

## *How to Play and Tune Sasando in Edon Style*

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### A B S T R A C T

*Sasando* is one of the cultural artifacts of the Rote Tribe that was born from ideas, good values, and local wisdom of the Rote people. This research is a qualitative case study type research aimed at gaining an understanding of *sasando* plays in Edon Studio and its tuning techniques. Edon Studio chose because the Edon technique has the characteristic of only using 7 fingers to play *sasando* and being able to tune *sasando* with two scales simultaneously. The results showed that at Edon Studio, *sasando* was played using 7 fingers consisting of 4 fingers of the left hand and 3 fingers of the right hand. On the left hand, the thumb and index finger enter in playing the melody, while the middle finger and ring finger meet in playing the bass. Besides playing the melody, the index finger is more positioned as the center of the movement of the other fingers. On the right hand, the thumb, index finger and middle finger are used to play rhythm. The middle finger meets as the commander, while the thumb and index finger meet to form the chord. For chords consisting of four notes, for example C7 chords, one note can be played from the melody (left hand). Regarding tuning, at Edon Studio, *sasando* tuning is done by considering modulation, namely *sasando* tuned using two scales. To set two or more basic *sasando* tunes, three important steps are used, namely: a) analyzing the composition of the melody on the song that will be played

**Keywords:** *Sasando*; Edon Style; Playing Techniques; Tuning Techniques.

## INTRODUCTION

East Nusa Tenggara is an island province consisting of various tribes with their respective cultures. Each culture has unique cultural elements, including traditional musical instruments. Lamaholot tribe has a *Nuren* which is a wind instrument (aerophone type) in the form of a double flute with a single hole at the bottom and *Toto Buang* which is a percussion instrument (membraneophone type) is played in two ways namely on the lap or hung; The Alor tribe has a trumpet drum, which is a musical instrument (membraneophone type) made of lai wood and deer skin as its membrane and is played during traditional ceremonies; The Timorese have *Heo* which is a stringed instrument (chordophone type) which resembles a violin with a bow (like a bow on a violin) made of horsetail and *Leko Boko* which is a stringed instrument (type chordophone) with 4 strings; The Ngada tribe in Flores has *Foy Doa*, which are wind instruments (aerophone-type) that resemble double flutes made of torches or small bamboos tied together by two or more and Thobo, a type of idiophone made of long bamboo (with books) and played by stomping to the ground as a companion *Foy Doa*; The Manggarai tribe has the *Prere*, which is a wind instrument (aerophone type) made of small bamboo (about 15 cm) and only produces do and re tones when blown; The Rote have *Sasando*, which is a stringed musical instrument (chordophone type) with a resonator made of woven palm leaves; and so forth.

Among all the traditional musical instruments of East Nusa Tenggara, one that is very well known to foreign countries is *Sasando* (Francis, 2017). Etymologically, *Sasando* comes from the Rote word, *Sasandu*, which means sound or vibrate (Gelu, Ulhadi, Darsono, & Liwa, 2017; Haning, 2009;

Koehuan, 2016; Murdowo & Riski, 2017). Haning (Kaet, 2019) explains that the word *Sasandu* comes from the basic word *Sandu* which means to vibrate or wriggle. When the word *Sandu* is mentioned repeatedly, *Sandu-Sandu*, the habit of pronunciation by the people of Rote then removes the last syllable from the word *Sandu* in the first part and experiences the word decay to become *Sasandu* which means to vibrate repeatedly. In subsequent developments, due to the influence of the Kupang dialect, said *Sasandu* later changed to *Sasando*.

*Sasando* is one of the cultural artifacts of the Rote Tribe born from ideas, good values, and local wisdom of the Rote people (Gelu, Marwoto, & Aji, 2020). According to the people of Rote, *Sasando* is a family musical instrument that is played and passed down from one generation to the next in the family. This causes a variety of versions that explain the history of the creation of *Sasando*, the technique of tuning, and the technique of playing *Sasando* following the narrative and playing style of each family.

Theedens (Francis, 2017) said that *Sasando* was created by a young man named *Sanguana* who came from *Oetefu-Thi* village (Southwest Rote District now). According to the story in the community, while sailing in search of fish, *Sanguana*'s ship was hit by a storm so it fell into the sea and was stranded on the island of *Ndana-Rote*. After a few days, he was then rescued by the surrounding community and brought to face King *Takala'a* the local ruler who lived in *Nusaklain*. Because *Sanguana* was a foreigner, he was allowed to stay in the king's palace while learning the local language. In *Nusaklain* there is often a game of *kebak* (*kebalai*) at night, which is a kind of youth game played by holding hands, forming a crushing movement left and right, with occasional clapping

movements with certain rhythms. In this game, a player will act as a *manehelo* (poet) who is usually in the middle of a circle and chants poems that tell about their bloodline. In this game, *Sanguana* who is talented in art has always been the center of attention and the king's daughter fell in love with him. Both of them fell in love with each other, but when asking for the blessing of King Takala'a, the King gave a condition that *Sanguana* must be able to create art that had never existed before; it is said that at that time the people of Rote were already familiar with gongs, drums, and flutes. *Sanguana* agreed and then succeeded in creating a musical instrument that he named *Sari Sandu* based on the vision he had in his dream when he was sleeping under a palm tree. *Sari Sandu* is a musical instrument that has seven strings and is attached to the *haik* which is a container used to store roomie. The Princess was very happy to receive this gift *Sanguana*, then named *Sandu* with *Hitu* which in *Nusaklain* means seven (based on the number of strings from *Sandu*), and the song played with *Hitu* was called *Depo Hitu* which means once played the seven vibrating strings. *Sandu* said, by the pronunciation of the people of Rote, then turned into *sasandu*, and then better known as *Sasando* who has experienced a lot of development from the form, method of making, and the number of strings.

In another version, *Sasando* was discovered by two shepherds, Lunggi Lain and Balok Ama Sina. When making *haik*, accidentally *fifik* (a kind of thread between the fingers of palm leaf sheets) on tightened palm leaves picking out and making different sounds, but easily broken. Both of them then began experimenting to create a musical instrument that was able to make different sounds resembling the sounds of gongs. The first musical instrument was successfully created using bones

from palm leaves which were fined or propped up with wooden sticks. However, the sounds produced are inconsistent and not heard loudly. They then lontar leaf bones with bamboo incisions by cutting bamboo stems and gouging it as much as a gong, then tapping it with wood so that it can produce a firmer and more consistent sound. In the development, the string from bamboo stems was replaced by using palm fiber and haik fibers as loudspeakers and the results were better than before. This is the initial *Sasando* form that was developed. In further developments, palm fiber (Lontar) as a material for making strings and then replaced by using strings and developed until now

The third version, *Sasando*, was discovered by a man named Pupuk Soroba from Rote Barat (Francis, 2017; Haning, 2009; Koehuan, 2016). Pupuk Soroba is inspired when listening to the beautiful sound of a spider playing its webs. Almost similar to the second version, Pupuk Soroba then tried to make a musical instrument using sticks from palm leaves which were still young and fined. When picked, the sound produced is still small so he then replaces the stick by using a bamboo section mounted on the *haik*, and the sound is adjusted to the sound of the gong. Experiments to find the right *Sasando* string continue to be carried out by Pupuk Soroba. The bamboo strings used are then replaced with the roots of the banyan tree, and then replaced again with dried weasel intestines. After the Nation of Rote knew the metal strings, the strings made from the weasel's intestines were then replaced with metal strings and developed until now.

Although there are several different versions of the person who first created *Sasando*, it has become a joint agreement that *Sasando Gong* is a traditional *Sasando* type that was first created when compared to the *Sasando* violin as it is often used

today.(2015)(Manesi et al., 2015)explains that *Sasando Gong* is an instrumental instrument used to accompany poems or Rote songs. This *Sasando* has been developing since the 7th century. According to the Rote community, it is called *Sasando Gong* because the tones produced by *Sasando Gong* are adjusted to the tones of the traditional Rote gong that had been known by the Rote people before the creation of *Sasando*. *Sasando gong* uses pentatonic scales, with the development of a diverse number of strings.Kaet (2019)explained that *Sasando Gong* originally had 7 strings, then continued to grow to 11 strings. Boesday & Suprpto (2016)specifically detailing the names of the strings in *Sasando Gong* consisting of 10 strings, with notes from the lowest to the highest ie: *Ina Makamu (mi)*, *Ina Taladak (sol)*, *Ina Tanik (la)*, *Nggasa Laik (do)*, *Nggasa Daek (re)*, *Leko Laik (mi)*, *Leko Daek/Paisele (sol)*, *Ana Laik (la)*, *Ana Daek (do)* dan *Ana Do (re)*.

Around the seventeenth to eighteenth century AD, *Sasando Gong* began to be developed into *Sasando violin* that uses diatonic scales so that it has a more complete number of notes when compared to *Sasando Gong*. In terms of shape, *sasando violins* resemble the shape of *sasando gong* but with a longer tube diameter and a higher number of strings compared to *sasando gong* (each string represents one note on the diatonic scale). The more complete notes on the *Sasando Violin* make *Sasando* no longer only functions as an accompaniment to a song but can also play a song instrumentally. In connection with the use of the word "violin" in this *Sasando*, there are several different versions that explain the embedding of the word. Theedens (Francis, 2017)explain that the word "violin" is used because the *Sasando violin* already uses diatonic scales like the violin. Meanwhile, according to

Edon, the word "violin" was used because, in ancient times, the string binding screw used on the *Sasando violin* resembled the shape of the violin body. This form is used because screws in ancient times were still made of wood; violin body shape is believed to be the most appropriate form because it is not easily broken if knocked when attached to the *Sasando* head. In addition, this form can also be easier to rotate when adjusting *Sasando* and can keep the string tied so it does not easily shift.Modifications are always carried out on *Sasando* to maintain its existence until now. In order to be able to develop more from traditional *Sasando* into musical instruments, *Sasando* makers began to create electric *Sasando* that uses electric current as a source of sound and resonators (different from traditional *Sasando* such as *Sasando Gong* and *Sasando violins* who still use *Haik* as a resonator) . This electric *Sasando* was first created by Arnoldus Edon, a physics teacher who also worked as a maker and player of *Sasando* in the 1960s. According to Abel Edon, *Sasando* maker, and successor to Arnoldus Edon, the *Sasando* electric experiment began in 1958 and then continued in the 1960s in West Nusa Tenggara when Arnold Edon was transferred from East Nusa Tenggara to West Nusa Tenggara. After the first electric *Sasando* was successfully created, this *Sasando* was then given to the Mesakh family to be played in Jakarta. Electric *Sasando* is a type of *Sasando* suitable for use as a musical instrument and can be combined with *Sasando Gong*, *Sasando violin*, and other musical instruments.

Although *Sasando* comes from the Rote area, not all Rote people can play it. This makes *Sasando* a special musical instrument, even for the people of Rote themselves (Bakok, 2017). In terms of how to play it, the Department of Education and Culture of

East Nusa Tenggara classifies Sasando as a chordophone musical instrument typical of East Nusa Tenggara (Depdikbud, 1994). One of the characteristics of Sasando that makes Sasando different from other chordophone instruments is the use of *haik* made from woven palm leaves as its resonator (especially in traditional Sasando). From the side of the making material, Sasando can be seen as a bamboo zither musical instrument because it uses bamboo as a place to play the string, setting the tone (together with *senda*), and loudspeakers (together with *haik*). Just like a harp, when viewed from the number of strings, Sasando, especially Sasando violin, has several strings far more when compared with other chordophone musical instruments. The number of strings of a Sasando varies greatly depending on the creativity of the makers of Sasando (some numbered 12, 26, 28, 30, 32, 36, even 60 strings). The greater the number of strings, the wider the octave range of a Sasando (Magang, Manu, & Odja, 2009). Besides, the greater number of strings also has an impact on the increasing diameter of the bamboo tube on which the *Sasando* string is bound to be able to load all of the strings. In order not to complicate in playing *Sasando*, a player must be able to do the tuning and laying the tone precisely following the characteristics of the song and the *Sasando* fencing techniques used. Error in tuning will be very difficult when playing *Sasando* with a wide octave range.

Sasando is a family musical instrument, so the variety of *Sasando* playing techniques also varies depending on the specifics of how to play from each family. Francis (2017) explained that in the beginning, the *Sasando* playing technique used six fingers namely the thumb, index and middle fingers on the right hand to play the accompaniment

(rhythm), the thumb of the left hand for the melody, and the index finger and middle finger on the left hand to play the bass. Today, *Sasando* playing technique has evolved into various techniques such as the 7 finger *Sasando* playing technique developed by the Edon family and the 10 finger *Sasando* playing technique developed by Djony Theedens. *Sasando* playing technique is then correlated with the *Sasando* tuning technique used by each family that adjusts to their respective playing techniques. This aims to assist *Sasando* players in playing a song so that with proper playing and tuning techniques, a song can be accompanied or played with the right notes and the player's hand can reach the required tones with relative ease following the technique play he uses.

*Sasando* is a cultural artifact of the people of East Nusa Tenggara that needs to be preserved and preserved. *Sasando* preservation is not only done by knowing the form of *Sasando* but also how to play it so that *Sasando* playing techniques can be passed down from generation to generation. Nowadays several *Sasando* studios have developed in Kupang City to introduce and pass down *Sasando* playing techniques to the younger generation. The interesting thing is that there are differences in *Sasando* playing techniques in the studios, such as in the techniques of their fingers. This difference in playing technique causes differences in the way of tuning *sasando* between one studio and another so that when a *sasando* has been tuned according to one of the studio's tuning techniques, players who master the techniques of playing *sasando* from another studio will have difficulty in playing the *sasando* caused by the difference in the location of the notes on each string. To make *Sasando* a part of learning in school, we need a general technique

that can be used in playing and tuning Sasando to make it easier for students to learn to play Sasando. Edon *Sasando* is one of the *Sasando* studios in Kupang City who developed the *Sasando* tuning technique using two scales. The specificity in tuning *Sasando* like this will greatly help a *Sasando* player when playing because to play a song that has complex tones or a wide range of tones, with the placement of the right tones according to the playing technique (figuring) it uses, it can use *Sasando* with a smaller number of strings to play the song. It is very necessary to remember the characteristics of *Sasando* that each string is only able to sound one note. This is very different from a guitar or violin that can produce many tones from just one string.

There have been many studies conducted relating to *Sasando*. Boesday & Suprpto (2016) analyze polyphonic signals in *Sasando* by using cross-correlation; Bakok (2017) conduct research on electric *Sasando*; Francis (2017) researching the transmission of *Sasando* musical instruments as a medium of art and culture in Rote Regency; Gelu (2017) research on the shape of palm leaves on the sound intensity of *Sasando* musical instruments; Kaet (2019) researching changes in organology and creativity in *Sasando* music learning at Sanggar Edon *Sasando* Kupang; etc. However, no research has been conducted on *Sasando* tuning techniques. In fact, this is necessary so that the preservation of *Sasando* games can be done to the next generation. By knowing the techniques of playing and tuning *Sasando*, students are expected to love *Sasando* as their cultural heritage and be able to preserve it in the future.

This research is a qualitative case study type

. Ghony & Almanshur (2014) explain case research that represents qualitative research

aimed at gathering data, making meaning, and gaining an understanding of the case taken. This research proposes in the steps of studio research proposed by Gay, Mills, & Airasian (2012) namely: (1) determining research objectives; (2) developing initial research questions; (3) related literature review; (4) choosing research subjects; (5) determine data collection strategies; and (6) data analysis and interpretation. The purpose of this research is to gain a deep understanding of the *Sasando* game at Edon Studio and its tuning techniques. Based on this goal the researcher develops some initial research questions; include: What is the object of research? Why choose the research object? Who is the Research Subject? Where is the research conducted? When was the research conducted? How will this research be carried out? These initial questions are used as a guide for researchers in carrying out research activities. Next, the researchers conducted a literature review related to the Edon *Sasando* style game. Based on this review it is known that the Edon style game technique has a characteristic that is only using 7 fingers to play *Sasando*. To obtain accurate data, the owner of Edon *Sasando* Studio and those involved in *Sasando* games and tuning in Edon Style were selected as Research Subjects. The study was conducted at the Edon *Sasando* Studio in Kupang City, a place for making and training *Sasando* in Kupang, which was raised by Abel Edon, the successor of Arnoldus Edon who created the electric *Sasando*. The study was



conducted by observing deeply and directly involved with the research subjects in the game and tuning Sasando based on Edon's style. Apart from observation, data was also collected through interviews with research subjects, making field notes, and documentation during the research activities.

After the research data is collected, the data is then analyzed and interpreted. Data analysis using qualitative data analysis techniques by Miles & Huberman namely: a) data reduction; b) data presentation; and c) data verification (Sugiyono, 2010). In the data reduction stage, the raw data collected is focused on the research objectives by eliminating foreign data that is not appropriate. Next, the reduction data are presented in the form of a brief description to understand the relationship between the data obtained and determine the next research step. Next, the researcher verifies based on the data presented and makes an interpretation related to the Sasando game based on Edon's style and tuning techniques. The validity of the interpreted data was tested through triangulation. Gay, Mills, & Airasian (2012) explains that triangulation is the process of gathering information using a variety of methods, collection strategies, time, and data sources to obtain a complete picture of what is learned and recheck the information obtained. In this study, researchers used a method triangulation that is collecting data using several different data collection methods and time triangulation that is comparing data collected at different times and seeing their compatibility.

## RESULTS AND DISCUSSION

The results of the discussion consist of several sub-topics and are given subtitles following the sub-topics and presented in graphical, tabular, or

descriptive form. Analysis and interpretation of these results is needed before being discussed.

### 1. History of Sasando in the Edon Perspective

*Sasando* known today, in general, can be grouped in traditional *Sasando* and *Sasando* electric. The fundamental difference between the two lies in the source of the sound. In traditional *Sasando*, the *Sasando* string is the only source of sound which is then reinforced by *Haik* as a resonator. Whereas in electric *Sasando*, the electric current becomes the source of the sound and no longer requires *Haik* as a resonator. According to Edon, the development of the traditional *Sasando* has known today begins with *Sasando* Gong which was discovered around the seventh century AD. *Sasando* gong at that time had 7 strings made of bamboo incisions that were attached to the *Sasando* body and were refuted by *senda*. Because the strings are made of bamboo, *Sasando* Gong does not have screw strings as in traditional *Sasando* today. The composition of the notes is still using pentatonic scales (do, re, mi, sol, la) and is played together with the gong to accompany the singing in the form of Rote language poems.

Along with the times, the number of strings in *Sasando* Gong also experienced growth from 7 to 8, 9, and 10 strings. The bamboo string is then replaced with a metal string and has a string turning a screw on top made of wood. The wood used for making screws is wood in two seasons so that it can withstand the dry and wet seasons. These screws besides functioning as a place to tie the strings at the top of *Sasando* Gong, also play a role in tuning the tones on *Sasando* Gong.

Around the seventeenth to eighteenth century AD, *Sasando* Gong began to develop into *Sasando* Violin. Different from *Sasando* Gong, *Sasando* Violin uses diatonic scales with a more complete tone

arrangement than *Sasando Gong* with pentatonic notes. In terms of shape, the *sasando* violin resembles *sasando gong* but with a greater number of strings and a larger diameter bamboo tube (*sasando* body) as a consequence of a large number of strings at the *sasando* violin. The strings on the *Sasando* violin, in general, are always even. From the initial generation of 24 strings, the strings on the *Sasando* violin then increased in number to 30, 32, even more, dependent on the creativity of the *Sasando* maker. Edon said that in its development, there were two types of violin *sasando* that had been created, namely *sasando* violin with *haik* made from woven palm leaves and *sasando* violin with box-shaped *haik* (box) made of wood/plywood. However, because of the practicality, aesthetics, and cultural characteristics, *Sasando* violin with a box-shaped *haik* began to be abandoned and now people are more familiar with *Sasando* violin with *haik* made from palm leaves. Edon also added that the word violin embedded in *Sasando* violin refers to the shape of the string screw-on *Sasando* that resembles the violin. This form is used because, in addition to making it easier to rotate, it is also relatively stronger than other forms and can keep the bond of the string in order not to quickly shift from its position. The string turning screw itself was originally made of wood, but in subsequent developments, it was replaced with metal, especially in electric *Sasando*.



**Figure 1.** *Sasando* Violin with *haik* from woven palm leaves (lontar)(Personal Documentation, 2019)



**Figure 2.** *Sasando* Violin in a square shape (Personal Documentation, 2019)

In the 1960s, the electric *Sasando* was later created by the late Arnold Edon. At the beginning of creation, electric *Sasando* has 30 strings in a form that is still the same as *Sasando Gong* and *Sasando* violin that is using *Haik* as a resonator, but with the addition of an electric current to amplify the sound produced. In the following decades, *Sasando* electric began to experience the development that is no longer using *haik* as a resonator and already using metal as a string screw. Electric *Sasando* is also no longer played in the lap like traditional *Sasando*, but has used buffer legs to facilitate a *Sasando* player to be able to move more freely. At the bottom (buttocks-bokong) there is an electric *Sasando* output that serves as a connector of *Sasando* sound to active speakers or electrical devices. The number of strings in the electric *Sasando* began to experience an increase, some even up to 60 strings. In Edon *Sasando* alone the number of strings in the electric *Sasando* that was created was in the range of 30, 32, 36, to 40 strings. Edon explained that this is because increasing the number of strings can also make it difficult for someone to play *Sasando* since each one of *Sasando* strings can only be tuned for one note. Therefore, although the number of strings made does not reach 60 strings, but with the modulation technique that can be done on the Edon-style *Sasando* playing technique, one



can still play songs that have wide pitch intervals with a smaller number of strings.



**Figure 3.**Sasando Electric  
(Personal Documentation, 2019)

## 1. Sasando Parts

Sasando has several important parts that have their respective functions as follows:

### a. Sasando Head

*Sasando* head is the part of Sasando which is located at the top, a place to tie haik to traditional *Sasando* and install string strapping screws.



**Figure 4.** Part Of Traditional Sasando Head  
(Personal Documentation, 2019)



**Figure 5.**Part Of Sasando Electric Head  
(Personal Documentation, 2019)

### b. String fastening screws

String binding screws are screws that are attached to the head of the *Sasando* that function as a binding place for the string (one screw for one string). These screws are generally made of wood, but today there are also those made of metal and are dynamically mounted on *Sasando* head (can

be rotated left or right) to adjust the notes on *Sasando*.



**Figure 6.**String fastening screws Of Sasando  
*Sasando Tradisional* (Personal Documentation, 2019)



**Figure 7.** String fastening screws Of Sasando  
*Electrico*(Personal Documentation, 2019)

### c. Body Of Sasando

*Sasando* body in the form of a long tube with an empty inside (like a pipe) called *aon*, and acts as 1) where the *Sasando* string is stretched; 2) the place where it is placed; 3) Resonators (besides haik, especially for traditional *Sasando*, *Aon* also helps in amplifying the sounds produced by *Sasando*). The *aon* size of a *Sasando* is greatly influenced by the number of strings that *Sasando* has. The more strings the longer the diameter of the *Sasando*. This can be seen from the *sasando* violin diameter which is longer than the *sasando* gong diameter. *Aon* is also dynamically mounted on *Sasando* which can be rotated left or right. This is because in the game, sometimes a player has difficulty in reaching the notes located on the back of the *aon* (the part closest to the haik in traditional *Sasando*) so that it will be very difficult if the *aon* is installed statically. To play *aon*, a player can do it by turning the head or buttocks *Sasando* attached directly

to the *aon* so that the tuning of the notes on the string does not change.



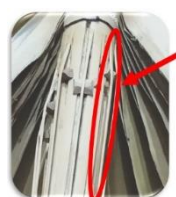
**Figure 8.** Aon At Traditional Sasando  
(Personal Documentation, 2019)



**Figure 9.** Aon At *Sasando* Elektrik  
(Personal Documentation, 2019)

#### d. Strings

As a chordophone instrument, the string is the main sound producer in *Sasando*. In ancient times, *Sasando* strings were made from bamboo cuts which were far more static when compared to strings today which are generally made of metal strings. Strings on *Sasando* can only produce one note. The number of strings also varies depending on the type and function of the *Sasando*. For example, strings on *Sasando* Gong with pentatonic notes are 7 to 10 strings, while strings on *Sasando* violin with diatonic notes are 24 strings and above. The more the number of strings, the more notes in a *Sasando*, especially for the half notes.



**Figure 10.** Bamboo String on Traditional Sasando  
(Personal Documentation, 2019)



**Figure 11.** Strings of Metal Strings on Sasando Elektrik  
(Personal Documentation, 2019)

#### e. Buttocks *Sasando*

Butt *Sasando* or the lowest part of *Sasando* has the main function as a place to tie the *Sasando* string (together with the *Sasando* head). In electric *Sasando*, *Sasando* buttocks have an additional function which is as a place for the output of *Sasando* jack and sound control produced by *Sasando* Electric.



**Figure 12.** Buttocks *Sasando* Traditional  
(Personal Documentation, 2019)



**Figure 13.** Buttocks *Sasando* Electric  
(Personal Documentation, 2019)

f. *Haik*

*Haik* is part of *Sasando* that functions as a resonator (especially in traditional *Sasando*). There are two types of *haik* known, namely *haik* made of woven palm leaves and *haik* made of wood / box-shaped plywood (but have begun to be abandoned at present). mounted on the electric *Sasando* more function as a decoration on *Sasando*. However, for traditional *Sasando*, Edon explained that *haik* has a very important role that needs to be maintained in its original form. This is supported by the results of research by Brylliant (2017) which revealed that when the *Sasando* string was picked, vibrations would arise along the string and form sound waves. The wave will then be amplified by the *haik*. Previous research by Gelu, sulhadi, Darsono, & Liwa (2017) also showed that the sound intensity produced by *Sasando* was strongly influenced by the size of the palm leaves used as *haik*.



**Figure 14.** *Haik* Made from (Palm) Lontar Leaves  
(Personal Documentation, 2019)



**Figure 15.** *Haik* Made of Wood  
(Personal Documentation, 2019)

g. Stringed strings on *Sasando* body

The strings on the *Sasando* body are called *senda*, a triangular prism-shaped wood that separates the *aon* and the strings. The number of *senda* is as much as the number of strings in *Sasando* (one *senda* for one string). *Senda* is not made static on the *aon* but can be shifted up and down. The placement also needs to be done carefully because *senda* functions to regulate the high or low sound produced by *Sasando* strings. The lower the *senda* position, the higher the sound produced. Conversely, the higher the *senda* position the lower the sound produced.



**Figure 16.** *Senda* Pada *Sasando*  
(Personal Documentation, 2019)

h. *Output jack*

Output Jack is a special part that is owned by *Sasando* Electric and is located in *Sasando* buttocks. Output jack serves as an introduction to electric current from electric *Sasando* to the amplifier to produce sound.



**Figure 17.**

Some Examples of the Form of Output Jack on Sasando  
(Personal Documentation, 2019)

i. Kaki-kaki (stand)

The legs or also called the stand is a part that is added to *Sasando* to help a player in playing *Sasando*. With a stand, a player no longer has to play *Sasando* by holding it, but can move more freely because they stand helps *Sasando* to stand alone.



**Figure 18.**

Kaki/Stand at *Sasando* Elektrik  
(Personal Documentation, 2019)

j. Decoration on Sasando head

The ornament on Sasando head is called *koan*, usually in the form of a woven flower with seven petals and become one unit with haik (which is made from palm leaves).



**Figure 19.** Decoration on Sasando Head  
(Personal Documentation, 2019)

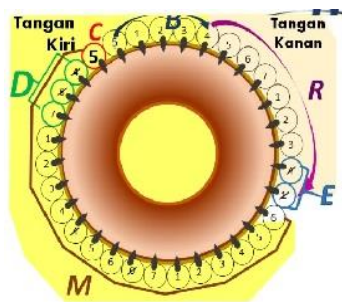
## 2. Composition on Sasando Made by Edon Sasando

At the beginning of the creation of Sasando electric, late. Arnoldus Edon created a 30 string *Sasando*. Now the number of strings is increasingly varied ranging from 32, 34, 36, to 42 strings. Edon explained that variations were made to reach half the notes often found in the songs being played. The more the number of strings, the more the half note can be tuned and played on *Sasando*. For *Sasando* with 32 strings, there are 3 half chromatic tones used in the Edon studio, namely the *fis*, *li*, and *di* which if the tuning is in the C scale then the notes are *fis*, *ais*, and *cis*. Edon added that the composition of the half notes in *Sasando* could be added completely like on a piano, but this would be very difficult for players, especially beginners. This is because, one string can only produce one note, so it will be very difficult to reach strings that are located far apart if the tunes are tuned and complete in tune like on a piano. To play full (chromatic) notes, a 36 or 42 string *Sasando* can be used. The key lies in tuning the scales on *Sasando* so that even with fewer strings, such as *Sasando* with 32 strings, it can already be used to play songs whose tunes are complex. Tuning is usually done with two scales, for example, D and A so that when playing, *Sasando* can be used for modulation.

## 3. Basic Techniques of Playing Sasando at Edon Sasando Studio

In *Sasando* game, a player can play 3 rhythms at once in Sasando namely melody, rhythm, and bass. The playing technique varies depending on the playing style of each family. Edon said that in the early development, Sasando was only played using 4 fingers. Then, the playing technique was modified into a game with 5, 6, and 7 fingers. Now in the Edon style, Sasando is played using 7 fingers consisting of 4 fingers of the left hand and 3 fingers

of the right hand. On the left hand, the thumb and index finger play a role in playing the melody, while the middle finger and ring finger play a role in playing the bass. Although the index finger is also used to play the melody, the thumb is more important in this regard. Meanwhile, the index finger is more positioned as the center or center of the left-hand game that regulates the movement of the other three fingers in playing the melody and bass. On the right hand, 3 fingers are used to play the rhythm in the form of the thumb, index finger, and middle finger. In practice, the middle finger acts as the commander, while the thumb and index finger play a role in forming the chord. For chords consisting of four notes, for example, C7 chords, one note can be played from the melody (left hand).



#### Information:

- M* : Melody (Thumb finger and left hand index finger)
- C* : Center (Left hand index finger)
- B* : Bass (middle finger and left hand ring finger)
- R* : Rhythm (thumb, index finger and middle finger of the right hand)
- D* : Strings that can be changed the tone
- E* : The two remaining strings that can be tuned to put the other half notes

**Figure 20.** *Sasando* Edon Style

#### 4. *Sasando* Tuning Technique in Edon *Sasando* Studio

*Sasando* tuning technique is very closely related to the technique of playing. In general, the division of tasks of the left hand and right hand in the Edon style is the same as playing techniques in

general ie the left hand is used to play a melody, while the right hand is used to play rhythm (Boesday, 2016). The fundamental difference lies in the process which then affects the playing technique and the tuning technique. Edon explained that *Sasando* is essentially a family musical instrument passed down through the generations in the family. When inherited, a technique can be maintained its originality or modified to be able to play more diverse songs with more varied tones. In the Edon style, modifications to the playing technique have been made from the beginning using the 5-6 finger play style by the late. Arnoldus Edon became a 7 finger playing style by Abel Edon. This is different from the style of playing in other studios, for example, the style of playing 10 fingers by Theedens (Francis, 2017).

Edon explained that *Sasando* was a dead set instrument. This term is used to describe the characteristics of *Sasando* musical instruments, where one string can only be tuned for one note. Although they are both chordophone types, these characters are different from guitars or violins where many tones can be produced from just one string. The nature tuning will cause its problems for a *Sasando* player in playing songs with complex tones or many containing chromatic tones. This can be overcome by increasing the number of strings to *Sasando*, but new problems will arise when playing *Sasando* with a very large number of strings. Because the tones are arranged in order, the players, especially those who are beginners, will have difficulty reaching the notes that are located far apart.

To overcome this, in Edon Studio, *Sasando* tuning is done by considering modulation, which is a *Sasando* tuned using two scales. Edon explained that tuning to scales in a *Sasando* could be done, but this



had implications for a smaller number of chords, so in general, it was tuned for just two scales. Regarding the number of strings, tuning with 2 scales can be done well for *Sasando* with 32 strings. Edon explained that *Sasando* with 32 strings is already rich in tone, the most important thing is how *Sasando* is tuned so that it can be used to play songs with a wide octave range. The right tuning will make *Sasando* can be played on all scales. Tuning for 2 scales is done simultaneously on *Sasando* to allow modulation. For example, a player can adjust *Sasando* on the D scale and A scale; or tuning the *sasando* on the F scales and the C scales. Tuning can also be done arbitrarily in the sense that there is no stipulation that a string can only be tuning for one particular note but is done based on the playing style of the *sasando* player. This is typical of the *Sasando* tuning technique when compared to other chordophone musical instruments such as guitars, violins, or cellos that have a standard place for each note.

To tune *Sasando* with two or more scales, three important steps are used, namely: a) analyzing the composition of the melody on the song that will be played; b) determine the tones to be used; and c) tuning *Sasando* following these notes. To get around the lack of half notes in *Sasando*, tuning is done by minimizing repetition of the same notes on different strings, so that the remaining strings can be used for the other half notes. Tuning is done for the left hand and right hand using diatonic scales. For the left hand, *Sasando* is tuned using two-tone soles: the small sol as the center of the melody and the large sol on the base is located right next to the small sole in the clockwise direction. The melody is tuned starting from the small sol in a counter-clockwise direction with the composition of the half note ie *fis* and *li* on the high note and *do*, *si*, *li*, *fis*, *sol* on

the low note. For the right hand, the rhythm (chord) is tuned clockwise after the bass with the composition of the notes ie *fa*, *sol*, *la*, *si*, *do*, *re*, *mi* (entered in the second octave), while the remaining two strings (part E in **Figure 20**) are used for tuning half notes, usually for the *fis* and *cis* notes, but it can also be tuned for the other half notes depending on the composition of the melody on the song to be played and the player's creativity.

In the Edon-style *Sasando* game, *Sasando* is often tuned in two scales: D and E; or scale E and scale B. Although the tuning can change depending on the composition of the melody and the style of the player, Edon explained that for *Sasando* with a string of 24 and up, the notes must be present in every tuning. Meanwhile, for *Sasando* with a string of 32 and above, tuning *ais* / *li* notes also need to be done, but it can also be tuned with other tones depending on the melodic composition of the song being played.

## CONCLUSION

*Sasando* is one of the cultural artifacts of the Rote Tribe that was born from ideas, good values, and local wisdom of the Rote people. Various versions explain the history of the creation of *Sasando*, but it has become a joint agreement that the *Sasando* known today developed from *Sasando Gong* which has existed since the seventh century AD.

From *Sasando Gong* with pentatonic notes, *Sasando* then developed into *Sasando* violin with diatonic notes. *Sasando* Electric itself was only created in the 1960s and continues to grow until now. Some important parts of *Sasando* are *Sasando head*, string player screw which is on *Sasando* head, *Sasando* body called *Aon*, *Sasando* string, strut support on *Aon* called *Senda*,



buttocks *Sasando*, *haik* (resonator on traditional *Sasando*), output jack, legs *Sasando*, and decoration on *Sasando* head called *Koan*.

In its development, there are various techniques of playing and tuning *Sasando*. This is because *Sasando* is a family musical instrument that is played and passed down from one generation to the next in the family. In the Edon style, *Sasando* is played using 7 fingers consisting of 4 fingers of the left hand and 3 fingers of the right hand. On the left hand, the thumb and index finger play a role in playing the melody, while the middle finger and ring finger play a role in playing the bass. Although the index finger is also used to play the melody, the thumb is more important in this regard. Meanwhile, the index finger is more positioned as the center or center of the left hand game that regulates the movement of the other three fingers in playing the melody and bass. On the right hand, 3 fingers are used to play rhythm namely the thumb, index finger, and middle finger. In practice, the middle finger acts as the commander, while the thumb and index finger play a role in forming the chord. For chords consisting of four notes, for example C7 chords, one note can be played from the melody (left hand).

Whereas relating to tuning, at Edon Studio, *Sasando* tuning is done by considering modulation which is a *Sasando* tuned using two scales. To tune *Sasando* with two or more scales, three important steps are used, namely: a) analyzing the composition of the melody on the song that will be played; b) determine the tones to be used; and c) tuning *Sasando* following these notes

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