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Microtonal Guitar Culture in Turkey

ABSTRACT

The main objective of this article is to analyze the development and the contemporary artistic milieu of microtonal guitar culture in Turkey. With a particular focus on the adjustable microtonal guitar developed by Tolgahan Çoğulu, we examined musicians' experiences and the ways that they relate to this musical instrument. We used qualitative research methods and conducted in-depth interviews with our key informant and adviser Tolgahan Çoğulu as well as eight musicians who specialize in microtonal guitar. We utilized Bennett and Peterson's definition of 'scene' to discuss microtonal guitar culture in Turkey. After briefly presenting the development of guitar music and questioning the nature of its representation in Istanbul, we analyzed the themes that emerged in conversation with the guitar players. We determined that our interviewees, who are educated, enthusiastic and committed musicians, are all influenced by Tolgahan Çoğulu's efforts to shape the microtonal guitar world and are driven by their own artistic motivations. We found that musicians shared views on the innovative and promising qualities as well as certain live performance-related difficulties of this instrument –including the need to hammer new frets for different tuning systems on stage and the necessity of sharing microtonal guitar music recordings or videos using new media technologies. Although musical pieces in the microtonal guitar repertoire are mainly rooted in Turkish music, many consider this instrument to be an attempt towards overcoming the generally accepted distinctions between Western and Eastern music. We aim to contribute to further analysis of this flourishing music culture through our discussions on future implications of the current situation and our projections for the growing interest in microtonal music in Turkey.

KEYWORDS

Microtonal guitar

Music scene

Turkey

Tolgahan Çoğulu

Introduction

While music as a way of communication and self-expression can create harmony among the members of a group or society, different instruments may also bring different perspectives based on different expressions by music makers. In this regard, the nature of musical representation cannot be put forward without questioning the nature of musical instruments. New instruments not only bring new sound opportunities, but also give an idea about different music cultures. In this article, centering the adjustable microtonal guitar developed by Tolgahan oęulu, we aim to examine the development of this recent invention and the opportunities it provides. In this collaborative research, in order to examine the emerging microtonal guitar culture in Turkey, we conducted semi-structured in-depth interviews¹ in January 2021 with prominent guitarists from Turkey who specialize in microtonal guitar, namely Akın Eldes, Ali Deniz Kardelen, Batuhan Karatay, Emre nlenen, İlke Şen, Salih Korkut Peker, Süleyman Hakan Görener, Tufan Kurdoęlu. Tolgahan oęulu has been our key informant throughout our research and served as the reference person in determining our interviewees. We also conducted a separate interview with oęulu to grasp the world of adjustable microtonal guitar.

After completing our literature review, followed by our in-depth interview recording² and transcription period, we realized a text-analysis in order to come up with the prominent themes and sub-themes. We structured our article as follows: In order to make sense of microtonal guitar's place in Turkey from a historical perspective, we examined how classical guitar evolved and how new inventions paved the way for adjustable microtonal guitar. Subsequently, in order to question the nature of the flourishing microtonal guitar scene, we positioned microtonal guitar music within the broader guitar culture milieu in İstanbul. The following sections describe the results and discussions that arose from the responses of our interviewees. In this context, after briefly mentioning educational background of our informants, based on the interviews, we discussed the following respectively: Pros and cons of the adjustable microtonal guitar, artistic attitudes and motivations of the musicians, the current position of adjustable microtonal guitar in

¹ Before conducting interviews, we applied for and received an ethics committee approval report from the corresponding author's affiliated institution, Maltepe University, Istanbul (Turkey). All interviews were conducted in Turkish and translated into English by the authors.

² Because of the Covid-19 pandemic, our interviews were conducted via Internet, following the ethical requirements of a qualitative research and in accordance with the availability and consent of the musicians.

Turkey and what to expect in the near future, the adjustable microtonal guitar's relationship to new media, and increasing public interest in microtonal guitar.

A Historical Overview: The Past and The Present of Guitar Culture

Musical innovations, technological advances and different guitar designs which push the limits have enabled guitar players going beyond conventional methods of playing. These developments also challenged assumptions about the nature of music and guitar. While “early efforts were taken to extend the instrument’s tessitura, or powers of projection” (Schneider, 2015: 58), the guitar still continues to evolve.

The instrument today known as the guitar dates back to the early 19th century. According to Harvey Turnbull, although the exact date for the transition to the six-string guitar is uncertain, “six-course guitars with an extended tuning became established in Spain at some time before 1780” (Turnbull, 1991: 62, 63). However, for him, this transition period cannot be reduced to “a single line of development” (Turnbull, 1991: 62). Nevertheless, some major cities of the 1800s evidence the increasing importance of six-course instrument: “By the beginning of the 1800s, the instruments found in Paris and Vienna, the two centers for guitar performance, boasted six single strings and tended to be wider and sturdier than its five-course predecessor” (Schneider, 2015: 3). The first half of this century is also called as ‘The Golden Age of Guitar,’ paving the way for developments in the instrument and playing techniques due to the influence of “a generation of composer guitarists including Fernando Sor (1778-1839), Mauro Giuliani (1781-1829), Ferdinando Carulli (1770-1841), Dionisio Aguado (1784-1849), and Matteo Carcassi (1792-1853)” (Çoğulu, 2011: 41). Graham Wade, on the other hand, emphasizes the pedagogic and the creative aspects of the guitar in the same time period: “Great teachers of the age developed the techniques...The leading guitarists also endeavoured to compose extended musical structures...” (Wade, 2012: 99)

Although the classical guitar's physical form is standardized as a six-stringed instrument with twelve equally spaced semitones in each string, many have attempted to design the guitar differently.³ These efforts also parallel the musical innovations and some avant-

³ One of the early contributors to the development of classical guitar, Spanish luthier Antonio de Torres lived in the 19th century, designed a specific structure to reshape guitar with a focus on “string length, fan-strutting beneath the front of the instrument, overall proportions, types of wood used, quality of tone etc” (Wade, 2001: 94).

gardist movements of the 20th century. Questioning 12-tone equal temperament to overcome sound limitations might be considered one of the heated discussions of the early 1900s. However, the start of this debate goes back centuries earlier. Different figures suggested a different division of the octave. Their main motivation was to change the gradation of the octave from finite to infinite. In other words, they sought to find different microtones, pitches less than a semitone. This effort was also related to the distinction between just intonation or Renaissance/Baroque period tunings (meantone and well temperaments) and 12 tone equal temperament.

It's possible to start the history of the microtonal guitar with the 'Enharmonic Guitar' designed by Perronet Thompson in 1829, which has hundreds of holes on its fretboard. The first efforts to produce microtonal guitar with individually movable frets date back to 1845. This early production of guitar is known as '*guitare à tempérament réglable*' and it was produced by luthier René François Lacôte and Henry Carnegie Carden (Schneider, 2015: 61; Westbrook, 2012).

Moving into the 20th century, re-fretting guitars in this period was firstly pioneered by Julian Carrillo, Augusto Novaro, Alois Hába and Harry Partch. Lou Harrison, Terry Riley, LaMonte Young, Ben Johnston and others followed them (Schneider, 2015: 60). Tom Stone made the first attempt to commercialize microtonal guitar. Designing many interchangeable fingerboards was considered to allow musicians to have different tuning possibilities:

"Like Harrison, the guitarist and luthier Tom Stone, an instructor at the San Francisco Conservatory, wanted to free the guitar of its reliance on equally tempered frets... Stone didn't want to lock the guitarist into any single tuning system. His ingenious solution was to create a system of interchangeable fingerboards, each of which could be swapped out and locked to the neck of a single guitar" (Alves et al., 2017: 343).

However, the promising company started by Stone went bankrupt in 1985 (Schneider, 2015: 60). Meanwhile, Daniel Friederich and Walter Vogt were also interested in how to overcome intonation problems of the guitar. In 1977, Friederich came up with a 'meantone guitar' with movable frets. "In 1985, Vogt invented a guitar with a fretboard he called 'the Fine-Tunable Precision Fretboard', on which all the frets are movable for

limited distances via the channels under the strings,” Çoğulu said (Turkish Musician Invents a Guitar for Music of East, 2013).

Schneider notes the problem with these two systems, writing that “the fretlets can only enter a channel from the end of the fingerboard at the soundhole: if an extra fret is required between 2nd and 3rd fret, for example, all of the frets would have to slide forward from above and subsequently retuned” (Schneider, 2015: 63).

In 2008, Tolgahan Çoğulu, a Turkish guitarist and PhD student at Istanbul Technical University at that time designed an adjustable microtonal guitar inspired by Lacôte and Vogt. Çoğulu states:

“On the adjustable microtonal guitar’s fretboard, there are channels under each string. I have 150 fretlets (little frets) that can be inserted into or removed from these channels. These fretlets can also be moved along the fretboard as you wish. I should say that the channel idea belongs to the German luthier Walter Vogt... Thanks to the financial support from Istanbul Technical University and luthier Ekrem Özkarpaz, I have a fretboard and fretlets that have all the properties I need” (Çoğulu, 2010: 80).

We can interpret Çoğulu’s statement about microtonal guitars as a search to find unconventional guitars with different tuning systems, one aimed at increasing the flexibility of the players by improving the range of intonational possibilities. Çoğulu, who founded the world’s first microtonal guitar department in 2014, has been working at Istanbul Technical University Turkish Music State Conservatory since 2003. He also received the first prize at Georgia Tech Margaret Guthman Musical Instrument Competition in 2014 (Tolgahan Çoğulu, 2021). Moreover, he started the world’s first microtonal guitar competition in 2016 and organized the world’s first microtonal guitar festival in 2019.

Çoğulu has not yet succeeded in transforming the adjustable microtonal guitar from an esoteric instrument meaningful to academics and fellow guitarists to a wider audience of popular music. However, he makes great efforts to spread this guitar throughout the world. More recently, Tolgahan Çoğulu’s new design with a collaboration with his son Atlas Çoğulu and Ruşen Can Acet, lego microtonal guitar, won the ‘People’s Choice’ award and became a finalist in the Guthman Musical Instrument Competition (2021)

A Contemporary Look: Can We Speak of a “Microtonal Guitar Scene” in Turkey?

The innovations, experimentalism and change in techniques in the pursuit of novelty within the guitar culture paved the way for the emergence of the microtonal guitar. In addition to the organological analysis presented in the previous part, we can now focus on and question this guitar’s current position within the broader music milieu. This will subsequently reveal its multilayered importance ‘as’ a culture on its own, and ‘in’ the music culture of Turkey. Merriam (1964: 32) had initially proposed such a cultural-focused approach in his model, which designates conceptualizations of music and the sound of the music itself as the essential analytic levels for analyses.

Fundamentally, it is possible to see the emergence of microtonal music long before its incorporation with guitar. Earlier examples of microtonal music date back to the post-Renaissance period. The Baroque Temperaments including ‘meantone temperaments’ and ‘well temperaments’ were followed later by ‘equal-tempered microtonality’ (19, 24, 31 TET etc.). Yet we could even trace its origin back in the ‘Pythagorean Tuning.’ When we analyze the history of music, Middle Eastern music (specifically Ottoman, Turkish, Kurdish, Arabic, Armenian, Persian, etc.) and Asian music (Indian Raga Music, Gamelan / Balinese Music, Thai Music, Vietnamese Music, etc.), as well as Breton music in France come to the forefront among its relatively minor usages within other genres (i.e. microtonal popular music, electronic music, spectral music, contemporary music, etc.). That is to say, microtonal guitar flourished significantly within microtonal folk/traditional music.

While trying to figure out the meaning and representations of microtonal guitar and locate its culture in a wider geographical context, the visibility and the prevalence of its usage come into prominence. The concept of “music scene”, used by many contemporary scholars such as Straw (1991: 470-78), is an explanatory concept that defines the characteristics of a particular music genre or style that is performed on a particular space in a distinct geographical region. Straw also defines “*musical community*”: a community or social group based around a particular music genre where there is a high level of interaction among its participants. Here, not only the musicians, but the audience and all of the social actors who contribute to the realization of a performance, their action before,

during and after the musical event matter⁴. Even though each music scene is unique and has its own cultural dynamics, Bennett and Peterson (2004: 7-8) define three general types of scene:

“‘Local scene’ corresponds most closely with the original notion of a scene as clustered around a specific geographic focus... ‘Translocal’ scene refers to widely scattered local scenes drawn into regular communication around a distinctive form of music and lifestyle... ‘Virtual scene’ is a newly emergent formation in which people scattered across great physical spaces create the sense of scene via fanzines and, increasingly through the Internet.”

In this sense, microtonal guitar music in Istanbul seems to mostly fit into the second type, the *translocal* scene as it is performed by various musicians scattered around the world. Even though these musicians are few in number and not geographically close to one another to create a practical face-to-face music scene, they manage to perform both regular⁵ and occasional academic and non-academic meetings. In addition, their web-based networking and YouTube Channels, especially the highly followed channel of our key informant Tolgahan Çoğulu,⁶ constitute a *virtual* scene within a broader geography. However, when compared to other ‘guitar music’ gigs in Istanbul, microtonal guitar performances are not scattered around many districts of Istanbul (even the cultural centers of the city, such as *Kadıköy* or *Beyoğlu*) as they do not yet regularly take place within performance halls or venues designed for a small range of audience members. It is therefore still early to observe a rooted local microtonal guitar scene in Istanbul. Instead, microtonal guitar musicians with high-level artistic talent are in the pursuit of sharing their creativity with a larger scale audience as much as possible. One can also speak of a music scene of a distinct city. The global image of Chicago blues may be an example, but it seems quite early to deem Istanbul the pioneer of microtonal guitar music scene. The emerging microtonal guitar culture thus reveals a small fraction of the larger Istanbul music culture, alongside other genres, such as western-originated genres (e.g. alternative rock, EDM or hip-hop, etc.) or many different *türkü* styles and Turkish folk songs

⁴ Such an approach reminds us of the description of “art worlds” (Becker, 1997) and revolves a great deal around the concept of “field” (Bourdieu, 1984).

⁵ III. Microtonal Guitar Competition (<http://www.miam.itu.edu.tr/en/2018/12/24/iii-international-microtonal-guitar-competition/>) held at Istanbul Technical University State Conservatory’s Centre for Advanced Studies in Music exemplifies this attempt to extend the microtonal guitar culture.

⁶ <https://www.youtube.com/tolgahancogulu>

originating from different regions of Anatolia. In this sense, it should be noted that seeking a clear-cut distinction between a music scene and a musical community does not contribute to the interpretation of the rising multifaceted existence of microtonal guitar in the intra-musical and extra-musical world of Istanbul. As a result, at the beginning of the 2020s, we have observed that the expansion of microtonal musical performances is rather at a slow (even though strong and significant) pace.

It is also useful to keep in mind that microtonal guitar music, just like other music styles and genres is a part of the cultural material through which an art milieu is constructed. As de Nora (2004: 123) explains, music scenes and cultures offer different kinds of agency, different sorts of reception and ways of being. In this sense, the following part aims to analyze the contemporary microtonal guitar music culture in Istanbul throughout its most efficient agents: the musicians.

Results and Discussions

Educational Backgrounds of the Informants

Our interviewees who encountered microtonal guitar in their 20s or later have different educational backgrounds.⁷ Some of them were educated in music schools, while others were oriented towards music in different ways. For example, while Akin Eldes predominantly improved his musical skills by himself, Emre Ünlenen graduated from the Classical Guitar Department of Bilkent University. İlke Şen completed his second undergraduate education in the composition department and then obtained his master's degree in this field. He is still pursuing his PhD in the Composition Department at İstanbul University. Batuhan Karatay, who is also an opera singer, graduated from Ankara University State Conservatory with a degree in opera-singing. Tufan Kurdoğlu, who started to learn music in his 20s, graduated from the Department of Economics. He is the first PhD student of the microtonal guitar department at the Center for Advanced Studies in Music at Istanbul Technical University. He has also been a lecturer at Istanbul Technical University, Turkish Music Conservatory since 2016. Ali Deniz Kardelen started to study guitar at a very early age and won awards in various international competitions.

⁷ It is also interesting to note that most of the microtonal guitar players are males. As evidence, Çoğulu stated that microtonal guitar players are mostly men (Tolgahan Çoğulu, Personal communication, January 11, 2021). There are only a few female guitarists such as Sevcan Tahtacı Çukur and Bahar Adıgüzel specialized in microtonal guitar. All of the guitarists we interviewed are also males.

Süleyman Hakan Görener, who studied in the Department of Electronics and Communications Engineering at İstanbul Technical University, bought his first guitar in 2000. He was the first Master's student of the microtonal guitar department at the Center for Advanced Studies in Music at İstanbul Technical University. Salih Korkut Peker, who started playing guitar at the age of 16, has made musical studies with many professional groups. The designer of the adjustable microtonal guitar, Tolgahan Çoğulu, who received his bachelor's degree in Business Administration from Boğaziçi University, continued his graduate studies at the Center for Advanced Studies in Music at İstanbul Technical University and gradually became a guitar professor.

Pros and Cons of the Adjustable Microtonal Guitar according to Informants

When we asked our informants about the differences between classical guitar, fretless guitar and adjustable microtonal guitar, they stated that these three different guitars have different advantages and disadvantages. Strangely enough, without realizing it, our interviewees answered this question mostly on the basis of the differences between fretless guitar and microtonal guitar. This might be related to the idea that many musicians consider the adjustable microtonal guitar as an alternative to the fretless guitar in some ways. For instance, Görener said that “adjustable microtonal guitar will play a complementary role to the fretless guitar with the techniques and facilities it provides in harmony” (Süleyman Hakan Görener, Personal communication, January 22, 2021). On the other hand, it is also possible to conclude that the adjustable microtonal guitar removes some of the shortcomings of the classical guitar. According to the interviews, one of the main findings is that the microtonal guitar offers new opportunities for different guitar playing techniques and sound rather than being superior to other guitars. Süleyman Hakan Görener's statement that “all guitars have their own sounds” (Süleyman Hakan Görener, Personal communication, January 22, 2021) exemplifies this situation. Considering fretless guitar and microtonal guitar, Şen also made a similar comment to Görener: “...the fretless guitar also has a window that it opens in its own way, and that's the beauty of it. Therefore, I am not very fond of such comparisons. Otherwise it sounds like we're comparing an apple to a pear” (İlke Şen, Personal communication, January 08, 2021).

As mentioned before, classical guitar's physical form is standardized as a six-string instrument with twelve equally spaced semitones in each string. This form is well

appreciated in classical music and also serves for standardization.⁸ However, it seems to have some disadvantages in different systems of melodic modes built upon different scales such as maqam music. The comments of our interviewees about the classical guitar demonstrate this. For instance, Kardelen stated that “classical guitar is a more suitable instrument for tonal music,” (Ali Deniz Kardelen, Personal communication, January 24, 2021) while Eldes mentioned the inadequacy of this guitar for maqam music (Akın Eldes, Personal communication, January 18, 2021). Similar to Kardelen, Peker also points out that “the classical guitar is a very important instrument for getting to know the map of the world created by western harmony” (Salih Korkut Peker, Personal communication, January 23, 2021). Peker also claims that 12-tone equal temperament has certain limitations. He adds that such limitations mainly restrict representations of different cultures like that of Turkey.

On the other hand, fretless guitar aims to go beyond sound limitations of classical guitar. It allows musicians to explore microtonal chords and melodies. In their ethnomusicological research, Kevin Dawe and Sinan Cem Eroğlu point out the importance of Erkan Oğur, one of the most important pioneers of fretless classical guitar in 1976, and they make the following statement:

“We establish some baseline data and evidence for the role of key individuals in the establishment of Turkish guitar culture. It is clear that Erkan Oğur has been a driving force behind the establishment of this instrumental culture and that he has made a broader contribution to Turkish musical life beyond the guitar” (Dawe & Eroğlu, 2013: 69).

While fretless guitar, unlike classical guitar, provides new opportunities for playing microtones, Ünlenen (Emre Ünlenen, Personal communication, January 10, 2021), Şen (İlke Şen, Personal communication, January 08, 2021) and Karatay (Batuhan Karatay, Personal communication, January 17, 2021) stated that it sounds more like oud⁹ than guitar. As Karatay stated, flexible microtones broadening musicians’ horizons in

⁸ Weber, in his rationalization theory, alleges that western music depicts rational foundations of music (Weber, 1958). Standardization of music notation and the instruments results in the same pitch, sound and timbre opportunities. Turley further states that “Weber identifies the historical and economic advances of the piano as symptomatic of the rationalization process at work in capitalist societies, because this was the goal of his design” (Turley, 2001: 639). Classical guitar also represents an example of rationalization of music.

⁹ Oud is a lute-like, pear-shaped string instrument “prominent in medieval and modern Islāmic music” (Üd, 2010). It resembles fretless guitar since they both have no frets.

ascending and descending scales are the most explicit advantages of fretless guitars. For this reason, Akin Eldes views such guitars as instruments with infinite freedom (Akin Eldes, Personal communication, January 18, 2021). According to our informants, other positive outcomes or advantages of fretless guitar include its contribution to various genres of Turkish music, the expansion of the musical possibilities of the oud and the tambur ¹⁰ and having a plummy sound. When it comes to disadvantages, our respondents mentioned the following negative features of the fretless guitars: difficulty overcoming guitar intonation issues, the inconvenience when playing chords with a wide variety of notes, difficulty finding the exact location of the microtones, lack of classical guitar's brightness and timbre in tonality and difficulty in playing.

Our informants presented their opinions on adjustable microtonal guitar in terms of general sound and musical possibilities, playing techniques and the place of guitar in practice. First of all, most of the interviewees stated that the microtonal guitar sounds more like a guitar than a fretless guitar. According to our informants, having more possibilities in different chord systems compared to the classical guitar, clearer voices and easy detection of microtones compared to fretless guitar seem to be the most explicit advantages of adjustable microtonal guitar. The feature of not losing the guitar tone in polyphonic arrangements, providing performance opportunities for both modal and contemporary music, offering an ergonomic advantage in bringing the horizontality of modal music and the verticality of western harmony seem to be other advantages of adjustable microtonal guitar with regard to sound and musical possibilities. In addition to these, Görener claimed that adjustable microtonal guitar supports new inquiries into other instruments such as baglama¹¹ and tambur since it requires consideration of how to calculate frets using microtones (Süleyman Hakan Görener, Personal communication, January 22, 2021). However, Ünlenen made a critique against the progress of music made by adjustable microtonal guitar. He told us that "with the influence of Tolgahan Çoğulu, these guitars have always been identified with an approach based on Turkish music" (Emre Ünlenen, Personal communication, January 10, 2021). He also thinks that timbral

¹⁰ Tambur is a fretted, long-necked, popular string instrument mainly used in Turkish classical music.

¹¹ Baglama is a plucked, traditional stringed instrument having a pear-shaped body and mainly used in Turkish folk music.

features in adjustable microtonal guitar, where nails are more prominent, distinguish this instrument from fretless guitar.

Explaining the difference between Eastern and Western cultures, architect Serkan Duman draws attention to the boundaries and possibilities of expression between different guitars. Identifying the Western view with measurability and the Eastern view with immeasurability, the artist emphasizes that the microtonal guitar has enough detail for a Westerner and carries traces of Eastern culture:

“The structure of Eastern cultures cannot be grasped with a superficial look... For a Western and modern eye that is accustomed to measurability, Eastern culture is like a fretless guitar at first glance; it is featureless, incalculable and without detail ... When given a little time, when it is grasped with time and experience, it is understood how much depth the East contains. At that time, it turns out to be a more detailed and variable world, a high culture that requires great care and study to be perceived and grasped. The visualized version of this situation is the microtonal guitar for the Western eye who wants to see that detail”¹² (Duman, 2017: 203).

On the other hand, according to the findings we obtained from the interviews, although the theoretical foundations seem strong, the adjustable microtonal guitar has some practical issues. Half of our informants think that, since this guitar doesn't have a proper design allowing a fixed pitch system, it is very difficult to switch different tunings for different musical pieces in different maqams. Kardelen stated that “it is very troublesome to add new frets by constantly hitting with the hammer, to think of different notation for different tonalities” (Ali Deniz Kardelen, Personal communication, January 24, 2021), and Şen added that this system is a primitive one. He also told us that “the constant testing of new tuning arrangements with hammers is like a torture” (İlke Şen, Personal communication, January 08, 2021) He illustrates one of the practical problems of the adjustable microtonal guitar: the difficulty of creating a different tuning system each time when switching to different musical works. However, Şen (İlke Şen, Personal communication, January 08, 2021), Kardelen (Ali Deniz Kardelen, Personal communication, January 24, 2021) and Eldes (Akın Eldes, Personal communication, January 18, 2021) stated that making a fixed pitch system or a new design allowing

¹² Translated by the corresponding author.

automatic switching to different chord systems would eliminate these drawbacks. According to our interview, Çoğulu also seems to be aware of this practical issue (Tolgahan Çoğulu, Personal communication, January 11, 2021).

Artistic Attitudes and Motivations of the Musicians

Tolgahan Çoğulu plays the leading role in implementing the microtonal guitar music in Turkey. He is the key academic figure within the guitar department of Istanbul Technical University State Conservatory and the International Microtonal Guitar Competition. He sends free frets to those interested in adjustable microtonal guitar all around the world in addition to creating instructive guitar videos on his highly followed YouTube channel. Consequently, other microtonal guitarists in Turkey are, to different extents, professionally related to him. In order to portray the microtonal guitar music culture in Turkey, it is essential to fully grasp the artistic motivations and attitudes of the major musicians who contribute to the growth of this music.

According to our interviews and observations, the essential dominant characteristics of all of our informants happen to be their enthusiasm about excelling in guitar by going beyond the limits of their instrument and their will to discover new sounds that might alter the existing sound spectrum of guitar. Artistic curiosity, intelligence, innovation and devotion emerged as the keywords to define their approach to microtonal guitar music. Another remarkable common point that these musicians share is they were all influenced, to different degrees, by the hard work of Tolgahan Çoğulu. For instance, according to Kurdoğlu, once the musician starts discovering the adjustable microtonal guitar, they get to know the limits of guitar better. His main motivation is his quest for trying new things and according to him this is how a repertoire of microtonal guitar is born. He shares one of his observations among Turkish musicians as follows:

“I’ve always seen Classical Turkish music composers who would show interest in Western polyphony, playing the piano or syncretizing these two musical traditions. Similarly, many piano or guitar players would usually like to play tambur or oud and blend these seemingly different tones and styles” (Tufan Kurdoğlu, Personal communication, January 10, 2021).

He thus thinks that microtonal guitar offers a passage between different sound systems from around the world and innumerable chances of experimentation. Many musicians including himself call this ongoingly enlarging capacity the 'black hole'. Starting back when he was playing flamenco guitar, whenever Kurdoğlu would meet a new music culture, he would ask himself how it could be expressed with guitar. He is therefore quite optimistic about the development process because he thinks that, when a musician learns to adapt his guitar to a new sound system, he definitely would leave a unique trace. That is why, he says: "Whatever a musician does with his microtonal guitar, it turns out to be something new" (Tufan Kurdoğlu, Personal communication, January 10, 2021).

Intellectual curiosity always lies beneath our informants' artistic interest in adjustable microtonal guitar. Not only they compare different guitars, such as fretless and classical guitar but they also seek to find similarities between different techniques and systems. As the head of Guitar Department of Anadolu University State Conservatory and a musician, Ünlenen's motivation is to develop microtonal guitar techniques from a comparative perspective (Emre Ünlenen, Personal communication, January 10, 2021). Concomitantly, Karatay's main motivation is associated with the capacity of playing polyphonic music with microtonal guitar. Karatay finds microtonal guitar more suitable for Turkish folk music arrangements, as it eliminates the intonation problem, when compared to fretless guitar (Batuhan Karatay, Personal communication, January 17, 2021). Similarly, Peker compares the classical guitar with fretless guitar in terms of artistic freedom, timbre and artistic techniques. He underlines that all musical instruments tend to 'imitate' nature and thus be natural and free in some ways; that is why more freedom of a satisfying adjustable microtonal guitar performance would inevitably become more and more appealing in the near future (Salih Korkut Peker, Personal communication, January 23, 2021). As the second prize winner in the composition category of the 4th International Microtonal Guitar Competition in June 2020, Şen's main motivation also lies in the capacity of adjustable microtonal guitar to present a blend of options that combine aspects of classical guitar and fretless guitar. He therefore appreciates the opportunity to produce microtones and the polyphony of guitar at the same time (İlke Şen, Personal communication, January 08, 2021).

As a mathematician and an award-winning finger style guitarist, Kardelen sees many pure mathematical systems in changing the frets and creating new sounds with adjustable

microtonal guitar. Kardelen also shared with us the inconvenience of changing the frets from one song to another while performing on stage. Still, he considers this an engineering issue (Ali Deniz Kardelen, Personal communication, January 24, 2021).

Eldes's main motivation is to play the sounds that he hears in his mind. He is mainly interested in creating certain sound patterns with his guitar. As he likes experimenting new things, he finds it fascinating when it comes to adjusting the positions of the frets with a hammer and says: "Honestly, when I first saw the microtonal guitar, I kind of found it a bit startling. It was huge, like an ocean" (Akin Eldes, Personal communication, January 18, 2021). He started playing microtonal guitar with oęulu after a musical lecture held at Boęazięi University. Before, he used to accompany him with his well-tempered electric guitar. He still remembers how he was captivated when he first heard the sound of the microtonal guitar.

On the other hand, Grener's main artistic motivation derives from his interest in discovering what lies beneath the logic of Turkish maęam system. As one of the award winners of last year's international microtonal guitar competition with his arrangement for *Hseyini Saz Semaisi*, he finds this guitar as one of the most promising "research-development efforts" of music and as the "latest instrument within Turkish music" (Sleyman Hakan Grener, Personal communication, January 22, 2021).

The General Framework of 'Microtonal Guitar Culture' in Turkey: Current Situation and What to Expect in the Near Future

Our informants' perspectives on the near future of microtonal guitar culture in Turkey revolve around certain requirements, including the necessary increase in the microtonal guitar repertoire, the decrease in the cost of manufacturing¹³ and the elimination of some practical problems in performance.

Concerning the current situation that will eventually shape its near future, Kurdoęlu points out that one of the most distinguishing characteristics of microtonal guitar is its "reconciliatory" aspect. He says: "Many musical instruments are subjected to so-called Eastern and Western divisions, whereas microtonal guitar is only interested in innovative

¹³ According to oęulu, there are only six adjustable microtonal guitars manufactured worldwide until today (Tolgahan oęulu, Personal communication, January 11, 2021).

works rather than these conflictual artistic dilemmas” (Tufan Kurdoğlu, Personal communication, January 10, 2021). He even shares his own experience as follows:

“I started playing classical guitar with flamenco through Moyano, Pera and Juan Martin methods. When I played Victor Jara or Inti Illimani, people were asking why I was not playing something local, something ‘from here’, a Turkish folk song for example” (Tufan Kurdoğlu, Personal communication, January 10, 2021).

So, he observes that people now find a kind of sense of belonging or familiarity when they hear the sound of microtonal guitar. Yet, he finds what it has to offer quite unique: “To me, baglama sounds like baglama, tambur sounds like tambur and microtonal guitar surely sounds like itself!”. (Tufan Kurdoğlu, Personal communication, January 10, 2021). According to Kurdoğlu, the future of this flourishing guitar culture depends highly on an upcoming passage to “mass production” of microtonal guitars and a considerable amount of cost-cutting. But he adds: “This seems like a bit far-off wish given the current instrument market in Turkey, where even classical guitars are mostly imported from China, let alone new costly instruments!” (Tufan Kurdoğlu, Personal communication, January 10, 2021).

Peker thinks that microtonal guitar will rapidly gain recognition and respect within the academic milieu and classical music entourage rather than gaining popularity in the music industry. He sees conservative attitudes as the main reason for this situation. Yet, he thinks that evolution is the destiny of all musical traditions and innovations would eventually fall into their place in the end. Peker evaluates microtonal guitar music as an “elaborate restaurant with fine dining where everyone appreciates but rarely goes!” (Salih Korkut Peker, Personal communication, January 23, 2021).

On the other hand, Eldes hesitates about the pace of microtonal guitar’s popularity in the near future because changing frets and adjusting might seem a bit unpractical for some stage performers. Eldes attributes a ‘soloist’ position to microtonal guitar and thus hesitates about its collaboration with other instruments outside its family. He therefore is a bit unsure about its adaptation to popular music bands (Akin Eldes, Personal communication, January 18, 2021). Kardelen thinks that we need time, as we need more compositions and arrangements, in addition to an increase in the number of musicians

like himself who allocated long hours for excelling at microtonal guitar. Yet he sees a great potential in this music culture and shares his anticipations:

“I have this view in my mind; young people who are interested in music in Turkey should have a guitar and a baglama at home. They should get to know these instruments and the whole ‘world’ that they represent at an early age. So, for instance, when they start a rock music band in high school, they can discover microtonal guitar and its almost unlimited playing capacity. This music can reach to millions of people in Turkey. I really find a potential in microtonal guitar music culture in the long run” (Ali Deniz Kardelen, Personal communication, January 24, 2021).

Relatedly, Görener strongly believes that many amateur guitar players, especially in Turkey, will choose microtonal guitar over other guitar types, if high costs in its production can be overcome in the near future. He says, “microtonal guitar includes ‘in itself’ the classical guitar. The increase of its usage within experimental and academic works is remarkable” (Süleyman Hakan Görener, Personal communication, January 22, 2021). He adds more musicians will start playing microtonal guitar as the power of microtonal guitar lies in its capacity to offer different sound systems, a new timbral spectrum and new playing techniques. According to Görener, fretless guitar broadened the possible techniques offered by tambur and oud, and now it is microtonal guitar’s turn to step forth with its latest techniques and innovations specific to harmonics. He additionally observed that after the arrival of microtonal guitar, many musicians have also been questioning the current shape of guitar frets. (Süleyman Hakan Görener, Personal communication, January 22, 2021).

On the other hand, Karatay thinks that microtonal guitar repertoire should expand to a certain extent in order to capture the attention of ‘beginners’ in the near future. Yet, he has hesitations about a notable increase in its popularity in the short term because of the relatively conservative attitudes of the guitar music audience. Similarly, he observes that some guitar players tend to find the change of frets a bit too complicated and hold themselves back (Batuhan Karatay, Personal communication, January 17, 2021).

When questioning the growing interest in microtonal guitar culture in Turkey, Şen attaches importance to the fact that Turkish music is microtonal. He says: “It is of great value to bring together our musical heritage and the sound of guitar” (İlke Şen, Personal

communication, January 08, 2021). Finally, Ünlenen reminds us certain prominent musical events abroad, such as Roseburg Guitar Festival or academic studies on microtonal guitar in Austria and Germany (Emre Ünlenen, Personal communication, January 10, 2021). This growing interest in microtonal guitar in the world and in Turkey will meet at some point so that both guitar players and younger students will simultaneously examine the chord systems of Renaissance and Baroque Periods and maqam system or modal music. We should also underline that there are graduate students in the first microtonal guitar department of Istanbul Technical University State Conservatory under the leadership of Prof. Tolgahan Çoğulu. This culture will become academically more well-established once undergraduate students are admitted to this program starting this year.

Attachment to ‘New Media’: Is It a Requirement for the Microtonal Guitar?

We have observed that all of our informants are aware of the impact of the new media technologies on the representation and proliferation of microtonal guitar music culture. Concerning this phenomenon, Peker thinks that internet and social media are our new city, neighborhood and home. He therefore is attentive to the importance of using the new media technologies to promote the microtonal guitar culture (Salih Korkut Peker, Personal communication, January 23, 2021).

Kurdoğlu finds YouTube an important ‘resource’ both for microtonal guitar players and students as well as for everyone who shows interest in this music, just like the ‘*Music Theory*’ webpage that many conservatory students use, or virtual groups like “The Xenharmonic Alliance of microtonal music aficionados.” Kurdoğlu states that when he uploads a video, he always shares the score to spread this guitar culture. Even though Kurdoğlu does not like spending time on the internet, he observes that his students are more motivated when shooting the videos of their performances. He says: “YouTube is like a personal webpage for musicians these days. I think creating microtonal guitar teaching methods and making them accessible for everyone matters a lot. A person might produce high-quality works after watching your video” (Tufan Kurdoğlu, Personal communication, January 10, 2021). He also draws attention to the lack of decent concert and performance halls in Turkey when contemplating on the importance of the internet.

Kardelen sees social media as a prerequisite in today's music industry, especially if a musician aspires to become a well-known artist. He says, "I spend a considerable amount of time before I share my music on my social media account. I only share the best take of my performance, with the highest audio-visual qualities" (Ali Deniz Kardelen, Personal communication, January 24, 2021). He points out that it has been many years since he watched anything noteworthy about the guitar world on television because Youtube and Instagram are replacing the traditional mainstream media tools. Yet, he has concerns about the continuous consumption of the new media musical content and says: "If I stop posting for a few weeks, the bond with my audience would lose strength" (Ali Deniz Kardelen, Personal communication, January 24, 2021). He admits that when paying so much attention to social media starts to feel like a duty for a musician, it may instead become a burden and wear the musician out.

Karatay emphasized the importance of the new media, especially YouTube, by drawing attention to the growing success of oęulu and his redeemed efforts to introduce this innovative instrument to the world (Batuhan Karatay, Personal communication, January 17, 2021). Grener emphasizes oęulu's success in promoting microtonal guitar via the internet and sees it as a new media cultural movement (Sleyman Hakan Grener, Personal communication, January 22, 2021). His voluntary fret delivery to all around the world is an open-source cultural action. On the other hand, Karatay also shared with us that he sees many encouraging and appreciative comments that on his Instagram account after posting a video, and sometimes sees a random listener expressing their negative reaction by asking a rather ignorant question: "What kind of music is it?" (Batuhan Karatay, Personal communication, January 17, 2021). In a related context, Eldes remarks that he was surprised to see some musicians who tend to teach maęam music on their Youtube channels despite their very limited knowledge on microtonal guitar. He therefore finds the vague and large impact of the new media a bit problematic (Akın Eldes, Personal communication, January 18, 2021).

nlenen, who has contributed to oęulu's YouTube video shoots in Eskişehir many times, shares the belief that oęulu's Youtube channel is more popular abroad than in Turkey. nlenen appreciates oęulu's effort on his YouTube channel and sees him as a "plant seeder" and a "pollen dispenser" on fertile soil (Emre nlenen, Personal communication, January 10, 2021). Finally, řen thinks that today everyone is creating their own new

television and becoming the manager of their own channel. He also thinks that people are able to find responses to their musical needs, at least within a limited virtual community among like-minded people. So, he sees the future of music cultures in the new media (İlke Şen, Personal communication, January 08, 2021).

Increasing Interest in the Microtonal Guitar Culture: Some Reflections on Its Growing Audience

Even though it is not possible yet to observe a wide range of microtonal guitar audience, musicians' efforts to introduce and promote adjustable microtonal guitar in Turkey and abroad is noteworthy. We should first emphasize Çoğulu's and Kurdoğlu's efforts to implement this culture through educational workshops starting with high school music teachers. They have founded the world's first microtonal guitar orchestra with more than 20 high school teachers.¹⁴ Kurdoğlu shares with us their latest effort: "Tolgahan and I gave lectures to many high school teachers on how to change and stick frets, and had a concert for 90 people before the day pandemic hit Turkey. After that concert we quarantined ourselves" (Tufan Kurdoğlu, Personal communication, January 10, 2021). Moreover, they send out free frets and organize microtonal guitar days at fine arts high schools around Turkey. This reveals a unique artistic service that helps to implement an innovative attitude among students at a younger age. Along with guitar festivals such as Istanbul Technical University's Guitar Festival, microtonal guitar seems to be sure to grow in the years to come.

Kardelen remarks a notable growing interest in microtonal guitar in Turkey, especially among young people. He builds this interest on two major grounds: "First, guitar is the ultimate instrument of the 20th century. Especially younger generations show a great interest in innovative guitar techniques and styles" (Ali Deniz Kardelen, Personal communication, January 24, 2021). Secondly, he thinks that microtonal guitar is more capable of meeting the demands of a wider audience in search of what people would call "our music" and states:

¹⁴ Their recordings can be reached at Istanbul Technical University Turkish Music State Conservatory's YouTube Channel: <https://www.youtube.com/watch?v=Xhveqe7IsF0>

“The Turkish audience likes the sound of the microtonal guitar mainly because of the familiarity of its tune. Hearing a microtonal guitar melody that might resemble to the sound of the Prayer, the Alevi music in the djemevi or the traditional music that they heard on the radio during their childhood, somehow appeal to them. This changes the listeners’ reception” (Ali Deniz Kardelen, Personal communication, January 24, 2021).

Similarly, according to Görener’s observation, microtonal guitar proposes unfamiliar melodies within little known sound systems through familiar timbres for a Western ear. That is why he predicts an upcoming popularity for Turkish music-based new styles (Süleyman Hakan Görener, Personal communication, January 22, 2021). Likewise, as more musicians start to incorporate microtonal guitar in their bands, new genres will likely to emerge in the medium term. Yet, Karatay thinks that we still need time for the audience to internalize the microtonal guitar culture, even if they develop an instant liking when they first hear its sound (Batuhan Karatay, Personal communication, January 17, 2021).

On the other hand, Şen sees the current microtonal guitar audience rather among the academics and curious open-minded musicians. The lingering questions concerning the ‘nature of maqams,’ ‘microtones’ and ‘microtonality’ accompany this growing interest. Even if he observes that Turkish listeners both love maqam music and guitar music, he thinks that we still need time to witness the popularization of microtonal guitar music, and says, “we really need a wide repertoire in order to see people saying, we’ll play microtonal guitar and play regularly at his music hall; or, let’s go and see a microtonal guitar gig this week” (İlke Şen, Personal communication, January 08, 2021).

Peker, like many other informants, thinks that microtonal guitar is more celebrated abroad than in Turkey. He observes that the foreign musicians find microtonal guitar as a ‘mind opener’ because of its capacity to offer a blend of Eastern and Western musical disciplines on the same instrument. But he observes a kind of “do-we-really-need-all-this?” attitude among conservative Turkish listeners. Yet, when cultural details are put aside, he sees microtonal guitar as the ultimate instrument which offers its listeners the opportunity to hear the vivid bright tone of guitar (Salih Korkut Peker, Personal communication, January 23, 2021). Ünlenen noticed that musicians and listeners from abroad deem microtonal guitar an ‘authentic’ instrument. He thus sees this instrument as

an adequate way to promote Turkish music and adds: “Microtonal guitar is slowly creating its own world” (Emre Ünlenen, Personal communication, January 10, 2021).

Conclusion

In this study, we have tried to make contributions to the further research into the microtonal guitar culture in Turkey. Our research on the microtonal guitar in Turkey mainly focusing on Tolgahan Çoğulu’s invention of the adjustable microtonal guitar in 2008 and its ongoing effects has revealed that it is too early to speak of a microtonal guitar scene in Turkey yet. However, we realized that there is a growing interest in microtonal guitar not only in Turkey, but also worldwide. But for now, microtonal guitar in Turkey seems to have attracted only a limited number of people to become microtonal guitar performers consisting of academics and some musicians.

Based on our interviews, we observed that the musicians who developed a tendency towards microtonal guitar were mostly educated, enthusiastic and devoted ones. Although they have different educational backgrounds, they are mostly musicians who are familiar with classical music or Turkish music traditions. On the other hand, they were all influenced by Tolgahan Çoğulu’s great efforts to shape microtonal guitar world. They also demonstrated the artistic motivation of sharing a new instrument practice benefiting from the distribution of the new frets for microtonal guitar by Çoğulu.

Our findings proved that although the adjustable microtonal guitar is a promising instrument in theory, it has some practical problems. In this regard, one of the fundamental problems is that it doesn’t have a proper design allowing fixed pitch system. This situation creates difficulties in performing different works, especially while taking the stage. Developing an instrument compatible with musical works in different maqams and tonalities may help to overcome this problem. Otherwise, it seems time consuming to hammer new frets for different tuning systems. Inadequacy in the microtonal guitar repertoire and high manufacturing costs are other negativities that need to be overcome.

However, in general, our informants demonstrated a positive attitude towards microtonal guitar. According to our interviews, apart from the aforementioned practical issues, adjustable microtonal guitar has offered many advantages to the world of guitar, including easy identification of microtones, new possibilities for chord systems, and the

possibility of new arrangements in guitar. Although musical pieces in the microtonal guitar repertoire are mainly rooted in Turkish music, it is possible to say that this instrument is an effort to overcome the generally accepted distinctions between Western and Eastern music. It is also noteworthy that every step taken on microtonal guitar under the leadership of Tolgahan Çoğulu is both new and innovative. The Lego microtonal guitar is one of the most contemporary examples of this reality.

Lastly, we think that it is too early to talk about the future of adjustable microtonal guitar yet. However, it offers a promising and rapidly growing music culture thanks to its enthusiastic and hard-working musicians, especially Çoğulu. Çoğulu's success in offering microtonal guitar performances using social media channels such as YouTube and Instagram is also increasing the visibility of the microtonal guitar. These efforts combined with educational workshops organized by Çoğulu and Kurdoğlu enabled microtonal guitar to reach more audiences. Since microtonal guitar provides familiar sound opportunities with Turkish music, some of our informants such as Kardelen and Görener assert that Turkish audiences are more likely to appreciate this instrument. On the other hand, Şen and Karatay think that it will take time to make microtonal guitar more recognizable for audiences. Peker and Ünlenen especially put emphasis on the potential value of microtonal guitar abroad.

Although microtonal guitar in Turkey provides an innovative guitar culture, it is a flourishing yet quite limited scene. It seems that it will gain momentum in the near future and offer us new research dimensions.

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