

“Semi-fretless Guitar Invention and Method Writing”

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1. Summary

Semi-fretless guitar is a new invention that let musician play the tonal and makam music with only one instrument. This invention that we propose is constructed on an organology and ethno-organology of chordophones played by strumming. In fact the invention has no need to be limited by guitar because the specialty of the invention is on his fret system so it can be done in all chordophones with fretboard/fingerboard. In the other hand it is better to start to work on the invention by limitation of instrument and model for optimization of capacity of being achieved. It would be good to clarify the essential instruments who gave the inspiration for the production of semi-fretless guitar; the guitar from the western culture with tonal music and the oud from the eastern culture with makam music. It is very important to prepare a multiculturally rich method of this guitar firstly in English with tonal and makam references.

As makam / modal music with gliding tones, exist in many different regions as Eastern Europe, Near-East, Middle East, Asia Minor, Central Asia, South Asia and Far-East Asia and in the same time as the fretted notes, chords are commonly used today in all this cultural area too, we think that semi-fretless guitar may be a useful invention for many composers and music performers seeking for multicultural musical experiences.

2.1 Quality, innovative aspects and credibility of the research

Istanbul is a city in which eastern and western culture live together and coexist every day. Only 100 years ago makam music was the main musical language of Istanbul. At the same period, piano and guitar has become popular in the society and educational institutions. Today tonal music is more common musical system used by musicians of Istanbul. At the same time makam music is still on the ears. Choosing one instrument or the other, like choosing guitar or oud direct the musician to learn one musical language or the other. That's why it would be interesting to have an instrument who makes possible to play makam music and tonal music, an instrument who can be both (Fig. 1); the guitar from the western culture with tonal music and the oud from the eastern culture with makam/makam music.



Fig. 1 – Semi-Fretless Guitar produced in 2012 in Istanbul

1. Guitar

When we think about the history of guitar or oud, the lute seem like the best starting point. The person qualified who can produce a musical instrument is called “luthier”. As Joël Dugot mention, we can find out the traces of lute in the antiquity, in the cultures of civilizations like Babylonian, Hittite, and many Asian civilizations. The definition of lute is: “Every instrument composed of a hemispherical, oval or pear-shaped resonating chamber with a short or long fingerboard with strings in tension to strum can be classified as lute.”¹.

As Sinier de Ridder² says; even in the written culture of Europe there is no big information about the lutes and luthiers before 17th century. The names of the luthiers who has produced guitars appears after 17th et 18th Century as René François Lacôte (second half of 19th century), Cesar Pons, Louis-David Pons (1827 - guitar with adjustable neck). At that time the most well known luthiers were living generally in France and in Italy. In another article Sinier de Ridder show that the production of guitar was considered at that time as an inferior work than production of violin.³



Fig. 2. Lyra - Guitar produced by Les Pons in 1805

On the other hand we know that there are tablatures written in 16th Century in Venice, in Germany and in France for the lutes⁴ and so we can say that the polyphony with lute starts at less in Europe with Simon Gorlier in Lyon in 1560 exactly.

Since 18th century the Spanish guitar expands his zone. With a painting called “Les Gitans” of French painter Edouard Manet we know that Spanish guitar form is used in Andalusia⁵. We should mention also Antonio Torres Jurado, the Spanish guitarist and luthier who has created the popular form of the modern guitar. At the beginning of the 20th Century the electric guitar is invented in the United States. Georges Beauchamp from California is known with the first patents⁶ in the electric guitar history. Since 1930-1940 the Jazz musicians like Charlie Christian (Fig.3), Eddie Durham has started to use this new technology in music.



Fig. 3 – Jazz Guitar Model played by Charlie Christian: Gibson - ES150

In 1950, Leo Fender also from California has developed Fender Telecaster (Fig. 3) and Stratocaster (Fig. 4) four years after. This invention has been very popular especially among rock musicians



Fig. 4 – One of the first telecasters produced



Fig. 5 – A close-up photo of a Stratocaster

In the last years of 20th Century two invention more has been produced: the micro tonal guitar⁷ which is known with John Catler and fretless guitar (Fig.6) known with Erkan Ogur.



Fig. 6 – A fretless guitar

Today we have many guitar models used in different music styles and in the many large part of the world. As Benjamin Ellie⁸ mention « This multitude happens with an evolution in the time and some instruments like “vihuela” are not used anymore and replaced by others. That can be explained by cultural adaptation. ».

A fretless guitar is not appropriate for a multicultural play but it is more practical in oriental way of playing. The physical balance that we can see on the fingerboard of the semi-fretted guitar/semi-fretless guitar show also the multicultural direction that we make available: open at the same time to two cultures; occidental by the fretted first part and simultaneously oriental by the fretless part without frequency limitation.

2. Oud

The fretless part of the fingerboard of the semi-fretless guitar can be taken as oud. For placing the invention in a timeline and a cultural-geographical spectrum, the oud will be the second instrument to mention. The history of oud is ancient as guitar's history and maybe more ancient because it is simpler than guitar. We know also the existence of Arabic culture in Andalusia in 8th Century so we can think twice about it. As the goal of our work is not the figuring out which is the first instrument between guitar and oud we let this discussion here and pass to the general history of oud. We go back to the lute as in guitar so to approximately to five thousand years ago. Sumerians, Akkads, Babylonians, Assyrians⁹ are in the most important civilizations in the pre-history of oud. Today, it is used in Greece, Turkey, Iraq, Iran, Azerbaijan, Armenia, Tunisia, Egypt, Jordan, Syria and in Somali in different names like Oud, Ud, Outi, Barbat, Kaban in different forms and tuning systems. “**Post-Ottoman**” can be evaluated a key adjective (by a historical reference to his imperial borders in the beginning of the 19th Century) cover the most part of this large cultural and geographical zone. As in the all empires it can be a common musical language and the word “**maqam**” as we find in the Arabic literature and “**makam**” as we find in Turkish literature is the most useful technical term.

Comparatively speaking the oud has a shorter fingerboard and a pear-shaped resonating chamber. The main difference is about the fret system; an oud doesn't have fret so that's how the oud player can give some essential pitches of makam music that he can not find on a fretted fingerboard.

Another big difference is about the method written for the instrument. That has started only after westernization in Asia and Asia-minor, it means four hundred years after the method written for the lute in Europe. The most popular and academically accepted oud method is written by Prof. Mutlu Torun and is published in 1993¹⁰. Serif Muhiddin Targan also has written a method. Targan is one of the founder of the Baghdad Conservatory (1936-1948) in which famous oud players like Munir et Jamil Bashir has studied. His

method is published in Turkey only after the method of Prof. Mutlu Torun¹¹. When we compare a western and easterner culture about method writing, we find a big difference like 1560 and 1993.

Conclusion

The question that we had as starting point on semi-fretless guitar production was "How we can enhance the possibilities of a musician, how we can give awareness on the richness of two musical languages which is tonal (of occidental culture) and makam language (of oriental culture). Using this invention we can teach, learn, and play the fretted sounds, scales, harmonies, polyphony of guitar and fretless sounds and ornaments of makam and much Asian music with one instrument. As Canadian musicologist Jean Jacques Nattiez mention in his book "Musicologue"¹², we think also that a musicologist (and ethnomusicologist) has to serve to the "l'accumulation du savoir" (accumulation of knowledge) in his domain. After our PhD thesis on "The Change of Turkish Makam Music after 1950's"¹³, we have seen clearly that we should make more available and accessible the knowledge of this post-ottoman urban music tradition. So I have decided to produce a second model¹⁴ always at the same direction¹⁵.

This instrument will be practical for playing gliding tones that used in many music cultures like Indian, Chinese, Japanese and also in Blues with his famous "blue note". We accept also that there is cultural difference between east and west, between the oriental and the occidental¹⁶, we do not intend to eliminate the differences but make them live together. We think that the invention can help to the growth of cross-cultural understanding.

It is now very important to prepare a multiculturally rich method of this guitar firstly in English. After all, the invention should be based on culturally balanced way of thinking so writing a method naturally means that we care about the westerner methodology in our multicultural project¹⁷.

We hope and believe that the invention of semi-fretless guitar may be classified as a multicultural musical instrument who will help the coexistence of the two main musical system which are; tonal and makam music systems.

Reference

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7. For a recent invention with adjustable micro-tonal guitar: <http://www.tolgahancogulu.com/tolgahancogulu-ile-roportaj-soundboard-vol-36-no-3-ekim-2010/> and <http://www.tolgahancogulu.com/mikrotonal-gitara-1-lik-odulu/>
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10. Torun Mutlu, Ud Metodu – Gelenekle Geleceğe (Oud Method – To the futur with the tradition), Caglar Yayinlari, Istanbul, 1993.
11. Targan Serif Muhiddin, Ud Metodu, Caglar Yayinlari, Istanbul, 2003.
12. Nattiez, Jean Jacques, Le Musicologue, Les Presses de l'Université de Montréal, 2005.
13. A list of URL link on interviews (only in Turkish for the moment) done with the musicians of post-ottoman Turkish Urban Music can be found on the "References" part.
14. The first model was a semi-classic guitar with 7 frets. The second guitar has 5 frets. The second one naturally gives more opportunity for makam music and the first more user friendly for playing chords.
15. Senalp Togay, What should be our national direction in music, www.rastmd.com.
16. Nisbett Richard, Ibid.
17. The maqams/makams (Rast, Hicaz, Nihavend) and rhythmical patterns (5/8 Türk Aksağı, 6/8 Yürük Semai, 8/8 Düyek , 9/8 Aksak) will be explained in the method book planned.