**ISTANBUL TECHNICAL UNIVERSITY ★ GRADUATE SCHOOL**

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**Ph.D. THESIS**

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**Department of Music**

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**İSTANBUL TEKNİK ÜNİVERSİTESİ ★ LİSANSÜSTÜ EĞİTİM ENSTİTÜSÜ**

# TRABZON VE ÇEVRESİNDE ORGANONSCAPE, ATMOSFERİK İLİŞKİLER VE KEMENÇENİN SES ETNOBİYOLOJİSİ

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***To my family,***

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October 2021

Uğur ASLAN
(Ethnomusicologist)

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## ABBREVIATIONS

**TRT** **:** Turkish Radio and Television Corporation

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## ORGANONSCAPE, ATMOSPHERIC RELATIONS AND SOUND ETHNOBIOLOGY OF *KEMENÇE* IN AND AROUND TRABZON

## SUMMARY

*Kemençe* is a three-string fiddle played especially in the East part of the Black Sea Region in Turkey. It is also called as *Karadeniz Kemençe* (Black Sea Kemençe) in order to distinguish this instrument from another kinds of *Kemençes* such as *Klasik Kemençe* or *İstanbul Kemençesi*, performed mostly in Turkish Classical Music. *Kemençe* is also a crucial part of the social life of the Black Sea people. In many cases, people express their cultural identity with this instrument and it represents their place, region, and even environment that they live in. This study aims to reveal the complex relations from the making of the *kemençe* to the musical performance and from its place in the soundscapes of the Eastern Black Sea region to the problem of the representation of the *kemençe* in the region. In this direction, I evaluate the *kemençe* instrument from three different perspectives and reveal the relationships of the *kemençe* with a different dimension in line with each point of view. These dimensions are space, nature and sound.

I collected the data about the *kemençe* by the fieldwork method. I used participant observation and interview techniques in the study. In this direction, I started taking lessons from İlyas Parlak, one of the well-known *kemençe* players in the region, since 2018. The fact that Parlak knows the region very well and is aware of the musical differences in the region has enabled me to distinguish more clearly the musical identities in the region. In addition, I obtained the data on the role of *kemençe* making in creating sound communities and its relationship with nature by conducting interviews with well-known *kemençe* makers in the region.

In order to interpret the *kemençe* from three different perspectives (space, nature, and sound), I held three different literature reviews and conceptual frameworks for this study. These three different perspectives are included in three different chapters in the thesis. In the first perspective, I discussed the aural spaces of the *kemençe* by making use of the literature of cultural geography and organology. As a result, I determined the aural spaces of the *kemençe* in and around Trabzon through different types of *kemençes*. I propose the concept of organonscape in order to explain the spatial analysis of the *kemençe* in this study. Through this concept, I show that *kemençe* takes place in a non-representational aural space in and around Trabzon, because five different types of *kemençe*(high-pitched, middle sized, low-pitched, four-stringed, and electronic) are performed in every part of the region and they are interacted with each other.

In the second perspective, I focus on how the *kemençe* creates certain feelings among people (bodies) through specific performances. In this context, the term I put in the center is sound. While discussing the sound of the *kemençe* in the context of performance, I examined the concept of atmosphere in this section in order to answer my research question. In this section, while referring to the *kemençe* performance,

which I consider as atmospheric practices, I have discussed the components related to creating a certain atmospheric situation with the concept of atmospheric relations. In this context, I aimed to present a broad structure that starts with the sound focus and also deals with the relationships between bodies in specific *kemençe* performances such as plateau festivals or *muhabbet* gatherings.

In the third perspective, I deal with the relationship between the musical instrument and nature while assessing the instrument making process. In this context, in this section, I have discussed how natural resources that are used in *kemençe* making form the sound and timbre of the *kemençe*. In this context, while making use of the ecomusicology literature, I also examined the term sound ethnobiology in detail. As a result, I propose the concept of the sound ethnobiology of musical instruments in this section. I took this concept as revealing how the luthiers' relationship with nature affects the instrument during the instrument making process. When it comes to the sound ethnobiology of the *kemençe*, luthiers can classify tree species in terms of suitability for making *kemençe*, taking into account the place where the trees are grown. Luthiers also know what kind of timbre can be created through what kind of tree. This knowledge of knowing the natural sources of *kemençe* constitutes the traditional ecological knowledge of sound production in the region. In connection with the various uses of natural resources, different types of *kemençes* can be made and each type of *kemençe* creates its own aural space in the region.

Consequently, local people reinterpret the *kemençe* instrument in a fluid aural space and create a space that is represented through the sound and timbre of the instrument. I considered this space as the organonscape of *kemençe* in this study. In addition, how the *kemençe* performance creates a common feeling and belonging on people is revealed with the concept of atmosphere. Thus, atmospheric relationships, practice, and certain atmospheric arrangements are required for these specific situations to occur. Finally, the relationship of the *kemençe* instrument with nature has been evaluated within the framework of sound ethnobiology from the manufacturing process to finding the appropriate timbre, and in this sense, it has contributed to future ecomusicology and sound ecology studies in terms of instrument-based studies.

# TRABZON VE ÇEVRESİNDE ORGANONSCAPE, ATMOSFERİK İLİŞKİLER VE KEMENÇENİN SES ETNOBİYOLOJİSİ

## ÖZET

Kemençe, Türkiye'nin Doğu Karadeniz bölgesinde yaşayan insanların sosyal yaşamlarının önemli bir göstergesi olmasının yanı sıra, bölge insansının doğa ve ses manzaraları (soundscape) ile de ilişkişkisini gösteren bir unsurdur. Bu bağlamda, kemençe çalgısına bölgede birden çok anlamlar atfedilmiştir. Bu anlamlar aynı zamanda bize bölgenin insanlar tarafından nasıl temsil edildiğini gösterir. Bunun yanı sıra, kemençe sadece bölgedeki müzikal performanslar açısından kendine özgü bir yapıda değildir. Bölge içerisinde değerlendirilebilecek alt-bölgeleri temsil etme açısından çeşitli sembol ve metafor kullanımları ile kemençe yapımının da bu süreç içerisinde etkin olduğu görülmektedir. Kemençe yapımcıları bu bağlamda her bir bölgeye has ve o bölgenin repertuvarına uygun kemençeleri üretmektedirler. Elbette bu süreç içerisinde kemençe yapımı için seçilen materyal de bir o kadar önem arz etmektedir. Bu bağlamda, hangi tür ağacın kullanıldığı, ağacın hangi yüzeyinden ne tür parçanın seçildiği kemençenin tınısını ve aynı zamanda hangi tür kemençe olduğunu etkilemektedir. Dolaylı olarak ise farklı tür kemençelerin bölge içerisinde farklı aidiyetlikler oluşturduğu görülmektedir.

Bu çalışma, kemençenin yapım aşamasından müzikal performansa ve Doğu Karadeniz bölgesi ses manzaraları (*soundscape*) içerisindeki yerinden kemençenin bölge içerisindeki temsil sorununa kadar kompleks ilişkiler bütününü ortaya çıkarmayı amaçlar. Bu doğrultuda, çalışmanın örnek olayı (kemençe çalgısı) üç farklı perspektifle ele alınmış ve her bir bakış açısı doğrultusunda kemençenin farklı bir boyut ile olan ilişkisi ortaya koyulmuştur. Bu boyutlar en geniş anlamda uzam (*space*), doğa ve ses (*sound*) şeklinde değerlendirilebilir.

Çalışmanın konusunu oluşturan kemençe ile ilgili veriler alan çalışması yöntemi ile toplanmıştır. Çalışmada öncelikli olarak ise katılımcı gözlem ve görüşme tekniklerine başvurulmuştur. Bu doğrultuda 2018 yılından itibaren bölgede oldukça tanınan kemençe icracılarından olan İlyas Parlak'tan dersler almaya başladım. Parlak'ın hem bölgeyi oldukça iyi tanıması hem de bölgedeki müzikal farklılıkların bilincinde olması benim bölgedeki müzikal kimliklerin ayırdına daha net varmamı sağladı. Bunun yanı sıra bölgede tanınmış kemençe yapımcıları ile görüşmeler gerçekleştirerek kemençe yapımının ses topluluklarını oluşturmadaki rolü ve doğa ile ilişkisi üzerine veriler elde edilmiş oldu.

Kemençe çalgısını değerlendirdiğim ilk perspektif organoloji ve kültürel coğrafya literatürü ile sıkı sıkıya ilişkilidir. Bu doğrultuda kemençe çalgısının Doğu Karadeniz bölgesinde sabit bir temsil olanağına sabit olmadığını, bunun akışkan bir yapıda olduğu ve müzikal performans ile her seferinde yeniden inşa edildiğini bu perspektif ile ortaya koyulmuştur. Bu bağlamda genel olarak müzikal enstrümanların benzer bir yapıya sahip olduğunu göstermek açısından organonscape kavramını önerdim.

Organonscape, peyzajlarda (*landscape*) icra edilen müzik aletlerine odaklanır ve maddi kültür aracılığıyla müzik uzamına (*space*) nasıl anlam yüklendiğine, mekanın müzik aletleri aracılığıyla nasıl ideolojik olarak temsil edildiğine ve müzik aletlerinin icrasının bir yerin kimliğini nasıl oluşturduğunu ele alır. Kemençenin organonscape'si ise Doğu Karadeniz bölgesinin landscape'sinin müzikal performansı nasıl etkilediğini ortaya koymaya çalışır. Bu etkileşimi ortaya koymaya çalışırken, bölgede icra edilen farklı tür kemençeleri de değerlendirmeye alır. Bu kemençeler tiz kemençe (zil kemençe), bölgede herkes tarafından Rum kemençe olarak ifade edilen ve Yunanistan'daki Rum'lar tarafından bu tavrın daha iyi icrası için geliştirilen kemençe yapısı ile ilişkili olan ve orada geliştirilen sonrasında Karadeniz bölgesine etkisini gördüğümüz bir kategori olarak ele alabileceğimiz kalın kemençe ve orta boy kemençe olmak üzere kategorilendirilir. Elbette bu kemençelerin yanı sıra dört telli kemençe ve yeni icat edilen elektro kemençe de eklenebilir. Bölgede icracı ve çalgı yapımcıları bu kemençelerin temsili için belirli alanlar belirlese de bu alanlar homojen bir yapıda değildir. Nitekim bütün kemençe türleri birbirleri ile etkileşim içerisindedir. Organonscape kavramı, bu doğrultuda, farklı tür kemençelerin akışkanlık ve iletişim aracılığıyla sabit bölgeler içerisinde sınırlı olmadığını ve bu doğrultuda akışkan bir müzikal uzam içerisinde yer aldığını bize gösterir. Bunun bir sonucu olarak, kemençenin içerisinde bulunduğu müzikal uzamların ideolojik olarak temsil edildiği ve bu temsilin her defasında yeniden değişime uğradığı, inşa edildiği ortaya çıkmaktadır. Bu sebeple, organonscape kavramı "temsil"den ziyade müzikal uzamların "sunumuna" odaklanır.

İkinci perspektif ise kemençe çalgısının müzikal performans aracılığıyla insanlar arasında nasıl ortak bir duygulanım yarattığına odaklanır. Bu bağlamda, Almanca literatürde oldukça yeni dolaşıma sokulan atmosfer kavramı iredelenmiş ve kemençe performansı bu kavram doğrultusunda değerlendirilmiştir. Atmosfer kavramının temelinde felt-body (*Leib*) kavramı yer almaktadır. Felt-body, fiziksel olarak çevreyi algıyan bireyin bedeninin ötesinde, etrafındaki çevreyi beş duyu organıyla hissetmenin yanı sıra diğer bedenler ile ilişkisini ve ortak bir duygulanım alanı yaratılmasını ifade eder. Bu kavram, atmosfer kavramının anlaşılmasında temel rolü oynar. Çünkü atmosfer kavramı genel bir ifade ile felt-body'nin uzamı anlamına gelir. Nitekim bu çalışmada, atmosfer kavramı ile ilişkili olarak geliştirilen atmosferik ilişkiler ve atmosferik pratikler kavramlarına başvurulmuştur. Kemençenin atmosferik ilişkilerini ortaya koymak ve felt-body'nin yer ettiği sonik uzamlarını değerlendirmek için bir spider-web model oluşturdum. Bu model içerisinde ele alınan bütün maddeler birbiri ile ilişkili olarak değerlendirilmiş ve belirli bir atmosferik ayarlamanın (*atmospheric arrangement*) nasıl yapıldığını ortaya konulmuştur.

Kemençenin atmosferik ilişkilerini ele alan spider-web model içerisindeki ana hatlar şu şekildedir: şehirler/merkezler/bölgeler, peyzaj (*landscape*), ses manzarası (*soundscape*), ekolojik durumlar, morfoloji, çalgı yapımcıları, üstadlar/icracılar, tarihler, danslar, ritimler, melodiler ve repertuar şeklindedir. Nitekim, bu atmosferik ilişkiler bütünü içerisinde danslar, ritimler, melodiler ve icracılar atmosferik pratikler içerisinde kendisine yer bulmaktadır. Diğer unsurlar ise belirli bir atmosferik durumun oluşturulmasında etken olan ve bölgedeki insan aktörler tarafından ayarlanan/kurgulanan elementler olarak kemençenin atmosferik ilişkileri içerisinde yer alır. Kemençenin belirli atmosferik durumlarını çeşitli performanslar aracılığı ile gözlemlemek mümkündür. Kemençe performanslarında yukarıda bahsi geçen bütün atmosferik unsurların birbiri ile ilişkisini göze çarpar. Nitekim, bu unsurların bütünlüklü bir aradalığı belirli bir atmosferin yaratılmasını sağlar. Örneğin, yayla

şenliklerinde her bir köyün kendi horon halkasını kurması, köy halkının yayladüzü denilen alana uzun horon kuyrukları oluşturarak girmesi ve çimenler üzerine senkronize şekilde her bir ayak basışının çıkardığı ses insanlar üzerinde ortak bir duygulanım yaratır. Elbette bunu sağlayan unsurlar, kemençe icracısı, horonbaşı, icra edilen repertuvar ve kemençe türü ve hatta kimi zaman yaylanın serin ve sisli havasıdır. Yaratılan bu atmosferi kendi memleketlerinde yeniden deneyimlemek için yurtdışında yaşayan Karadeniz insanı sadece yayla şenlikleri için kendi memleketlerine gelmekte ve bu atmosferin deneyimlenmesi ile birlikte kendi kültürel kimliklerini ve aidiyetlerini güçlendirmektedirler.

Tez çalışmasının üçüncü bölümü ise çalgı yapım odağında, kemençe çalgısının ekolojik perspektiften ele alınmasını içerir. Kemençe çalgısının yapım aşamasından belirli bir bağlamda icra edilmesine kadar doğa ile sıkı sıkıya ilişkisi vardır. Bu ilişki genellikle Doğu Karadeniz bölgesinin florası içerisinde şekillenirken insanlar tarafından kemençe icrasının doğal kaynaklar ve doğa ile ilişkisi sözel olarak ifade edilmektedir. Bu ilişkinin en temel ve açık örneğini kemençenin yapım aşamasında görmek mümkündür. Bu doğrultuda, kemençe yapım aşamasını doğa-kültür ilişkisi bağlamında ele alırken temel olarak ekomüzikolojik literatürden faydalanıldı. Ayrıca "çalgıların etnobiyolojisi" düşüncesi bu bölüm içerisinde belirli bir teorik çerçeveye oturtularak "çalgıların ses etnobiyolojisi" bağlamında yeniden değerlendirildi. Böylelikle yeni bir teorik çerçeve çizilmiş ve çalgı odaklı çalışmalara "sound ecology" ve ekomüzikoloji çerçevesinde yeni bir bakış açısı getirilmiş oldu.

Kemençenin ses etnobiyolojisi, ses üretimi odaklı çeşitli uygulamaları gerektirmektedir. Bunlardan birincisi ses üretiminin ekolojik bilgisidir (*ecological knowledge of sound production*). Bu durum çalgı yapımcıların hangi tür materyalin ne tür ses ve tını üretebileceğini bilmesi anlamına gelir. İkincisi ise uygun ses üretmenin tını düzenlenmesi (*timbre arrangement of producing proper sound*). Bu durum çalgı yapımının belirli oranlar ve formlar doğrultusunda materyali dikkate alarak spesifik bir tını üretmeyi ima eder. Üçüncüsü ise ses üretiminin eko-biyolojik kaynaklarıdır (*eco-biological sources of sound production*). Ekolojik bilginin daha ötesinde, bu durum çalgı yapımcısının kullanacak olduğu ağaç türünün, dokusunun ve yetiştiği yerin ses ve tını üzerindeki etkisini bilmeyi içerir.

Trabzon ve çevresinde çalgı yapımcılar ile yaptığım görüşmeler sonucunda, her bir çalgı yapımcısının yukarıda bahsi geçen süreçleri çalışmalarında işlediklerini gözlemledim. Nitekim, bunu kemençe yapımında da net bir şekilde gözlemlemek mümkündür. Kemençe yapımcıları hangi tür ağacın kemençe yapımına uygun olduğunu ayırt edebilmekte ve hangi tür materyalin nasıl işlenerek ne tür bir tını yaratacağını tahmin edebilmektedirler. Bunun sonucunda spesifik tonlarda kemençeler üretilmenin yanı sıra farklı repertuvarları icra edebilmek adına farklı tür kemençeler de üretebilmektedirler. Elbette, bütün bu hikayenin başlangıcı ağacın hangi tür olduğu, nerede yetiştiği ve ağacın hangi yüzeyinden parçanın kullanılacağıdır. Bütün bu unsurlar kemençenin tınısını etkilemekte ve hangi tür kemençenin yapılabileceğini belirlemektedir.

Sonuç olarak, kemençe çalgısı akışkan bir işitsel uzam (*aural space*) içerisinde insanlar tarafından yeniden yorumlanmakta ve çalgının ses ve tınısı aracılığıyla yeniden bir temsil alanı oluşturulmaktadır. Bu alanı çalışma içerisinde kemençenin organonscape'si olarak ele aldım. Bunun yanı sıra kemençe performansının insanlar üzerinde nasıl bir ortak duygulanım ve aidiyet yarattığı atmosfer kavramı ile ortaya koyulmuştur. Bu spesifik durumların oluşması için atmosferik ilişkilerin, pratiğin ve belirli atmosferik düzenlemelerin olması gerekmektedir. Son olarak ise, kemençe çalgısının doğa ile ilişkisi, yapım aşamasından uygun tınının bulunmasına kadar ses etnobiyolojisi çerçevesinde değerlendirilmiş ve bu anlamda gelecekteki ekomüzikoloji ve ses ekolojisi çalışmalarına çalgı temelli çalışmalar açısından katkı sağlamıştır.

# 1. INTRODUCTION: SPACE, NATURE AND SOUND OF *KEMENÇE*

When I moved to Trabzon in 2017, I observed that the *kemençe* instrument is one of the most important symbols of the culture of the Eastern Black Sea region. People choreograph the *horon*[1] lines with the sound of *kemençe*, and practice their traditional dances at the events such as weddings and plateau festivals. In addition, it is possible to see that the *kemençe* has an important role in the symbolization process of the region in the city centers. There are many *kemençe* statues in the settlements such as Görele and Trabzon. This shows us that the *kemençe* plays a visual role in the presentation of the region as well as the social life.

In this study, I attempt to show the social life of *kemençe*. In order to do that I explained the process of manufacturing the instrument as well as examining the role of the *kemençe* in the usage of daily life in the Eastern Black Sea region. In this sense, this study more about understanding the *kemençe* more than observing and collecting data about this instrument as Jeff Todd Titon (2008, p. 25) mention the epistemology for ethnomusicological studies. Of course, *kemençe* find a place in a complex cultural organization which is formed by the discourses of people, musical practices to its relationship to the environment. For this reason, I applied three different perspectives in this study in order to explain this complex structure of *kemençe*. These perspectives are space, nature, and sound. I give three different chapters for each perspective in this study. However, all these three terms are interrelated to each other.

I started this study in 2018 by taking *kemençe* lessons from İlyas Parlak. He is from Sürmene and he has lived in Istanbul for years. While living in Istanbul, he has performed *kemençe* in different stages and he has been a part of the Black Sea music scene in Istanbul. He also has held concerts in European countries such as France and Greece. Since it was necessary to evaluate the *kemençe* making process in order to reveal the social life of the *kemençe*, I conducted interviews with the *kemençe*

[1] *Horon* is a type of traditional dance played in the form of a circle, semicircle or line in the Eastern Black Sea region.

producers in and around Trabzon. In this context, I held interviews with İlyas Parlak, İsmail Kırcı, Ali Kemal Bulut, Mustafa Aydın, and Ceyhun Demir who lives in Çanakkale and invented the first electronic *kemençe*.

In the first part of the study, I discuss the space of the *kemençe* in detail. In this section, I evaluate where the different types of *kemençe* are frequently performed in and around Trabzon. Obviously, musicians perform different repertoires with different types of *kemençe* in the Eastern Black Sea region. As a result of this, people create certain statements with different kinds of *kemençes*. However, as I observed during the fieldwork, these statements change both discursively and practically. Indeed, *kemençe* performances are fluid and therefore, people who experience it reinterpret these performative spaces and attempt to create stability. Finding a certain presentations for creating a stability is processual as well. In order to theorize this complex issue, I coined the term organoscape. Organonscape deals with the aural spaces of musical instruments. It shares many common understandings with the term landscape, especially from the cultural geographical point of view which deals with the term space. The other important point of this concept is the non-representational theory coined by Nigel Thrift (1996; 2004) which gives emphasis on embodiment and performance through focusing on fluidity of a space.

In the second part of the study, I discuss how people create a common feeling and have a relationship with the bodies (human and non-human) through the sound of the *kemençe*. In this framework, I evaluate the sound of the *kemençe* as an atmospheric practice (Riedel, 2020) and explain how everyone achieves a common feeling via certain atmospheric arrangements. In addition to the atmospheric practice, I handle all human and non-human actors that the *kemençe* is related to create an atmosphere in the spider-web model I developed. I evaluate the spider-web model as the atmospheric relations of the *kemençe*. Of course, the main lines such as melody, rhythm, repertory, performers, and dance in this model mean the atmospheric practices of the *kemençe*. As a matter of fact, atmospheric practices are also an important part of these relations.

In the last part of the study, I focus on the *kemençe* making process and discuss how luthiers use the natural resources in the region the in instrument making process. In this context, the timbre of the instrument changes according to the type of wood used and different textures. In parallel with this, *kemençe* makers in the region know very well what kind of tone they can obtain from which tree. This not only allows them to

make different types of *kemençe*, but also shows the close relationship between the luthiers and nature. I discuss this section, in which I evaluated the culture-nature relationship in the process of making the *kemençe* in the context of material culture, with the title of "sound ethnobiology of musical instruments". Nevertheless, it is possible to evaluate the *kemençe* making process in the context of ecomusicology and sound ecology. In addition to this, I propose the term sound ethnobiology of musical instruments in order to reveal how the natural resources of the region affect the instrument making process in the region.

## 1.1 Purpose of Thesis

The aim of this thesis is to reveal how musical culture is related to landscape, aural space, soundscape, environment and nature through *kemençe* in the Eastern Black Sea region. Furthermore, one of the main subjects of this study is how people relate to nature and the environment through the *kemençe*. In this context, I conduct this thesis around three basic terms as mentioned above that could provide answers to all these questions.

One of the aims of this study is not only to reveal, define and describe musical spaces, but also to reveal how people create certain aural spaces and what kind of effects spaces have on the music made by people. In this sense, space is a phenomenon that is produced imaginatively and reinterpreted ideologically. Thus, it is possible to reveal each of these effects when we examine the place of the *kemençe* in a certain aural space.

This thesis also aims to discuss the relationship of the *kemençe* instrument with nature. In this context, I examine how the climate of the Eastern Black Sea region affects the timbre of the instrument. I also discuss how the natural resources in the region are used in making *kemençe* and what kind of tone is obtained as a result. Nevertheless, in this study, I question how natural conditions and natural resources affect the instrument making process, the timbre, and tone of the instrument. Accordingly, this study also approaches the role of different timbre of *kemençes* in creating a certain aural space.

## 1.2 Description of *Kemençe*

Kemençe is a three-string fiddle played especially in the East part of the Black Sea region in Turkey. It is also called as *Karadeniz kemençe* (Black Sea *kemençe*) in order to distinguish this instrument from another kind of *Kemençes* such as *Klasik kemençe* or *İstanbul kemençesi,* played mostly in *Turkish Classical Music*. Although these two instruments share the same nomenclature which is the name *kemençe*, there are differences in terms of playing technique, form, material, timbre, and repertoire. In this thesis, I focus on the *Karadeniz kemençe* which is mostly practiced in the Eastern Black Sea region of Turkey.

The length of *Karadeniz kemençe* can be between 50-60 cm, but we can also find few example of *kemençe* in between 35.3 cm and 73.5 cm at the museums and old written sources (as cited in Akat, 2015, p. 372). This instrument has a long, narrow body. Luthiers use trees such as walnut, mulberry, and plum in the making of the body of this instrument. Instrument makers generally prefer to use the spruce tree for making the soundboard of *kemençe*. This instrument can be performed both by sitting or standing. It is possible to see the performer raise the *kemençe* up with one hand to take advantage of the greater resonance (Picken, 1954, p. 76-77).

The Eastern Black Sea Region is placed in the north-eastern corner of Turkey (Figure 1.1). According to the census (2014) “The region with the mountainous shoreline, covers 36,837 km² (4.7% of the country) and has a population of 2.6 million” (As cited in Somuncu and Ceylan, 2015, p. 80).



**Figure 1.1 :** Provinces situated in the Eastern Black Sea region of Turkey (URL-1).

> The Black Sea lies between the East European massif in the north and Asia Minor in the south, between Caucasia in the east and the Balkan Peninsula in the west. The eastern Black Sea region is located in north-eastern Turkey, besides Georgia and has a steep, rocky coast with rivers that cascade through the gorges of the coastal ranges. Access inland from the coast is limited to a few narrow valleys because mountain ridges, with elevations of 3.000 to 4.000 meters in the Kaçkar Mountains, form an almost unbroken wall separating the coast from the interior. The higher slopes facing north tend to be densely forested. Because of these natural conditions, the Black Sea coast historically has been isolated from Anatolia. (Akat, 2015, p. 370)

Politically, Eastern Black Sea region of Turkey consists of seven provinces which are Ordu, Giresun, Gümüşhane, Trabzon, Bayburt, Rize, and Artvin. Musicians from Ordu, Giresun, Trabzon, and Rize mostly perform the *Kemençe* in specific events such as weddings or plateau festivals. This musical instrument is also performed in Georgia and Greece where is one of the largest migrations occurred from Turkey as population exchange between Greece and Turkey in 1923 (Bayındır Goularas, 2012; Çakıcı, 2018, p. 333-334; Çelik, 2016). With this exchange, the Christian Pontic communities in Turkey were sent to Greece, while the Turkish communities there were sent to the newly established Republic of Turkey. In this context, people of Greek origin living in many parts of the Black Sea had to leave their place of residence.This circumstance

is a crucial component of the cultural identity and representation in the Eastern Black Sea area of Turkey.

Besides political borders in the region, natural and geographical conditions also shape the cultural differences in the Eastern Black Sea Region, including playing style and types of *kemençe*. Indeed, although we talk about one specific musical instrument, *kemençe*, there are other subcategories of this musical instrument according to the different regions in the Eastern Black Sea part of Turkey. Geographical conditions play a crucial role to distinguish the different types of *kemençe* through creating different interactions with diverse cultural groups in the region. For instance, Abdullah Akat and Songül Karahasanoğlu (2013) indicates that geographical factors affect the (net)tachments transformation and actor-network relationships in the Eastern Black Sea Region (p. 15-16). This case might be explained in terms of cultural geography and/or music geography. Different types of *kemençe* and different playing styles occur in the Eastern Black Sea region because of different ecoles which are the result of the (net)tachments in the region which shape the relationships between cultural groups.

In the Eastern Black Sea region, people mostly perform the three-stringed *kemençe*. However, there is no consensus on this classification among researchers and musicians as well. For instance, two perspectives have been put forward in the classification of the *kemençe* according to the tone range. First, according to the region where the three-stringed *kemençe* is used, there is a view that separates them into two groups as high-pitched voice (*tiz,* lit. high-pitched), and low-pitched (*pes, kaba,* lit. low-pitched, coarse), (Kaya ,2017, p. 55-56; Akat, 2012, p. 3). As a second view, according to the tone range, *kemençe* should be evaluated in three categories as high pitched (*tiz*), middle sized (*orta boy*, lit. mid) and low pitched (*pes, kaba*) (Balcı, 2001; Şişman, 2007, p. 214). Besides that, musicians perform the other types of *kemençes* in the region as well such as electro *kemençe* and four-stringed *kemençe*. These *kemençes* are used in various activities in the region and also define the sound communities within the region.

### 1.3 Space and Nature in the Eastern Black Sea Region

The land conditions and climate of the Eastern Black Sea region greatly affect the musical practices. This situation drives us to examine two important concepts. These are space and nature. We can understand the relationship between landscape, nature

and music better through examining these two term together in the Eastern Black Sea region. For example, according to Veysel Usta (2015), “The Black Sea region makes it necessary and mandatory to be examined only through the settlement method along the valley” (p. 74) as indicated first by the Turkish historian Feridun M. Emecen (2011; 2019, p. 23). Akat and Karahasanoğlu (2013) explains the necessity of examining with this method because the region, which is split by the valleys, enables transportation in certain directions and because of the fact that different interaction areas are formed in itself. It also shapes some cultural basins which include more than one valley.

The weather, flora and biota of the region can be considered in two parts as the seaside and mountainous region. While the air is more humid at the seaside, the mountains rising at the back do not allow the evaporating air from the sea to pass to the back sides. As a result, the sea-facing surface of the mountains allows a wide variety of plants to live (Figure 1.2). As one climb higher mountains, the humidity decreases and cooler air becomes more affective in the atmosphere. This situation affects the musical culture and the way people live, as well as the timbre of the instruments. For example, *kemençes* made from trees such as mulberry, which are easily affected by moisture, cannot produce a good sound at the seaside or outdoors. However, *kemençe* makers state that the best sound is obtained from the mulberry tree in a non-humid environment. For this reason, when we consider the factors affecting the pitch and tone of the *kemençe*, it is obvious that the geographical conditions, landscape, weather and nature of the region should be part of our analysis.

**Figure 1.2 :** Forest area in Maçka, Trabzon.

According to Somuncu and Ceylan (2015), "several studies on cultural geography have investigated a variety of culture traits unique to Eastern Black Sea Region including house types, traditional economies and transhumance" (p.80). When culture is considered as a complex whole as a Tylor's sense (as cited in Barnard and Spencer, 2010, p.170), it will be seen that music culture is related to geography and the environment people live in. Indeed, Somuncu and Ceylan (2015) express the same situation for the music of Eastern Black Sea Region: "The folk music of the region describes the natural beauty and human relationship with mountains, meadows and plateaus" (p. 83-84). At the same time, local musicians have established a relationship between music and nature in the Black Sea region and made discourses in this context. For example, for a musician, the meaning of music is the sound of nature, while another musician expresses the meaning of music as love for each other and nature. According to one person, "*kemençe* expresses the emotions of this region's people, their love and attachment to nature" (ibid, p. 84-85).

When we examine the relationship of the people of the region with nature, we find another striking point is the relationship with the place where they live and its perception as a space. At this point, it is necessary to mention the space/place dichotomy. According to Phil Hubbard (2005, p. 41- 43), while place is understood as a distinctive and bounded location, the term space emphasises the socially produced facts, consumption, and mobility. The examination of place and space dichotomy over

the *kemençe* can be read through ethnicity and belonging. As a matter of fact, local people interpret the certain locations in the Eastern Black Sea region as aural spaces based on ethnic identity and locality.

"Chepni, a tribe of the Oghuzs, settled in the Eastern Black Sea Region with the Turkmen migration in the 11$^{th}$ century and had a role to Turkify the region. Their arrival in Anatolia dates back to before the Ottoman Empire" (as cited in Bahadır Yılmaz and Ata, 2020, p.321). Then, Chepnis conquered the region in the east-west direction parallel to the shoreline. However, at the beginning of 1461, 100.000 Chepni from inner parts were placed between Giresun and Trabzon (Cihanoğlu, 2004, p. 22). According to Akat (2017, p. 4), "one of the most important events in terms of regional music is the fact that the Chepnis acquired the *kemençe* by associating it with their cultural practices". Indeed, Kipchak and Chepni people were mostly settled in rural areas and plateaus. Therefore, we see the most "authentic" playing style where these groups settle, in between Giresun and Trabzon. In the light of this information, which belongs to a certain region historically, it is possible to understand the relationship between the *kemençe* and ethnicity.

> Ethnicity allows us to turn from questions directed towards defining the essential and 'authentic' traces of identity 'in' music (a question with which much nationalist and essentially racist folklore and ethnography is explicitly concerned) to the questions of how music is used by social actors in specific local situations to erect boundaries, to maintain distinctions between us and them, and how terms such as 'authenticity' are used to justify these boundaries. (Stokes, 1994, p. 6)

As we observe that the "authenticity" issue mentioned by Stokes appears as the creation of certain aural spaces through the *kemençe* in the Eastern Black Sea region. Of course, On the basis of this we can find the differences between cultural groups in terms of ethnicity and cultural identity. For instance, historically, Laz communities also interacted with Chepni and Kipchak communities in the region for many years. Although today Laz communities do not come to the fore with their *kemençe* practices, the kemençe instrument is encountered in their epics. We can also come across the phenomenon of *kemençe,* which Laz took from the Kipchaks in the 1700s and imposed their own identity (Akat, 2012, p. 5). Indeed, historically interaction between ethnicities such as Kıpchaks, Chepnies, Laz, Rum, and Georgians have shaped the

different forms and practices of *kemençe* today. However, my aim is not to find which community or place has the "original" *kemençe* in the region in this study. I attempt to show that social actors use the *kemençe* in the region in order to strengthen their cultural identity and also maintain the difference between us and them even in provincial discourse which transforms the bounded locations into mobile aural spaces. We can reveal that *kemençe* is part of national identity to create the difference between Turkish and Greek, and also part of local identity to put the difference between provincial music practices such as Görele, Trabzon, Sürmene, etc as aural spaces.

### 1.4 Hypothesis and Research Questions

This thesis aims to contribute to the organological studies while focusing on cultural, structural, social, and musical features of *kemençe* through organoscape, atmosphere and sound ethnobiology. The research will provide an ecological understanding of the form, function, meaning, and context of *kemençe* in the Eastern Black Sea region of Turkey by approaching the instrument manufacturing process and performance. In this research, I would like to illustrate that *kemençe* has a unique role in creating aural spaces due to having a social life that is affected by nature. *Kemençe* takes place in the networks of many actors in the Eastern Black Sea region of Turkey. At the same time, it plays an important role in human-nature relationships as it is seen in the lyrics of traditional Black Sea Music. *Kemençe* as a cultural object is affected by the natural conditions of the Black Sea region. In this context, while considering cultural organology of *kemençe*, organonscape can provide a deep insight into the space-time, actor-relations, experiencing sound, spatiality, and the re-interpretation of *kemençe*. The main questions of this research are how nature and soundscape affect *kemençe* and its sound? What are the roles of *kemençe* as musical material in cultural life? How can we illustrate the social life of *kemençe* or say that *kemençe* has a social life through its sound? In order to investigate these questions, the research consists of fieldwork methods and literature review**.**

*Kemençe* as part of material culture is related to nature (the wood chosen for instrument manufacturing, the place where it will be performed such as seaside where the weather is humid or highland are factors that affect the *kemençe's* timbre). The sound of *kemençe* is strongly engaged with the natural sources that are used in making the instrument as well. The type of wood decides the context in which *kemençe* can be

played (*İnce Ayar* or *Kalın Ayar*, *Horon* or *Oturak Türkü*) as well as its ratios. In this context, while talking about the social life of *kemençe* in terms of organology, I consider both cultural and natural conditions in the Eastern Black Sea Region. In this sense, this research combines the studies in anthropology of sound, organology, cultural geography, and ecomusicology which create a unique aspect for the research in ethnomusicology of musical instruments

## 2. ORGANONSCAPE AND AURAL SPACE OF MUSICAL INSTRUMENTS

What should we understand when we talk about the aural spaces of musical instruments? In the traditional sense, marking where the musical instruments are performed on the map does not show us the aural space. Clearly, aural space is more complex than this, and in this sense it requires addressing the place/space dichotomy. Aural spaces of *kemençe*, on the other hand, includes the complex, intertwined, and interrelated features based on landscape of the Eastern Black Sea region. Musicians perform different types of *kemençes* in this region and the repertoire varies according to each sub-region. However, the fact that embodiment of *kemençe* and its performance through interaction between people makes this region not a static place. As a result of this, the aural space of the *kemençe* has a fluid structure. This space is constantly re-forming and changing.

In the literature, studies on the *kemençe* instrument focus on different phenomena related to the instrument. Some of these topics are the structure of the instrument (Akat, 2012; Balcı, 2001; Demir, 2005; Kaya, 2017); the historical development and origin (Balcı, 2001; Demir, 2005; Duman, 2004); the differences in practice in the region (Akat, 2006; Akat, 2013; Çolak, 2007; Şişman, 2007; Yılmaz, 2018); the characteristics of practice (Küçük, 2015); performers and *usthad*s/masters (Duman, 2004); and musical texture and polyphony (Karahan, 2009). Thus, this study aims to reveal the meaning of the *kemençe* instrument in the region, as well as to expand the literature on the *kemençe* from a new perspective. In this sense, in addition to focusing more on the issue of space, I also discussed the discursively constructed boundaries in terms of cultural identity in this study. In this context, I evaluated how the *kemençe* instrument creates belongings in relation to material culture and plays a role in the construction of identity through different types of *kemençe*. Cultural geographical studies constitute the theoretical framework of this part of the study. By making use of both organology and cultural geography studies, I discussed the situation of the

*kemençe* instrument in and around Trabzon with the concept of organonscape that I developed in order to understand the spatiality of musical instruments.

I organise this part of thesis around two different approaches which are organology and analysis of space through non-representational theory which is developed in the studies of cultural geography. The concept that I propose in this section is formed by the combination of the terms *organon* and *scape*. Thus, the concept of organonscape covers organology and space-oriented cultural geography studies.

Organology is the first constituent that formed the concept of organonscape. The disciplines of musicology and ethnomusicology mostly shape the organology studies (Khalil, 2010, p. 3). As a matter of fact, the studies of organologists and ethnomusicologists are about explaining society and culture through instruments (De Vale, 1990, p. 22; Hill, 1979; Johnson, 1995; Kartomi, 2001; Qureshi, 2000; Racy, 1994; Van Gulik, 1938; Zemp, 1978). Another field of study that will contribute to organology studies is music geography studies, which are in parallel with cultural geography studies (Chakrabarty and Mandal, 2013, p. 221).

Studies of musical instruments in the context of cultural geography, music geography and non-representational theory constitute the other constituent of the concept of organonscape. Shifting paradigm from Sauer's "traditional" geography to "new" cultural geography has also influenced music geography research through focusing on spaces and performances of popular music (Leyshon et. al., 1998; Kong, 1995; Jones, 2002; Liu and Cai, 2014; Gibson, 1998), deterritorialization and globalization (Connell and Gibson, 2004), identity and musical places (Hudson, 2006; Canova, 2013; Shobe and Banis, 2010) postcolonialism (Hancock-Barnett, 2012), non-representational theories (Revill, 2004), and reinterpretation of landscape (Froneman, 2015; Grimley, 2016; Burnham, 2005). Without a shadow of doubt, "cultural turn" brought new perspectives to the works of Peter Nash and George Carney, music geographers who follow Sauers' approach (Nash and Carney, 1996; Carney, 1998), benefiting from social theories. In this context, "traditional" music geography studies have been extended with new theories and concepts. At this point, one of the subjects that music geography focuses less on in terms of musical subjects is musical instruments. In this context, the concept of organonscape aims to analyze the spaces of musical instruments from an interdisciplinary perspective.

The analysis of space from the perspective of cultural geography through non-representational theory constitutes the second viewpoint of the study. Indeed, these two broad categories are the basis of the organonscape concept. Organonscape focuses on the spatiality of the musical instruments as well as their relationship to the landscape. Organonscape also includes the meaning of instruments in a particular space, the process of symbolization, and materiality. The contribution of non-representational theory to the concept of organonscape is that it places its focus on performance and embodiment, as well as the term space. In this context, the concept of organonscape focuses on how a particular aural space is presented through musical instruments and their sounds (performance).

The first part of this chapter covers the concept of organonscape and its basic components. In this context, I have evaluated organology, scapes, non-representational theory and landscape in this section. Then I defined the concept of organonscape and its focal points within the framework of these related terms. In this section, I also focus on the new materiality and aural spaces presented by the performances. Focusing on these tow topics are also important part of the non-representational theory (Thrift, 2004) which constitute the concept of organonscape.

In the second part of this chapter, I dealt with the aural space of the *kemençe* with the concept of organonscape. In this context, I especially evaluated the meanings attributed to the *kemençe* instrument by the local people in and around Trabzon. I evaluated the role of the *kemençe* in creating space in terms of different types of *kemençe*. As a result, I revealed that it is not possible to represent the *kemençe* with a specific region. On the contrary, the aural space of *kemençe* has a fluid structure and this can only be presented instead of being represented.

## 2.1 Fundamentals of Organonscape

Organonscape focuses on the musical instruments performed in landscapes and focuses on how meaning is attached to musical space through material culture, how ideologically the place is represented through musical instruments, and how the performance of musical instruments constitutes the identity of a place. Organonscape concept originates from studies of organology, ethnomusicology of musical instruments and cultural geography. The combination of the terms *organon* and *scape* form this concept. Thus, this concept also means the study of spaces of musical

instruments. In addition, the concept of organonscape focuses on the performance of musical instruments. The main reason for this is that in most cases, a certain aural space is presented through performance. In order to evaluate this situation as a whole, organonscape focuses on “presentation of cultures with performance”.

We can list the constituents, terms and studies that form the fundamentals of the concept of organonscape as follows: organology, scape, non-representational theory and landscape. Although they seem to be separate terms and studies, organonscape is shaped around the partnerships and relations of these concepts and studies with each other. For example, considering the term landscape as a space relates us to the theory of scapes. In this direction, it is possible to interpret a landscape with non-representational theory. In addition, it is the primary aim of the concept of organonscape to understand the issue of complex spaces of musical instruments by focusing on the instruments in this space.

Although the components of organonscape are related to each other, we will consider each of them under a different heading. Thus, it is possible to apply the holistic analysis to musical instruments in line with the analysis of each item. The functionality of organonscape is also in this analysis style. Evaluating the different perspectives of the musical instruments with various terms and theories, giving a holistic result allows us to understand the complex spaces of the instruments.

### 2.1.1 Organology

The term organology “comes from the Greek *organon*, meaning a tool or instrument used in some activity or trade (even an organ of the body). It was used for musical instruments as well as for the organs governing the human voice” (Dournon, 1992, p. 245). From the time of comparative musicology to the end of 1980s and beginning of the 1990s, organology studies were mostly about the classification systems of musical instruments and researchers carried out the studies in this direction. As a result of this, it is possible to see different classification methods of musical instruments in organology (see Kvifte, 2007). As a matter of fact, today organologists also evaluate socio-cultural contexts and processes in their studies (Kartomi, 2001, p. 291). Thus, organology and musicology studies started to become more similar to each other (Tresch and Dolan, 2013, p. 278). Indeed, organological studies focus on the analysis

of various aspects such as musical production, usage of the instrument, cultural dynamics and the education of the players (Dournon, 1992, p. 247).

Organology studies began to focus more on social and cultural issues in the late 1980s and early 1990s. Organologists and ethnomusicologists have taken the musical instruments from many different perspectives. Examples among these are gender (Doubleday, 1999); actor-network theory (Bates, 2018); the cognitive aspect of perception (Wegner, 1993); the historic-geographic method (Goertzen, 1985); ethnoscience and linguistics (Zemp, 1978); semiotics and communication through performance (Hill, 1979). However, critical organology (Sonevytsky, 2008; Bates, 2012; Tresch and Dolan, 2013; Tucker, 2016), lived organology (Hooshmandrad, 2004), and cultural organology (Johnston, 2008) studies do not focus on the spaces of instruments and how they create a representation within these spaces. The concept of organoscape, on the other hand, offers a new perspective to the literature in order to eliminate this deficiency in organology studies. In addition, the concept of organonscape is closely related to the "cultural turn" that took place in organology studies in the 1990s.

### 2.1.2 Theory of scapes

*Scape* is another important constituent that establish the concept of organoscape. I used *scape* in this study with the aim of presenting a new perspective to the ethnomusicological studies of musical instruments. In Merriam-Webster's Collegiate Dictionary (2003, p. 1108), scape is described as "a view or picture of a scene" in relation to the landscape, and researchers usually apply this term for "analysing how people experience and understand their world(s) by superseding standard geographical thinking in social-cultural analysis" (Salazar, 2003, p. 753).

The concept of organonscape covers the definitions of *scape* associated with landscape. However, organonscape shares many main understandings with other *scapes* such as soundscape (Schafer, 1994), guitarscape (Dawe, 2010), and musicscape (Cohen, 2012; Darren, 2015; Dumnic, 2016; Roberts, 2015). Thus, Arjun Appadurai (1990) is the first name that comes to mind when we mention the theory of *scapes*. Appadurai has identified five scapes to evaluate global and local cultures in the process of globalization. These are in the form of ethnoscapes, mediascapes, technoscapes, financescapes, and ideoscapes. Just like five scapes, concepts such as

policescape (Atanasovski, 2016), culturescapes (King, 2002), and socioscapes (Chaney, 2000) have been put forward in order to reveal the mediation issues in a certain space. These concepts, like other scapes, emphasize the "fluidity" issue.

Organonscape also contributes to the theory of scapes and their general understanding. In parallel with the theory of scapes, organonscape involves in the aural space of musical instruments as well as their ideological background and material culture. In general, organonscape seeks to understand how an aural space can be "represented" through musical instruments and questions the term of "representation". When we consider the musical instruments as material culture and their spaces, it is possible to raise the question of representation through musical instruments. Clearly, organonscape is not only about the "mappings of material worlds" in terms of musical instruments, but also it is about understanding ideological ideas of them for not producing "surface geographies" (Kirsh, 2012, p. 435). In this context, organonscape covers the landscape related theory of *scapes* as well as the issues of creating aural spaces that have a fluid structure.

Organonscape is also related to other *scapes* and it is shaped through these relations. Perhaps the most related concept to the organonscape is Kevin Dawe's concept of guitarscape. Dawe (2010, p.42) shows how musical instruments might take place in a global cultural economy through technology, physical environment, body, senses, and performance. However, there are few differences between guitarscape and organonscape. Guitarscape mostly related to the cultural study of musical instruments in terms of globalization, economy, and new media (Dawe, 2010, p.43-51). However, organonscape mostly focuses on the cultural geographical approaches, spatiality, and non-representational features of spaces in terms of theory of *scapes*. Organonscape therefore is more about the understanding of spatiality with the terms fluidity, process, and materiality (Simpson 2017).

### 2.1.3 Non-representational theory

Organonscape aims to discover the aural spaces of musical instruments through non-representational theory through focusing on performance, embodiment, and new materiality. Indeed, Nigel Thrift (2004, p. 121) attempts to suggest to reformulate "rich world" through three main elements: "recognizing the richness of the world, embodiment, and producing a different ethos of engagement with the world". While

Thrift (2004, p. 132) suggests that new materiality shows us the richness of the world, embodiment produces effects in this rich world and performance in which embodiment is observed and creates “spaces that have to come to life because they are in play and so can track and intervene in the play of space”. The sources of nonrepresentational theory which suggest that geographers should focus on embodied practitioners can be found in different theory practices. According to Thrift (1996, p. 6), these theories deny the efficacy of representational models of the world and “instead focus is on the “external” in which basic terms and objects are forged in the manifold of actions and interactions” (as cited in Söderström, 2005, p. 14). In this context, non-representational theory is also defined as “more-than-human and more-than-textual in multi-sensual worlds” (Lorimer, 2005, p. 83).

Non-representational theory works with three interrelated theories which are actor-network theory, performance studies, and embodiment. It also has five main tenets to considers which are practice, everyday life, performance and performativity, embodiment and the body, time and space (Cadman, 2009, p. 3-6). In this context, organonscape atttempt to analyze the complex fluid spaces of musical instruments by applying the main tenets of non-representational theory and other related theories. Indeed, in most cases, musical instruments are the primary factors that embody a musical performance. The most basic element that provides this fact is the sound of the musical instruments. Organonscape focuses on various features of the musical instruments through non-representational theory. It is possible to apply them through questions. How are these presented with a particular space instrument performance? How does the sound of the instrument create an embodied affect and what are the effects on the body? How does this affect our understanding of aural spaces? Do instrument sounds have a role in the “representation” of space?

### 2.1.4 Landscape as a space

While the term landscape is one of the most basic topics of interest to cultural geographers, shaping the concept of organonscape around landscape discussions will add a different perspective to organology studies. In this context, organonscape is about the ideologically produced and experienced aural spaces and their understandings through musical instruments. In this context, with the concept of

organonscape, we can understand how people experience and interpret the landscape through musical instruments and the sounds of musical instruments.

“Landscape refers to a form of representation, both as an art and as a complex system of meanings” (Mitchell, 1994 cited in Mitchell, 2005, p. 49). Cosgrove and Jackson (1987), who first considered the concept of landscape in the context of “cultural turn”, considered the contributions of cultural studies in the context of explaining “culture” and “ideology” in the evaluation of landscape. In this context, researchers began to read the term landscape as an ideologially created space. Indeed, Don Mitchell (2005, p.54). also states that landscape can be described in terms of power relations, ideology, and spatiality.

There are also other definitions of the term landscape related to nature and space. For instance, we can see a landscape as an “interaction between nature and culture” (Worster 1990, as cited in Hitchlife, 2003, p. 208) as well as a “space to be lived by people” (Lefebvre, 1991, p. 143). Indeed, either reading a landscape through nature or seeing as an ideologically created space, musical instruments might play a role in defining and describing a landscape. In this context, organonscape is closely related to the interpretations of cultural geographers on the term landscape and its academic usage.

The term landscape has been reconsidered in various studies to understand musical issues. Aural landscape (Emmerson, 1999, p.138) is the most related one to the concept of organonscape. Thus organonscape attempt to analyze the aural spaces of musical instruments. Emmerson (1999) analyzes the aural landscape as nested layers. Accordingly, while the widest area is the landscape, the narrowest area is the arena. He also mentions that sound can create a sense of place that we can interpret as an aural landscape (1999, p. 139).

The concept of organonscape includes all these discussions of landscape. These discussions also define the boundaries of the organonscape concept. As a result, just like aural landscape, organonscape deals with how places that have defined boundaries become a space which has fluid boundaries through musical instruments. This analysis requires a process view and therefore an understanding of fluid spaces. In this context, organonscape also contains the place-space dichotomy within itself. Thus, space can

be created when places, bounded locations, begins to be socially produced and consumed (Hubbard, 2005, p.42-43).

## 2.2 Understanding the Aural Space of *Kemençe* in the Eastern Black Sea Region

*Kemençe* instrument is one of the most important elements presenting the Eastern Black Sea region culture of Turkey. It is possible to observe this in and around Trabzon where I did fieldwork. For example, it is possible to see the *kemençe* sculptures in various parts of the city, and in all the shops where touristic gifts are sold, we see the products with *kemençe* motifs or *kemençes* used as decoration. Of course, in this wide geography, *kemençe* does not have a static meaning. In this context, there are various types of *kemençe*, as well as the environment, context, and repertoire in which these *kemençe* are performed. To understand these differences in terms of *kemençe* in the region, I took *kemençe* lessons from İlyas Parlak, a well-known *kemençe* player, starting in March 2018. I learned these differences in detail in these lessons and in my interviews with *kemençe* makers and performers.

The place where I took *kemençe* courses at the city center of Trabzon is called *İskender Pasajı* which is a building where only shops and markets are placed. *İskender Pasajı* is only one of the parts that visually present and show the human relations that shape the aural space of the *kemençe*. Thus, there are mostly *kemençe* houses and music markets in the *İskender Pasajı*. It is an old building that when one sees the building from outside, it gives the impression of the 1980s in Turkey. Even the signboard of the *pasaj* stays for more than 30 years. Thus, when one come inside the building it gives the same feeling. At the first floor, there is only one *kemençe* house and few shops which sell dress and fabrics. At the left side of the stairs, there is one music market. This music market gave me impression of being “historical” and “authentic” that remined me my childhood due to selling cassettes of local musicians from Trabzon. The most interesting thing about this music market is the music and album they advertise through posters. They especially choose the albums of *kemençe* players who have *kemençe* houses in this *pasaj*. This situation allows us to see the *İskender Pasajı* as a place that embodies the aural space of *kemençe* as well as showing the economic relationship between the *kemençe* performers and the music market.

The most *kemençe* houses are placed in the basement of the *İskender Pasajı*. When I went there for the first time, it was a little bit scary for me because the basement was

so dark. I supposed I came to the wrong place and then I asked to the music market the *Manahos Kemençe Evi* where İlyas Parlak holds his *kemençe* courses and perform with other *kemençe* players. He showed me the basement and it became more surprising to me. There were at least four *Kemençe* houses in the basement and one *Kahvehane* (café). After I began *kemençe* courses with İlyas Parlak, I observed that there was no economic competition between *kemençe* players and the owners of *kemençe* houses. During the class, many people, including owners of *kemençe* houses, come to İlyas and ask for different things such as help for making *kemençe*, offering student etc. Sometimes *kemençe* players perform at the *kahvehane* and other traders listen. Some of them are interested in *kemençe* as well. For instance, İlyas' neighbor who sells second-hand stuff is interested in making *kemençe*. İlyas shows the way how to make *kemençe* to him in every detail when he has free time while having *çay* (tea). Indeed, within the framework of this network of relations, it is possible to talk about the aural space of the *kemençe* and to observe how people create this space. In this direction, İlyas' *Manahos Kemençe Evi* is not a confined place, but rather a place where the social actors in this aural space stop by and share with each other.

Exploring the non-representational aural spaces of the *kemençe* and learning about its social life is an occasion. In this sense, I evaluated the manufacturing process of the *kemençe*, its performance and the dances it is associated with, within the aural space that people experience. Indeed, the aural spaces in which the *kemençe* is located are in a fluid structure and include terms such as nature, ideology, mobility, in which the landscape is defined.

The role of the *kemençe* in the creation of the aural space is related to the natural beauty and landscape of the Eastern Black region. This region of Turkey attracts many tourists with its nature, and it also has a diverse cultural life which changes even from village to village. The geographical conditions of the region make transportation difficult. In general terms, it is possible to evaluate the region as two different sub-regions: seaside settlements and mountainous areas. Transportation between the mountainous region and the seaside is possible only through valleys (see Figure 2.1). As a result, it is possible to see a similar musical culture along a valley near a seaside settlement. The primary reason for this situation is that transportation is only possible along the valley.

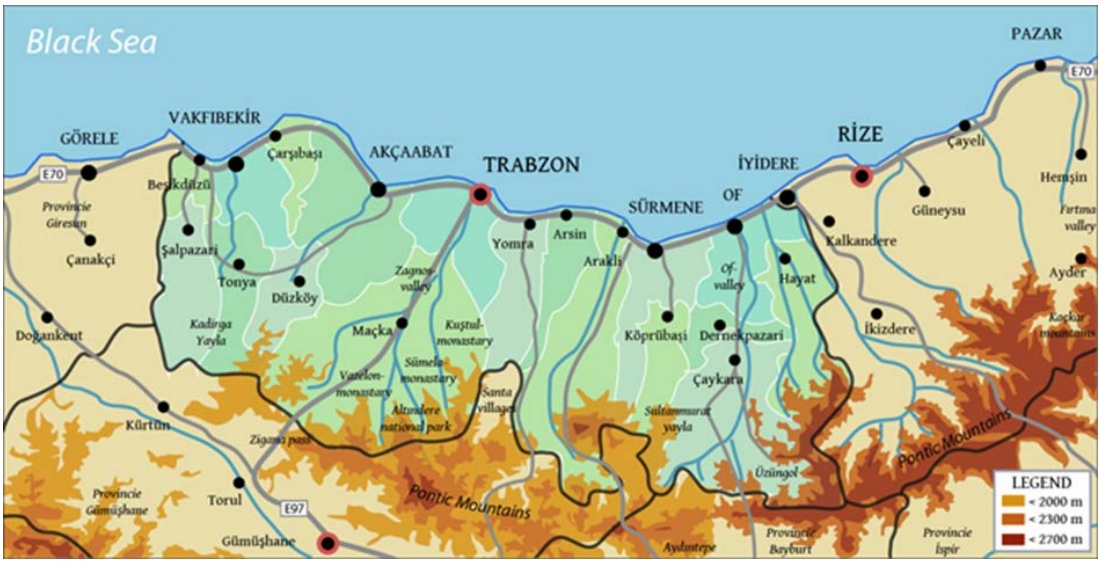



**Figure 2.1 :** Trabzon Province Map (Kılıçoğlu, 2012).

The landform of Trabzon and the surrounding regions also affects the nature and the atmosphere of the region. For example, as one goes from the coast to the mountains, the forest areas become denser, and the air becomes drier. Thus, it is remarkable to see the use of the mountainous region and the sea as metaphors in traditional pieces in and around Trabzon. There are expressions such as “towards the high mountains” and “grass of the plateau” in many pieces. It is possible to see a similar situation in the *kemençe*. For example, the air exchange between the mountainous region and the seaside also affects the timbre of the *kemençe*. This change in timbre is clearly seen when we tune the *kemençe*. When tuning the *kemençe*, one first found the appropriate sound on the middle string. The middle string gives a loud and clear sound at whichever note, the other strings are tuned as a $4^{th}$ interval according to that note. The “good” sound in the middle string is called the sound in which the *kemençe* “sings out” (*ötmek*). Of course, the sound that the *kemençe* “sings out” varies according to the humidity of the environment and the region where the *kemençe* is performed (Akat, 2012, p.3).

The *kemençe* has certain symbolic meanings in relation to the landform of the region. There are two discourses that contain this symbolic meaning. The first is the expression “*kemençe* is the voice of the mountains”. The second is that the trills and ornamentations played in the *kemençe* are likened to the vibration of anchovy which is an important symbol of the region. Some symbols of the *kemençe* are related to the *kemençes* performed in a certain place. For example, the ornamentations engraved on the scroll part of the *kemençes* performed in Görele are likened to the waves of the

Black Sea. The same ornamentation is likened to the gray wolves (*bozkurt*), which is seen as the symbol of "Turkishness" by some performers and is expressed in that way. In addition, *kemençe* performers in the region liken the head of the Greek *kemençe* to the shape of a heart. Thus, in some cases, the positioning of the tuning pegs of the Greek *kemençe* is the symbol of the cross which is the symbol of Christianity (Gazimihal 1929, p. 82).

Landform of the region also influences *kemençe* performance. We can see the most visible example of this when people travel to the highlands to spend their summers. People in the region travel from their villages to the highlands to graze their animals and spend their summers. This journey takes place on certain dates for each village. During this journey, musicians accompany people with instruments such as *kemençe* and drums. In doing so, the geographical conditions of the region also affect the sound of the instruments. The musicians usually stand at the front of the group followed by the other villagers in a long line. When the musicians move behind the mountain while playing the *kemençe* together with drums, the instrument sounds much quieter at the back of the mountain where the peasants are following.

People in the region reinterpret the sound of an instrument every time when they encounter it on the landscape. We can see the clearest example of this in *yol havası* (road songs) and *gelin havası* (song for the bride) performed during travel. People in the region classify the sounds of *kemençe* and drums coming from afar according to the repertoire played and know what kind of activity is done accordingly. For example, if they hear a *yol havası* from their place, they guess that there is a plateau migration according to the date, and if they hear a *gelin havası*, they know that there is a wedding in a nearby village. Of course, the sound of the instruments is shaped under the influence of the landscape and the landform of the region ensures that it can be heard from different villages. For example, the fact that the villages are located opposite each other on both sides of the valley and their roads extend from the valley to the mountains in a winding way affect the perception of these sounds throughout the performance. This morphological structure of the region allows the sound of the musical instruments to be heard in a very wide space. As a result, different villages know which event is taking place, depending on the piece being performed.

It is not possible for us to state a fixed meaning and representation of the *kemençe* within the Eastern Black Sea region. The *kemençe* is reinterpreted by *kemençe*

performers and people according to each environment and context just as a soundscape is in a constantly changing structure, the *kemençe* takes place in such an aural space. As a result of this, the sound and timbre of the *kemençe* are not perceived the same everywhere in the region. People in the region perform various types of *kemençe*. However, the context, environment, and repertoire in which they perform each *kemençe* differ. Thus, people construct the cultural identities through different types of *kemençes* such as *Trabzonluluk* (being from Trabzon in generations) and *Görelelilik* (bein from Görele in generations). Although there are commonalities between these types of *kemençes*, people build their own *kemençe* with different interpretations. For example, while the waves of the Black Sea are represented on the scroll part of the *kemençe* in Görele, the wolf picture, which is usually seen when one view the instrument from the side profile, is symbolized in Trabzon. This is a metaphor that includes the emphasis on "Turkishness" and the phrase "People from Trabzon are Chepni". From this point of view, it is possible to analyze the aural spaces and role of the instrument through different types of *kemençes*. Thus, in the next section, I talk about the different types of *kemençe* to reveal the non-representational aural spaces of the *kemençe*.

### 2.3 Types of *Kemençe,* Classification and Non-representational Spaces

The *kemençe* can be classified into several types according to various factors. These factors are the form and size of the instrument, the material of the instrument, the timbre of the instrument, the tonal range, and the place where the instrument is performed. The fact that the classification of *kemençe* depends on so many different factors proves that this instrument is located in a non-representational space. Thus, people do not have a shared understanding about the classification of the *kemençe* in terms of these factors. In the Eastern Black Sea region, the types of *kemençe* vary according to the repertoire, dance type and sub-regions in terms of performance. In general, types of *kemençe* are divided according to three basic elements. These are the tonal range, the "good" tone in which the *kemençe* sings out, and the location. Of course, these three basic elements also affect the repertoire performed with the *kemençe*, the type of dance it is associated with, and the categorization of the sub-regions. As a result of this, when considering different types of *kemençe*, it is necessary

to reveal the relationship between these elements and how this relationship is related to the types of *kemençe*.

Researchers, firstly, categorize *kemençes* according to the tone range (Akat, 2012; Balcı, 2001; Kaya, 2017). They do this categorization in two ways: The first view separates the *kemençe* into high-pitched voice (*tiz*) and low-pitched (*pes, kaba*) (Akat, 2012, p. 3; Kaya, 2017, p. 55-56). In the second view, the *kemençe* is evaluated in three categories, as high pitched (*tiz*), middle-sized (*orta boy*) and low pitched (*pes, kaba*) (Balcı, 2001; Şişman, 2007, p. 214). In addition to these types of *kemençes*, there are also the four-stringed *kemençe* and the electronic *kemençe*.

If we consider the four-stringed and electronic *kemençe* in a unique classification, certain standards for the other three categories (low pitched, middle-sized, high pitched) have are not clearly provided through researchers. For this reason, there is no consensus among performers and *kemençe* makers about which *kemençe* falls into which category. This situation also affects the performance of the *kemençe*. Nevertheless, *horons* that are said to be performed with high-pitched *kemençe* in many regions can also be performed with low-pitched *kemençe*. This ambiguity in *kemençe* types is of course an element that also shows the non-representational space of the *kemençe*. As a matter of fact, Adnan Saygun (1937, p.16-18) shows that there is no specific standard when analyzing the different tuning systems used for the *kemençe*. Consequently, the middle cluster (middle-sized *kemençe*) intersects with other clusters at certain points. Indeed, these classifications are abstract and have no clear, absolute rules in classification of *kemençe* in the region.

Besides the classification system according to the tone range, many musicians and *kemençe* makers in the region also use a specific tone to identify a *kemençe*. This situation is related to which tone of the *kemençe* is tuned and in which tone it gives a "good" sound. The "good" tone of the *kemençe* varies considerably, as it is related to the natural conditions of the environment and the weather. As a result of this, we can say that each *kemençe* has its own unique timbre. Despite this situation, *kemençe* makers and musicians use the expression "*kemençe* can be made in every tone" to create a certain standard. In the region, the "best" tone of *kemençe* gives the name of this instrument such as *La Kemençe, Sol Kemençe, Fa Diyez Kemençe* etc. Of course, this situation is also related to the non-representational space of the *kemençe*. For example, İsmail Kırcı, a well-known luthier in Trabzon, describes how the

performance opportunity of the *kemençe* and the spaces where it is presented develop by producing different types of *kemençe*:

> There are 7 notes… We can make 14-15 kinds of *kemençe* with the flat and sharps. According to every sound ... It is not that difficult. We even made *kemençes* in sizes that would not be made today, we are now practicing the features of violin, viola and cello for *kemençe*. High C (C5)… low C (C4)… by making an octave difference, we can create an orchestra consisting of 2 *kemençes*. (Personal Interview with the author, Trabzon, 28 January 2020)

The fact that the *kemençe* is an instrument with an octave range is a factor that greatly affects the performance. As İsmail Kırcı stated, the presented space of the *kemençe* has expanded with the performance of different types of *kemençes*. A similar statement was made by my teacher İlyas Parlak, with whom I took *kemençe* lessons. Parlak mentions that there are enough *kemençe* types to produce any different tone shades (Personal interview with the author, Trabzon, 02 March 2018). Clearly, this type of classification addresses a broader classification as it relates each *kemençe* to a particular tone. People who use this classification mainly prefer this classification to emphasize how diverse timbre and sound the *kemençe* has. As a result, applying this classification create a basis for the discourse of a non-representational spaces of *kemençe* in and around Trabzon.

Location is another element that presents non-representational spaces to us in the organonscape of *kemençe*. Indeed, Some researchers state that place names are used in naming the *kemençe* such as *Görele kemençe* and *Sürmene kemençe* (Şişman 2007, p. 214; Kaya 2015, p. 580). The basis of this naming is the local identity of the place associated with the *kemençe* and their unique musical styles. Thus, in most cases, it is not very clear what the *kemençes*, which are referred to by place names, refer to. For example, the primary reason for using the name *Görele kemençe* is that this region is characterized as the land where the *kemençe* was born. The name *Sürmene kemençe* usually refers to the low-pitched *kemençe*, which is also known as the *Rum kemençe* by many people in the region. During my fieldwork, I also heard the name of *Trabzon kemençe*. However, it is not clear which type of *kemençe* this name refers to. Because all types of *kemençe* can be found in and around Trabzon. In this context, the name

*Trabzon kemençe* transforms Trabzon from being a bounded *kemençe* place to a non-representational aural space that includes all types of *kemençe*.

There is also an effort to classify certain places according to the type of *kemençe* performed in the Eastern Black Sea region. However, today it is seen that various types of *kemençe* are performed in all sub-regions of the Eastern Black Sea region and classifications in a "traditional" sense are no longer valid. As a result of this, we can talk about the non-representational aural spaces of the *kemençe* in the region. For instance, Balcı (2001, p. I) indicates that low-pitched *kemençe* is used in Rize while middle sized *kemençe* is performed in Trabzon and we observe the high-pitched *kemençe* mostly in Giresun. Although it is crucial to see that this categorization of *kemençe* includes both place and tone range, I should mention that we cannot clearly categorize the types of *kemençe* into three locations as Balcı makes according to three provinces (Rize, Trabzon, and Giresun). The space of the *kemençe* has a fluid structure and people and all actors interact with each other in this space. As a result, aural spaces that are in motion and cannot be represented by a static meanings of *kemençe*.

Another situation in which there is a crisis of representation in terms of naming the *kemençe* develops in the context of ethnic and national identity. *Rum kemençe* is the most obvious example of this situation. Although *Rum kemençe* (Pontus lyra, Greek lyra/*kemençe*) is related to the Pontic community of the Eastern Black Sea region, there are two different musical traditions of *Rum kemençe* that have been separated from each other after the exchange starting from 1923, when a part of this community was forced to leave the country while the rest changed their religion to Islam and were able to stay in the newly-established Republic of Turkey. The name of the *Rum kemençe* is used for these two traditions that developed in different regions. Low-pitched *kemençes* performed in the region are called *Rum kemençe* and this instrument is also associated with the Greeks (*Rumlar*). Thus, even when talking about a specific type of *kemençe* and its repertoire, it is possible to refer to different musical traditions as a result of a naming. This situation shows us the non-representational feature of the aural space of *kemençe* through musical performances developed in different regions.

## 2.4 Mapping the *Kemençe*, Interpretting the Organonscape

The association of different types of *kemençe* with non-representational aural spaces is a factor that affects how we interpret the organonscape. While talking about different types of *kemençe*, it is not easy to map and mark which type of *kemençe* people perform in and around Trabzon in parallel with non-representational factors. There are differences in musical styles, repertoire and dance performances from village to village in and around Trabzon. In this sense, it is a very rich region in terms of musical diversity, and it is very difficult to address the region within a certain, fixed classification. While the people I interviewed approve of this situation, there is an effort to present the region to outsiders and to divide it into sub-regions in order to achieve a certain static description. For example, while my *kemençe* teacher İlyas Parlak stated that there are many types of *kemençe* in the region, he told me that he can play at weddings anywhere with three different *kemençe* (Interview with the author, Trabzon, 2 March 2018). According to him, there are three *kemençe* sub-regions in and around Trabzon.

According to Parlak, the first region is Tonya, Ağasar, Vakfıkebir, and Beşikdüzü, which are located in the west part of Trabzon. The most important feature of this region is the *horon* dances and the musical tempo is faster than other regions. High-pitched *kemençe* is usually performed in the region. The plateau festivals of this region also host music and dance performances. People living in certain villages organize these festivities by coming together on specific highlands on certain dates. The primary reason for using high-pitched *kemençe* in these plateau festivals is that each dancer on long horon lines should hear the sound of *kemençe*. More than a decade ago, sound systems were not used for these festivals and so people performed high-pitched *kemençes* to transmit the sound for every dancer. In this context, one of the primary reasons for associating the high-pitched *kemençe* with the *horon* was the resonance of the instrument. Nevertheless, this specific tone of *kemençe* continues to create the aesthetic pleasure of the people of the region.

*Horon* dance also varies within the region, just like the performance of the *kemençe*. Although the basic principles of this dance are the same everywhere, the dance style differs from place to place. *Horon* dance usually starts at a slow tempo and this part is also called *yayma/düz horon*. As the tempo increases, the dancers keep their bodies in

an upright position and raise their hands in the air. *Yenlik* is the part where shoulder movements are used frequently. This part generally comes after the part *düz horon*. After this section, the fastest part of the *horon* called *sıksara* or *dik horon* starts with the command given by the *horonbaşı* (Cihanoğlu, 2004, p. 25-28). Thus, this form and performance process of *horon* dance realizes the presentation of the region through performance. Especially in plateau festivals, each village performs its own *horon* dance as a separate line. Despite all these commonalities of *horon* dance, it is possible to see different *horon* styles in plateau festivals as a specific space. This shows us that the organonscape of *kemençe* is not in a fixed structure.

In the western part of the province, there is a tradition of singing folk songs in this ecole and *oturak alemleri*[2]. Singers use high-pitched sounds by shouting that their throats scratch in order to sing unison with the melody of high-pitched *kemençe*. The local people are also very selective in terms of the tone and playing style of the *kemençe*. Thus, I came across many times the discourse that express the selectivity about the sound of *kemençe*. For instance, people from Tonya do not enjoy every kind of *kemençe* and they prefer to listen "their" *kemençe* style. When *kemençe* performed with a style from outside their own region, they immediately realize this and want it to be performed in their own style. The purpose of doing this is to put Tonya in a distinguished place in the organonscape of *kemençe*. The way to achieve this is to provide it discursively along with performance. Consequently, the sound of *kemençe* becomes a materialized actor through performers who symbolize and present a specific location. It is also possible to see the best example of this in dance names such as *Ağasar horonu, Tonya horonu, Akçaabat üç ayak horonu* etc.

The second region mentioned by İlyas Parlak in organonscape of *kemençe* is Maçka region, which is an inland of Trabzon. The people of this region have been culturally influenced by both the eastern and western regions. The important features of this region are the *sallama* dance together with the *horon*. In this sub-region, people perform all types of *kemençe* here. One of the main events that distinguishes this region from other places is the *Kalandar* festival which is celebrated as a new year eve (13th January) by the local people every year. During these festivities, villages gather,

[2] Mainly men gatherings in a closed place. They sing songs and play *kemençe* in these events. Muhabbet means conversation in Turkish. Thus, in these events there are improvised songs lyrics by two people as if they are having conversation which is called *atışma* and *atma türküler*.

perform theatre plays and *horons*. In addition, they wear various costumes and visit all the houses in the village one by one accompanied by the *kemençe*. Nevertheless, it is possible to see that a similar activity was held in places such as Yomra on the east side of Trabzon. In this sense, both the *horon* dance and the *Kalandar* festival are not only related to a specific location. These are performances that take place in the organonscape of *kemençe* and have a "fluid" structure and do not have static meanings.

Third region that İlyas Parlak mentioned consists of east part of city center of Trabzon which includes Sürmene, Of, and Çaykara. At this region besides *kemençe* they also perform Black Sea *kaval* (end-blown flute). People in this region prefer to perform low-pitched *kemençes*. They also perform high-pitched *kemençes* only for horons. In this region, there is a relationship between *kemençe* and *kaval*. Although people perform *kemençe* for the *horon*, "it can be seen that today the *horons* of this region are played with the *kaval* (Akat, 2017, p. 5-6). It is possible to read the example of the *kemençe* being used for specific activities and dances, making it an unstable and unpredictable structure, through the instruments used in this region. For example, when I asked İlyas Parlak whether *horons* can only be played with a high-pitched *kemençe*, he told me that this is about getting used to. It is possible to play the *horon* with a low-pitched *kemençe*, and it is possible to see the clearest example of this situation in the immigrants who immigrated to Greece after 1923. These communities are continuing to perform *horon* with low-pitched *kemençe*. It shows that interaction between types of *kemençes* and other musical instruments shape the organonscape of *kemençe* through exchanging the repertoires, melodies, and playing styles.

Musicians and luthiers are searching new meanings in the aural space of *kemençe* as well as attempting to expand this aural space through searching for innovations on the musical instrument. From this point of view, luthiers tried to create a new opportunities for the musicians through making innovations in the structure of the *kemençe*. In this context, we can mention two more types of *kemençe*. These are the four-stringed *kemençe* and the electronic *kemençe*. Thus, it is clear that with these two types of *kemençe*, the performance area of the *instrument* and thus the organonscape were tried to be expanded. In order to ensure that the *kemençe* takes more place in different aural spaces, these novelties are placed on the instrument.

The four-stringed *kemençe*, as a new type of *kemençe*, later entered the classifications of *kemençe* thorugh becoming popular among musicians and well-known usthads such

as Yusuf Cemal Keskin. The four-stringed *kemençe* is also related to the historical creatin of the regional musical style and the possible changes that will take place on the instrument in the future. In terms of changes on the structure of the instrument, the four-stringed *kemençe* aims to develop the performative features of the instrument, which has 1.5 octaves, and to provide easy performative settings for the musicians.

*Kemençe* began to change in terms of musical performance, style, and meaning after the 1960s. "The shaping of local music through interaction has been accomplished by the musicians in the regions where there was no mass media, by going to the surrounding settlements, performing their art in the highlands, weddings, entertainments or special meetings and returning back. In this case, this situation has changed after the establishment of Turkey Radio and Television Corporation (TRT) with the spread of radio among radio programs and the public" (Akat, 2017, p. 7). Thus, musicians in the region started to be influenced by Turkish Folk Music thanks to radio programs starting from the in the mid of 1960s. Thus, in some cases, we can observe the changes in certain musical styles. For example, İlyas Parlak states that the pre-TRT playing style is called "authentic" in the region. Because, as a result of compilation studies, radio programs and relations with Turkish Folk Music, certain standardizations have been taken place in the music of the Black Sea region. The term "authentic" is used in reference to the process preceding this standardization process.

Although radio began to appear in the region in the 1930s, the lack of sufficient radio receivers reduced the cultural effects of radio until 1960s (see also Okur 2019, p. 164). It is possible to say that the influence of radio in the region has increased, especially since the second half of the 1960s. Although recordings began to be made in the region from the 1920s via Mahmut Ragıp Gazimihal's folklore expedition (1929), both the geographical conditions of the region and the limited use of technology did not have a serious impact on local communities, including the *halkevleri*, where people were education in order to reach the contemporary civilization target as set by the newly established Republic of Turkey. Especially, the works of Trabzon *halkevi* did not go any further apart from the detached collection studies and informing the public about the rest of the country (see also Yılmaz 2011, p. 98; Yılmaz 2020, p. 44). However, with the compilation works, the Black Sea regional music has entered the category of folk music and these efforts are also seen through recordings and "Yurttan Sesler", radio programs made by Muzaffer Sarısözen in the 1940s. Thus, folklorists have

carried out compilation studies in parallel with the Early Republican Music Policies of the newly-established country followed between 1923-1950 (Balcı 2009, p. 62-63) and the regional music was considered within the "folk music".

Musicians who consider the *kemençe* as a Turkish Folk Music instrument state that the music of all regions of Turkey can be performed with the *kemençe*. In this context, *kemençe* makers and performers aimed to expand the performative spaces of the instrument by considering the *kemençe* in the "folk music" category. This shows us that the organonscape of *kemençe* has been ideologically re-evaluated and reconstructed through actors such as *kemençe* players and luthiers. The four-stringed *kemençe* was invented to deal with this expanded aural space of *kemençe* in a broader context.

*Kemençe* maker Hasan Sancak states that he made the first four-stringed *kemençe* (DiyanetTV, 2015). According to him, the four-stringed *kemençe* allows musicians to play the instruments both as if it is a high-pitched or low-pitched *kemençe* through having advantage of two different tone. He also adds that players can put down the lower string if they use low pitches. If treble sounds are to be used in the high-pitched *kemençe*, the thick string can be left out. This situation not only makes playing easier for the performers, but also shows us that all the *kemençe* spaces are intertwined, as it brings together different types of *kemençe*. Indeed, with the four-stringed *kemençe*, performers can play all the pieces in the organonscape of the *kemençe*. Besides, ideologically, this instrument is not confined to the Eastern Black Sea region in terms of repertoire. By performing pieces specific to other regions, the aural space of the *kemençe* and the space it is presented expands.

The discursive and performative expansion of the aural space in which the *kemençe* is presented shows us how the concept of organonscape is related to the ideological background. Ismail Kırcı states that this use of *kemençe* is not valid and if there are four strings, all of them should be used (See Figure 2.3). He also mentions "The reason why I used the *kemençe* to four strings is to play the high-pitched parts in the right place on the keyboard and play them comfortably" (Personal Interview with the author, Trabzon, 28 January 2020).



**Figure 2.2 :** Ismail Kırcı showing his four-stringed *kemençe*.

In addition to the four-stringed *kemençe*, another innovation that tries to expand the boundaries of the instrument has been introduced with multiple *kemençe* (Akat, 2012). With multiple *kemençe*, it is aimed that *kemençe* players can perform pieces of different tones with a single instrument. With this feature, the *kemençe* player going to an event will not have to carry more than one *kemençe* with different tones (ibid, p. 5-6). Thus, the electro *kemençe* is also produced for the same purpose.

Electro *kemençe* is an instrument developed to provide various conveniences in terms of performance. The first of these conveniences is related to the tone range of the *kemençe*. Traditionally, the *kemençe* has a tone range of 1.5 octave. Together with the electro *kemençe*, this instrument has an even wider tone range. Pieces of any tone can be performed with the electro *kemençe*. Stage is another environment in which the instrument is suitable for performance. Especially in the Eastern Black Sea region, the plateau festivals are now in a structure where the stages are set and sound systems are used. With the popularization process of the music of the Black Sea region, both the Black Sea Pop/Rock phenomenon emerged and this process has affected the traditional culture of the region. While this situation started in the 1970s, today we can see the

effects of this process on the *kemençe* performance in plateau festivals (Akat, 2017, p. 9-13).

Ceyhun Demir was the first luthier to design and make the electro *kemençe* in 2007 (See Figure 2.4). He mentions that when he made the electro kemençe, some kemençe performers and luthiers criticized this instrument and his effort. According to these critics, he destroyed the originality of *kemençe* and the tradition of this performance:

> They claimed that I distorted the original structure of the *kemençe*, but unfortunately they cannot realize that the *kemençe* they played on the stage has undergone a lot of changes. When I asked if they could play the *kemençe* 200 years ago in our discussions, I generally did not get a response because the strings structure, form, and tuning pegs have changed. Therefore, to be able to go on the stage and adapt to the music of this period, there must be a change, and now the electro *kemençe* has taken its place among the choices. Especially the new generation musicians prefer it. (Online interview with Ceyhun Demir, 14 March 2020)

According to Ceyhun Demir, the electronic *kemençe* was designed considering the new needs of the instrument, and in this sense, stage performance with the *kemençe* is one of the most important issues. Indeed, with the stage performance, the aural space of the *kemençe* was moved to a different dimension and the stylistic structure and timbre of the instrument changed. On the other hand, electronic *kemençe* provides a lot of comfort to performers in genres such as Black Sea Rock and Black Sea Popular Music. In this context, the electro *kemençe* has become an element of the *kemençe* that undertakes the presentation in new spaces and in different music genres by undertaking a task that connects music, culture and technology within the organonscape of *kemençe*.



**Figure 2.3 :** Four-stringed and three-stringed electro *kemençes* made by Ceyhun Demir (Photo by Ceyhun Demir).

## 2.5 Organonscape and *Kemençe* as an Aural Space Marker

When we talk about the organonscape and aural spaces of the *kemençe,* we can mention the five types of *kemençe*. Nevertheless, it is true that these *kemençes* are in interaction with other instruments within an ambiguous space. We can apply the concept of organonscape in analyzing the aural spaces of musical instruments through focusing on the material culture, *scapes*, performance, and the experience of a landscape. In order to reveal the organonscape of the *kemençe,* I mentioned five types of *kemençe* and discussed how musicians and luthiers interpret these different types of *kemençe* in the aural space where they live in.

The organonscape of the *kemençe* includes the presentation of certain locations to others through this instrument as an aural space. *Kemençe* plays an important role in presenting the Eastern Black Sea region to outsiders. It is possible to see the clearest examples of this especially in Trabzon and Görele. For example, the presence of *kemençe* statues in various parts of Trabzon and the sale of the *kemençe* as souveniers

show that Trabzon has an aural space presented through the *kemençe* (see Figure 2.5). Another example is Görele, a district of Giresun. Thus, people living in this region attach special meanings to the *kemençe*, and they equate this instrument with their own location. Through this, they claim that the *kemençe* was born in Görele and that this is the center of the *kemençe*. Parallel to this, they ideologically distinguish their own *kemençe* from other regions with names such as Görele *kemençe*. At the same time, they equate this type of *kemençe* with the Chepni cultural identity.




**Figure 2.4 :** Souvenirs at the *Uzungöl*, Trabzon.

The five types of *kemençe* performed in the organonscape of *kemençe* show us the repertoire and dances performed in this aural space, as well as how people experience this space. For example, while the high-pitched *kemençe* is often used for *horon*, this *kemençe* type is also associated with a specific location by attributing different meanings to the decorations and carvings used on it such as Görele *kemençe*. It is possible to say a similar situation for the low-pitched *kemençe*. While this *kemençe* is known as *Rum kemençe* in the region, it is also frequently performed in the eastern part of Trabzon. While the low-pitched *kemençe* is performing the *atma/oturak türkü* in *muhabbet* gatherings, *horons* can also be performed with this instrument. In this sense, it is seen that different types of *kemençe* do not have a static meaning and can be

performed in different performance spaces. This situation shows us the non-representational features of the organonscape of *kemençe*.

Organonscape of *kemençe* includes the environments and contexts in which five different types of *kemençe* are performed withic the framework of landscape and aural space. The organonscape of *kemençe* does not have a single meaning and representation. In this sense, the *kemençe* produces multiple and fluid meanings as a space marker. Concerning the aural landscape, the organonscape is about the ideologically produced sound spaces, a way of being in the landscape through musical instruments. The organonscape of *kemençe*, in this context, covers all the spaces in which the *kemençe* is heard and performed.

Material culture is one of the another important point that defines the organonscape of *kemençe*. Hence, as Jackson pointed out, "material culture is the relationship between people and things" (as cited in Lees, 2002: 102), and *kemençe* is one of the most important elements that show us this relationship in and around Trabzon. Luthiers have one of the most active roles in the creation of this material culture. *Kemençe* makers know very well which type of *kemençe* to make and in which tone. In the same way, they know which type of *kemençe* is suitable for which type of performance. In this context, as a result of a mutual interaction process with musicians, they get the kind of *kemençe* they want. This situation shows us that they know the aesthetic features of the region through this interaction and in parallel they make their instruments.

## 3. ATMOSPHERIC RELATIONS OF *KEMENÇE* IN THE EASTERN BLACK SEA REGION OF TURKEY

This part of the study deals with the specific situation of *kemençe* performances and how it creates a unique and common experiences among listeners and musicians. For this reason, in this section, I mostly focus on specific moments I encountered during my fieldwork between 2018-2020. I also utilized from the experiences of my interviewers to show how people share specific experiences together and create a collective feelings.

The first encounter of mine with the *kemençe* is a kind of story that created an unique feelings among people. When I was a member of the Mountaineering Federation of Turkey, we held a climbing at the *Kazdağları* (Ida Mountains), Çanakkale. There were lots of small groups gathered around the Turkey in this event and I still remember so clearly the group from the Black Sea region (Rize and Trabzon). While everyone was focused on the climbing and event at that time, groups from the Black Sea region were so cheerful and acting like they are in a familiar environment as we were at the mountain. As we were coming down from the mountain, one member of these group began to sing a traditional Black Sea song loudly. Indeed, this song transformed the atmosphere of the place with the combination of the sound of the nature, eco in the environment, and the forest. At that moment, we all felt like we were climbing to the *Kaçkarlar* in the Eastern Black Sea region. After climbing was done, one musician from that group played *kemençe* for us at the camp area. He really made us feel the unique aural space of the Black Sea region through this performance.

I had never been to a part of Eastern Black Sea region before this climbing, but I had known this region with its nature, mountains, forests, and distinctive accent.The reason why I felt like in the Black Sea region at that moment is that the musicians created the atmosphere of this region through songs sung and the *kemençe* performance with the combination of the visuality such as foret, trees, climate of the place, the sound of the footsteps etc. After I moved to Trabzon in 2017, I understood more clearly how the settings of an enviroment and the sound interact each other and became a symbol of a

certain space. There is a strong effect of nature such as flora, climate, and non-human actors on the cultural practices of the local people in the Eastern Black Sea region.

In this section, I analyzed the *kemençe* and its performance by the concept of atmosphere. Also, by applying the concept of atmosphere, I attempt to evaluate the complex relationship between the *kemençe* performance and the soundscape of the region. Indeed, the sound of kemençe is placed in a surfaceless sonic space which has a fluid structure in the region where *kemençe* is performed. In this context, the questions of this section are about the nature, soundscape and the role of the musical instruments as an actor: Can we "read" the soundscape of the Eastern Black Sea region? If yes, how we can read and understand the soundscape? How we can understand the idea of fluidity in a soundscape? Are there any mutual connection between the soundscape and atmosphere? If yes, how these connection can create a new perspective for both soundscape studies and atmosphere? How we can talk about the sonic atmospheres of the Eastern Black Sea region through *kemençe* instrument? How can we understand the role of musical instruments in a specific soundscape or atmosphere?

In the first part of this chaper, I evaluate the concept of atmosphere through focusing on its commonality with the concept of soundscape. While taking the critics of the concept of soundscape into consideration, I attempt to show that atmosphere can contribute to a new understanding of the soundscape and open a new perspectives for the future research. From this point of view, I evaluate the new concepts derived from the concept of atmosphere in this part. These are atmospheric practices, atmospheric relations, and atmospheric arrangements. According to Riedel (2020, p. 4-6), while atmospheric practices mean specific performances that create an unique atmospheric situation, atmospheric relations imply a generative relationships between bodies (human and non-human) which create an atmospheric situation. From this point of view, I also offer a new concept, atmospheric arrangement, in order to analyze how actors make the arrangements both in terms of sound and visualiations to create an atmospheric situations through performance and interactions between bodies.

In the second part of this section, I apply the concept of atmosphere into analyzing the sonic spaces of the Eastern Black Sea region and *kemençe* performances. In this context, I talk about two different perspectives in this section. First is the *kemençe* performances as atmospheric practices which considers the sound of kemençe as a

creator of an atmospheric stiuation. In this section, I also apply the atmospheric arrangements in order to show how an arrangement of the sound of *kemençe* is a part of creating an atmospheric situation. Second is the atmospheric relations of *kemençe* that mostly consider the relationship between all actors (human and non-human) in the region. These relationships affects the atmospheric practices as well as help human actors such as musicians and luthiers to create an atmospheric situation through the space of felt-body (*Leib*).

### 3.1 Soundscape and Atmosphere: Capturing the Space

In this study, I apply a method of analysis following the commonalities between the concept of soundscape and atmosphere. Although the term soundscape was first used in the field of urban planning to understand and perceive the space in terms of sound (Simonett 2014, p.118), it became widely used thanks to R. Murray Schafer's The World Soundscape Project and writings with the focus on the facts of the soundscape (Schafer 1970, 1994, 2012, p. 95-103). This term is still widely used in academic discussions (Raimbault and Dubois 2005, p. 339-350; Samuels et al, 2010, p. 329-345; Adams et al, 2008). Indeed, soundscape began to receive certain criticism in the first half of the 21st century. These criticisms developed especially within the concepts of transduction (Helmreich, 2010, p. 10) and immersion (Ingold, 2007, p.10). In terms of this study, I take into account the intersection of sound and felt-body (*Leib*), extension of the body through the surface and surfaceless space in terms of Herman Schmitz's approach, along with the analytical approach of the concept of the atmosphere as opposed to the concept of the soundscape as Patrick Eisenlohr puts it comparatively (Eisenlohr, 2018, p. 39). Based on this, I examine the concepts of atmosphere and soundscape in this work.

Although I often prefer the concept of atmosphere in this study, I am not in favor of getting rid of the concept of soundscape completely. From this point of view, we suggest that the concept of atmosphere can be used as an alternative to the concept of soundscape while evaluating atmospheric relations in the context of the concept of felt-body. For this reason, I tried to reveal the strengths of these two concepts in the *kemençe* analysis in the second part of the section. Additionally, I put forward the necessity of handling the concept of the atmosphere with the idea of "nature". Indeed, taking nature as a space that includes material and non-material realities connects us

to consider the commonalities between the concept of atmosphere and soundscape. In the last part of the article, I discuss the atmospheric relations of the *kemençe* in the axis of soundscape, atmosphere, and nature. In this context, in the spider web model I developed, I worked on all the elements that *kemençe* is related to as an actor.

The soundscape is one of the important concepts that affect music and sound studies as well as providing a new perspective in order to read other concepts such as the atmosphere. Many thoughts suggested by Murray Schafer along with the concept of the soundscape can be considered in terms of atmosphere and sonic spaces of felt-body, especially through the critiques of the concept of soundscape. For instance, Tim Ingold states that the concept of soundscape is no longer functional because it creates an unrealistic stability within the fluid world of sound (Ingold, 2007, p. 10). The term immersion proposed by Ingold may play an important role in understanding sonic spaces and the concept of atmosphere without getting rid of key terms in the basic understanding of soundscape. For example, the three fundamental terms which are keynote sounds, signals, and soundmarks proposed by Schafer reveal the idea of landscape and space through focusing on its consistency and careful listening (Schafer 1994, p. 9-10, 2012, p. 101). Considering the characteristics of the sonic space in these three terms is also connected to the idea of nature and environment. In this regard, the commonalities of the terms of nature, soundscape, and atmosphere are notable.

Raymond Williams famously mentioned that “nature is… perhaps the most complex word in the language” and he points out the pluriform of this term (see also Williams, 1972, p. 146-164). However, when I talk about nature in this study, I also accept certain understandings such as “nature” is not “out there” and that it is the material world that deals with human and non-human beings. Also, the effect of interrelation between nature and environment on the soundscape can be presented by transduction. In this context, nature is the world in which we can observe the relationships, existence, and “fluidity” of living and non-living beings, including human activities in a broad sense. When we say nature, we understand that it is a world where dualisms from a Cartesian perspective such as human - non-human, and nature-culture are intertwined. As a result of this, when we look at the sound world of a specific space, we encounter a constantly changing world in which all these components are in motion. In short, the structure of the sound world is nature itself. Indeed, the relationship between the terms soundscape and nature has various commonalities with the concept of felt-body, which is an

important term for understanding the concept of atmosphere. From this point on, I will evaluate the concept of atmosphere in parallel with the terms felt-body and soundscape.

The concept of atmosphere first appeared in academic debates with phenomenology in the mid-1960s (Schmitz, 1965; Tellenbach, 1968). Along with the new phenomenology, Herman Schmitz evaluates the concept of atmosphere together with emotion, space, and embodiment. The point he emphasizes with the atmosphere is felt-body and *corporeality* (as cited in Kazig, n.d.). Schmitz's concept of felt-body, a key term in the understanding of the atmosphere, mainly questions the space and how it is perceived. While Schmitz talks about the layers of spaces, he mentions two kinds of spatiality which are locational space and surfaceless spaces that are layers below the locational space (Schmitz, 2020, p. 64). Felt-body appears in both surface and surfaceless space. It begins with corporeal stirrings (*leibliche Regungen*) such as fright, fear, pain, hunger on the surface and can be extended on the surfaceless spaces as being the space of the felt-body or the space of feelings as atmospheres (Schmitz, 2020, p. 64-65). According to Herman Schmitz, "the space of the felt-body is a surfaceless space just like the space of sound" (Schmitz, 2017, p. 10). Thus, it is possible to transpose the surfaceless space into a system of relative locations, for instance, capturing the sound sources through visualizing its' possible location via perceptual body (Schmitz, 2017, p. 11). Noticeably, transposing surfaceless sonic spaces, including soundscapes, shares many common understandings with the notion of transduction such as the role of perceiving the sound through the body (Eisenlohr, 2018, p. 39), and analyzing the fluid sonic spaces through being in the space "effortless" (Helmreich, 2007, p. 633, 2010, p.10). Just as transduction allows us to think about the production of space, presence, and soundscapes, the concept of felt-body allows us to think about soundscapes in a broader framework with the concept of atmosphere such as experiencing the sound and understanding the surfaceless sonic spaces through the extension of the body.

Embodiment is another term to be explored through the concept of felt-body to reveal the full potential of the atmosphere. According to Schmitz, "felt-body also concerns embodied dynamism and the embodied communicating resulting from spatial structure" (Schmitz, 2017, p. 12). In this context, Schmitz describes the felt-body as "in embodied affectedness is open to that which takes hold of and forces the human

being to become aware of itself, be it purely by feeling or also aided by reflection". Indeed, embodiment links the *Leib*, felt or lived body, to the atmosphere as a lived surfaceless space. From this point of view, "an atmosphere is a total or partial – in any case, considerably extended – occupation of a surfaceless space in the region of that which is lived (*erlebt*) as present in a particular case" (Schmitz, 2020, p. 65).

While evaluating the concept of atmosphere with the surfaceless space and embodiment, which is discussed with the term felt-body, this concept shares the main understanding of spatiality and transduction with the soundscape. According to Eisenlohr (2018), "atmospheres are quasi-objective entities that spread in a given space, touching and enveloping the bodies of those perceiving them in a way that exceed single, definite sensory impressions" (p. 39). In line with this definition, the felt-body allows us to question and understand sound as a whole, beyond the boundaries of the body, beyond the inside-outside dilemma (Eisenlohr, 2018, p. 35). Andrew McGraw (2016) indicates "atmosphere refers to a shared sense of affective intensity and is described as occupying an immersive, resonant, and spherical spatiality, much like sound itself" (p. 131). McGraw (2016, p. 131) remarks on the similarities between the concept of atmosphere and soundscape in terms of being more-than-sound and sensory ethnography. He also discusses atmosphere in terms of affect theory and actor-network theory in his influential study. Thus, Birgit Abels (2020) discusses that with the term of atmosphere we can overcome the lingering dualisms and further to that we explore "how atmospheres bring about resonances between the divergent dimensions of the lived experience through the human body – allowing cognition; affect and discourse; pasts, presents and futures; and the self and the world – to coalesce in a given situation" (p. 169). In this context, atmosphere can be considered in relation to the embodiment as it is seen in Abel's studies. Consequently, we can evaluate this concept in different contexts and frameworks as a result of its flexibility and inter-related terms such as space, felt-body, and soundscape. Each of these definitions shows us that the concept of atmosphere can contribute to the idea of nature and soundscape. In particular, the concept of atmosphere justifies some criticism brought on the concept of the soundscape through accepting surfaceless sonic spaces and what is felt in these spaces with the extension of the body. In this regard, we may assert that the concept of atmosphere leads us to reflect more of a relationship between bodies and structures.

It is possible to put this idea more clearly and to indicate the similarities between soundscape and nature with the idea of the atmosphere. According to Riedel (2020, p. 3), when we bring up the idea “music as atmosphere”, we can head towards nine different premises. These are the effect of music-making about the atmosphere, experiencing music and sound as atmosphere, the individuality of atmospheric feelings, insufficiency of identifying feelings, the affective power of sonic as environmental atmosphere, atmospheres as auditory realm, musical and/or the acoustic as critical dimensions of atmosphere, categorical distinctions of sonics such as “music” and “sound”, and finally the relational structure of music, sounds, and atmosphere. It will be clear from these thoughts that music is both a part of the atmosphere, the atmosphere itself, or an element that creates the atmosphere. These nine premises about ‘music as atmosphere’ are valid for soundscape as well. Effect, experience, fluidity, individuality, feelings, and environment are also key concepts in the soundscape. Besides that, thinking music and sound categories in atmospheric relations could also be connected to the soundscape. In this context, we may claim the saying that soundscapes are atmospheres and soundscapes create an atmosphere.

### 3.1.1 Atmospheric practices

According to Riedel (2020), “atmosphere or an atmospheric situation pertains primarily to the overall situation in which a multiplicity of bodies cohere. In analogy, atmosphere asks how music and sounds impact on the totality of things rather than on individual listening bodies, but nevertheless impact the individual body through the totality” (p. 4). In this context, while atmosphere emphasis on affect and embodiment, soundscape can be considered as a surfaceless sonic space that is pertained by the felt-body. Additionally, atmosphere and soundscape share main understandings and give importance to similar terms such as effect, experience, fluidity, individuality, feelings, and environment. Understanding an atmospheric situation may require the analysis of the soundscape to evaluate the sonic space where the felt-bodies are placed, interacted with, and affected by the music or sound. Besides that, thinking music and sound in atmospheric relations could also be connected to the soundscape. As a result, Riedel (2020) expands the idea of atmosphere by considering atmospheric relations and practices (p. 5-6).

Mikkel Bille (2019) described the term atmospheric practices in his book titled *Homely Atmospheres and Lighting Technologies in Denmark: Living with Light*. His further work also focused on this term which is an important part of the concept of atmosphere. While Bille and Simonsen (2021) examine the term atmospheric practices within the framework of the concept of atmosphere, another subject they emphasize is affect theory. They evaluate the term atmospheric practices with the concept of *affective atmosphere* and tie this term with the literature of *affective atmospheres*. According to Bille and Simonsen (2021), "the implication of attending to atmospheric practices beyond atmospheric perception is to see human bodies and materiality as attuned with affective potentials, where the resulting atmospheres are affective forces" (p. 305). Clearly, according to this description, atmospheric practices do not separate the issues of atmosphere and affect from each other and consider the body as a unity that occurs as a relation.

The term atmospheric practice is also related to the term atmospheric relations because it includes the relations of human bodies in relation to affect. Of course, there are certain arrangements to be made in order to create a certain affect within this network of relations. I refer to these specific practices with the term atmospheric arrangements that I propose.

### 3.1.2 Atmospheric arrangements

In this study, I use the term atmospheric arrangements in relation to atmospheric practices. Although atmospheric practices and atmospheric relations have been discussed in relation to the concept of atmosphere, there is no approach that deals with how a certain atmospheric situation is created. Indeed, all actions taken to create a particular atmospheric situation can be treated as atmospheric arrangements.

It is necessary to examine and evaluate the term atmospheric arrangements in the context of atmospheric practices. Because both terms are evaluated to create a certain atmospheric situation. "Atmospheric practices (or what Morton calls *ambient poetics*) are precisely those that imbue a situation with coherence, and which, in turn constitute the (homogeneous) sonic-social or aesthetic milieu" (Riedel, 2020, p. 17). In this context, an atmospheric practice must contain a certain atmospheric arrangements. Otherwise, it would not be possible to create a sonic-social space that is accepted as a certain aesthetic.

One of the most appropriate ways to deal with the term atmospheric arrangements in terms of musical practices is Christopher Small's (1998) concept of musicking. According to Small (1998), musicking is "To music is to take part, in any capacity, in a musical performance, whether by performing, by listening,by rehearsing or practicing, by providing material for performance (what is called composing), or by dancing" (p. 9). In short, this concept includes not only the instantaneous process of musical performance, but also the preparation processes before and after it. The situation of creating a certain atmospheric situation is also related to musicking. Every action taken to create a common affect between people before and after the musical performance takes place in atmospheric arrangements. Examples of this are setting up the stage, sound check, rehearsals, setting and arranging the space. Thus, if we expand this situation even more, the practices of musicians and the works performed on creating a certain affect on other people, and for this reason, they are evaluated within the process of atmospheric arrangements.

The primary objective of the atmospheric arrangements process is to create a particular atmospheric situation. This is possible by realizing a certain atmospheric practice. Of course, another important element that needs to be addressed with these two terms is relations. As a matter of fact, it is possible to talk about a certain atmosphere as a result of the relationship and interaction between bodies (people).

### 3.1.3 Atmospheric relations

According to Riedel (2020, p. 5), atmospheric relations emphasize the modalities, structures, relations, and mediations in atmospheric situations. Riedel (2020) also states that dichotomies such as individual and environment, matter and mind, body and self are no longer opposites and that they are intertwined in atmospheric studies (p. 13). Removing binary oppositions in terms of thinking about the relationship between bodies and structures in each surfaceless sonic space reveals the atmospheric relations of a soundscape. Also, "*atmospheric relations* describes the sonic-social structures, and their related *atmospheric practices*, that stabilize an affective field or social situation by imbuing it with homogeneity and thereby charging it with identity and difference"( Riedel, 2020, p. 29). In this perspective we look at how space affects sound and the characteristics of sound output, which is an analysis of the soundscape

contribution to revealing the atmospheric relations in a sonic space and atmospheric practices.

Atmospheric relations have been primarily associated with atmospheric practices in the literature. “Atmospheric practices are the cultural techniques of forging atmospheric relations” (Riedel, 2020, p. 30). Thus, Bille and Simonsen (2021) also emphasized relations while describing the atmospheric practices. “Atmospheric practices are rather than viewing atmosphere and affect (verb, adjective) as something in the relation between people, place, and things, they unfold as the relation” (p. 296). The remarkable point here is the meaning of the term “relation” and the preference of this term over “relationships”.

“Relations (*Beziehungen*) are directed, namely from something that relates, to something it relates to, possibly via intermediaries. Relationships (*Verhältnissen*) are undirected. An example: two things lie next to one another” (Schmitz, 2020, p. 61). Also, we can divide the relationships into relations. In this sense, it is possible to determine many features that will serve as intermediaries in atmospheric relations. Each of these features is undoubtedly the components in the atmospheric practice. If we consider that the existence of elements that play a similar role exists before and after the musical performance, it is possible to see intermediaries in the atmospheric arrangements process as well. Indeed, as a result, atmospheric practices and arrangements emerge through relations. There are actors and intermediaries who provide the atmospheric situation[3]. With the combination of these three terms (atmospheric practices, atmospheric arrangements, atmospheric relations), we can detect a certain atmosphere or atmospheric situation.

### 3.2 Sound of *Kemençe* as Atmospheric Practices

The sound of *kemençe* has a strong effect in the region. It also reflects the people’s collective feelings. While reflecting the pain of people through the folk songs sung in a closed place until the morning, it reflects the liveliness and happiness of the people

[3] These actors and intermediaries might be both human and non-human that effect our understanding of an atmospheric situation. Of course, the relationship between these actors that create an atmospheric stiuation includes atmospheric pratices. In this sense, it is possible to see atmospheric arrangements for musical performances in order to create a common feelings among felt bodies. As a result of this, we can clearly encounter with a atmospheric situation in which all actors take part.

together with the *horons*[4] performed in a fast tempo. Even in the most unexpected situations, the sound of the *kemençe* can activate people's bodies. Next to the small atelier where I learned to play *kemençe*, there were several *kemençe* houses/shops and a coffee house. Men who have shops around this building in Moloz (a district in the Trabzon city center) usually sit in the coffee house, drink tea and chat for long hours. Their conversation is accompanied by the sounds of *kemençe* coming from *kemençe* shops. One of the most interesting moments took place while my *kemençe* teacher İlyas Parlak was teaching me the *sıksara* rhythm that is the fastest *horon* style in the region. It is the climax of the *horon* dance after the slow part, which is generally called the *düz horon*, and the part where the dancers show their skills by improvised figures. İlyas gradually accelerated the *sıksara* rhythm, starting from a slow tempo. When it came to the "right" tempo, around 160 – 175 bpm, a few people sitting in the coffeehouse got up, came in front of the Ilyas' shop, and started to dance *horon*. This was one of the first examples I observed how the sound of the *kemençe* creates communally lively dance practice that all bodies interacted through the sound of *kemençe*. It was the partial surfaceless sonic space of the felt-body through sharing experiences of dancers and *kemençe* player.

The place where İlyas Parlak's *kemençe* house was located offered me a very suitable environment for observing the atmospheric practice of the instrument. There were a few more *kemençe* shops next to İlyas's *kemençe* house, and the sound of *kemençe* was constantly heard from these shops. *Kemençe* performances also transformed the large, empty space in front of the shops in terms of "feeling". For example, when I went for a lesson a few times, no one were playing the *kemençe* on the ground floor and the very dark place gave me the feeling of a "cold" space in silence. When I heard the sound of the *kemençe* coming from the shops, I understood more clearly that this feeling of mine had changed about this place. The sound of *kemençe* completely transformed the atmosphere of the damp, cold, and dark place with the shops downstairs. In addition, the reaction of those sitting in the coffeehouse to the sound of

[4] *Horon* is a traditional dance are performed in joyful times, *Imece* (working songs), weddings, plateau festivities, Military Send-Off and entertainments organized between friends. This dance can be performed in a ring, semi-ring or straight row. The movements in this dance are associated with nature of the people of the region. For example, body movements performed while working in the field are reflected in this dance. See also Trabzon Provincial Directorate of Culture and Tourism, "Horon ve Çalgılarımız."

*kemençe*, along with the practice of *kemençe*, was one of the important elements that transformed the atmosphere. Their singing accompanied by *kemençe* and playing horon shows us the shared feeling of the transformed atmosphere by the bodies. The *çay* (tea) was the another important element that transformed the atmosphere besides the sound of *kemençe* and people's conversations. The conversation while having tea helps to establish a special intimacy between people. We did not have any lessons that we did without drinking tea with İlyas. In the *kahvehane* next to İlyas's shop, there were many people playing the *kemençe* while drinking tea and chatting about the music at the same time. Sometimes one person plays the *kemençe* and the others have their conversation with the atmosphere created by the sound of the *kemençe*, accompanied by tea.



**Figure 3.1 :** Three-stringed Black Sea *kemençe*.

*Kemençe* is one of the most effective material elements that has shaped the identity of this region through the expression of the feelings of the people, through being an integral part of cultural life, and being a marker of ethnic identities such as Chepnis (Akat, 2006) or Pontic (Yılmaz, 2018, p. 133; Şentürk, 2020, p. 189-212). However, in addition to these reasons, the *kemençe* has a close relationship with non-human elements such as the natural resources of the Eastern Black Sea region, plateaus, roads, streams, flora, and sea. For instance, "The folk music of the (Black Sea) region describes the natural beauty and human relationship with mountains, meadows, and

plateaus" (Somuncu and Ceylan, 2015, p. 83-84), and lyrics of the regional songs involve natural resources such as sea, waves, and rivers (Uğur, 2015, p. 249). Concordantly, *kemençe* performance and dance mean experiencing the Eastern Black Sea region as a sonic space through the felt-body. In this context, the sound of *kemençe* and the space of the felt-body create an atmospheric situation that is related to the nature of the Eastern Black Sea region. For example, the *horon* dance is strongly connected to the nature of the Black Sea region. According to Ay, the *horons* express the waves of the Black Sea, mountain air, cornbread, and the trembling and fluttering of the anchovy (as cited in Çolak, 2007, p. 9).[5]

*Kemençe* is a part of the atmosphere through relational epistemologies in the Eastern Black Sea region.[6] The main feature that creates this situation is relationality and surfaceless space of the felt-body. *Kemençe* has relations with all aspects of social life and non-human actors in the Eastern Black Sea region. *Kemençe* provides this through its sound and the sound is fluid like social life. In this context, it is possible to explain the atmospheric relations of the *kemençe* and the sound of the *kemençe* as atmospheric practices.

The sound of *kemençe* as atmospheric practices means that there is an atmospheric arrangement according to the space of the performance. The place where *kemençe* is performed (plateau, mountain head, wooden cottage, tent, city center, etc.) is an important part of the atmosphere and visually influences our understanding of the space. In addition, the timbre of the *kemençe* is one of the important points that make the atmospheric arrangements to create a collective feeling in a surfaceless sonic space. Considering the location of the performance and the timbre of *kemençe* enables us to evaluate the sound of the *kemençe* as atmospheric practice. The chosen material for the *kemençe* influences the sound of *kemençe*. Wood must be chosen properly according to the weather condition of the place where the *kemençe* will be performed. In this sense, the materials affect the timbre of the *kemençe* concerning the climate. For instance, the weather at the seaside is humid whereas the weather at the mountainside is dry in the Black Sea region. Ilyas Parlak, my *kemençe* teacher, went

[5] Fishing is one of the important sources of income for people living in the Black Sea region. Anchovy is a type of fish that is frequently found and consumed there it is one of the symbols of the region (especially in Trabzon).

[6] "Relational epistemology is about knowing the world by focusing primarily on relatedness, from a related point of view, within the shifting horizons of the related viewer" (Bird-David, 1999, p. 69).

to *Samistal Yaylası* (plateau), one of the highest plateaus in the Rize area, to check the sound of a *kemençe*. He said it sounds well both at the Trabzon city center and plateau, and it shows that it is a good instrument. For this reason, luthiers mostly prefer juniper and wild plum which are not affected by moisture. These instruments give "clear" sounds both in the dry and humid air. Although the mulberry tree gives a very nice tone, it is easily affected by moisture. Therefore, the *kemençes* made from the mulberry tree are mostly performed in dry air. From this point of view, creating a "clear" sound of *kemençe* is crucial to produce an atmospheric situation such as *horon* dance at a plateau festival or performing songs in a closed place. It is important as an atmospheric arrangement for a performance that creates a collective feeling among bodies (humans). The performance of *kemençe* also cultivates the atmospheric relations of this instrument.

### 3.3 Atmospheric Relations of *Kemençe*

As can be seen in Figure 3.2, I identify all actors with which the *kemençe* instrument is associated in the Eastern Black Sea region to reveal the atmospheric relations of this instrument. The primary purpose of creating this figure is to show the atmospheric relations of *kemençe* visually. While creating this image, I was inspired by spider webs, one of the most remarkable creations in nature. When I give attention to spider webs, I see that the main lines and interconnecting lines cannot be expressed in terms such as "perfect", "equal", "absolute". There is a natural perfection in this unequal structure of spider webs, and the atmosphere has that kind of structure as well. When we look at the atmospheres of *kemençe*, it will be seen that different relations and categorizations will not be equal numerically. However, this does not mean that one element is less important than another. On the contrary, the spider web model uniquely looks at all elements in the atmosphere of the *kemençe* and rejects any hierarchical structure.

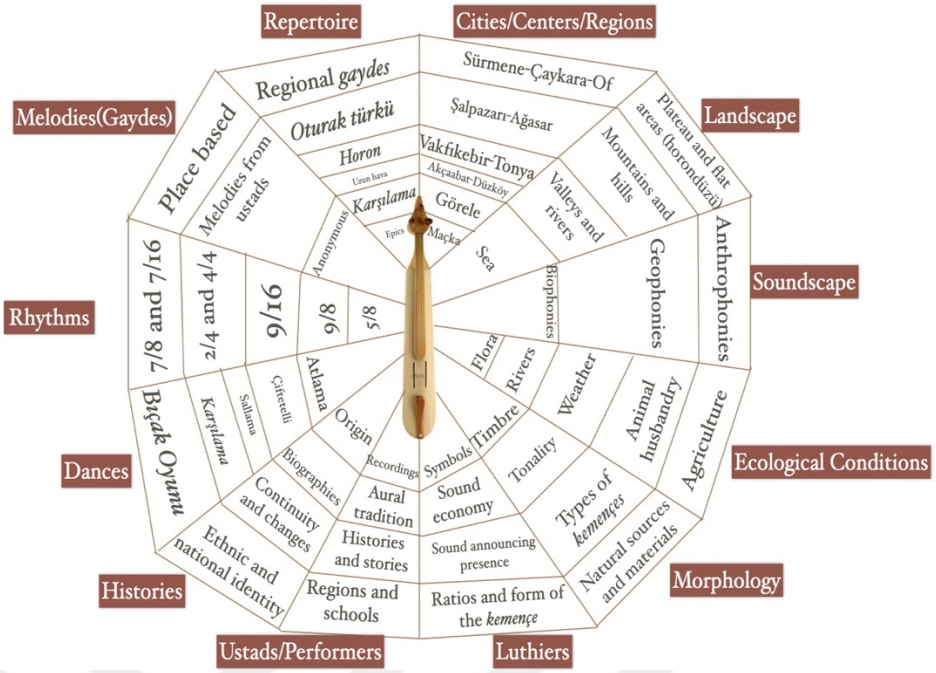



**Figure 3.2 :** Spider web model of the atmospheric relations of *kemençe*.

We determine twelve categories through the main lines in the spider web model considering the atmospheric relations of *kemençe*. While each topic we evaluate within these categories is related to each other, they may also differ according to the category. Furthermore, it is not possible to separate the soundscape from the landscape or to think of performers and performances without luthiers. All of these are the product of a relational loop and are fluid in time-space. This situation, in many cases, creates uniquely experienced and lived sonic spaces where the *kemençe* is part of it.

Cities, centers, and regions is one of the main webs of our model. Different types of *kemençe* are performed in different places and cities, and each sub-region has a different repertoire and style in the Eastern Black Sea region. These *kemençes* are high-pitched (*tiz*, lit. high-pitched), low-pitched (*pes*, *kaba*, lit. low-pitched, coarse), and middle sized (*orta boy*, lit. mid) (Balcı, 2001, p. I; Şişman, 2007, p. 214; Kaya, 2017, p. 55-56, Akat, 2012, p. 3). The *kemençe* performers divide the region according to playing style and types of *kemençe* performed into six categories: 1-) Sürmene-Çaykara- Of 2-) Vakfıkebir- Tonya 3-) Şalpazarı- Ağasar 4-) Akçaabat- Düzköy 5-) Görele 6-) Maçka. Of course, making these six categories is an attempt to find a certainality in the broad regional differences and it is possible to find and expand the aural spaces of *kemençe* through looking micro lenses in the region. Although the type and performance differences of *kemençe* are handled by place, the differences between

these regions are not very sharp and they also carry certain commonalities such as *horon* dance. Thus, in general, the high-pitched *kemençe* is performed more frequently in the west of Trabzon city center, especially for the *horon* dances to transmit the sound to every dancer in the line, and the low-pitched *kemençe* is mostly performed in the east part of the city center of Trabzon. Thus, I handled this situation with the concept of organonscape in the first part of the study. Indeed, the types of *kemençe* are another important element that creates the musical performance differences between the sub-regions. The interpretation and experience of the *kemençe* in each region differs from each other. This situation also shows us that the atmospheric situations of the region are different from each other. For example, plateau festivals in the western part of Trabzon stand out as more prominent events. Parallel to this, people of this region emphasize the *horon* dance in their specific events. *Horon* dance creates a unity according to them and provides a common feeling with common figures.

Landscape is another main web in the atmospheric relations of the *kemençe*. The geographical conditions of the Eastern Black Sea region have a serious impact on the performance of *kemençe*. In the Eastern Black Sea region, the mountains extend parallel to the coast and as a result, there are differences in terms of landform between the settlements on the seaside and the inland. The presence of high mountains makes it possible to transport between settlements by the sea and inland areas only through the valleys (Figure 3.3). Inside each valley, there is a flowing river or stream, where the many songs of the region are mostly named after the streams and rivers. Most musicians understand which region a piece belongs to from the names of the streams and rivers in the song lyrics.

Knowing the music through the natural resources in the region also provides musicians with a sense of belonging to those pieces. People have a distinct sense of belonging in the region, especially towards the streams and plateaus. One of the most important elements of bringing this into existence is the songs in which their names are mentioned. In this way, people try to revive the various emotional effects of the region on them through songs. It is possible to see one of the clearest examples of this in the piece called *gelevera deresi*. According to the story in this piece, a school bus rolled into the Gelevera creek because of a landslide. Hasan, who is in the school bus, saves the girl he loves, Elif, from drowning. However, a scar remains on Elif's face. Hasan, on the other hand, asks Elif to inflict a wound on his face with a knife, as he cannot

protect Elif's beauty. Elif, on the other hand, opens this wound years later, when Hasan gets cancer after getting married. According to the story, Gelevera stream continues to talk about their suffering. In addition to reminding this story in the region, this song also reminds people of the geographical conditions of the region and the stories experienced on this landscape.

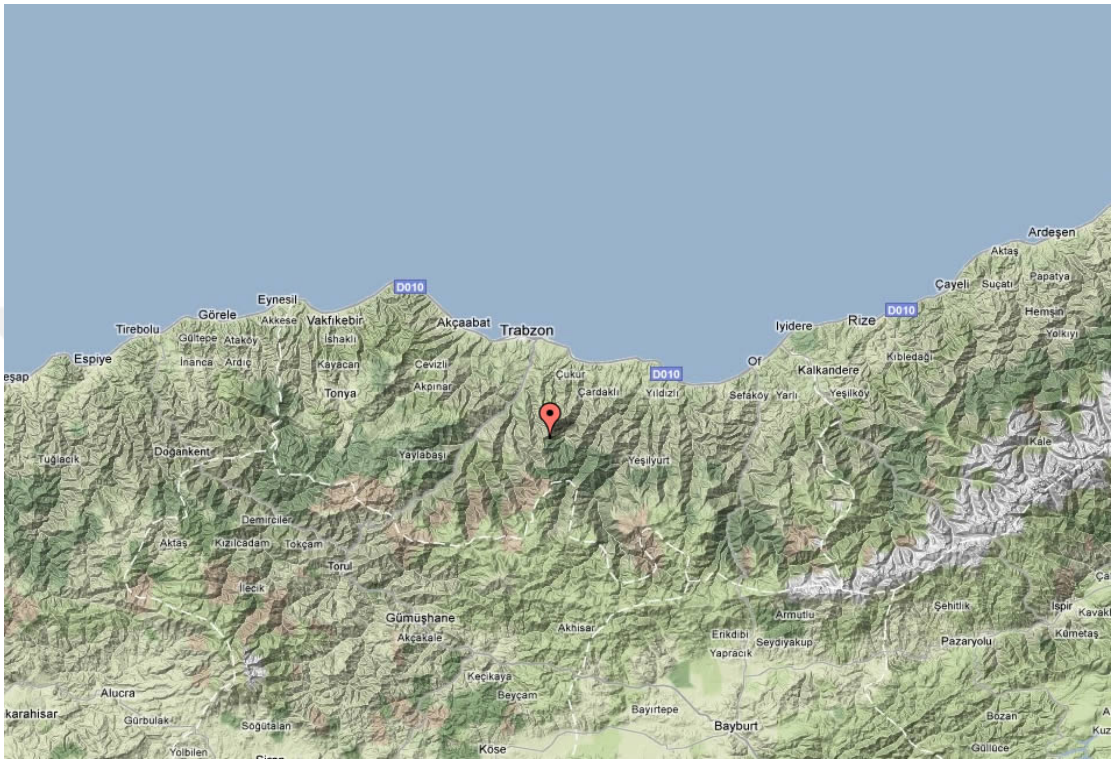



**Figure 3.3 :** Trabzon terrain map that shows the landform of the region (Trabzon terrain map, n.d.).

Soundscape as one of the main webs of my model is related to the landscape of the region. This situation is similar to the music practices of Kaluli people in Bosavi as explained by Steven Feld (2012; 2017). The Kaluli community reflects the sound environment of they live in to their musical practices and Feld (2017, p.93) calls this situation as lift-up-over-sounding. As a matter of fact, people in and around Trabzon reflect the situation of the environment and soundscape in which they live in the practice of kemençe. It is possible to observe the effect of the landform on the collective feeling and atmosphere in the communal practices of the people (bodies) as well as the soundscape of the region. One of the most important cultural features of this region is the plateau festivals. Local people who live in the rural areas spend winter in villages. They go to the plateaus where the weather is cooler in summer and where they can graze their animals comfortably. While the date on which each village will

go to the plateau is certain, the journey is arranged in a festive mood and they go to the plateaus by performing *yol havaları* (journey airs) accompanied by *kemençe*, *davul* (double-headed drum), or *kaval* (end-blown flute). Each plateau has plateau festivals on a specific date or date range. During these festivities, one of the traditional dances of the region, the *horon*, is performed and the region is promoted to the visitors as a touristic event. In these festivals, *horons* are performed in places called *yayladüzü* (plateau flat) or *horondüzü* (horon flat) (see Figure 3.4), and the first arrival to the plateau during the festival is made with long *horon* lines. The first entrance to the plateau is accompanied by music means the transformation of the soundscape of that area. While the most important sonic element of the plateau before the arrival of people was the sound of the wind, the community create a sonic space due to the atmospheric arrangement through *kemençe* and other instruments, voices of the people, and the sound resulted from the movements of the bodies during *horon* dance such as "rap rap" sound when they put their feet on the grass.



**Figure 3.4 :** *Yayladüzü* and plateau festival at the *Sis Dağı* (URL-2).

The effect of landscape and landform on the soundscape is visible in the region. While it is possible to experience this situation sonically at the plateau festivals, some *kemençe* performers have discourses to prove this effect on the soundscape. Concordantly, the landform of the region determines the *kemençe* performance. For instance, Salih Avcı's father made a *kemençe* for Picoğlu, one of the crucial *kemençe* masters, from the core of the mulberry tree. This instrument was sounding so beautifully that Picoğlu said, "I will play this *kemençe* from the top of the hill and you will dance *horon* at the Gullet (opposite hill)" (URL-3; URL-4). This discourse shows

that the "appropriateness" of the timbre can be measured by landform and how far its sound can be transmitted. The sound of *kemençe* is transmitted to the bodies in the surfaceless sonic space or soundscape, and after the dancers hear that sound, the bodies reflect the nature of the Black Sea region through *horon* dance collectively.

In relation to soundscape and landscape, ecological conditions of the region can be considered as one of the main webs in the atmospheric relations of *kemençe*. Nature and the ecological condition of the region shape the soundscape as well as the atmospheric situation of this sonic space. In this sense, the soundscape, in which the *kemençe* is also a part, consists of anthrophonies, geophonies, and biophonies[7]. For example, the wild waves of the Black Sea and the sound of the mountains are reflected in the *kemençe* performances, and people use the associated metaphors for these performances such as saying that "moving your fingers like anchovy" fish which grows in this region and also symbolizes it or indicating "*kemençe* is the sound of the mountains". In addition, many performers and *kemençe* masters made compositions inspired by the non-human animal sounds they heard during the plateau journey. For example, Tuzcuoğlu, one of the oldest known *kemençe* players, born in Görele in 1829, composed a *horon* piece inspired by nature (Bayraktar, 2015). According to Abanoz Küçük, "this piece describes the massive migration to the plateau during summer. During that migration, the bells called *kor* on the necks of the animals and the sounds of birds would resonate in the valley. Tuzcuoğlu was influenced by these voices and composed this piece" (Küçük, 2015, p. 51). The most important practice representing the *kor* sound in this piece is the ornamentations, especially when the performer plays the melody on a single string (on the high-pitched string). In this context, this piece clearly shows the effect of the soundscape on regional music. Besides that, the sounds of the animal bells are one of the atmospheric markers that help us understand and present this surfaceless sonic space of the plateaus.

Other ecological conditions that affect the atmospheric relations of *kemençe* in the region include flora, rivers, streams, and agriculture. For example, in the croplands of the region, people sing working songs (*imece* songs) accompanied by *kemençe*. While

[7] "Geophonies are the result of sonic energy produced by nonbiological natural agents such as winds, sea waves, running water etc. Biophonies are the result of animal vocalizations and anthrophonies are the result of all the sounds produced by technical devices (engines, baldes, Wheel revolutions, industries, etc.)" (Farina, 2014, p. 1)

people are planting their crops, one performer accompanies their collective practice via *kemençe*. The workers, on the other hand, follow the cyclical melody of the *kemençe* with a 4/4 or 5/8 rhythm. During planting, the bodies of all workers create a unity with the sound of the *kemençe*, creating a common feeling, and everyone shares the space of the felt-body. Secondly, the rich flora of the region allows a wide variety of trees to grow in the region. Each of these features is used as a natural resource in making *kemençe*. In this case, changing weather also affects the seashore and mountainous region. While the humid air of the Black Sea coast enriches the sea-facing sides of the mountains in terms of flora, the air gets drier as one climbs higher. The *kemençe*, which is an instrument performed in these two different places, is expected to be resistant to different weather conditions. For this reason, tree selection is important for the *kemençe* making process.



**Figure 3.5 :** Materials used in making *kemençe*.

Choosing a tree for making *kemençe* may differ depending on the type of the *kemençe* in terms of morphology of the instrument as one of the main mesh of the spider web model. For example, spruce wood is generally used for the soundboard of the *kemençe* (See Figure 3.5) (Mustafa Aydın, personal interview, Trabzon, September 20, 2019). The spruce tree grows in high, mountainous areas in the region. The north and south faces of the spruce tree are also important factors that determine the type of *kemençe*. For example, the age rings are closer to each other at the part of the trunk that faces to

the south. Because the south-facing side of the tree gets more sunlight. For this reason, if a part facing south is used as a soundboard, it will usually be a high-pitched *kemençe*. If a piece from its north-facing surface is to be used, this part is more suitable for a low-pitched *kemençe* (İsmail Kırcı, Personal interview, January 28, 2020). The timbre of the *kemençe* also varies according to the type of tree used. As a result of the selected material, these different types are performed for different events in different regions such as high-pitched *kemençe* performed for *horon* or *sıksara* dance, or low-pitched *kemençe* for songs in a slower tempo. These two kinds of *kemençe* also differ from each other in terms of size and tone range. The high-pitched *kemençe* is smaller than the low-pitched *kemençe* and its tone range is between A4 to C5. Thus, the distinctive timbres of *kemençe* specialize the sonic spaces in the Eastern Black Sea region as an atmospheric arrangement.

Luthiers as another significant web of our proposed model transform the natural resources into musical instruments as technological products that take part in sonic spaces. *Kemençe* producers determine the characteristics, timbre, and structure of the *kemençe* in terms of atmospheric practice. Luthiers are also involved in the return of natural resources to nature through sound in a different cyclical process. If the sound of *kemençe* represents the mountains and the waves of the sea, *kemençe* makers are the people who visualize it materially and enable us to experience it audibly. In this sense, *kemençe* makers produce various symbols through audio-visual materials such as carving the head (scroll) into a waveform. We also perceive audibly and visually that the *kemençe* is an element that creates an atmosphere in *horon* dance through shared feelings in a given space of felt-bodies. For instance, Martin Stokes indicates that "in the Black Sea region of Turkey my informants constantly told me that the *horon* dance 'bring us all together'; global peace was imagined as a *horon* line stretching across the whole world" (Stokes, 1994, p. 10).

The oral tradition is a crucial way to convey musical knowledge in the region through usthads and performers that take part in our spider web model. Correspondingly, local people determine each region according to specific *kemençe* masters. For example, while names such as Halil Kodalak, Piçoğlu Osman, Mehmet Sırrı Öztürk stand out in the Görele region, Bahattin Çamurali in Sürmene is one of the most important masters in the region. In addition to this, Hasan Tunç from Maçka, Koryanalı Hüseyin from Akçaabat, Hasan Sözeri from Rize, Yusuf Cemal Keskin from Çaykara are known as

important masters in these regions[8]. The recordings of these names made an impact on the musicians and performers of the region today. This situation is related to differences in terms of regional performance, as well as to see historical creation through *kemençe* masters.

Historical creation in the context of ethnic identity affects atmospheric practices and takes place in the atmospheric relations of the *kemençe*. The sound of *kemençe* in most cases reminds people of their past. In some cases, it tells them where they came from. It is seen as a legacy from its ancestors. As a result, the creation of collective feelings and their transmission can be made possible by "nostalgia" (Botstein, 2000). For example, in the Görele region, local people consider *Görele kemençe* (high-pitched and the scroll curved in the shape of sea wave) as the "original" *kemençe* and that it first came to the region from here through Chepni people. On the contrary, the low-pitched *kemençe*, known as the *Rum kemençe* (Pontic Lyra, Greek Lira) in the region, is mostly performed indoors. The cultural group with which this *kemençe* is related was the Pontic Greeks and their historical existence in the empire of Trebizond (Vassiliyev, 1936; Bryer, 1980). Although a large part of this community, especially the Christian Pontic Greeks (Özkan, 2013, p. 1), was forced to emigrate to Greece in 1923, this type of *kemençe* is still practiced in the region and is related to this historical phenomenon. *Rum kemençe* and *horon* are also performed in Greece by exchanged communities. In this context, the performance of *kemençe* is an atmospheric practice in the new country where the refugees settled. İlyas Parlak tells one of his memories about this practice. He is a well-known *kemençe* player who has given concerts in various countries in Europe. While observing people from the stage, he stated that people who are unfamiliar with this instrument generally listen unresponsively. However, the concert he gave in Thessaloniki, Greece was very different from other concerts. When he started playing the *kemençe*, everyone instantly began to dance *horon* and this encouraged him to play more reflexive on the stage. While this shows that people maintain their relations with their homeland, it proves that one of the most

[8] It is possible to increase this list more. One of the interesting points is that each master is mentioned with his hometown. This shows us the importance of regional performance differences. For more detailed information about the *kemençe* masters in the region, you can look at Mustafa Duman's (2004) book entitled *Kemençemin Telleri*.

important factors is to create certain atmospheric situations through atmospheric practices.

Historical creations about the *kemençe* have an important place in describing atmospheric relations. Nevertheless, luthiers and kemençe players try to explain such historical narratives in various ways on the *kemençe* in the Eastern Black Sea region. The dominant views of ownership of the *kemençe* are strongly allied with sentiments of Turkish nationalism and Turkish ethnicity or the pronounced "Turkishness" in widespread discourse concerning the history of the instrument in the Eastern Black Sea region. For instance, Ali Kemal Bulut (Personal Interview, 6 March, 2020), 82 years old and one of the well-known *kemençe* makers in the region, highlights the emphasis on "Turkishness" by considering the historical evolution of the *kemençe*. During my interview with Ali Kemal Bulut in his home, I had the opportunity to see his large collection of *kemençes* (Figure 3.6). What made the greatest impression on me during the interview was not the fifty four instruments on display, but rather the symbols of Turkishness he had painstakingly incorporated onto their bodies.



**Figure 3.6 :** *Kemençe* collection of Ali Kemal Bulut.

The symbols on the *kemençes* have standards in terms of messages that they convey about the historical creation of the instrument which is the biography of the *kemençe*. Although, Ali Kemal Bulut's discourse is strongly tied to the idea of "Turkishness" and nationalism in terms of describing the history of *kemençe*, It is not my intention to support or oppose this idea. Rather, I would like to show that how historical creation of the musical instruments affects the interpretations about the instruments and its

performances. Clearly, historical creation of the musical instruments affects also the atmospheric situations and the form and sound of the instruments. For example, the Turkish star and crescent (symbols associated with the Turkish national flag) was present on the soundboards of the instruments. When I asked which instrument was Ali's favorite, he showed me a *kemençe* he had made in 1962. In addition to symbols from the Turkish flag, he had written the work "Turk" using the *Gokturk* alphabet. Other expressions of nationalism were inscribed on the case in which he kept the instrument, namely the following words: "The music of my grandfather is Turkish as is that of my mother and my child. It is my voice and a part of my body. Our music is Turkish music" (See Figure 3.7). Clearly, this idea shows us how ideological meanings attributed to the musical instruments and how it affects the historical creation of the instruments. In terms of *kemençe*, the nationalist understanding attributed to the *kemençe* by some people in the Eastern Black Sea region also affected the performance of the *kemençe*. Along with these meanings, the performance of the *kemençe* in the region has also been attributed such nationalist meanings.




**Figure 3.7 :** The box in which he kept his *kemençe* made from the wood of a *mulberry* tree (*dut*).

There are different dance styles and rhythms for each region and context as one of the main webs of the atmospheric relations of *kemençe*. *Horon* is the most common dance in the region. However, *horons* are also played with different motifs, orders, and rhythms in a sub-region. For example, *horons* around Trabzon are generally 7 times such as 7/8 or 7/16, while in Rize it is possible to encounter *horons* in rhythms such as 9/8, 4/4. In parallel with this, the *dik horon* or *sıksara*, known as the fast part of the *horon*, is performed at the rhythm where the dance begins. In addition to the *horon*, there are also dances in the area that serves as space markers. For example, while the *karşılama* is usually performed in Giresun, *Sallama* is performed around Sürmene and Maçka regions. *Bıçak oyunu* is a dance played especially around Sürmene and it is performed in the rhythm of the *sıksara*.

The *kemençe* melodies, mean *gayde* in regional speech, are named after place names such as *Sürmene gaydesi, Maçka gaydesi,* etc. This type of classification has been the situation that most affected me during the fieldwork. The musicians and listeners know which region a melody belongs to. As an outsider, these melodies seemed quite similar

to each other for me, and it was not possible to distinguish them by location. The only melodies that can be distinguished for me were those that I learned the region of while learning *kemençe*. At some points rhythm also helped me to distinguish. Generally, when I came across the 9/8 rhythm, I could guess that it was probably from Giresun / Görele or Sürmene, Of, Çaykara. But of course, this was not a very healthy way of distinguishing. It was also important to be able to feel the melodies in order to be aware of this distinction. For this reason, it is necessary to experience those pieces, to participate in on-site performances, and to be in those atmospheric practices.

Local media could be interpreted as another factor that can be evaluated within the atmospheric relations of the *kemençe* and that affects the *kemençe* performance as an atmospheric practice. The interaction between people through local media constantly shapes the performance space of the *kemençe*. This situation affects the human relations to gain a new dimension through the media and indirectly affects the performance of the *kemençe*. In most cases, people can learn about various events, organizations, and create a sound community through social media as well as local media. It is possible to see the clearest example of this in the plateau festivals, which have recently taken on a touristic structure. Nowadays, the dates of these events are announced via local media and social media, and the participants are informed in advance to create a certain atmosphere.

# 4. SOUND ECOLOGY AND SOUND ETHNOBIOLOGY OF MUSICAL INSTRUMENTS

"When the tree dies, it comes to life again as a musical instrument." (Demir, 2018)

This statement, shared by the luthier Ceyhun Demir, is one of the discourses that reveal the relationship between instrument manufacturing and nature. First, it indicates the close relationship between the instruments with nature. Second, "the death and revival of trees" takes place through the instruments to imply that the musical instruments are ''living creatures''. Indeed, nature is a crucial part of "the social life of musical instruments" (Bates, 2012) in many cases. This research takes this complex relationship between nature and instrument making in the context of *kemençe*. Indeed, the most attractive subject for me was the relation of this instrument with nature in the ethnographic work, I have been conducting since 2018. The relationship between *kemençe* and nature is at the forefront both in terms of manufacturing and performance. The pieces performed with the *kemençe* show us the close relationship between the local people and nature. This relationship is also important for choosing the proper tree in the manufacturing process of the instrument. The most significant indicator of this phenomenon are the discourses showing the relationship of *kemençe* with nature and the traditional song lyrics.

In this section of the thesis, I examine the *kemençe* making processes and its relation to the timbre and sound that affects the performance in relation to nature. In this context, I provide an ecological perspective for the manufacturing process of *kemençe*. Thus, I offer a new approach, sound ethnobiology of musical instruments, which is a theoretical framework that considers the "social life of musical instruments" in relation to nature through an ecological perspective. In this chapter, while explaining the sound ethnobiology of the *kemençe*, I have evaluated the processes from the manufacturing process to the creation of sound communities through the instrument's relationship with nature.

This part of the study is closely related to the ecomusicology literature, as I examine the *kemençe* instrument in the context of its relationship with nature. Although I have

discussed the *kemençe* instrument within the framework of sound ethnobiology and sound ecology in this chapter, the discussions in this section in general will contribute to the ecomusicology literature.

Most contributions come from the disciplines of ecology and ethno/musicology to the field of ecomusicology and therefore, there are different methodologies and research techniques between these two disciplines such as applying quantitative and qualitative research (Boyle and Waterman, 2016). To distinct these two approaches, Margaret Guyette and Jennifer C. Post (2016) use the definition of "ethno-ecomusicologist" that "note patterns of human behavior especially in relation to landforms and biological entities to reveal the significance of both sound and materiality (to local communities) and to demonstrate their in-depth knowledge of the land around them (expressed in time and space)" (p. 42).

First of all, practicing ecomusicology is a political action due to its relation to ecocriticism, environmental crisis, applied ethnomusicology (Schippers and Bendrups, 2015), and political ecology (Allen et. al., 2014), in addition to being "study of music, culture, and nature in all the complexities of those terms" (Allen, 2013). Although interest in the relationship between music and nature has a root in Ancient Greece, the relationship between humanity and the natural environment gained currency in the academy due to environmental concern since the 1970s (Allen 2011, p. 391). Thus, the field of ecomusicology emerged in the early 2000s (as cited in Bock 2017, 2) although this field has roots in ethnomusicological research in the 1970s such as Steven Feld and Anthony Seegers' transformative studies in both anthropology and ethnomusicology.

Allen and Dawe (2016, p. 1) mention that "there is no one ecomusicology but many ecomusicologies constituting a dynamic field". Ecomusicology is a dynamic field because it has a structure that deals with the terms "culture", "music" and "nature" from different perspectives. Indeed, for example in much ecomusicological research approaches the music studies are similar with as it is in sound studies (see Guyette and Post, 2016; Titon, 2016; Pedelty, 2012). According to Allen (2012, p. 197) "from contemplating sounds to considering music. The shift might be considered paradigmatic of the nature-culture divide: the existence of sounds, even without listeners, contrasts with the reification of art by human listening and thinking". As a result of this situation, R. Murray Schafer, Steven Feld, and Anthony Seeger,

frequently mentioned in ecomusicological studies and attributed an important role in the emergence of this field, have done sound-oriented studies.

Steven Feld (2012) has an important place in ethnomusicology with his work among the Kaluli community in Papua New Guinea, as well as guiding ecomusicological studies in terms of the anthropology of sound. In addition to coining the concept of acoustemology which means "sound as a way of knowing" and "knowing through relations" (Feld 2003, 2012, 2015), Feld has laid the groundwork for today's ecomusicological studies with the idea of "echo-muse-ecology" connected to linguistics, anthropology, and ethnomusicology (As cited in Keogh 2013, 3).

Like Feld's work, Anthony Seeger (1987) reveals the similarity between social structure and musical structure with his work among the Suya community in the 1980s. Thus, his study shows how the relationships between humans and non-human are embodied through certain rituals and it also finds a place in ecomusicological studies. Interestingly, while these two studies are about the "anthropology of sound" and "musical anthropology" and brought a new dimension to ethnomusicological studies, they also affected ecomusicological studies in the context of revealing human-nonhuman relations. However, "neither Feld (who initially proposed the notion of anthropology of sound) nor Seeger (who initially proposed the notion of musical anthropology) saw themselves as developing new fields: with those terms, they sought only to signal that they were reconsidering how to configure questions regarding sound" (Gautier 2016, 134).

R. Murray Schafer is a leading actor for sound-oriented studies with the concept of the soundscape and also provides a critical understanding of the ecomusicological studies. Since the 1970s, Schafer's concept of soundscape has been reinterpreted by many researchers and has been made use of in ecomusicological studies since the 2000s. According to Schafer (1994, 7), "the soundscape is any acoustic field of study… We can isolate an acoustic environment as a field of study just as we can study the characteristics of a given landscape". Schafer's term "soundscape" also shaped the new field of study called soundscape ecology (Pijanowski et. al. 2011). Indeed, "Schafer (1977) recognized that sounds are ecological properties of landscapes, referring to soundscapes as "the acoustical characteristics of an area that reflect natural processes" (Pijanowski et. al. 2011, 204).

In the first part of the chapter, firstly, I mention the lack of sound and music-oriented studies in the literature of ethnobiology. Afterwards, I define the key elements of sound ethnobiology in parallel with organology, sound studies, sound ecology, ecomusicology, and ethnoecology. From this point of view, I focus on the sound ethnobiology of musical instruments which consist of two main processes: instrument making and producing sound (performance). Thus, in the first part of the article, I cover the instrument making process which I divide into three issues. These issues are "bioecological sources of sound production", "ecological knowledge of sound production", and "timbre arrangement of producing proper sound".

In the second part of the chapter, I mostly focus on the performance side of the sound ethnobiology of musical instruments. I determined two issues which are related to knowledge and meaning of the sound of the musical instruments to evaluate this section. These are "traditional ecological knowledge of the sound of musical instruments", and "ecological meanings of musical instruments". I also applied to sound ecology (Titon 2020) to reveal the traditional ecological knowledge and ecological meaning in the context of sound ethnobiology.

In the last part of the chapter, I discussed the five issues I developed under the title of sound ethnobiology of musical instruments in the context of the *kemençe*. In this context, I have examined how luthiers use and engrave the natural resources in the *kemençe* making process. Thus, I evaluated how biological and non-biological materials affect the sound production from an ecological perspective. Of course, at the same time, in this part of the study, I have revealed how people attribute ecological meanings to the sounds produced by musical instruments and how the sounds of musical instruments might be related to the traditional ecological knowledge.

## 4.1 Sound Etnobiology of Musical Instruments

Ethnobiology is a field that defined as "the study of the biological knowledge of particular ethnic groups- cultural knowledge about plants and animals and their interrelationships" (Anderson, 2011, p. 1). Clearly it also implies "the study of the interactions of people and the environment that is associated with human ecology and ethnoecology" (Albuquerque and Alves, 2016, p. 3). Although ethnobiology is methodologically and theoretically related to ethnoecology, ethnobotany and ethnozoology (Albuquerque et. al, 2019), it is possible to find commonalities between

ethnobiology and ethnomusicology, sound studies, and soundscape ecology when the focus is on the sound (Wright, 2017, p. 59).

With this chapter, I propose the term sound ethnobiology for sound-oriented ethnobiological studies and evaluate this term in terms of musical instruments. While Claire Wright (2017, p. 59) mentions that sound-oriented ethnobiology studies have great potential to open new perspectives into the interdisciplinary studies of sound and music, she also states that ethnobiologists do not pay enough attention to this issue. Nevertheless, The *Journal of Ethnobiology* published a special issue in 2019 specific to ethnobiology studies focusing on song and music. Although we can see that music and sound studies to take place in ethnobiological studies as an important step, there are still many facts to discover about the world of sound and music practices (Llamazares and Lepofsky, 2019, p. 337). Especially ethnobiological studies of musical instruments are at the forefront of areas waiting to be discovered. For instance, although organology studies include the natural resources used in instrument making and their classification (Grame, 1962; Tresch and Dolan, 2013, p. 281), interpreting this in terms of traditional ecological knowledge[9] will provide new perspectives to interpret the human activities in a certain environment.

Sound ethnobiology shares many main understandings with soundscape ecology, sound ecology, and ethnoecology. In this context, the term ethnoecology, which is frequently used in parallel with ethnobiology, can contribute to sound ethnobiology. According to Barrera- Bassols and Toledo, “ethno-ecological approach consists of interdisciplinary studies of how nature is perceived by humans through a screen of beliefs and knowledge, and how humans, through their symbolic meanings and representations, use and/or manage landscapes and natural sources” (as cited in Garrido-Perez, 2015, p. 174). In this context, sound ethnobiology focuses on how people perceive and symbolize their environment through sound, as well as how they reflect the natural resources and landscape they live in, into their musical practices. In short, sound ethnobiology focuses on how people create traditional ecological knowledge through sound.

[9] “Traditional ecological knowledge is a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment” (Berkes 2012: 7).

Sound ethnobiology of musical instruments, on the other hand, focuses on musical instruments and the sound they produce, examining traditional ecological knowledge. Indeed, musical instruments have an important potential in the production of traditional ecological knowledge. According to Kevin Dawe (2012, p. 195), musical instruments can be studied from many different aspects such as acoustic, ecology, and sound both quantitively and qualitatively. He also indicates the term ethnobiology of musical instruments by explaining "how their (musical instruments) primary materials of flora and fauna are connected to their environment and the landscape" (Dawe 2016, p. 112). Thus, I will explain and analyze the process of instrument making in terms of traditional ecological knowledge. Considering that studying musical instruments from this perspective will reveal new phenomena, and I think that using the term sound ethnobiology of musical instruments will open new directions for future studies.

In this chapter, I have re-evaluated Kevin Dawe's idea of "ethnobiology of musical instruments" as "sound ethnobiology of musical instruments" to establish a specific theoretical framework. Sound ethnobiology of musical instruments focuses on the sound production and its connection to the application of traditional ecological knowledge. There are three issues in analyzing a musical instrument in terms of sound ethnobiology. These issues are "bioecological sources of sound production", "ecological knowledge of sound production", and "timbre arrangement of producing proper sound". These three subjects are closely related to the instrument making process. Nevertheless, two more titles can be added in addition to this process: "traditional ecological knowledge of the sound of musical instruments" and "ecological meanings of musical instruments".

### 4.1.1 Bioecological sources of sound production

The first issue of the sound ethnobiology of musical instruments is the bioecological sources of sound production. Bioecological theory is known by psychologist Urie Bronfenbrenner which focuses on human development through emphasizing the environment in which a developing individual spends time and the relations with others (Bronfenbrenner, 2005; Rosa and Tudge, 2013, p. 244). The fundamental part of the bioecological model is the conception of the process-person-context-time (PPCT) (Prati et. al, 2019, p. 31-35). In this context, bioecological sources of sound production include knowing the effect of the type of wood the instrument maker will

use through spending time in nature, having a relationship with other luthiers and developing a new understanding about the usage of materials for creating a new tone color, and having a relationship with non-human actors as well as biological and non-biological materials. Of course, all these processes differ depending on the context. The act of making an instrument is a learned lifetime behavior. In this context, this process consists of the learning to make a musical instrument, the observation of other luthiers, their knowledge of relations with nature and how to use resources to produce a proper sound.

We need to adress the development of instrument makers as agents in order to assess how bioecological sources are evaluated. Nevertheless, although it is important which natural resource is used and how it is processed, it is people who make it happen. In this context, their relationships with their environment and other people are very decisive. Bronfenbrenner (1979) handles this issue with the ecology of human development. Bronfenbrenner describes the ecology of human development as follows:

> The ecology of human development involves the scientific study of the progressive, mutual accommodation between an active, growing human being and the changing properties of the imme- diate settings in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts in which the settings are embedded. (Bronfenbrenner, 1979, p. 21)

Both ecology of human development and bioecological theory of human development have common points that Bronfenbrenner (1979, 2005) emphasizes. These are experince, proximal process, developmental outcomes, time, internalization, and third party. It is possible to evaluate this in terms of instrument makers as follows. Instrument makers produce by experiencing the act of making instruments and the sound of instruments. Learning to make an instrument is also part of this experience. Of course, it takes a certain amount of time to learn how to make an instrument, get this experience, and produce an instrument. While making an instrument, besides using the time correctly, instrument makers stay as calm as possible and focus on making the instrument without rushing in time. It is a process. While learning instrument making, they continue this development by accumulating their own experiences and learning from their masters or teachers. Of course, every instrument maker wants to

produce a result of this accumulation. The element in which this is observed is the instrument itself and the sound it produces. This one is the developmental outcomes of this process. In many cases, the instrument makers express a special bond with them when producing the instrument. This bond they establish with the instruments develops during this process, which can also be considered as internalization in terms of bioecological theory of human development. Who and what the third party is can be interpreted in many ways. The third party can be a person or institution that gives a certain status to the instrument maker, or it can be a second master who helps him improve his instrument making. Likewise, musicians who value and evaluate his work can be interpreted as a third party. The important point here is that the elements we call the third party must be in a certain interaction.

### 4.1.2 Ecological knowledge of sound production

The second issue is the ecological knowledge of sound production. Contrary to bioecological thinking, this process deals with the luthiers and musicians' relationship with the biological entities that they are surrounded and interact with. From this interaction luthiers and musicians give meaning to musical instruments and these meanings are often related to the natural sources of the musical instruments. For instance, according to Dawe (2016, p. 111), "the *lyra* is often described as a product of the mountains. It is ideally made from mountain wood. It has a body, a neck, eyes, a heart, a soul, and a voice that cries out like the spirits and animals of the mountains". As another example, the sound of *qyl-qopyz* has a meaning related to the sounds heard in the environment. According to Megan Rancier (2014, p. 389), "The *qyl-qobyz* possesses the ability to imitate sounds from nature, such as the sound of wind, the call of swans, or the howling of wolves".

Another of the best examples that can be given in terms of ecological knowledge of sound production is the instruments made of bamboo. Because bamboo grows in a very wide geography, it is one of the biological elements that has an important place in instrument making. We can observe the clearest example of this in the 'Are'are community. For example, this community has a highly developed classification system for bamboo, and how bamboo is used is an important determinant both in terms of sound production and musical culture (Zemp, 1978, p. 37-44). We can refer to the way in which local communities use bamboo with the term ecological knowledge of sound

production. Thus, getting detailed printouts of such sound productions requires ecological knowledge and analysis.

Ecological knowledge of sound production also means that instrument makers can recognize the kind of material that produces a certain sound and timbre. The best example of this situation is John Baily's (1976) work on the *dutār* in Afghanistan. Although Baily does not refer to ecological thinking in this work, he provides us with ecological information of sound production as he describes in detail how the biological and non-biological materials used in instrument making are important in collective and individual invention as well as how the sound of musical instruments is affected through the materials and systems that are applied in instrument making process.

### 4.1.3 Timbre arrangement of producing proper sound

The third is the timbre arrangement of producing a proper sound. This implies producing a specific timbre, considering the material in terms of certain proportions and forms of instrument making. Timbre arrangement is directly related to the organological studies. Timbre arrangement of producing a proper sound is also related to "methodologies and techniques of acoustics, wood studies, material conservation, museum studies, and biological systematics" (Dawe 2001, p. 219). Of course, for the instrument maker to achieve a certain timbre, they must know well the material they will use, know what kind of sounds can be made from natural sources, know the cultural codes and the kind of preferred timbre of the people who will listen to the instrument. This situation requires both ecological knowledge and suitable knowledge of bioecological resources.

The instrument maker's obtaining the desired timbre is related to how they utilize from the ecological knowledge. First of all, the instrument makers must decide on the timbre they want to create and which biological or non-biological source they need to use to obtain this timbre. Of course, the most important factors determining this are the proximal process mentioned in the bioecological theory of human development. Instrument makers develop instrument making skills through interaction. In addition, they decide which material, how and where to use as a result of their relationship with

the environment. When they strategically apply this process to timbre adaptation, we are talking about the process of the timbre arrangement of producing proper sound.

### 4.2 Sound Ecology

Uncovering the nature-related meanings of instruments requires examining people's traditional ecological knowledge. In this context, ecological knowledge and meaning includes how people perform musical instruments in addition to the three items we mentioned in the previous section. The traditional ecological knowledge and ecological meaning associated with instruments has many common points with Jeff Todd Titon's (2020) idea of "sound ecology". For this reason, understanding the basic ideas of sound ecology makes it possible to analyze musical instruments in an ecological sense.

According to Jeff Todd Titon, sound ecology "is, first of all, a way of being in the world of sound, a sound ontology and there are four different but related aspects: 1-) sound experience announcing presence, or co-presence, 2-) sound community, 3-) sound economy, and 4-) a sound view of nature" (as cited in Bock, 2017, p. 5). Thus, it is possible to interpret the four components of sound ecology in the context of musical instruments. Indeed, this interpretation provides us with traditional ecological knowledge and ecological meaning of instruments, which is an important element of sound ethnobiology of musical instruments.

According to Titon (2013), ethnomusicology contributes to the field of ecomusicology through relational epistemologies that resulted from its methodology in "sound ecology" besides sound ontology. "A sound ecology embodies an ecological rationality aimed at who we think we are, how we know, what we know, and what we can do to bring about ecojustice in a sustainable world" (Titon, 2019, p. 103). Thus, interconnectedness is at the heart of ecological rationality (Titon, 2019, p. 104). In this context, the four aspects of sound ecology are *telescopic* and have a fluid structure in a certain place, landscape, and culture.

Sound ecology also has a place in the studies of sound ethnobiology of musical instruments. It is possible to address this with terms developed within sound ecology. For example, it is possible to create sound communities through musical instruments and the unique sound of each instrument. In addition, each musical instrument shows

its own existence with its unique sound and timbre and says “I am here”. In this direction, people attribute certain meanings to musical instruments and these instruments have a certain economic value with these meanings. In addition, this situation can manifest itself as an exchange within a certain environment. Finally, it is possible to evaluate the musical instruments from a specific sound viewpoint, which is one of the primary interests of sound ethnobiology of musical instruments.

### 4.2.1 Sound announcing presence

Sound announcing presence is a form of self-expression for individuals, communities, or even musical instruments. “Sound says “here I am”. It says it to the sounder and to any creature who may feel sounder’s vibrating resonance in its body, whether through an ear or other means of reception. Sounding locates a being in space and time” (Titon, 2015, p. 4). As a result of this, sound announcing presence means being by sound, co-presence, and connection (As cited in Bock, 2017, p. 5). It is possible to evaluate and interpret the term sound announcing presence in terms of instruments. Nevertheless, in most cases, the sound of musical instrument shows its own existence in space and time. It is possible to see and interpret the sound announcing presence of the musical instruments in the ethnomusicologists’ studies and the world music cultures in various regions and countries. Musical instruments are among the most important material culture in which people show themselves to “others” through sound. In this context, researchers are investigating how people made music and what kind of sound they expressed through musical instruments before the invention of sound recording (Titon 2009, p. 29).

There are mostly semiotic and linguistic approaches applied in terms of musical performances concerning the sound announcing presence in the context of the study of musical instruments and ethnomusicological studies. For instance, George Herzog’s (1945) study on drum signaling in Eartern Liberia, Carol Robertson’s (1976) study on Tayil, and Bahr and Haefer’s (1978) work on what “blowing” means in the Piman community can be considered as examples of sound announcing presence. Of course, such studies involve the kind of approach to revealing what the message is conveyed through sound. Thus, evaluating the sound of musical instruments from an ecological perspective, together with the semitoic approach, means considering the term sound announcing presence in the context of sound ethnobiology of musical instruments. The

sounds of musical instruments are often thought to be related to the natural conditions, biological and non-biological features of the region in which they belong to. In this case, people argue that the sound of musical instruments also creates a representation of the environment in which they are performed. Such a situation undoubtedly shows us that sound announcing presence can be considered in terms of the nature related sounds of musical instruments with an ecological perspective.

### 4.2.2 Sound community

According to Titon (2015, p. 1), cultural groups can emerge because of the commitment of communication through sound that he calls sound communities. According to Titon, music-making communities have a peak experience of sound communication among sound communities (As cited in Bock, 2017, p. 5). No doubt, a sound community can be created through a musical instrument and its sound. In this context, the sound announcing presence of a musical instrument has the potential to be a sound signal of a sound community. In terms of musical instruments, the timbre of certain instruments strengthens the sense of belonging to a sound community as part of musical performance such as Gourd Rattles performances in the rituals of the Suya community (Seeger, 1987), didgeridoo performance among Aborigines (Miller and Shahriari, 2017, p. 59), and *Anzad* performances of women among Tuareg people (Wendt, 2008, p. 261-262).

It is possible to see the sound community creation through instruments, both in the meaning attributed to the instrument and in various symbols inscribed on the instrument itself as an object. For example, while *bağlama* is considered as a national instrument in Turkey (Markoff, 1993, p. 96), *bağlama* together with its sound and image often constitute a representation of this belonging. Thus, this instrument is also the most important material that forms and unites the *Alevi* communities (Erol, 2009, p. 132-133). So how do musical instruments create the sound communities in the context of sound ethnobiology? It is possible to find the answer to this question through the consensus on ecological meanings that people attribute to musical instruments. For example, most of the time, the meanings related to the nature of the region attributed to the musical instruments also contribute to the continuity of the local communities. Communities' devotion to their land is thus embodied through the musical

instruments. When instruments play such a role, it may be possible to consider the term sound communities within sound ethnobiology.

### 4.2.3 Sound economy

Economy and ecology are phrases with the same word origin in Greek, *Oikos* (household) (as cited in Bock, 2013, p. 5). Jeff Todd Titon (2015, p. 2-3) defines the term sound economy concerning the sound community and comparing it to the unsound economy. According to Titon, unsound economy is organized hierarchically but sound economy is participatory and egalitarian.

Besides, the way to handle the sound economy entirely is to apply to Marxist and Neo-Marxist approaches that have economy-based thinking. In this context, the sound economy of musical instruments is best understood through the cost of materials, their turning process into commodities, value, and meta fetishism (Churton, 2000, p. 3-13). Martin Stokes' (2002) study about *kemençe* and *bağlama* (long-neck lute) is one of the best examples of the sound economy of musical performance, although he does not use the term sound economy. In this study, Stokes shows the attitudes of musicians about selection of musical instruments, musical materials, money, performance, and exchange.

Titon's fourth term is a sound view of nature. Sound view of nature consists of what a sound ecology might look like (As cited in Bock, 2017, p. 5). He also emphasizes that sound ecology is about relations and responsibility. In this context, sound ecology has a fluid-structure, and sustainability is one of the key terms of this. Interestingly, in this context, relations in the sound ecology can be interpreted in classic actor-network theory (ANT) which is mostly applied for the musical instruments and their relations with non-human actors and facts (De Mori, 2018, p. 184; Bates, 2012). From this point of view, sound ecology contains the relationship between human and non-human in terms of an ecosystem.

The traditional ecological knowledge and ecological meanings of the musical instruments provide us with a sound view of nature offered by sound ecology. In this context, people attribute ecological meanings to the sounds of musical instruments and create sound communities through traditional ecological knowledge of musical instruments. In addition, it creates a certain sound economy with the meanings attributed to the instruments and their sounds.

### 4.3 Sound Ecology and Sound Ethnobiology of *Kemençe*

The *kemençe* has a dynamic relationship between the environment and biota in the Eastern Black Sea region. This interaction is also prominent in the sound ethnobiology of the *kemençe*. In this context, topics such as the materials of *kemençe*, the name of the instrument parts, the interaction of the instrument's sound with the natural environment, the ecological meanings of the sound of the instrument, and the ecological knowledge in the production of the instrument constitute the sound ethnobiology of the *kemençe*.

It is possible to see the relationship of people with their environment in the naming of the parts of the *kemençe*. Thus, this relationship is also formed by the traditional ecological knowledge. The parts of the *kemençe* are the head (scroll), boat (soundbox), handle (neck), ear (auger), cover (soundboard), tie (keyboard), eyebrows (sound holes), frog (tailpiece), bridge, and sound post (*can direği*) (Balcı, 2001, p. 32-33). People have named these parts making an analogy with the objects they see around them and the human body parts.



**Figure 4.1 :** A *kemençe* with its materials used.

Bioecological sources of the sound production in *kemençe* making process begin with choosing the trees. Choosing the proper tree affects the sound and timbre of the *kemençe* as well as help local people to create a discourse in relation to "richness" of the timbre of *kemençe*. "The body of the *kemençe* can be made from almost any type of tree. However, the ones made of trees such as juniper, walnut, mulberry, plum, cherry, elm, ash, which can be easily shaped, do not split, and are not undeterred, are

more preferred" (Demir, 2005, p. 85). For instance, Ali Kemal Bulut made *kemençes* from 54 different kinds of trees to show that this instrument has a rich timbre (Ali Kemal Bulut, personal interview, 6 February 2020). In this sense, the materials used for the instrument are symbols to raise the status of the instrument with its timbre.

The *kemençe* making process requires knowledge of certain techniques as well as ecological knowledge and the ability to adjust the timbre with small touches to be able to produce the right sound. *Kemençe* makers give a rough shape with an ax to the trunk of the tree while making the instrument. Then, they draw a template on the log in which they pre-determine the length of the instrument and cut the log according to this template. After cutting according to the template, they carve the soundbox according to the ratios. After this process, they engrave the neck (handle) and rub the instrument with emery sandpaper. Then, they attach the cover (soundboard) to the instrument.



**Figure 4.2 :** The process from templating the *kemençe* to carving the body.

The correct preparation and affixion of the soundboard are fundamental in terms of producing a proper sound. After properly gluing the cover, they open two eyebrows (soundholes) with equal proportions on the soundboard. Then they prepare the

tailpiece and affix the small parts such as augers and bridges. Finally, they string the *kemençe* and it is ready to play. In the next section, we will explain this situation by discussing the crucial points in terms of the timbre and sound arrangement of the *kemençe*.

Trees are one of the most important biological sources of *kemençe*. Of course, the type of wood the *kemençe* is made of and the environment in which the tree grows are also important. According to Hasan Sancak, a well-known *kemençe* maker in Trabzon, the best *kemençe* is made from mulberry wood. But at the same time, the place where mulberry tree grow is also very important. For example, the sound of a tree that grows on barren land is better than a tree growing on a wetted area (DiyanetTV, 2015). Consequently, luthiers prefer dry trees that grow in dry places for *kemençe* making.

Of course, recent climate change is one of the factors affecting the tree resource in *kemençe* making. With global warming and climate change in the region, it is obvious that *kemençe* producers will experience resource shortages in the coming years. For example, when instrument makers will use resources such as ivy, they take care to choose it from the mountainous region. Because the frequent settlement on the seaside causes air pollution, and trees are adversely affected by this situation. Similarly, some *kemençe* makers choose the spruce tree especially from the Artvin region because the air pollution in that region is less than in other regions. As a matter of fact, climate change will seriously affect the making of *kemençe* in the coming years and it is inevitable to find certain solutions in this context.

Ecological knowledge in making *kemençe* does not mean knowing only the bioecological resources. Knowing the climate and the natural conditions of the region should also be considered as an ecological knowledge of sound production. In this sense, all *kemençe* makers know which tree types produce a better sound from a particular climate. For instance, luthiers prefer to use juniper and wild plum for kemençes performed in the open areas such as plateau festivals and outdoors weddings, since the texture of these trees is not easily affected by moisture. Although the mulberry tree gives a very nice tone, it is easily affected by moisture. Wood pores of the mulberry tree get easily wet in a humid air and these *kemençes* begin to give “hoarse voice” and “croaky” sound. For this reason, a mulberry *kemençe* may vary in tone depending on the environment in which it will be performed.

The anatomy of the tree is also important in terms of the sound produced. This situation is crucial especially in terms of making the soundboard. Thus, this aspect shows us how ecological knowledge takes part in the process of the timbre arrangement for producing proper sound of *kemençe*. When the texture of the wood is close-grained and the annual rings (cambiums) are close to each other, the sound becomes sharper. In addition to this, the grains must come in a straight line and the parts of the tree with smooth grain must be selected. It is essential to use unbranched parts of a tree for *kemençe* (Mustafa Aydın, personal interview, 20 September 2019).



**Figure 4.3 :** Spruce tree with annual rings close to each other and prepared for the cover of the high-pitched *kemençe*.

Footnotes *Kemençe* makers act responsibly in deciding which of the bioecological sources are suitable for making the soundboard of the *kemençe*. Then, the process of the timbre arrangement of producing a proper sound begins by engraving these resources. The grain texture of the cover (soundboard) determines the timbre of the instrument. *Kemençe* producers especially prefer spruce wood for the cover. This tree, which grows in the higher parts of the region, is “sliced to a thickness of about one centimeter and taken from the knot-free part near the top” (Demir, 2005, p. 86). This smooth piece is first wetted slightly and kept for a few days. Then they tie it to a round

object to be slightly curved. After it takes the proper shape, both sides are smoothed with a grater and thinned.

The spruce tree has certain criteria to be chosen for producing a proper sound. The luthier İsmail Kırcı explains this situation as follows (interview with the first author, Trabzon, 28 January 2020):

> The common feature of the instruments, the cover that gives the sound must be made of spruce and fir. In other words, spruce should be used to get the most ideal sound. But it also has a trick. Can every spruce be a cover for an instrument? It is not possible. Because the place where a tree lives, the place where it grows, and the growth direction of the tree are important. The south direction and the north direction of the tree are not the same. In short, spruce, which can be used for making a soundboard, can be changed according to its hardness-softness. Soft spruce is more suitable for a low and sonorous voice, while hard spruce is more suitable for high and metallic sound. The north side of the spruce tree has the most beautiful part. Luthiers take a part of a tree from the north direction at a distance of 10-15 cm from the core. When we look at this part, some streaks come upright, some of them are slanted. The flat one is soft, the steep one is harder. Perpendicular streaks are used for high-pitched sounds. Tilted ones are used for soft sounds. If it is too inclined, those streaks expand a little, and there is no problem for sound.

Although there are certain standards about the cover of the *kemençe* and the type of tree to be used, the variety is at the top level in terms of timbre, just like the nature. For example, many luthiers mention that there should be no knots on the cover of the instrument. However, according to İsmail Kırcı, sometimes a ramulose cover can give a good result by chance. For instance, the knot might come across the thick string side and produce rich sound. When İsmail Kırcı says, “just as the eggs of each chicken are different from each other, every *kemençe* is different”, he associates the timbre of different *kemençes* with their associated bioecological sources (interview with the first author, Trabzon, 28 January 2020).

Luthiers also use bioecological sources in terms of strings and bows in *kemençe* making process. While in the past the strings of *kemençe* were made from the intestine, today they use factory-made steel strings. Although this change, which came with

technology, has an impact on the instrument in terms of timbre, the bow of the *kemençe* is still made by horsetail hair, used for the bow for centuries. “The strings of the bow are obtained from the tail of the male horse. Because the tail of the male horse is not damaged by urine” (Demir, 2005, p. 87).

We can also see the use of bioecological resources to obtain a specific timbre of *kemençe* with ecological knowledge in the soundpost (*can direği*) example. The soundpost is placed between the cover and the base of a *kemençe*. If a sound post is not attached to a *kemençe*, it gives a “hoarse” sound. The sound post transmits the resonance from the string to the resonance box and it gives life to the instrument. It also determines the character of the instrument. In this context, small details such as which tree the sound post is made of, where it stands between the cover and the base, which side of the bridge is on, and which direction it faces, all affect the timbre of the instrument. According to İsmail Kırcı, “the point where we put the soundpost in the *kemençe* is usually at the bottom of the bridge, where the thin string is. The soundpost is in the form of a rectangular prism. However, the direction of the soundpost also influences the sound color we are looking for. Whether it is upright, sideways, or oblique is related to the sound color. The soundpost must also be dry. It can be made from any tree the trunk is made of” (İsmail Kırcı, personal interview, 28 January 2020).

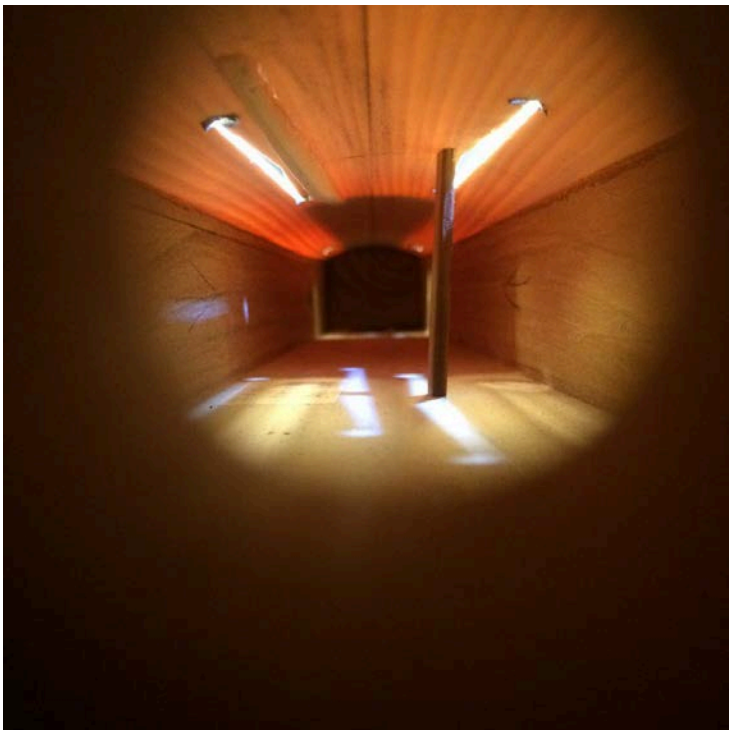


**Figure 4.4 :** The soundpost of a *kemençe* (Photo by Ceyhun Demir).

In the preparation of the cover and soundpost, such details show us the relationship of the instrument with nature. In which region the tree grows, what species it is, how it transmits sound, its texture, and its relationship with weather conditions directly affect the timbre. Thus, it is possible to encounter different types of *kemençes* because of this. For example, a soundboard with close rings of age is suitable for making high-pitched *kemençe*, while a soundboard with age rings far from each other will produce a low-pitched *kemençe*. High-pitched *kemençe* is generally performed in the west of Trabzon and around Görele (Akat, 2017, p. 4-5). The low-pitched *kemençe* is performed mostly indoors in the eastern part of Trabzon. As a result, it is possible to encounter various sound communities in and around Trabzon through different types of *kemençes* and their sounds. When we consider all this network of relations, it is seen how luthiers form and define the sounds of sound communities through engraving the bioecological sources with ecological knowledge.

### 4.4 Traditional Ecological Knowledge and Ecological Meaning of *Kemençe*

*Kemençe* makers are in a very close relationship with nature as well as the biological sources of the region. This situation is effective on the traditional ecological knowledge of luthiers as well as their orientation to this profession because of their relationship with nature. For example, Ceyhun Demir (Interview with the author, online, 13 March 2020), mentioned that he learned to make *kemençe* because his grandfather was making and playing *kemençe*, and he considered himself lucky to be able to live in nature. He states that he always had a piece of wood and a pocketknife. Thus, Hasan Sancak also states that he always carries a piece of wood with him and makes small *kemençes* from them (DiyanetTV, 2015).

The close relationship of *kemençe* makers with nature sometimes causes them to see the *kemençe* as a part of nature. In fact, some instrument makers approach the *kemençe* as if it were a living creature. Thus, one of the most basic reasons for the emergence of this situation is the relationship of luthiers with bioecological sources. *Kemençe* also has a character originating from the relationship with nature in terms of manufacturing. Oktay Üst, a luthier and performer, indicates “I approach every *kemençe* as if they are human. Repairing the *kemençe* is like raising someone from the dead. Fixing a *kemençe* is like reviving endangered music that my musicianship gave me” (Osman Deniz, 2012). According to Üst, covers also have a personality like a human. While he

was burning the cover to prevent cracking while drilling the sound holes, he said "we are hurting the *kemençe* right now, but then it will play with pain" (Osman Deniz, 2012). He also mentions that there is a strong connection between *kemençe*, Black Sea music culture, and nature.

It is possible to read the traditional ecological knowledge and ecological meaning from the pieces performed with the *kemençe*. In this sense, the lyrics as well as the sound of the *kemençe* show us the ecological meanings of the instrument. For instance, "*atma türküler* (improvised folk songs) are sung in verses" in the Black Sea region (Pelikoğlu 2009, p. 39), and the relationship between nature and the *kemençe* is explained in the first two lines of the quatrains, while the last two lines are mostly about love and suffering. The lyrics also refer to each part of the *kemençe* such as bridge, strings, and head. Thus, expressions related to nature stand out in many songs traditionally performed with *kemençe*. For example, in the piece titled *Gitti Yarum Ormana* by Koryanalı Hüseyin Köse, lyrics are "she went to the forest. She got wet. I ask the trees. To which one she was leaning on?" (Özkurt, 2015). In this example, it is seen that the trees are personalized similar to the instrument. Also, in the lyrics of the piece *Ağasar Horonu* performed by Apolas Lermi (2011), the words "his *kemençe* got wet. Its sound doesn't reach to the mountain" are tied to the nature as well as the traditional ecological knowledge of the sound of *kemençe*.

*Kemençe* sculptures function as symbols in Trabzon as well as showing the traditional ecological knowledge through the musical instrument. *Kemençe* is an essential tool for the promotion and presentation of Trabzon. However, the meaning and message imposed on the *kemençe* sculptures in Trabzon may differ from Görele. References are mostly about the *kemençe* masters in Görele which creates a sound community through the discourse about locality. However, in some cases, the meaning spread throughout the Black Sea in Trabzon through discourses on the sculptures. For example, the words written on the underside of the *kemençe* sculpture on the beach of Beşirli in Trabzon are quite remarkable:

> Karadeniz'in hırçın dalgasından
> Dumanlı dağından, serin yaylasından
> Bir hışım ile kopan/kopamayan
> Hem gurbet hem sıla türküsüdür
> Bu bizim türkümüzdür…
> Sevdasına, kemençesine, ölümüne…

From the harsh wave of the Black Sea
From the foggy mountain, cool plateau
Ripped off with a mystery
It is both homesickness and homeland songs
It is our folk song…
To its love, to its *kemençe*, to the death…



**Figure 4.5 :** *Kemençe* sculpture on the seaside of Beşirli in Trabzon.

The striking point here is that the emphasis is not on Trabzon but the Black Sea as a landscape. The last three lines talk about the people who migrated from the Black Sea and who are longing for the homeland. The last line shows how vital the *kemençe* in the Black Sea culture. The *kemençe* is also an indispensable symbol in the culture of Trabzon and the being from Trabzon (*Trabzonluluk*). In this context, such material cultures show us what kind of a sound community the *kemençe* creates, what role the nature of the Black Sea region plays in this process, and how people's belonging to nature becomes an embodied practice through the discourse about *kemençe*.

Undoubtedly, these expressed thoughts reveal an important relationship between sound ethnobiology of kemençe and sound ecology.

# 5. CONCLUSIONS AND RECOMMENDATIONS

Although this thesis focuses on a single instrument which is *kemençe*, it shows us how broadly an instrument can be considered and be part of the social life. In this context, if it is necessary to examine the social life of an instrument, we should consider the following components as a whole: the manufacturing process of the instrument, what kind of performance is done through instrument, the timbre of the instrument and its relationship with the performance, the meanings attributed to the instrument and its performance, how the instrument creates the sound communities, how it creates emotions on people, and the aural space of the instrument. Since this study was carried out to answer these questions, three perspectives on each topic were determined. These perspectives are terminologically space, nature, and sound. In this sense, it would be appropriate to examine the results of the study in parallel with the three chapters (organonscape, atmospheric relations, and sound ethnobiology).

In the first part of the study, I discussed different types of *kemençes* and their sub-regions with the concept of organonscape. By proposing this concept, I demonstrated that instruments cannot be represented statically within certain aural spaces. A similar situation applies to the *kemençe* instrument. Fluid aural spaces include various musical instruments and their performances. These performances are not static and therefore, as non-representational theory suggests, they cannot be represented but can be presented.

Five types of *kemençe* are performed in the Eastern Black Sea region. These *kemençes* are high-pitched, middle sized, low-pitched, four-stringed, and electronic *kemençe*. These instruments are associated with different musical spaces and performances within the region and undertake a wide variety of cultural presentations. The concept of organonscape works in the aural space analysis of the *kemençe* in and around Trabzon through focusing on material culture, *scapes*, performance, experience, landscape and ideology. Thus, in the first part of the thesis, I discussed different types of *kemençes* and sub-regions in order to analyze the aural space.

The organonscape of the *kemençe* becomes evident mainly around two issues: non-representational aural space and performance. In this context, it can be said that the landscape of the Eastern Black Sea region is performed by *kemençe*. The difference in types of *kemençe* is also reflected in the musical style and rhythm diversity in the region. It is also possible to observe that this situation is localized. The clearest example of this is the naming of *kemençes* based on location such as *Görele kemençe, Sürmene kemençe, Trabzon kemençe, Rum kemençe* etc. In parallel with the location-based naming of the *kemençe,* it is also possible to encounter performance naming related to certain places such as *Akçaabat horonu, Sürmene gaydesi, Giresun karşılama* etc. Although these nomenclatures "represent" the specific places, there is no homogeneity in terms of performance and types of *kemençe* in each region. For example, while the *horon* dance can be performed via the low-pitched *kemençe,* the *muhabbet* tradition can be seen in various places in and around Trabzon. In addition, we can expand the aural spaces of this instrument through the four-stringed *kemençe,* stage performances with electro *kemençe* and popular music practices within the organonscape of *kemençe*.

Another point where Organonscape of *kemençe* is evaluated is landscape as a space and its non-representational features. Performing the *kemençe* on a certain landscape and making its spatial analysis are among the priorities of the organonscape concept. However, while doing this, we problematize the issue of representation together with the concept of organonscape. As a result, *kemençe* performances in a particular landscape do not have a single meaning. The primary reason for the absence of a single static meaning is the fluid nature of aural spaces. Thus, everything is constantly changing in a certain space and a structure based on repetition is not formed. Kemençe performances are like that. Although the people of the region try to create a stable representation, the meaning and performance of the kemençe is constantly changing. In this context, organonscape of *kemençe* means the interpretation of landscape through the instrument, in which multiple meanings are created. In this context, organonscape of *kemençe* refers to the whole aural aspect in which the *kemençe* is heard, performed, and interpreted.

Another important point of the organonscape concept is the evaluation of instruments as a material culture. As a result of this, performing only a performance-oriented analysis of the *kemençe* instrument as a material culture is not a sufficient element to

talk about organonscape. For this reason, in this study, I also mentioned the manufacturing process of the *kemençe* as a material culture. In this context, how the sources affect the timbre in the making of the *kemençe* and innovations on the form of *kemençe* are also mentioned.

Organonscape provides approaches that include complex as well as interrelated phenomena. These facts are about music practices that organology, musicology/ethnomusicology, and cultural geography are commonly concerned to problematize. Eventually, organonscape considers musical instruments as material culture, performance, experience, place/space, landscape, and ideology while focusing on spatial musical cultures.

The third chapter of the thesis deals with how an atmospheric situation is created through the *kemençe*. In this context, I evaluated the concept of the atmosphere with two different approaches. The first is the sound of *kemençe* as the atmospheric practice. According to this approach, *kemençe* performance includes atmospheric arrangements such as choosing the type of instrument, timbre, and repertoire to create an atmospheric practice. As a result, we can observe the effect of the sound of *kemençe* in the surfaceless sonic space of the *felt body*. The second thought is the atmospheric relations of *kemençe*. According to this view, *kemençe* is one of the crucial elements in creating an atmospheric situation concerning the whole (material and non-material) in a sonic space. The process of establishing a relationship in a surfaceless space is fluid and variable. Subsequently, the atmospheric relations of the *kemençe* are formed within the elements of the spider web model.

Together with the spider web model of *kemençe*, I indicated the atmospheric relations of the instrument, as well as revealing the elements by which the sound of the *kemençe* is shaped in an atmosphere. Thus, I rendered the atmospheric environment of the *kemençe*, which "construes feelings as collectively embodied, spatially extended, material, and culturally inflected" (Riedel, 2019, p. 85). Spider web model shows that the atmospheric relations of *kemençe* are linked to two terms. The first is "nature" and "nature as space", which includes geography, landscape, soundscape, and landform. The second is the "performance", which includes repertoire, melodies, dances, and rhythms performed with *kemençe*. Spider web model also reveals the atmospheric situations through performance (*horon, sıksara* etc.) and its place (plateau festival, closed place, etc.). As a result, an atmospheric situation is a processual fact, and instead

of catching it, we need to “flow” with it and within it, as well as understanding the atmospheric arrangement for an atmospheric practice.

The fourth chapter of the thesis mainly focus on the *kemençe* making process and the relationship between the luthiers and the nature of the Eastern Black Sea region. Indeed, the music culture of the Eastern Black Sea region offers ethnomusicologists a diverse and rich field of research due to having a strong connection with the nature and the environment of the region. Thus, it is possible to examine this relationship through the musical instruments and song lyrics performed in the region. In this study, I discussed the nature-culture relationship in a holistic way with the focus of *kemençe*. In this context, I have revealed the sound ethnobiology of the instrument by evaluating the instrument making and performance process.

When examining the sound ethnobiology of musical instruments, it should be emphasized how bioecological sources are handled with ecological knowledge. At the same time, how luthiers make the timbre arrangement of producing proper sound is also a part of this process. In addition, how the sounds of musical instruments are part of traditional ecological knowledge and how ecological meanings are attributed to these sounds are included in the content of sound ethnobiology of musical instruments.

*Kemençe* makers, on the other hand, evaluate the bioecological resources used in instrument making in terms of sound production and process them in line with ecological knowledge. In the process of making *kemençe,* luthiers can obtain different types of *kemençes* and various tones, especially with small changes in terms of soundboard and soundpost. Of course, this includes the issue of timbre arrangement of producing proper sound as well. Thus, with the completion of the instrument and the beginning of its performance, ecological meanings begin to be attributed to the sound of *kemençe*. One of the main reasons for the formation of these meanings is the traditional ecological knowledge of the people of the region.

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