# **INSTRUMENT ORGANLOGY OF KULCAPI MUSIC**

#### **Adina Sastra Sembiring**

Music Education Study Program Faculty of Language and Arts, Medan State University E-mail: jordaneugene1234@gmail.com

**Abstract:** This article reviews the organology of the traditional musical instrument *Kulcapi* in the Karo community. Organologically the music instrument is classified as a musical instrument because the strings are the primary source of the vibrator; the sound comes from the lines. Following its shape, *Kulcapi* is a lute musical instrument which has a neck, and its strings are parallel to its resonator box with other languages which are more detailed, categorized as the two-stringed fretted-necked lute. The *Kulcapi* instrument consists of parts that have functions and shapes interrelated with the form of *Kulcapi* as an instrument of traditional Karo music. Furthermore, to play other melodies played following the main song melody, improvisation techniques are needed so that the resulting tune is not dull. The *Kulcapi* playing technique is traditionally placed perpendicular to the body, the left hand is positioned on the neck, the finger (except the thumb) pressing the string (the front collar of the front) while the thumb pressing on the neck, the back of the face, the right hand is placed, the index finger and the thumb holds the *kuir-kuir* (a type of guitar picking device that functions to pick the string of the guitar) while the other finger is positioned below the body of the body. The position of the body when playing *Kulcapi* is by sitting cross-legged, and half the clothes opened so that the tongs (resonator) can be directly attached to the abdomen of the *Kulcapi* player as a traditional technique of picking music in the Karo community.

Keywords: Kulcapi, Organology

The learning process on campus is an interactive event that involves students, educators by implementing curriculum designs that are applied to the achievement of knowledge acquisition, mastery of specific skills or skills, and the formation of good attitudes and confidence in students. The learning process is highly expected to continue to be able to develop and can produce innovative learning products that can compete and be able to answer challenges and can meet educational needs in the community.

It is necessary to make creative and innovative efforts by the teaching staff to obtain maximum learning outcomes in the learning process. These efforts can be done in various ways, including by analyzing and updating the learning tools, such as; methods, techniques, and provision of teaching materials or instructional media as well as periodic curriculum review so that it can be adapted to the development and needs of the community in the developing world of education.

The Karo ethnic group in North Sumatra has a culture of playing stringed musical instruments called Kulcapi. In organology, kulcapi has construction forms that can be used almost the same as a guitar. As a tradition, the game technique is only learned from generation to generation by a small part of the Karo community. Based on information from traditional music experts, the organology instrument is closely related to the legend of the Karo people folklore in Kesain Kuta, as in the legendary story of the perkatimbung beru Tarigan, and the legend of the sitajor horse-raisers. In the game technique, kulcapi also has a connection with the story of the Karo community legend tradition. Based on this, it is considered very important if the culture plays the instrument Kulcapi can be packaged and used as the instructional material for learning guitar instruments in the Unimed music education program. This thing is so that the guitar learning process can further enrich students' understanding of the theoretical concepts of traditional stringed musical instruments in North Sumatra. With the effort to study and understand the device kulcapi in this guitar course, it will be perfect teaching materials for the achievement of better quality learning outcomes. Based on the above background, the following problems can be formulated; how do the concept of organology theory and the game techniques of the Karo game in this paper be explained.

## **Concept and Theory of Organology**

To discuss the problem with the concept of organology theory in question, we will see some conceptions of the organological theory that were presented by several experts, including the idea proposed by Mantle Hood (1982: 124) that the problem of organology has a tendency to be used as a limitation in describing physical appearance, the acoustic property and the history of musical instruments. Furthermore, organology is the science of musical instruments, which not only includes the history and description of musical instruments, but as necessary as the "science" of the musical instrument itself, among others: performance techniques, musical functions, decorative, and variations of social culture.

Other conceptions that explain the study of organology or the research of musical instrument form and the production of musical instruments can be distinguished based on their classification. According to Curt Sachs and Hornbostel (1961) that the system of classifying musical instruments can be identified based on the source of the main vibrator sounds. This classification system is divided into four parts, namely: 1) Idiophone, the main vibrator is the body of the instrument itself. 2). Aerophone, the main vibrator sounds air, 3). Membranophone, the main vibrator sounds is the membrane or skin 4). Chordophone, the main vibrator sounds is string or string.

*Kulcapi* game techniques are not the same as classical and pop guitar playing techniques, according to Tarigan (2016) *kulcapi* is a music culture of the Karo people who have acquired their skills through direct delivery from their parents orally and for generations. Besides that *Kulcapi* is played by accompanying the story of the Karo community legend. The game technique played in *Kulcapi* is closely related to social events which are depicted in the story of the Karo community legend.

In addition to the above opinion, the study of organology or material music culture in ethnomusicology has also been stated by Allan P Merriam (1964) as follows: that the area of research includes the study of musical instruments compiled by researchers with commonly used classifications, namely: idiophones, membranophones, aerophone, and chordophones. Besides that, every musical instrument must be measured, described and drawn on a scale or photographed; the principles of manufacture, materials used, decoration motifs, performance methods and techniques, determining the notes produced, and theoretical problems need to be noted. In addition to the issue of a description of musical instruments, there are still many other analytical problems that can be subjected to ethno musicological field research, including their use and social functions for the supportive community.

The theoretical conceptions of the organology above will be used as a scalpel in understanding and be found in depth the conclusions of organological theory on the subject. The concept of the above approach is considered very suitable to explore how the structure of the form, game techniques, and sound production, as well as the relevance of the functions and uses, are very closely related to the events of the cultural side of the supporting community.

# Discussion

#### Instrument organology of Kulcapi

In classifying sarunei instruments, the author refers to the theory proposed by Curt Sach and Hornbostel (1961), namely: "The system of classifying musical instruments based on the main vibrator source sounds. This classification system is divided into four parts, namely: Idiofon, (the main vibrator reads the body of the instrument itself), Aerofon, (the main vibrator understands air), Membranofon, (the main vibrator is the skin or membrane), Chordophone, (vibrator the main sound is string or string). According to the theory, the kulcapi is classified as a musical instrument of the chordophone because the line is the primary source of the vibrator; the sound is from the string. Following its shape, kulcapi is a music lutes device that has a neck, and its lines are parallel to its resonator box with other languages which are more detailed, categorized as the two-stringed fretted-necked lute

The parts construction of Kulcapi.

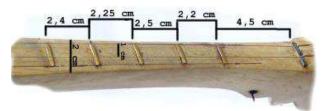
To discuss this part of the construction, the author refers to one of the Kulcapi made by the creator of the artist, Mr. Pauji Ginting

Following are the Kulcapi Instruments based on instrument parts:

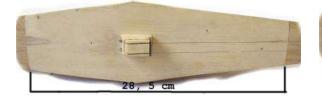
1. The head of the glass or the top of the glass



Leher kulcapi (kerahung)



Tembuku





Nggo



Takkur



Tonggum (resonator)



# The Technique to Make the Instrument of Kulcapi

The technique of making Kulcapi is still done traditionally. In producing a good and perfect tone, kulcapi as a musical instrument is made with accurate calculations and measurements. This step determines the clarity and authenticity of the sound that will be produced by a cup. In the initial stages, establishing the essential ingredients of the ingredients will determine the outcome of the tone gesture. For this reason, the selection of crucial components needs to be considered as the foremost step before continuing the process of making glass. In some circles of craftsmen and experts in the manufacture of kulcapi, the type of wood tualang is still the primary choice as a necessary ingredient for cacao. Although relatively rare, this type of wood is still widely found in the karo land plateau.

Since the beginning of the beginning of civilization in Tanah Karo, people have already known tualang as a favorite type of wood. This type of wood is believed to be able to add magical

elements to the tone produced by kulcapi. Besides, this type of tualang wood is easily formed and carved and has smooth fibers, thus minimizing the risk of failure in establishing a pattern of curing. It is essential to know; a kulcapi consists of one unified circuit starting from the taxis (heads) to the tonggum. There is no part separated so that a connection is needed using adhesive glue, nails or the like. Overall, a kulcapi has an ideal length of 78 cm. With a head size of 9.8 cm as a string regulator. As well as 52 cm as a neck or a guide. Calculation of the distance between the head and the body of the body also determines the color of the tone that will be produced. The manufacturing process is completely done manually.

#### **Tones Produced**

As information, I need to inform you that the explanation of the sound the writer will explain is an explanation based on personal conclusions and does not have formal formal references and is based on the musical instruments that the author has on his own, so that the mismatch may occur due to the laying of the fret on the fingerboard that is different in distance and size on each face depends on the creators themselves, because as we all know there is no standard and formal standardization in the manufacture of cookies. In fact, the karo kulcapi had never been paired with a fret/tone like the ones we find today, so in determining the tone when playing it looks more like a violin than a guitar. But to make it easier for players and sound clarity to be produced, there are many creators now who deliberately add their frets on the fingerboard to karo.

In general, there are 5 frets installed on the glass, but for reaching the tone of one octave we have to play it until the fret 9 on the fret transparent (which is not installed). But in general the sound on the karo karcapi can be explained as follows:

## a. Tone Area

The tone that is often used in the tradition of sitajor horse climbers is mi -sol - la in the pentatonic scale. It's just that there are many repetitions of tones in each game, as well as ornamentation (rengget) tones so that the resulting sound seems to be different.

The basic technique is the beginning of the previous player before.

Then playing with the tone produced by kulcapi, as for the primary method in question is the position of the right hand playing the two strings of kulcapi by using the pick to follow the rhythm of the gung and pengakak like a sarune drum on a drum song silengguri, where lines 1 are considered as pengakak while the two strings are gung after being proficient at this stage, the kulcapi players were invited to play the kulcapi strings with pick up and down movements on the 1st string. Both of these stages were still in the free position, i.e. without pressing any of the glass cords which functioned to produce a perfect tone.

After being proficient with the right hand, the first kulcapi player plays the left side followed by the left hand to produce a trenching tone in presenting the trunks; there are 5 types of left hand positions. First is by pressing fret 1 using the index finger on the kulcapi cup and 1 string but with half the pressure while the right finger picked the second string but touched on the string 1. The two ring fingers on fret 4, how to play it the same as the first string is playing one series with the ring finger of the right hand at half the pressure. The three-ring fingers press full fret 4 while the little finger is in the half position the burden remains on the strings 1. The fourth finger indexes on the 2 ring fret on the 4 fingers fret middle at 3rd fret, on these three fingers only the middle finger is half pressure by following the rhythmic drum drum . The five index fingers on the 3rd fret with full strength. After going through the primary stages of the game, the Kulcapi player is guided to play the melody by playing the major-tone odak-odak melody on the 2nd string. This thing is so that the player can produce a tune if he wants to play the theme on other songs. Furthermore, to perform different melodies played following the songs that are desired, at this stage improvisation is very necessary so that the resulting tune is not dull.

#### b. The technique of playing kulcapi

Kulcapi is placed upright with the body, the left hand is positioned on the neck, the finger (except the thumb) pressing the string (the front neck) while the thumb touches the neck and the back of the cuff, the right hand is placed, the index finger and thumb hold kuir-kuir (a type of

guitar picking device that functions to pick the string of the guitar) while the other finger is positioned under the body of the body. Position the left front finger position of the thumb Right finger position

To play a game, of course, has the technique so that the player can play it with maximum fitness. The method of playing kulcapi is not much different from playing guitar in general, that is, the left finger pressing on the neck of the kulcapi to play the melody and fingers, to pick strings, but slightly different from the position of the body when playing kulcapi. The location of the body when playing kulcapi is by sitting cross-legged, and half the clothes opened so that the tongs (resonator) can be directly attached to the abdomen of the player.

## Conclusion

Organologically the kulcapi music instrument is classified as a musical instrument cordophone because the string is the primary source of the vibrator the sound comes from the lines. Following its shape, kulcapi is a music lutes device that has a neck, and its strings are parallel to its resonator box with other languages which are more detailed, categorized as the two-strenged fretted-necked lute.

The kulcapi instrument consists of parts that have functions and forms that are interrelated with the structure of kulcapi as an instrument of traditional karo music, the parts are:

- 1. The head of the glass or the top of the glass
- 2. Neck cuff (collar)
- 3. Tembuku

4. Nggo

5. Accurate

6. Tonggum (resonator)

The technique of making Kulcapi is still done traditionally, at an early stage, the determination of the essential ingredients of the ingredients will determine the final result of the tone gesture. The type of wood tualang is still the primary choice as the essential ingredient of cacao.

In general, there are five frets installed on the glass, but for reach the tone of one octave we have to play it until the fret 9 on the fret transparent (which is not installed). The tone that is often used in the tradition of sitajor horse climbers is mi -sol - la in the pentatonic scale. It's just that there are many repetitions of tones in each game, as well as ornamentation (rengget) tones so that the resulting sound seems to be different.

The basic technique of positioning the right hand plays the two strings of the kulcapi using pick following the rhythm of the gung and pengakak like the sarune drum, where the 1st string is considered as pengakak while the two lines are the gung, to produce a tune in creating the rhythm there are 5 types of left-hand positions.

- 1. Pressing the fret 1 using the index finger on the cuff and the 1st string but with half the pressure while the right finger picks the second string but pressed on the string 1.
- 2. ring finger on fret 4, how to play it exactly the same as the first step is to play one string with the right ring finger position at half the pressure.
- 3. the ring finger presses the fret full 4 while the little finger is in the half position the burden remains on string 1.
- 4. the index finger on the 2 ring fret on the 4 finger fret middle on the 3rd fret, on these three fingers only the middle finger with half pressure by following the rhythm of the drum drum.
- 5. index finger on fret 3 with full strength. After finishing the primary stage of the game, the Kulcapi player is guided to play the melody, which is to play the major-sounding odak-odak melody on the 2nd string. This is so that the player can produce a tune if he wants to play the theme on other songs.

Furthermore, to play other melodies played following the songs that are desired, at this stage improvisation is very necessary so that the resulting tune is not dull. The kulcapi playing technique has traditionally been placed upright with the body, the left hand is positioned on the neck, the finger (except the thumb) pressing the string (the front neck) while the thumb pressing on the neck, the back of the cuff, the right hand is placed, the index finger and the thumb holds the quir-kuir (a type of guitar picking device that functions to pick the string of the guitar) while the other finger is positioned below the body of the body. The position of the authority when playing kulcapi is by sitting cross-legged, and half the clothes opened so that the tongs (resonator) can be directly attached to the stomach of the player.

#### References

Hornbostel, Erich M. Von and Curt Sach, 1961. Clasification of Musical Instrument. Translate from original German by Anthony Baines and Klausss P.Wachsmann.

Merriam, Allan P, 1964. The Antropology of Music. North Western : University Press

- Sadiman, Arif, dkk. 2002. Media Pendidikan, Pengertian, Pengembangan, dan Pemanfaatan (edisipertama, cetakan ke-10). Jakarta: PT. Raja Grafindo Persada.
- Sitepu Beri Pana, 2013. Kajian Organologi Kulcapi Pada Masyarakat Karo Buatan Bapak Pauji Ginting Skripsi Sarjana Departemen Etnomusikologi Fakultas Ilmu Budaya Universitas Sumatera Utara.