | top | Suojärvi, Leppäniemi |
| 78 | | HM 188.51 | top | Suojärvi, Nieminen |
| 68 | 07.2 | 8967.1453 | top | Suomi |
| 73 | 22.2 | 238 | top | Suomi |
| 60 | | 4366 | top? | |
| 26 | 20.2 | F2181 | top? | Karjala? |
| 25 | 12.2 | F2144 | top? | Salmi, Kirkkojoki |
| 16 | 23.2 | F1626 | top? | Suistamo |

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Material for Body and Top

Page 1

| file | photo | museumnumb | body | ma | top | mat | place |
|------|-------|------------|-------|--------|-----|-----|----------------------|
| 03 | | F198 | alder | | | | Ilomantsi |
| 20 | | F1925 | alder | | | | Leppävirta |
| 33 | | 1855.13 | alder | | | | Polvijärvi |
| 37 | | 1855.36 | alder | | | | Savo, Pohjois? |
| 89 | | T2 | alder | alder | | | |
| 91 | | PP SP | alder | alder | | | |
| 65 | | 4972.3 | alder | alder | | | Aunus, Suurenniemi |
| 05 | 19.1 | F208 | alder | alder | | | Iisalmi |
| 30 | G00 | 1855.9 | alder | alder | | | Inkeri, Soikkola |
| 36 | 06.1 | 1855.17 | alder | alder | | | Inkeri, Vatja |
| 53 | 25.2 | 1762.5c | alder | alder | | | Karjala |
| 09 | 25.1 | F213 | alder | alder | | | Kuopio |
| 34 | 15.2 | 1855.14 | alder | alder | | | Maaninka |
| 07 | 36.1 | F211 | alder | alder | | | Nilsinä |
| 08 | 11.1 | F212 | alder | alder | | | Nilsinä |
| 55 | 10.2 | 1763 | alder | alder | | | Pielisjärvi |
| 58 | 20.1 | 3045.49 | alder | alder | | | Pohjanmaa, Muhos |
| 17 | 28.2 | F1692 | alder | alder | | | Pohjanmaa, Lehtimäki |
| 06 | 17.1 | F210 | alder | alder | | | Savo, Pohjois |
| 50 | 16.1? | 684 | alder | alder | | | Savo, Pohjois |
| 77 | | HM 188.50 | alder | alder | | | Suojärvi |
| 51 | 01.2 | 731 | alder | birch | | | Kurkijoki |
| 14 | 10.1 | F1616 | alder | pine | | | Salmi |
| 46 | 03.1 | 1855.46 | alder | pine | | | Inkeri |
| 19 | 09.2 | F1839 | alder | pine | | | Karjala |
| 42 | | 1855.41 | alder | spruce | | | |
| 64 | | 4972.2 | alder | spruce | | | Aunus, Videle |
| 21 | | F2016 | alder | spruce | | | Heinävesi |
| 41 | G24-7 | 1855.40 | alder | spruce | | | Inkeri |
| 52 | | 1762.5a | alder | spruce | | | Karjala, Impilahti? |
| 18 | 11.2 | F1838 | alder | spruce | | | Karjala, Viipuri |
| 27 | 09.1 | F2182 | alder | spruce | | | Keski Suomi |
| 11 | 18.1 | F1177 | alder | spruce | | | Korpiselkä |
| 32 | 15.2 | 1855.11 | alder | spruce | | | Liperi |
| 10 | 06.2 | F443 | alder | spruce | | | Suojärvi |
| 78 | | HM 188.51 | alder | spruce | | | Suojärvi, Nieminen |
| 02 | 21.2 | F197 | aspen | aspen | | | Tohmajärvi |
| 81 | | HM 47.405 | birch | | | | Karstula |
| 13 | G20 | F1201 | birch | birch | | | Myrskylä |
| 04 | 15.1 | F201 | birch | birch | | | Pielisjärvi |
| 88 | | T229 | birch | birch | | | Pohanmaa, Pohjois |
| 86 | | PK LK522 | birch | pine | | | Suojärvi, Leppaniemi |
| 56 | 21.1 | 2218.218 | birch | spruce | | | Juva |
| 62 | G51 | 4880 | birch | spruce | | | Pietarin lääni |
| 80 | | HM 188.53 | birch | spruce | | | Sununen, Tulomajärvi |

Material for Body and Top

| file | photo | museumnumb | body | ma | top | mat | place |
|------|-------|------------|--------|----|---------|-----|-------------------|
| 85 | | PK LK521 | birch | | spruce | | Suojärvi |
| 43 | 00.2 | 1855.42 | birch? | | spruce? | | Juva |
| 49 | | 1855.74 | pine | | | | |
| 25 | 12.2 | F2144 | pine | | | | Salmi, Kirkkojoki |
| 24 | 31.2 | F2143 | pine | | | | Salmi |
| 90 | | PP 4402.1 | pine | | pine | | |
| 59 | | 4043 | pine | | spruce | | |
| 23 | 34.1 | F2142 | pine | | spruce | | Impilahti |
| 57 | | 2701 | spruce | | | | |
| 29 | | 1855.8 | spruce | | | | Inkeri, Soikkola |
| 35 | | 1855.15 | spruce | | | | Inkeri, Soikkola |
| 54 | | 1762.5e | spruce | | | | Karjala |
| 45 | G36 | 1855.45 | spruce | | spruce | | |
| 63 | | 4972.1 | spruce | | spruce | | Aunus, Videle |
| 39 | 04.1 | 1855.38 | spruce | | spruce | | Inkeri |
| 44 | 02.1 | 1855.44 | spruce | | spruce | | Inkeri |
| 28 | G45 | 1855.7 | spruce | | spruce | | Inkeri, Soikkola |
| 61 | G44 | 4849.31 | spruce | | spruce | | Inkeri, Soikkola |
| 31 | G52 | 1855.10 | spruce | | spruce | | Inkeri, Vatja |
| 26 | 20.2 | F2181 | spruce | | spruce | | Karjala? |
| 12 | 02.2 | F1178 | spruce | | spruce | | Korpiselkä |
| 01 | G39 | F188 | spruce | | spruce | | Muolaa |
| 16 | 23.2 | F1626 | spruce | | spruce | | Suistamo |
| 76 | | HM 188.49 | spruce | | spruce | | Suojärvi |
| 38 | 13.2 | 1855.37 | spruce | | spruce | | Suomi, Marta? |

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Number of Strings

| file | photo | museumnumb | num | file | photo | museumnumb | num |
|------|-------|------------|-----|------|-------|------------|-----|
| 06 | 17.1 | F210 | 5 | 33 | | 1855.13 | 9 |
| 07 | 36.1 | F211 | 5 | 43 | 00.2 | 1855.42 | 9 |
| 08 | 11.1 | F212 | 5 | 61 | G44 | 4849.31 | 9 |
| 20 | | F1925 | 5 | 67 | 12.1 | 8419.1193 | 9 |
| 21 | | F2016 | 5 | 77 | | HM 188.50 | 9 |
| 85 | | PK LK521 | 5 | 79 | | HM 188.52 | 9 |
| 32 | 15.2 | 1855.11 | 5 | 17 | 28.2 | F1692 | 10 |
| 37 | | 1855.36 | 5 | 22 | 26.2 | F2084 | 10 |
| 38 | 13.2 | 1855.37 | 5 | 26 | 20.2 | F2181 | 10 |
| 39 | 04.1 | 1855.38 | 5 | 60 | | 4366 | 10? |
| 40 | 08.1 | 1855.39 | 5 | 74 | 05.2 | 8340 | 10? |
| 50 | 16.1? | 684 | 5 | 76 | | HM 188.49 | 10 |
| 51 | 01.2 | 731 | 5 | 80 | | HM 188.53 | 10 |
| 56 | 21.1 | 2218.218 | 5 | 02 | 21.2 | F197 | 11 |
| 57 | | 2701 | 5 | 14 | 10.1 | F1616 | 11 |
| 58 | 20.1 | 3045.49 | 5 | 16 | 23.2 | F1626 | 11 |
| 86 | | PK LK522 | 5 | 44 | 02.1 | 1855.44 | 11 |
| 87 | | PK LK3232 | 5 | 54 | | 1762.5e | 11 |
| 88 | | T229 | 5 | 69 | 08.2 | 7419.18 | 11 |
| 89 | | T2 | 5 | 05 | 19.1 | F208 | 12 |
| 90 | | PP 4402.1 | 5 | 10 | 06.2 | F443 | 12 |
| 91 | | PP SP | 5 | 12 | 02.2 | F1178 | 12 |
| 11 | 18.1 | F1177 | 6 | 13 | G20 | F1201 | 12 |
| 59 | | 4043 | 6 | 25 | 12.2 | F2144 | 12 |
| 29 | | 1855.8 | 7 | 45 | G36 | 1855.45 | 12 |
| 30 | G00 | 1855.9 | 7 | 46 | 03.1 | 1855.46 | 12 |
| 31 | G52 | 1855.10 | 7 | 49 | | 1855.74 | 12 |
| 34 | 15.2 | 1855.14 | 7 | 52 | | 1762.5a | 12 |
| 35 | | 1855.15 | 7 | 55 | 10.2 | 1763 | 12 |
| 41 | G24-7 | 1855.40 | 7 | 63 | | 4972.1 | 12 |
| 62 | G51 | 4880 | 7 | 64 | | 4972.2 | 12 |
| 81 | | HM 47.405 | 7 | 65 | | 4972.3 | 12 |
| 01 | G39 | F188 | 8 | 66 | 14.1 | 7114.2 | 12 |
| 04 | 15.1 | F201 | 8 | 68 | 07.2 | 8967.1453 | 12 |
| 84 | | PK LK503 | 8 | 71 | 24.2 | 8174 | 12 |
| 28 | G45 | 1855.7 | 8 | 75 | | Kuop 607 | 12 |
| 36 | 06.1 | 1855.17 | 8 | 82 | 19.2 | 1762.5 | 12 |
| 42 | | 1855.41 | 8 | 24 | 31.2 | F2143 | 13 |
| 83 | | PK LK502 | 8 | 47 | 01.1 | 1855.47 | 13 |
| 70 | 16.2 | 7581.2 | 8 | 15 | 28.2 | F1617 | 14 |
| 73 | 22.2 | 238 | 8 | 23 | 34.1 | F2142 | 15 |
| 78 | | HM 188.51 | 8 | 48 | 00.1 | 1855.48 | 15 |
| 03 | | F198 | 9 | 72 | 29.2 | 7507 | 15 |
| 18 | 11.2 | F1838 | 9 | 09 | 25.1 | F213 | 16 |
| 19 | 09.2 | F1839 | 9 | 53 | 25.2 | 1762.5c | 18 |
| 27 | 09.1 | F2182 | 9 | | | | |

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Shape of the Ponsi and Notch

Page 1

| file | photo | museumnumb | ponsi | notch | place |
|------|-------|------------|---------|---------|----------------------|
| 42 | | 1855.41 | | | |
| 49 | | 1855.74 | | | |
| 57 | | 2701 | | | |
| 29 | | 1855.8 | | | Inkeri, Soikkola |
| 54 | | 1762.5e | | | Karjala |
| 20 | | F1925 | | | Leppävirta |
| 33 | | 1855.13 | | | Polvijärvi |
| 75 | | Kuop 607 | none | none | |
| 28 | G45 | 1855.7 | none | none | Inkeri, Soikkola |
| 35 | | 1855.15 | none | none | Inkeri, Soikkola |
| 31 | G52 | 1855.10 | none | none | Inkeri, Vatja |
| 53 | 25.2 | 1762.5c | none | none | Karjala |
| 16 | 23.2 | F1626 | none | none | Suistamo |
| 21 | | F2016 | round | | Heinävesi |
| 37 | | 1855.36 | round | | Savo, Pohjois? |
| 56 | 21.1 | 2218.218 | round | round | Juva |
| 81 | | HM 47.405 | round | round | Karstula |
| 10 | 06.2 | F443 | round | round | Suojärvi |
| 69 | 08.2 | 7419.18 | round | square | Suojärvi |
| 84 | | PK LK503 | rounded | round | Aunus, Tulonijärvi |
| 74 | 05.2 | 8340 | rounded | round | Karjala |
| 50 | 16.1? | 684 | rounded | round | Savo, Pohjois |
| 38 | 13.2 | 1855.37 | rounded | round | Suomi, Marta? |
| 90 | | PP 4402.1 | rounded | rounded | |
| 55 | 10.2 | 1763 | rounded | square | Pielisjärvi |
| 34 | 15.2 | 1855.14 | rounded | square | Maaninka |
| 08 | 11.1 | F212 | semrnd | square | Nilsinä |
| 59 | | 4043 | square | | |
| 60 | | 4366 | square | | |
| 65 | | 4972.3 | square | | Aunus, Suurenniemi |
| 64 | | 4972.2 | square | | Aunus, Videle |
| 03 | | F198 | square | | Ilomantsi |
| 61 | G44 | 4849.31 | square | none | Inkeri, Soikkola |
| 52 | | 1762.5a | square | none | Karjala, Impilahti? |
| 62 | G51 | 4880 | square | none | Pietarin lääni |
| 24 | 31.2 | F2143 | square | none | Salmi |
| 71 | 24.2 | 8174 | square | none | Salmi |
| 78 | | HM 188.51 | square | none | Suojärvi, Nieminen |
| 18 | 11.2 | F1838 | square | opensqr | Karjala, Viipuri |
| 41 | G24-7 | 1855.40 | square | round | Inkeri |
| 47 | 01.1 | 1855.47 | square | round | Inkeri |
| 30 | G00 | 1855.9 | square | round | Inkeri, Soikkola |
| 43 | 00.2 | 1855.42 | square | round | Juva |
| 51 | 01.2 | 731 | square | round | Kurkijoki |
| 17 | 28.2 | F1692 | square | round | Pohjanmaa, Lehtimäki |
| 70 | 16.2 | 7581.2 | square | round | Suojärvi |

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Shape of the ponsi and notch

Page 2

| file | photo | museumnumb | ponsi | notch | place |
|------|-------|------------|---------|---------|----------------------|
| 86 | | PK LK522 | square | round | Suojärvi, Leppäniemi |
| 73 | 22.2 | 238 | square | round | Suomi |
| 89 | | T2 | square | rounded | |
| 91 | | PP SP | square | rounded | |
| 26 | 20.2 | F2181 | square | rounded | Karjala? |
| 88 | | T229 | square | rounded | Pohanmaa, Pohjois |
| 45 | G36 | 1855.45 | square | square | |
| 63 | | 4972.1 | square | square | Aunus, Videle |
| 83 | | PK LK502 | square | square | Aunus, Vieljärvi |
| 23 | 34.1 | F2142 | square | square | Impilahti |
| 39 | 04.1 | 1855.38 | square | square | Inkeri |
| 40 | 08.1 | 1855.39 | square | square | Inkeri |
| 44 | 02.1 | 1855.44 | square | square | Inkeri |
| 46 | 03.1 | 1855.46 | square | square | Inkeri |
| 48 | 00.1 | 1855.48 | square | square | Inkeri |
| 36 | 06.1 | 1855.17 | square | square | Inkeri, Vatja |
| 72 | 29.2 | 7507 | square | square | Jyväskylän lahisto |
| 66 | 14.1 | 7114.2 | square | square | Karjala |
| 67 | 12.1 | 8419.1193 | square | square | Karjala, Ladoga |
| 82 | 19.2 | 1762.5 | square | square | Karjala? |
| 27 | 09.1 | F2182 | square | square | Keski Suomi |
| 12 | 02.2 | F1178 | square | square | Korpiselkä |
| 09 | 25.1 | F213 | square | square | Kuopio |
| 01 | G39 | F188 | square | square | Muolaa |
| 22 | 26.2 | F2084 | square | square | Myrskylä |
| 07 | 36.1 | F211 | square | square | Nilsinä |
| 04 | 15.1 | F201 | square | square | Pielisjärvi |
| 58 | 20.1 | 3045.49 | square | square | Pohjanmaa, Muhos |
| 14 | 10.1 | F1616 | square | square | Salmi |
| 15 | 28.2 | F1617 | square | square | Salmi |
| 25 | 12.2 | F2144 | square | square | Salmi, Kirkkojoki |
| 06 | 17.1 | F210 | square | square | Savo, Pohjois |
| 79 | | HM 188.52 | square | square | Suistamo |
| 80 | | HM 188.53 | square | square | Sununen, Tulomajärvi |
| 85 | | PK LK521 | square | square | Suojärvi |
| 76 | | HM 188.49 | square | square | Suojärvi |
| 77 | | HM 188.50 | square | square | Suojärvi |
| 68 | 07.2 | 8967.1453 | square | square | Suomi |
| 02 | 21.2 | F197 | square | square | Tohmajärvi |
| 19 | 09.2 | F1839 | square | squared | Karjala |
| 13 | G20 | F1201 | squared | none | Myrskylä |
| 87 | | PK LK3232 | squared | square | |
| 05 | 19.1 | F208 | squared | squared | Iisalmi |
| 11 | 18.1 | F1177 | squared | squared | Korpiselkä |
| 32 | 15.2 | 1855.11 | squared | squared | Liperi |

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Varras

| file | photo | museumnumb | varras | place |
|------|-------|------------|--------|---------------------|
| 42 | | 1855.41 | double | |
| 05 | 19.1 | F208 | double | Iisalmi |
| 09 | 25.1 | F213 | double | Kuopio |
| 34 | 15.2 | 1855.14 | double | Maaninka |
| 55 | 10.2 | 1763 | double | Pielisjärvi |
| 33 | | 1855.13 | double | Polvijärvi |
| 02 | 21.2 | F197 | double | Tohmajärvi |
| 45 | G36 | 1855.45 | none | |
| 03 | | F198 | rod up | Iломantsi |
| 28 | G45 | 1855.7 | rod up | Inkeri, Soikkola |
| 61 | G44 | 4849.31 | rod up | Inkeri, Soikkola |
| 31 | G52 | 1855.10 | rod up | Inkeri, Vatja |
| 53 | 25.2 | 1762.5c | rod up | Karjala |
| 52 | | 1762.5a | rod up | Karjala, Impilahti? |
| 62 | G51 | 4880 | rod up | Pietarin lääni |
| 24 | 31.2 | F2143 | rod up | Salmi |
| 71 | 24.2 | 8174 | rod up | Salmi |
| 16 | 23.2 | F1626 | rod up | Suistamo |

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Bridges

| file | photo | museumnumb | bridges | place |
|------|-------|------------|---------|--------------------|
| 63 | | 4972.1 | both | Aunus, Videle |
| 79 | | HM 188.52 | both | Suistamo |
| 46 | 03.1 | 1855.46 | ponsi | Inkeri |
| 47 | 01.1 | 1855.47 | ponsi | Inkeri |
| 66 | 14.1 | 7114.2 | ponsi | Karjala |
| 82 | 19.2 | 1762.5 | ponsi | Karjala? |
| 84 | | PK LK503 | tngpg | Aunus, Tulonijärvi |
| 23 | 34.1 | F2142 | tngpg | Impilahti |
| 44 | 02.1 | 1855.44 | tngpg | Inkeri |
| 48 | 00.1 | 1855.48 | tngpg | Inkeri |
| 53 | 25.2 | 1762.5c | tngpg | Karjala |
| 12 | 02.2 | F1178 | tngpg | Korpiselkä |
| 24 | 31.2 | F2143 | tngpg | Salmi |
| 71 | 24.2 | 8174 | tngpg | Salmi |
| 16 | 23.2 | F1626 | tngpg | Suistamo |
| 10 | 06.2 | F443 | tngpg | Suojärvi |
| 69 | 08.2 | 7419.18 | tngpg | Suojärvi |
| 76 | | HM 188.49 | tngpg | Suojärvi |

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| | | | Tip | Page 1 |
|------|-------|------------|---------|----------------------|
| file | photo | museumnumb | tip | place |
| 42 | | 1855.41 | | |
| 49 | | 1855.74 | | |
| 57 | | 2701 | | |
| 29 | | 1855.8 | | Inkeri, Soikkola |
| 33 | | 1855.13 | | Polvijärvi |
| 60 | | 4366 | cut | |
| 75 | | Kuop 607 | cut | |
| 03 | | F198 | cut | Iломantsi |
| 48 | 00.1 | 1855.48 | cut | Inkeri |
| 66 | 14.1 | 7114.2 | cut | Karjala |
| 19 | 09.2 | F1839 | cut | Karjala |
| 51 | 01.2 | 731 | cut | Kurkijoki |
| 15 | 28.2 | F1617 | cut | Salmi |
| 79 | | HM 188.52 | cut | Suistamo |
| 11 | 18.1 | F1177 | expoint | Korpiselkä |
| 21 | | F2016 | hook | Heinävesi |
| 27 | 09.1 | F2182 | hook | Keski Suomi |
| 32 | 15.2 | 1855.11 | hook | Liperi |
| 01 | G39 | F188 | hook | Muolaa |
| 64 | | 4972.2 | knob | Aunus, Videle |
| 81 | | HM 47.405 | knob | Karstula |
| 68 | 07.2 | 8967.1453 | knob | Suomi |
| 59 | | 4043 | point | |
| 89 | | T2 | point | |
| 05 | 19.1 | F208 | point | Iisalmi |
| 39 | 04.1 | 1855.38 | point | Inkeri |
| 40 | 08.1 | 1855.39 | point | Inkeri |
| 30 | G00 | 1855.9 | point | Inkeri, Soikkola |
| 35 | | 1855.15 | point | Inkeri, Soikkola |
| 61 | G44 | 4849.31 | point | Inkeri, Soikkola |
| 31 | G52 | 1855.10 | point | Inkeri, Vatja |
| 53 | 25.2 | 1762.5c | point | Karjala |
| 26 | 20.2 | F2181 | point | Karjala? |
| 09 | 25.1 | F213 | point | Kuopio |
| 13 | G20 | F1201 | point | Myrskylä |
| 07 | 36.1 | F211 | point | Nilsinä |
| 08 | 11.1 | F212 | point | Nilsinä |
| 62 | G51 | 4880 | point | Pietarin lääni |
| 88 | | T229 | point | Pohanmaa, Pohjois |
| 58 | 20.1 | 3045.49 | point | Pohjanmaa, Muhos |
| 17 | 28.2 | F1692 | point | Pohjanmaa, Lehtimäki |
| 24 | 31.2 | F2143 | point | Salmi |
| 25 | 12.2 | F2144 | point | Salmi, Kirkkojoki |
| 06 | 17.1 | F210 | point | Savo, Pohjois |
| 37 | | 1855.36 | point | Savo, Pohjois? |
| 50 | 16.1? | 684 | point | Savo, Pohjois |

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Tip

Page 2

| fil | photo | museumnumb | tip | place |
|-----|-------|------------|---------|----------------------|
| 16 | 23.2 | F1626 | point | Suistamo |
| 10 | 06.2 | F443 | point | Suojärvi |
| 73 | 22.2 | 238 | point | Suomi |
| 38 | 13.2 | 1855.37 | point | Suomi, Marta? |
| 02 | 21.2 | F197 | point | Tohmajärvi |
| 04 | 15.1 | F201 | revcrv | Pielisjärvi |
| 63 | | 4972.1 | round | Aunus, Videle |
| 90 | | PP 4402.1 | rounded | |
| 91 | | PP SP | rounded | |
| 44 | 02.1 | 1855.44 | rounded | Inkeri |
| 22 | 26.2 | F2084 | rounded | Myrskylä |
| 43 | 00.2 | 1855.42 | scrl hk | Juva |
| 34 | 15.2 | 1855.14 | scrl hk | Maaninka |
| 71 | 24.2 | 8174 | scrl sm | Salmi |
| 87 | | PK LK3232 | scroll | |
| 45 | G36 | 1855.45 | scroll | |
| 65 | | 4972.3 | scroll | Aunus, Suurenniemi |
| 84 | | PK LK503 | scroll | Aunus, Tulonijärvi |
| 83 | | PK LK502 | scroll | Aunus, Vieljärvi |
| 23 | 34.1 | F2142 | scroll | Impilahti |
| 41 | G24-7 | 1855.40 | scroll | Inkeri |
| 46 | 03.1 | 1855.46 | scroll | Inkeri |
| 47 | 01.1 | 1855.47 | scroll | Inkeri |
| 28 | G45 | 1855.7 | scroll | Inkeri, Soikkola |
| 36 | 06.1 | 1855.17 | scroll | Inkeri, Vatja |
| 56 | 21.1 | 2218.218 | scroll | Juva |
| 72 | 29.2 | 7507 | scroll | Jyväskylän lahisto |
| 67 | 12.1 | 8419.1193 | scroll | Karjala, Ladoga |
| 54 | | 1762.5e | scroll | Karjala |
| 74 | 05.2 | 8340 | scroll | Karjala |
| 52 | | 1762.5a | scroll | Karjala, Impilahti? |
| 18 | 11.2 | F1838 | scroll | Karjala, Viipuri |
| 82 | 19.2 | 1762.5 | scroll | Karjala? |
| 12 | 02.2 | F1178 | scroll | Korpiselkä |
| 20 | | F1925 | scroll | Leppävirta |
| 55 | 10.2 | 1763 | scroll | Pielisjärvi |
| 14 | 10.1 | F1616 | scroll | Salmi |
| 80 | | HM 188.53 | scroll | Sununen, Tulomajärvi |
| 85 | | PK LK521 | scroll | Suojärvi |
| 69 | 08.2 | 7419.18 | scroll | Suojärvi |
| 70 | 16.2 | 7581.2 | scroll | Suojärvi |
| 76 | | HM 188.49 | scroll | Suojärvi |
| 77 | | HM 188.50 | scroll | Suojärvi |
| 86 | | PK LK522 | scroll | Suojärvi, Leppäniemi |
| 78 | | HM 188.51 | scroll | Suojärvi, Nieminen |

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Sound Holes

Page 1

| file | photo | museumnumb | sound | h | place |
|------|-------|------------|---------|---|----------------------|
| 42 | | 1855.41 | | | |
| 49 | | 1855.74 | | | |
| 57 | | 2701 | | | |
| 60 | | 4366 | | | |
| 29 | | 1855.8 | | | Inkeri, Soikkola |
| 74 | 05.2 | 8340 | | | Karjala |
| 82 | 19.2 | 1762.5 | | | Karjala? |
| 81 | | HM 47.405 | | | Karstula |
| 20 | | F1925 | | | Leppävirta |
| 32 | 15.2 | 1855.11 | | | Liperi |
| 33 | | 1855.13 | | | Polvijärvi |
| 24 | 31.2 | F2143 | | | Salmi |
| 37 | | 1855.36 | | | Savo, Pohjois? |
| 21 | | F2016 | C holes | | Heinävesi |
| 25 | 12.2 | F2144 | circle | | Salmi, Kirkkojoki |
| 59 | | 4043 | cross | | |
| 45 | G36 | 1855.45 | cross | | |
| 84 | | PK LK503 | cross | | Aunus, Tulonijärvi |
| 30 | G00 | 1855.9 | cross | | Inkeri, Soikkola |
| 36 | 06.1 | 1855.17 | cross | | Inkeri, Vatja |
| 19 | 09.2 | F1839 | cross | | Karjala |
| 54 | | 1762.5e | cross | | Karjala |
| 18 | 11.2 | F1838 | cross | | Karjala, Viipuri |
| 01 | G39 | F188 | cross | | Muolaa |
| 22 | 26.2 | F2084 | cross | | Myrskylä |
| 17 | 28.2 | F1692 | cross | | Pohjanmaa, Lehtimäki |
| 80 | | HM 188.53 | cross | | Sununen, Tulomajärvi |
| 85 | | PK LK521 | cross | | Suojärvi |
| 68 | 07.2 | 8967.1453 | cross | | Suomi |
| 38 | 13.2 | 1855.37 | cross | | Suomi, Marta? |
| 64 | | 4972.2 | cross* | | Aunus, Videle |
| 39 | 04.1 | 1855.38 | cross* | | Inkeri |
| 28 | G45 | 1855.7 | cross* | | Inkeri, Soikkola |
| 35 | | 1855.15 | cross* | | Inkeri, Soikkola |
| 31 | G52 | 1855.10 | cross* | | Inkeri, Vatja |
| 62 | G51 | 4880 | cross* | | Pietarin lääni |
| 58 | 20.1 | 3045.49 | cross* | | Pohjanmaa Muhos |
| 70 | 16.2 | 7581.2 | cross* | | Suojärvi |
| 12 | 02.2 | F1178 | crossrn | | Korpiselkä |
| 43 | 00.2 | 1855.42 | crostar | | Juva |
| 56 | 21.1 | 2218.218 | crostar | | Juva |
| 27 | 09.1 | F2182 | F holes | | Keski Suomi |
| 41 | G24-7 | 1855.40 | flower | | Inkeri |
| 61 | G44 | 4849.31 | flower | | Inkeri, Soikkola |
| 90 | | PP 4402.1 | flower* | | |
| 88 | | T229 | heart | | Pohanmaa, Pohjois |

Sound Holes

Page 2

| file | photo | museumber | sound h | place |
|------|-------|-----------|---------|----------------------|
| 69 | 08.2 | 7419.18 | keyhole | Suojärvi |
| 91 | | PP SP | none | |
| 05 | 19.1 | F208 | none | Iisalmi |
| 40 | 08.1 | 1855.39 | none | Inkeri |
| 09 | 25.1 | F213 | none | Kuopio |
| 51 | 01.2 | 731 | none | Kurkijoki |
| 55 | 10.2 | 1763 | none | Pielisjärvi |
| 15 | 28.2 | F1617 | none | Salmi |
| 06 | 17.1 | F210 | none | Savo, Pohjois |
| 50 | 16.1? | 684 | none | Savo, Pohjois |
| 77 | | HM 188.50 | none | Suojärvi |
| 02 | 21.2 | F197 | none | Tohmajärvi |
| 34 | 15.2 | 1855.14 | none? | Maaninka |
| 53 | 25.2 | 1762.5c | pentagn | Karjala |
| 14 | 10.1 | F1616 | rectang | Salmi |
| 76 | | HM 188.49 | rectang | Suojärvi |
| 86 | | PK LK522 | rectang | Suojärvi, Leppäniemi |
| 89 | | T2 | round | |
| 65 | | 4972.3 | round | Aunus, Suorenniemi |
| 63 | | 4972.1 | round | Aunus, Videle |
| 03 | | F198 | round | Ilomantsi |
| 23 | 34.1 | F2142 | round | Impilahti |
| 44 | 02.1 | 1855.44 | round | Inkeri |
| 46 | 03.1 | 1855.46 | round | Inkeri |
| 47 | 01.1 | 1855.47 | round | Inkeri |
| 48 | 00.1 | 1855.48 | round | Inkeri |
| 72 | 29.2 | 7507 | round | Jyväskylän lahisto |
| 66 | 14.1 | 7114.2 | round | Karjala |
| 67 | 12.1 | 8419.1193 | round | Karjala, Ladoga |
| 52 | | 1762.5a | round | Karjala, Impilahti? |
| 26 | 20.2 | F2181 | round | Karjala? |
| 11 | 18.1 | F1177 | round | Korpiselkä |
| 13 | G20 | F1201 | round | Myrskylä |
| 07 | 36.1 | F211 | round | Nilsjä |
| 04 | 15.1 | F201 | round | Pielisjärvi |
| 71 | 24.2 | 8174 | round | Salmi |
| 16 | 23.2 | F1626 | round | Suistamo |
| 79 | | HM 188.52 | round | Suistamo |
| 10 | 06.2 | F443 | round | Suojärvi |
| 78 | | HM 188.51 | round | Suojärvi, Nieminen |
| 73 | 22.2 | 238 | round | Suomi |
| 08 | 11.1 | F212 | square | Nilsjä |
| 83 | | PK LK502 | square* | Aunus, Vieljärvi |
| 75 | | Kuop 607 | stars | |
| 87 | | PK LK3232 | swastik | |

Printed 91 of the 91 records.

APPENDIX 2

BOX KANTELE REPORTS

The following reports were generated with the PC-File™ database program. The file number indicates the order in which the information for each instrument was entered in the database. The photo number gives the roll number then the exposure number. The museum numbers are those assigned by the various museums, preceded by the following code: K = Folk Music Institute, Kaustinen ; T = Tampere University Institute for Folk Traditions ; S = Sibelius Museum, Turku ; H = Haapavesi Kantele Camp Display, 1983 ; N = National Museum, Helsinki. All measurements are given in centimeters. The "Bridges" report indicates the side of the instrument on which a bridge was found. All the instruments in the sample had round sound holes; only variations to a round hole or secondary sound holes are cited in the "Sound Holes" report. Most of the kanteles of the sample had a pointed tip and the "Tip" report only contains the exceptions. If data cells have been left blank, it means that data was not available in that category.

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Index

| file | photo | museum | file | photo | museum | file | photo | museum |
|------|-------|--------|------|-------|--------|------|-------|------------|
| 01 | 01.01 | K | 46 | 12.24 | T023 | 91 | 02.27 | NF2148 |
| 02 | 01.02 | K | 47 | 12.25 | T327 | 92 | 02.18 | NF2183 |
| 03 | 01.03 | K | 48 | 12.26 | T327 | 93 | 01.07 | N1855.43 |
| 04 | 01.04 | K | 49 | 12.27 | T028 | 94 | 01.05 | N1855.49 |
| 05 | 01.05 | K | 50 | 12.28 | T328 | 95 | 01.36 | N3198.7 |
| 06 | 01.06 | K | 51 | 12.29 | T241 | 96 | 02.30 | N7771 |
| 07 | 01.07 | K | 52 | 12.31 | T | 97 | 01.28 | N9040 |
| 08 | 01.08 | K | 53 | 12.32 | T329 | 98 | 01.26 | N10031.3 |
| 09 | 01.09 | K | 54 | 12.33 | T013 | 99 | G | N5750 |
| 10 | 01.10 | K | 55 | 34.13 | S095 | 100 | 02.03 | N57046.120 |
| 11 | 01.12 | K | 56 | 34.21 | S | 101 | 04.09 | T250 |
| 12 | 02.01 | K | 57 | 34.22 | S | 102 | 04.10 | T10 |
| 13 | 02.02 | K | 58 | 34.23 | S068 | 103 | 04.11 | T14 |
| 14 | 02.09 | K | 59 | 34.24 | S675 | 104 | 04.12 | T19 |
| 15 | 02.10 | K | 60 | 34.25 | S153 | 105 | 23.01 | T269 |
| 16 | 02.11 | K | 61 | 34.26 | S126 | 106 | 23.03 | T270 |
| 17 | 04.09 | T250 | 62 | 34.27 | S178 | 107 | 23.04 | T17 |
| 18 | 04.10 | T10 | 63 | 34.31 | S092 | 108 | 23.05 | T330 |
| 19 | 04.11 | T14 | 64 | 34.32 | S125 | 109 | 23.10 | T247 |
| 20 | 04.12 | T19 | 65 | 34.33 | S496 | 110 | 23.12 | T |
| 21 | 05.01 | T11 | 66 | 34.34 | S138 | | | |
| 22 | 05.02 | T | 67 | 34.35 | S035 | | | |
| 23 | 12.01 | T026 | 68 | 34.15 | S131 | | | |
| 24 | 12.02 | T010 | 69 | 34.3 | S130 | | | |
| 25 | 12.03 | T301 | 70 | | S128 | | | |
| 26 | 12.04 | T273 | 71 | 14.04 | H | | | |
| 27 | 12.05 | T333 | 72 | 14.04 | H | | | |
| 28 | 12.06 | T248 | 73 | 14.05 | H | | | |
| 29 | 12.07 | T335 | 74 | 14.06 | H | | | |
| 30 | 12.08 | T336 | 75 | 14.09 | H | | | |
| 31 | 12.09 | T008 | 76 | 14.10 | H | | | |
| 32 | 12.10 | T337 | 77 | 14.11 | H | | | |
| 33 | 12.11 | T027 | 78 | 15.02 | H | | | |
| 34 | 12.12 | T020 | 79 | 15.04 | H | | | |
| 35 | 12.13 | T029 | 80 | 15.05 | H | | | |
| 36 | 12.14 | T338 | 81 | 15.06 | H | | | |
| 37 | 12.15 | T016 | 82 | 15.07 | H | | | |
| 38 | 12.16 | T339 | 83 | 15.08 | H1227 | | | |
| 39 | 12.17 | T021 | 84 | 15.10 | H1520 | | | |
| 40 | 12.18 | T015 | 85 | 01.30 | NF455 | | | |
| 41 | 12.19 | T341 | 86 | G14 | NF1176 | | | |
| 42 | 12.20 | T024 | 87 | 01.33 | NF1202 | | | |
| 43 | 12.21 | T324 | 88 | 01.27 | NF1203 | | | |
| 44 | 12.22 | T340 | 89 | 01.13 | NF1210 | | | |
| 45 | 12.23 | T031 | 90 | 01.29 | NF2086 | | | |

Printed 110 of the 110 records.

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Length

| file | photo | museum | length | file | photo | museum | length |
|------|-------|----------|--------|------|-------|--------|--------|
| 93 | 01.07 | N1855.43 | 57.5 | 46 | 12.24 | T023 | 104 |
| 86 | G14 | NF1176 | 59 | 54 | 12.33 | T013 | 105 |
| 89 | 01.13 | NF1210 | 62 | 49 | 12.27 | T028 | 105 |
| 92 | 02.18 | NF2183 | 66 | 87 | 01.33 | NF1202 | 107 |
| 91 | 02.27 | NF2148 | 68 | 28 | 12.06 | T248 | 109 |
| 94 | 01.05 | N1855.49 | 69 | 62 | 34.27 | S178 | 109 |
| 64 | 34.32 | S125 | 76 | 21 | 05.01 | T11 | 111 |
| 53 | 12.32 | T329 | 79 | 69 | 34.3 | S130 | 112 |
| 36 | 12.14 | T338 | 79 | 85 | 01.30 | NF455 | 117 |
| 60 | 34.25 | S153 | 82 | 45 | 12.23 | T031 | 117 |
| 47 | 12.25 | T327 | 84 | 99 | G | N5750 | 127.5 |
| 48 | 12.26 | T327 | 84 | 26 | 12.04 | T273 | 132 |
| 31 | 12.09 | T008 | 85 | | | | |
| 50 | 12.28 | T328 | 86 | | | | |
| 61 | 34.26 | S126 | 88 | | | | |
| 27 | 12.05 | T333 | 90 | | | | |
| 25 | 12.03 | T301 | 90 | | | | |
| 58 | 34.23 | S068 | 90 | | | | |
| 19 | 04.11 | T14 | 91 | | | | |
| 20 | 04.12 | T19 | 91 | | | | |
| 88 | 01.27 | NF1203 | 91 | | | | |
| 32 | 12.10 | T337 | 92 | | | | |
| 38 | 12.16 | T339 | 93 | | | | |
| 51 | 12.29 | T241 | 93 | | | | |
| 35 | 12.13 | T029 | 94 | | | | |
| 23 | 12.01 | T026 | 94 | | | | |
| 17 | 04.09 | T250 | 95 | | | | |
| 55 | 34.13 | S095 | 95 | | | | |
| 34 | 12.12 | T020 | 95 | | | | |
| 37 | 12.15 | T016 | 95 | | | | |
| 66 | 34.34 | S138 | 96 | | | | |
| 33 | 12.11 | T027 | 97 | | | | |
| 63 | 34.31 | S092 | 97 | | | | |
| 68 | 34.15 | S131 | 98 | | | | |
| 90 | 01.29 | NF2086 | 98 | | | | |
| 41 | 12.19 | T341 | 99 | | | | |
| 43 | 12.21 | T324 | 99 | | | | |
| 42 | 12.20 | T024 | 99 | | | | |
| 30 | 12.08 | T336 | 100 | | | | |
| 70 | | S128 | 100 | | | | |
| 65 | 34.33 | S496 | 100 | | | | |
| 40 | 12.18 | T015 | 101 | | | | |
| 24 | 12.02 | T010 | 101 | | | | |
| 44 | 12.22 | T340 | 102 | | | | |
| 39 | 12.17 | T021 | 103 | | | | |

Printed 52 of the 110 records.

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| Width | | | | Thickness | | | |
|-------|-------|----------|-------|-----------|-------|----------|-------|
| file | photo | museum | width | file | photo | museum | thick |
| 93 | 01.07 | N1855.43 | 18.5 | 58 | 34.23 | S068 | 3.5 |
| 91 | 02.27 | NF2148 | 20 | 55 | 34.13 | S095 | 5 |
| 89 | 01.13 | NF1210 | 21 | 93 | 01.07 | N1855.43 | 5 |
| 92 | 02.18 | NF2183 | 22 | 86 | G14 | NF1176 | 6 |
| 88 | 01.27 | NF1203 | 23 | 89 | 01.13 | NF1210 | 6 |
| 64 | 34.32 | S125 | 25 | 92 | 02.18 | NF2183 | 6 |
| 94 | 01.05 | N1855.49 | 28 | 91 | 02.27 | NF2148 | 6.5 |
| 99 | G | N5750 | 28 | 61 | 34.26 | S126 | 7 |
| 86 | G14 | NF1176 | 28.5 | 68 | 34.15 | S131 | 7 |
| 87 | 01.33 | NF1202 | 29.5 | 85 | 01.30 | NF455 | 7.5 |
| 90 | 01.29 | NF2086 | 30 | 70 | | S128 | 8 |
| 69 | 34.3 | S130 | 31 | 62 | 34.27 | S178 | 8 |
| 85 | 01.30 | NF455 | 31 | 87 | 01.33 | NF1202 | 8 |
| 61 | 34.26 | S126 | 32 | 94 | 01.05 | N1855.49 | 8 |
| 60 | 34.25 | S153 | 34 | 90 | 01.29 | NF2086 | 8.5 |
| 66 | 34.34 | S138 | 35 | 99 | G | N5750 | 8.5 |
| 70 | | S128 | 36 | 63 | 34.31 | S092 | 9 |
| 63 | 34.31 | S092 | 37 | 64 | 34.32 | S125 | 10 |
| 58 | 34.23 | S068 | 38 | 69 | 34.3 | S130 | 10 |
| 68 | 34.15 | S131 | 44 | 88 | 01.27 | NF1203 | 10.5 |
| 62 | 34.27 | S178 | 45 | 66 | 34.34 | S138 | 11 |
| 55 | 34.13 | S095 | 64 | 60 | 34.25 | S153 | 11 |
| 65 | 34.33 | S496 | 88 | 65 | 34.33 | S496 | 18 |

Printed 23 of the 110 records.

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Number of Strings

| Page 1 | | | | Page 2 | | | |
|--------|-------|----------|-----|--------|-------|------------|-----|
| file | photo | museum | str | file | photo | museum | str |
| 30 | 12.08 | T336 | | 110 | 23.12 | T | 24 |
| 93 | 01.07 | N1855.43 | 11 | 13 | 02.02 | K | 25 |
| 86 | G14 | NF1176 | 12 | 21 | 05.01 | T11 | 25 |
| 89 | 01.13 | NF1210 | 12 | 49 | 12.27 | T028 | 25 |
| 95 | 01.36 | N3198.7 | 13 | 53 | 12.32 | T329 | 25 |
| 88 | 01.27 | NF1203 | 14 | 55 | 34.13 | S095 | 25 |
| 91 | 02.27 | NF2148 | 14 | 87 | 01.33 | NF1202 | 25 |
| 92 | 02.18 | NF2183 | 14 | 03 | 01.03 | K | 26 |
| 54 | 12.33 | T013 | 17 | 51 | 12.29 | T241 | 26 |
| 106 | 23.03 | T270 | 17 | 61 | 34.26 | S126 | 26 |
| 01 | 01.01 | K | 18 | 10 | 01.10 | K | 27 |
| 32 | 12.10 | T337 | 18 | 11 | 01.12 | K | 27 |
| 27 | 12.05 | T333 | 18 | 48 | 12.26 | T327 | 27 |
| 90 | 01.29 | NF2086 | 18 | 97 | 01.28 | N9040 | 27 |
| 101 | 04.09 | T250 | 18 | 109 | 23.10 | T247 | 27 |
| 17 | 04.09 | T250 | 19 | 25 | 12.03 | T301 | 28 |
| 96 | 02.30 | N7771 | 19 | 33 | 12.11 | T027 | 28 |
| 28 | 12.06 | T248 | 20 | 35 | 12.13 | T029 | 28 |
| 64 | 34.32 | S125 | 20 | 40 | 12.18 | T015 | 28 |
| 66 | 34.34 | S138 | 20 | 50 | 12.28 | T328 | 28 |
| 94 | 01.05 | N1855.49 | 20 | 62 | 34.27 | S178 | 28 |
| 105 | 23.01 | T269 | 20 | 63 | 34.31 | S092 | 28 |
| 18 | 04.10 | T10 | 21 | 74 | 14.06 | H | 28 |
| 41 | 12.19 | T341 | 21 | 81 | 15.06 | H | 28 |
| 43 | 12.21 | T324 | 21 | 84 | 15.10 | H1520 | 28 |
| 108 | 23.05 | T330 | 21 | 71 | 14.04 | H | 28 |
| 04 | 01.04 | K | 22 | 85 | 01.30 | NF455 | 28 |
| 06 | 01.06 | K | 22 | 14 | 02.09 | K | 29 |
| 07 | 01.07 | K | 22 | 46 | 12.24 | T023 | 29 |
| 47 | 12.25 | T327 | 22 | 100 | 02.03 | N57046.120 | 29 |
| 98 | 01.26 | N10031.3 | 22 | 107 | 23.04 | T17 | 29 |
| 102 | 04.10 | T10 | 22 | 08 | 01.08 | K | 30 |
| 05 | 01.05 | K | 23 | 16 | 02.11 | K | 30 |
| 12 | 02.01 | K | 23 | 20 | 04.12 | T19 | 30 |
| 22 | 05.02 | T | 23 | 23 | 12.01 | T026 | 30 |
| 31 | 12.09 | T008 | 23 | 24 | 12.02 | T010 | 30 |
| 02 | 01.02 | K | 24 | 34 | 12.12 | T020 | 30 |
| 19 | 04.11 | T14 | 24 | 37 | 12.15 | T016 | 30 |
| 29 | 12.07 | T335 | 24 | 39 | 12.17 | T021 | 30 |
| 38 | 12.16 | T339 | 24 | 44 | 12.22 | T340 | 30 |
| 56 | 34.21 | S | 24 | 52 | 12.31 | T | 30 |
| 59 | 34.24 | S675 | 24 | 57 | 34.22 | S | 30 |
| 69 | 34.3 | S130 | 24 | 58 | 34.23 | S068 | 30 |
| 70 | | S128 | 24 | 65 | 34.33 | S496 | 30 |
| 103 | 04.11 | T14 | 24 | 73 | 14.05 | H | 30 |

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Number of Strings

Page 3

| file | photo | museum | str | |
|------|-------|--------|-----|---------------------------|
| 104 | 04.12 | T19 | 30 | |
| 09 | 01.09 | K | 31 | |
| 79 | 15.04 | H | 31 | |
| 80 | 15.05 | H | 31 | |
| 83 | 15.08 | H1227 | 31 | |
| 15 | 02.10 | K | 32 | |
| 36 | 12.14 | T338 | 32 | |
| 42 | 12.20 | T024 | 32 | |
| 67 | 34.35 | S035 | 32 | |
| 72 | 14.04 | H | 32 | |
| 78 | 15.02 | H | 32 | |
| 99 | G | N5750 | 32 | |
| 60 | 34.25 | S153 | 33 | |
| 26 | 12.04 | T273 | 35 | |
| 75 | 14.09 | H | 36 | |
| 76 | 14.10 | H | 36 | |
| 77 | 14.11 | H | 36 | |
| 82 | 15.07 | H | 36 | |
| 68 | 34.15 | S131 | 49 | |
| 45 | 12.23 | T031 | 64 | [32 courses of 2 strings] |

Printed 20 of the 110 records.

Chromatic

| fil | photo | museum | chromatic | place |
|-----|-------|------------|-----------|---------|
| 55 | 34.13 | S095 | yes | |
| 10 | 01.10 | K | yes | |
| 85 | 01.30 | NF455 | yes | Kajaani |
| 68 | 34.15 | S131 | yes | |
| 99 | G | N5750 | yes | Kajaani |
| 100 | 02.03 | N57046.120 | yes | |

Printed 6 of the 110 records.

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Bridges

| fil | photo | museum | bridges | type | place |
|-----|-------|------------|------------|-------|----------|
| 56 | 34.21 | S | both | | |
| 62 | 34.27 | S178 | both | | |
| 44 | 12.22 | T340 | both | round | |
| 57 | 34.22 | S | both | | Estonia? |
| 65 | 34.33 | S496 | both | | Helsinki |
| 68 | 34.15 | S131 | both | | |
| 108 | 23.05 | T330 | ponsi? | | |
| 96 | 02.30 | N7771 | ponsi | | Askola |
| 58 | 34.23 | S068 | ponsi | | Helsinki |
| 55 | 34.13 | S095 | ponsi | | |
| 100 | 02.03 | N57046.120 | ponsi | | |
| 107 | 23.04 | T17 | ponsi? | | Anjala |
| 89 | 01.13 | NF1210 | tuning pin | round | Salmi |

Printed 13 of the 110 records.

Sound Holes

| fil | photo | museum | sound hole | place |
|-----|-------|---------|---------------|--------------------|
| 66 | 34.34 | S138 | flower | |
| 02 | 01.02 | K | flower | Perho River Valley |
| 03 | 01.03 | K | flower | |
| 89 | 01.13 | NF1210 | flower | Salmi |
| 92 | 02.18 | NF2183 | flower | Karjala? |
| 106 | 23.03 | T270 | flower | Ahtavalta |
| 13 | 02.02 | K | flower; heart | |
| 28 | 12.06 | T248 | heart | Saarijärvi? |
| 95 | 01.36 | N3198.7 | heart | Vihti |
| 96 | 02.30 | N7771 | heart | Askola |
| 63 | 34.31 | S092 | heart | |
| 17 | 04.09 | T250 | heart | |
| 61 | 34.26 | S126 | heart | |
| 54 | 12.33 | T013 | lyre | |
| 01 | 01.01 | K | lyre | Saarijärvi? |
| 32 | 12.10 | T337 | lyre | |
| 41 | 12.19 | T341 | lyre | Saarijärvi? |
| 19 | 04.11 | T14 | lyre | Saarijärvi? |
| 59 | 34.24 | S675 | lyre | Turku |
| 69 | 34.3 | S130 | lyre | Saarijärvi? |
| 37 | 12.15 | T016 | lyre | Saarijärvi |
| 36 | 12.14 | T338 | lyre | Alavesi |
| 97 | 01.28 | N9040 | lyre | Saarijärvi? |
| 103 | 04.11 | T14 | lyre | Saarijärvi? |
| 50 | 12.28 | T328 | lyre* | |
| 44 | 12.22 | T340 | Mercedez star | |

Printed 26 of the 110 records.

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Round Ended

| fil | photo | museum | type | place |
|-----|-------|----------|-------|---------------------|
| 30 | 12.08 | T336 | round | |
| 54 | 12.33 | T013 | round | |
| 01 | 01.01 | K | round | Saarijärvi? |
| 17 | 04.09 | T250 | round | |
| 27 | 12.05 | T333 | round | |
| 28 | 12.06 | T248 | round | Saarijärvi? |
| 66 | 34.34 | S138 | round | |
| 43 | 12.21 | T324 | round | |
| 04 | 01.04 | K | round | |
| 47 | 12.25 | T327 | round | |
| 12 | 02.01 | K | round | |
| 22 | 05.02 | T | round | |
| 02 | 01.02 | K | round | Perho River Valley |
| 19 | 04.11 | T14 | round | Saarijärvi? |
| 29 | 12.07 | T335 | round | |
| 69 | 34.3 | S130 | round | Saarijärvi? |
| 13 | 02.02 | K | round | |
| 21 | 05.01 | T11 | round | |
| 03 | 01.03 | K | round | |
| 61 | 34.26 | S126 | round | |
| 11 | 01.12 | K | round | |
| 14 | 02.09 | K | round | Oulu |
| 46 | 12.24 | T023 | round | |
| 16 | 02.11 | K | round | Oulu |
| 44 | 12.22 | T340 | round | |
| 52 | 12.31 | T | round | Oulu? |
| 60 | 34.25 | S153 | round | |
| 87 | 01.33 | NF1202 | round | Sipoo |
| 89 | 01.13 | NF1210 | round | Salmi |
| 90 | 01.29 | NF2086 | round | Perho River Valley? |
| 91 | 02.27 | NF2148 | round | Korpiselkä |
| 94 | 01.05 | N1855.49 | round | |
| 97 | 01.28 | N9040 | round | Saarijärvi? |
| 98 | 01.26 | N10031.3 | round | Tammela |
| 101 | 04.09 | T250 | round | |
| 103 | 04.11 | T14 | round | Saarijärvi? |
| 106 | 23.03 | T270 | round | Ahtavalta |

Printed 37 of the 110 records.

Appendix 2: Box Kantele Reports p. 212

Ponsi Size

Page 1

| fil | photo | museum | ponsi size | place |
|-----|-------|------------|------------|-------------|
| 64 | 34.32 | S125 | large | |
| 18 | 04.10 | T10 | large | |
| 06 | 01.06 | K | large | |
| 07 | 01.07 | K | large | |
| 47 | 12.25 | T327 | large | |
| 48 | 12.26 | T327 | large | |
| 09 | 01.09 | K | large | Kalajoki |
| 85 | 01.30 | NF455 | large | Kajaani |
| 99 | G | N5750 | large | Kajaani |
| 107 | 23.04 | T17 | large | Anjala |
| 41 | 12.19 | T341 | medium | Saarijärvi? |
| 49 | 12.27 | T028 | medium | Vaasa |
| 53 | 12.32 | T329 | medium | |
| 55 | 34.13 | S095 | medium | |
| 10 | 01.10 | K | medium | |
| 33 | 12.11 | T027 | medium | Kymenlaakso |
| 35 | 12.13 | T029 | medium | |
| 74 | 14.06 | H | medium | Haapavesi? |
| 81 | 15.06 | H | medium | Haapavesi |
| 84 | 15.10 | H1520 | medium | Komu |
| 08 | 01.08 | K | medium | Kaustinen |
| 20 | 04.12 | T19 | medium | Haapavesi |
| 23 | 12.01 | T026 | medium | |
| 24 | 12.02 | T010 | medium | |
| 34 | 12.12 | T020 | medium | Haapavesi? |
| 37 | 12.15 | T016 | medium | Saarijärvi |
| 39 | 12.17 | T021 | medium | |
| 73 | 14.05 | H | medium | Haapavesi |
| 79 | 15.04 | H | medium | Haapavesi |
| 80 | 15.05 | H | medium | Haapavesi |
| 83 | 15.08 | H1227 | medium | Kalajoki |
| 15 | 02.10 | K | medium | Kalajoki |
| 36 | 12.14 | T338 | medium | Alavesi |
| 67 | 34.35 | S035 | medium | |
| 71 | 14.04 | H | medium | Haapavesi |
| 72 | 14.04 | H | medium | Haapavesi |
| 26 | 12.04 | T273 | medium | |
| 75 | 14.09 | H | medium | Haapavesi |
| 76 | 14.10 | H | medium | Haapavesi |
| 77 | 14.11 | H | medium | Haapavesi |
| 82 | 15.07 | H | medium | Kalajoki? |
| 68 | 34.15 | S131 | medium | |
| 45 | 12.23 | T031 | medium | Saarijärvi |
| 93 | 01.07 | N1855.43 | medium | Inkeri? |
| 100 | 02.03 | N57046.120 | medium | |

Appendix 2: Box Kantele Reports p. 213

| | | | Ponsi Size | |
|-----|-------|---------|------------|----------------|
| fil | photo | museum | ponsi size | place |
| 92 | 02.18 | NF2183 | medium | Karjala? |
| 102 | 04.10 | T10 | medium | Leppävirta |
| 104 | 04.12 | T19 | medium | Haapavesi |
| 109 | 23.10 | T247 | medium | Kankaanpää |
| 110 | 23.12 | T | medium | |
| 32 | 12.10 | T337 | none | |
| 31 | 12.09 | T008 | none | Kaustinen |
| 38 | 12.16 | T339 | none | |
| 50 | 12.28 | T328 | none | |
| 62 | 34.27 | S178 | none | |
| 57 | 34.22 | S | none | Estonia? |
| 86 | G14 | NF1176 | none | Valkeala |
| 88 | 01.27 | NF1203 | none | Vihti |
| 95 | 01.36 | N3198.7 | none | Vihti |
| 96 | 02.30 | N7771 | none | Askola |
| 108 | 23.05 | T330 | none | |
| 05 | 01.05 | K | small | |
| 56 | 34.21 | S | small | |
| 59 | 34.24 | S675 | small | Turku |
| 51 | 12.29 | T241 | small | Karjala, Salmi |
| 25 | 12.03 | T301 | small | Kuopio |
| 40 | 12.18 | T015 | small | Vaasa |
| 58 | 34.23 | S068 | small | Helsinki |
| 65 | 34.33 | S496 | small | Helsinki |
| 42 | 12.20 | T024 | small | |
| 78 | 15.02 | H | small | Puhdasjärvi |
| 105 | 23.01 | T269 | small | Alaveteli |
| 63 | 34.31 | S092 | small-very | |

Printed 73 of the 110 records.

Covering Board Type

| file | photo | museum | cvrngboard | type | Page 1 place |
|------|-------|--------|------------|-------|-----------------|
| 41 | 12.19 | T341 | covering | | Saarijärvi? |
| 06 | 01.06 | K | covering | | |
| 07 | 01.07 | K | covering | | |
| 53 | 12.32 | T329 | covering | | |
| 51 | 12.29 | T241 | covering | | Karjala |
| 48 | 12.26 | T327 | covering | | |
| 35 | 12.13 | T029 | covering | | |
| 40 | 12.18 | T015 | covering | | Vaasa |
| 50 | 12.28 | T328 | covering | | |
| 74 | 14.06 | H | covering | | Haapavesi? |
| 81 | 15.06 | H | covering | | Haapavesi |
| 84 | 15.10 | H1520 | covering | | Komu |
| 08 | 01.08 | K | covering | | Kaustinen |
| 20 | 04.12 | T19 | covering | | Haapavesi |
| 24 | 12.02 | T010 | covering | | |
| 34 | 12.12 | T020 | covering | | Haapavesi? |
| 37 | 12.15 | T016 | covering | | Saarijärvi |
| 39 | 12.17 | T021 | covering | | |
| 73 | 14.05 | H | covering | | Haapavesi |
| 09 | 01.09 | K | covering | | Kalajoki |
| 79 | 15.04 | H | covering | | Haapavesi |
| 80 | 15.05 | H | covering | | Haapavesi |
| 83 | 15.08 | H1227 | covering | | Kalajoki |
| 15 | 02.10 | K | covering | | Kalajoki |
| 36 | 12.14 | T338 | covering | | Alavesi |
| 42 | 12.20 | T024 | covering | | |
| 67 | 34.35 | S035 | covering | | |
| 71 | 14.04 | H | covering | | Haapavesi |
| 72 | 14.04 | H | covering | | Haapavesi |
| 82 | 15.07 | H | covering | | Kalajoki? |
| 104 | 04.12 | T19 | covering | | Haapavesi |
| 105 | 23.01 | T269 | covering | | Alaveteli |
| 109 | 23.10 | T247 | covering | | Kankaanpää |
| 110 | 23.12 | T | covering | | |
| 30 | 12.08 | T336 | covering | round | |
| 54 | 12.33 | T013 | covering | round | |
| 27 | 12.05 | T333 | covering | round | |
| 28 | 12.06 | T248 | covering | round | Saarijärvi? |
| 43 | 12.21 | T324 | covering | round | |
| 47 | 12.25 | T327 | covering | round | |
| 12 | 02.01 | K | covering | round | |
| 02 | 01.02 | K | covering | round | Perho River |
| 29 | 12.07 | T335 | covering | round | |
| 13 | 02.02 | K | covering | round | |
| 03 | 01.03 | K | covering | round | |
| 61 | 34.26 | S126 | covering | round | |
| 11 | 01.12 | K | covering | round | |
| 46 | 12.24 | T023 | covering | round | |

| file | photo | museum | Covering cvrngboard | Board type | Type | place |
|------|-------|------------|------------------------|---------------|------|-------------|
| 60 | 34.25 | S153 | covering | round | | |
| 87 | 01.33 | NF1202 | covering | round | | Sipoo |
| 90 | 01.29 | NF2086 | covering | round | | Perho River |
| 97 | 01.28 | N9040 | covering | round | | Saarijärvi? |
| 98 | 01.26 | N10031.3 | covering | round | | Tammela |
| 103 | 04.11 | T14 | covering | round | | Saarijärvi? |
| 106 | 23.03 | T270 | covering | round | | Ahtavalta |
| 78 | 15.02 | H | damping | | | Puhdasjärvi |
| 75 | 14.09 | H | damping | | | Haapavesi |
| 45 | 12.23 | T031 | damping | | | Saarijärvi |
| 76 | 14.10 | H | hinged | | | Haapavesi |
| 77 | 14.11 | H | hinged | | | Haapavesi |
| 68 | 34.15 | S131 | hinged | | | |
| 64 | 34.32 | S125 | none | | | |
| 18 | 04.10 | T10 | none | | | |
| 31 | 12.09 | T008 | none | | | Kaustinen |
| 38 | 12.16 | T339 | none | | | |
| 56 | 34.21 | S | none | | | |
| 59 | 34.24 | S675 | none | | | Turku |
| 49 | 12.27 | T028 | none | | | Vaasa |
| 55 | 34.13 | S095 | none | | | |
| 25 | 12.03 | T301 | none | | | Kuopio |
| 62 | 34.27 | S178 | none | | | |
| 63 | 34.31 | S092 | none | | | |
| 23 | 12.01 | T026 | none | | | |
| 57 | 34.22 | S | none | | | Estonia? |
| 58 | 34.23 | S068 | none | | | Helsinki |
| 65 | 34.33 | S496 | none | | | Helsinki |
| 26 | 12.04 | T273 | none | | | |
| 85 | 01.30 | NF455 | none | | | Kajaani |
| 86 | G14 | NF1176 | none | | | Valkeala |
| 88 | 01.27 | NF1203 | none | | | Vihti |
| 93 | 01.07 | N1855.43 | none | | | Inkeri? |
| 95 | 01.36 | N3198.7 | none | | | Vihti |
| 96 | 02.30 | N7771 | none | | | Askola |
| 99 | G | N5750 | none | | | Kajaani |
| 100 | 02.03 | N57046.120 | none | | | |
| 92 | 02.18 | NF2183 | none | | | Karjala? |
| 102 | 04.10 | T10 | none | | | Leppävirta |
| 107 | 23.04 | T17 | none | | | Anjala |
| 108 | 23.05 | T330 | none | | | |
| 19 | 04.11 | T14 | none | round | | Saarijärvi? |
| 14 | 02.09 | K | none | round | | Oulu |
| 44 | 12.22 | T340 | none | round | | |
| 52 | 12.31 | T | none | round | | Oulu? |
| 89 | 01.13 | NF1210 | none | round | | Salmi |
| 91 | 02.27 | NF2148 | none | round | | Korpiselkä |
| 94 | 01.05 | N1855.49 | none | round | | |

Appendix 2: Box Kantele Reports p. 216

Left Handed

| file | photo | museum | lft handed | type | place |
|------|-------|----------|------------|-------|----------------|
| 43 | 12.21 | T324 | yes | round | |
| 56 | 34.21 | S | yes | | |
| 51 | 12.29 | T241 | yes | | Karjala, Salmi |
| 62 | 34.27 | S178 | yes | | |
| 63 | 34.31 | S092 | yes | | |
| 74 | 14.06 | H | yes | | Haapavesi? |
| 81 | 15.06 | H | yes | | Haapavesi |
| 84 | 15.10 | H1520 | yes | | Komu |
| 20 | 04.12 | T19 | yes | | Haapavesi |
| 34 | 12.12 | T020 | yes | | Haapavesi? |
| 57 | 34.22 | S | yes | | Estonia? |
| 73 | 14.05 | H | yes | | Haapavesi |
| 79 | 15.04 | H | yes | | Haapavesi |
| 80 | 15.05 | H | yes | | Haapavesi |
| 83 | 15.08 | H1227 | yes | | Kalajoki |
| 67 | 34.35 | S035 | yes | | |
| 71 | 14.04 | H | yes | | Haapavesi |
| 72 | 14.04 | H | yes | | Haapavesi |
| 78 | 15.02 | H | yes | | Puhdasjärvi |
| 75 | 14.09 | H | yes | | Haapavesi |
| 76 | 14.10 | H | yes | | Haapavesi |
| 77 | 14.11 | H | yes | | Haapavesi |
| 82 | 15.07 | H | yes | | Kalajoki? |
| 86 | G14 | NF1176 | yes | | Valkeala |
| 88 | 01.27 | NF1203 | yes | | Vihti |
| 96 | 02.30 | N7771 | yes | | Askola |
| 98 | 01.26 | N10031.3 | yes | round | Tammela |
| 104 | 04.12 | T19 | yes | | Haapavesi |
| 105 | 23.01 | T269 | yes | | Alaveteli |
| 107 | 23.04 | T17 | yes | | Anjala |

Printed 30 of the 110 records.

Appendix 2: Box Kantele Reports p. 217

| | | | Tip | |
|------|-------|----------|---------|-------------|
| file | photo | museum | tip | place |
| 57 | 34.22 | S | curved | Estonia? |
| 15 | 02.10 | K | curved | Kalajoki |
| 36 | 12.14 | T338 | curved | Alavesi |
| 78 | 15.02 | H | curved | Puhdasjärvi |
| 75 | 14.09 | H | curved | Haapavesi |
| 76 | 14.10 | H | curved | Haapavesi |
| 77 | 14.11 | H | curved | Haapavesi |
| 82 | 15.07 | H | curved | Kalajoki? |
| 05 | 01.05 | K | cut | |
| 33 | 12.11 | T027 | cut | Kymenlaakso |
| 74 | 14.06 | H | cut | Haapavesi? |
| 81 | 15.06 | H | cut | Haapavesi |
| 84 | 15.10 | H1520 | cut | Komu |
| 08 | 01.08 | K | cut | Kaustinen |
| 20 | 04.12 | T19 | cut | Haapavesi |
| 23 | 12.01 | T026 | cut | |
| 34 | 12.12 | T020 | cut | Haapavesi? |
| 73 | 14.05 | H | cut | Haapavesi |
| 79 | 15.04 | H | cut | Haapavesi |
| 80 | 15.05 | H | cut | Haapavesi |
| 83 | 15.08 | H1227 | cut | Kalajoki |
| 67 | 34.35 | S035 | cut | |
| 71 | 14.04 | H | cut | Haapavesi |
| 72 | 14.04 | H | cut | Haapavesi |
| 60 | 34.25 | S153 | cut | |
| 104 | 04.12 | T19 | cut | Haapavesi |
| 86 | G14 | NF1176 | rounded | Valkeala |
| 93 | 01.07 | N1855.43 | rounded | Inkeri? |
| 53 | 12.32 | T329 | scroll | |
| 58 | 34.23 | S068 | scroll | Helsinki |
| 65 | 34.33 | S496 | scroll | Helsinki |
| 88 | 01.27 | NF1203 | scroll | Vihti |
| 95 | 01.36 | N3198.7 | scroll | Vihti |

Printed 33 of the 110 records.

Appendix 2: Box Kantele Reports p. 218

Sides

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| file | photo | museum | sides | tng | pin | br | protect | br | type |
|------|-------|--------|----------|----------|-----|----|------------|----|-------|
| 30 | 12.08 | T336 | nonparal | | | | | | round |
| 43 | 12.21 | T324 | nonparal | | | | | | round |
| 05 | 01.05 | K | nonparal | | | | | | |
| 12 | 02.01 | K | nonparal | | | | none | | round |
| 38 | 12.16 | T339 | nonparal | | | | | | |
| 13 | 02.02 | K | nonparal | | | | none | | round |
| 68 | 34.15 | S131 | nonparal | | | | | | |
| 45 | 12.23 | T031 | nonparal | ? | | | | | |
| 73 | 14.05 | H | nonparal | covering | | | | | |
| 54 | 12.33 | T013 | nonparal | inside | | | | | round |
| 04 | 01.04 | K | nonparal | inside | | | none | | round |
| 47 | 12.25 | T327 | nonparal | inside | | | none | | round |
| 31 | 12.09 | T008 | nonparal | inside | | | | | |
| 02 | 01.02 | K | nonparal | inside | | | none | | round |
| 49 | 12.27 | T028 | nonparal | inside | | | | | |
| 03 | 01.03 | K | nonparal | inside | | | none | | round |
| 11 | 01.12 | K | nonparal | inside | | | none | | round |
| 48 | 12.26 | T327 | nonparal | inside | | | | | |
| 50 | 12.28 | T328 | nonparal | inside | | | | | |
| 63 | 34.31 | S092 | nonparal | inside | | | none | | |
| 74 | 14.06 | H | nonparal | inside | | | | | |
| 81 | 15.06 | H | nonparal | inside | | | | | |
| 84 | 15.10 | H1520 | nonparal | inside | | | | | |
| 14 | 02.09 | K | nonparal | inside | | | horizontal | | round |
| 46 | 12.24 | T023 | nonparal | inside | | | | | round |
| 34 | 12.12 | T020 | nonparal | inside | | | | | |
| 39 | 12.17 | T021 | nonparal | inside | | | | | |
| 79 | 15.04 | H | nonparal | inside | | | | | |
| 80 | 15.05 | H | nonparal | inside | | | | | |
| 83 | 15.08 | H1227 | nonparal | inside | | | | | |
| 71 | 14.04 | H | nonparal | inside | | | | | |
| 72 | 14.04 | H | nonparal | inside | | | | | |
| 85 | 01.30 | NF455 | nonparal | inside | | | none | | |
| 104 | 04.12 | T19 | nonparal | inside | | | | | |
| 16 | 02.11 | K | nonparal | inside? | | | top of pin | | round |
| 66 | 34.34 | S138 | nonparal | outside | | | | | round |
| 56 | 34.21 | S | nonparal | outside | | | none | | |
| 69 | 34.3 | S130 | nonparal | outside | | | none. | | round |
| 55 | 34.13 | S095 | nonparal | outside | | | none | | |
| 61 | 34.26 | S126 | nonparal | outside | | | none | | round |
| 25 | 12.03 | T301 | nonparal | outside | | | none | | |
| 37 | 12.15 | T016 | nonparal | outside | | | ? | | |
| 52 | 12.31 | T | nonparal | outside | | | horizontal | | round |
| 58 | 34.23 | S068 | nonparal | outside | | | none | | |
| 65 | 34.33 | S496 | nonparal | outside | | | none | | |

Appendix 2: Box Kantele Reports p. 219

Sides

Page 2

| file | photo | museum | sides | tng | pin | br | protect | br | type |
|------|-------|------------|----------|------------|-----|----|---------|----|--------|
| 87 | 01.33 | NF1202 | nonparal | outside | | | none | | round |
| 90 | 01.29 | NF2086 | nonparal | outside | | | none | | round |
| 93 | 01.07 | N1855.43 | nonparal | outside | | | none | | |
| 94 | 01.05 | N1855.49 | nonparal | outside | | | none | | round |
| 97 | 01.28 | N9040 | nonparal | outside | | | none | | round |
| 98 | 01.26 | N10031.3 | nonparal | outside | | | none | | round |
| 99 | G | N5750 | nonparal | outside | | | rod up | | |
| 100 | 02.03 | N57046.120 | nonparal | outside | | | none | | |
| 92 | 02.18 | NF2183 | nonparal | outside | | | none | | |
| 106 | 23.03 | T270 | nonparal | outside | | | none | | round |
| 108 | 23.05 | T330 | nonparal | outside | | | none | | |
| 110 | 23.12 | T | nonparal | outside | | | none | | |
| 89 | 01.13 | NF1210 | nonparal | outside* | | | none | | round |
| 27 | 12.05 | T333 | nonparal | outside? | | | none? | | round |
| 28 | 12.06 | T248 | nonparal | outside? | | | none | | round |
| 06 | 01.06 | K | nonparal | outside? | | | | | |
| 32 | 12.10 | T337 | nonparal | outside?fl | | | none | | round* |
| 91 | 02.27 | NF2148 | nonparal | top | | | none | | round |
| 53 | 12.32 | T329 | parallel | | | | | | |
| 07 | 01.07 | K | parallel | inside | | | | | |
| 51 | 12.29 | T241 | parallel | inside | | | | | |
| 33 | 12.11 | T027 | parallel | inside | | | | | |
| 35 | 12.13 | T029 | parallel | inside | | | | | |
| 40 | 12.18 | T015 | parallel | inside | | | none | | |
| 62 | 34.27 | S178 | parallel | inside | | | none | | |
| 20 | 04.12 | T19 | parallel | inside | | | | | |
| 44 | 12.22 | T340 | parallel | inside | | | | | round |
| 57 | 34.22 | S | parallel | inside | | | none | | |
| 15 | 02.10 | K | parallel | inside | | | | | |
| 36 | 12.14 | T338 | parallel | inside | | | | | |
| 67 | 34.35 | S035 | parallel | inside | | | | | |
| 78 | 15.02 | H | parallel | inside | | | | | |
| 75 | 14.09 | H | parallel | inside | | | | | |
| 76 | 14.10 | H | parallel | inside | | | | | |
| 77 | 14.11 | H | parallel | inside | | | | | |
| 82 | 15.07 | H | parallel | inside | | | | | |
| 96 | 02.30 | N7771 | parallel | inside | | | none | | |
| 107 | 23.04 | T17 | parallel | inside | | | none | | |
| 17 | 04.09 | T250 | parallel | inside fl | | | none | | round |
| 29 | 12.07 | T335 | parallel | inside sq | | | none | | round |
| 24 | 12.02 | T010 | parallel | inside? | | | | | |
| 09 | 01.09 | K | parallel | inside? | | | | | |
| 26 | 12.04 | T273 | parallel | inside? | | | | | |
| 01 | 01.01 | K | parallel | outside | | | none | | round |
| 64 | 34.32 | S125 | parallel | outside | | | none | | |

Sides

| file | photo | museum | sides | tng pin | br protect | br type |
|------|-------|---------|----------|----------|------------|---------|
| 18 | 04.10 | T10 | parallel | outside | none | |
| 41 | 12.19 | T341 | parallel | outside | | |
| 19 | 04.11 | T14 | parallel | outside | none | round |
| 59 | 34.24 | S675 | parallel | outside | none | |
| 23 | 12.01 | T026 | parallel | outside | | |
| 42 | 12.20 | T024 | parallel | outside | | |
| 60 | 34.25 | S153 | parallel | outside | | round |
| 101 | 04.09 | T250 | parallel | outside | none | round |
| 102 | 04.10 | T10 | parallel | outside | none | |
| 103 | 04.11 | T14 | parallel | outside | none | round |
| 105 | 23.01 | T269 | parallel | outside | none | |
| 109 | 23.10 | T247 | parallel | outside | | |
| 86 | G14 | NF1176 | parallel | outside* | none | |
| 88 | 01.27 | NF1203 | parallel | outside* | none | |
| 95 | 01.36 | N3198.7 | parallel | outside* | none | |

Printed 105 of the 110 records.

* tuning pegs instead of tuning pins