

How to Explore the Contemporary Possibilities of the Duduk

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How to Explore the Contemporary Possibilities of
the Duduk

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Chapter 1: Introduction

1.1 Duduk

"The duduk is a double-reed acrophone made of apricot wood, with a distinctive velvety and deeply evocative sound, which for many Armenians has become strongly associated with notions of national identity. Although almost identical in basic construction to similar instruments played for example in neighboring Georgia (duduki), Azerbaijan (yasti balaman), and Turkey (mey) since the 1920s in Armenia the duduk has slowly acquired a distinctive national identity and sound. Furthermore in recent years the duduk has been brought to the attention of the world through the recordings of Djivan Gasparyan, for example the recording of "I will not be sad in this world" by Brian Eno and the soundtrack to Scorsese's Film The Last Temptation of Christ (1988)" (Cornell, 1998, p.3)

"The mey, balaban, and duduk are three closely related instruments of the double-reed family. The Turkish mey, the Caucasian balaban (particularly in Azerbaijan, but also northern Iran and northeastern Iraq), and the Armenian duduk are closely related, double-reed aerophones, characterized by a short cylindrical tube with seven or more finger holes and a thumb hole coupled with a bridle affixed to a large flattened reed. Other, closely related instruments are the balaban of Central Asia; the duduki of Georgia;

the hichiriki of Japan; the kuan, guan, or guanzi of China; the yasti balaban of Dagestan; the hyanpiri of Korea; the balaban of Uzbekistan; and the Kamis Sırnay of Kyrgyzstan." (Karahasanoğlu, 2008, p.438)

The Armenian duduk was improved by V.G. Buni in the 1920s and '30s. (Nercessian, 2001, p.17) *"The development of the duduk has been strongly patterned by sociopolitical events. V. G. Buni's reconstruction of the instrument, for example, has to some extent, instigated its appearance on the concert stage as a solo or ensemble instrument. The use of diatonic scale and notation has been a result of the Soviet policy of Europeanization."* (Nercessian, 2001, p.18)

According to the information I received from my Armenian teacher Suren Asaduryan, the name of the duduk was "Tsiranapogh" before. The name was changed to "Duduk" later because "Tsiranapogh" was not easy to pronounce for Russian-speaking people. I could not find any meaning of "Duduk" in Armenian but "düdük" means "whisper" in Turkish. After a long period of sharing the same land and being very close of Turks and Armenians, I think it would be inevitable to take some words from each other and "duduk" may be one of these words.

Armenian ethnomusicologist Andy Nercessian stated that *"I had, as a child; often overheard my parents and my grandparents use the word düdük in Turkish expressions, which refer to a whistle"* (Nercessian, 2001, p.4). And Turkish musicologist Songül Karahasanoğlu says *"The letter and sound of "ü" does not exist in the Armenian language; instead, the "u" without umlauts has been used, so the word duduk is only a variation of the word düdük. The Armenian citizens who live in Türkiye pronounce the word üzüm (grapes) like uzum or yuzum."* (Karahasanoğlu, 2008, p.444)



The duduk has a 1.5 octave range and it is a transposed instrument which means that there are different keys and sizes of duduks. My key of A bass duduk has an exception; it has a one-octave range but there are also wider range, extended bass duduks. It is possible to play all microtones, semitones, mods, and scales on the duduk.

The duduk has mainly two pieces; the body and the reed. The body is the wooden part and is mostly made of apricot wood. There are 10 fingerholes on the body; 8 of them are in front and the other 2 are behind. The reed part is made of cane and it also has two more tiny pieces; a regulator (gamish, karnış) and a cap. The regulator is like a ring and is made of grape tree branches. It is to control and make tiny adjustments on the wideness of the mouth of the reed for stabilizing the intonation and tuning. The cap is to keep the reed closed and protected when it is not used.

My duduks have an exception. After my instrument build experiments, I made my duduks with one of the back holes in front, because the fingerhole at the bottom-front is made to be closed by the belly or knee but since it is not possible to use the knee or belly when we play with a microphone. Also, all the sounds of the duduk come from the fingerholes; the volume balance of the instrument is better when we have all the fingerholes in the front. As you can see in the image above, the keys of F, C and D duduks have 9 fingerholes in the front while the keys of A, Ab, and G duduks have 11 fingerholes.

1.2 Autobiography

I was born in 1990 in Istanbul, Turkey, amidst the complexities of Armenian and Turkish relations, I am a Turkish duduk player passionately preserving Armenian techniques. (Cornell, 1998)

In my artistic expression, I blend the heritages of Armenian, Ottoman, Turkish, and Anatolian traditions with a contemporary perspective, echoing the diverse essence of Istanbul. My pursuit of authenticity encompasses the exploration of extended techniques and the use of electronic treatments. These elements are integral to my journey, allowing me to push the boundaries of the duduk and explore new realms of sound and expression.

In Istanbul, while pursuing my studies in Turkish music at Istanbul Technical University, I was fortunate to have the opportunity to meet and learn from esteemed duduk masters Suren Asaduryan and Özcan Gül. Their guidance was instrumental in shaping my perspective on the duduk.

Furthering my education, I had my master's degree in World Music program at the University of Agder, and have been to the University of Gothenburg as an exchange student for two semesters, I was honored to study under some of Scandinavia's most distinguished musicians. They generously shared their expertise and insights, deeply enriching my musical identity and the way to be a solo artist and a curious collaborator.

1.3 A Closer Look to My Relation with the Duduk

I met the duduk when I was studying Mey and Zurna at Yalova Municipality Conservatory in the town where I was born. I discovered the duduk through my mey teacher Erdem Kılıç and the performance video of Turkish Duduk player Ertan Tekin on YouTube who has been a pioneer in Turkey. I started to learn the duduk with the instruction of my mey teacher Erdem Kılıç and by myself in 2006.

To buy a duduk, I met Armenian duduk artist Suren Asaduryan, who comes to Turkey from Armenia from time to time. I bought my first duduks from him and every time we met he gave me some technical information, but at that time I was not aware of how good his technical capacity was. During our meetings, he recommended meeting Özcan Gül and taking lessons from him, but since I had never heard this name before, I did not pay much attention to this advice. One day, I crossed paths with Özcan Gül in Istanbul and we met. This duduk player, whose name I had never heard, had a very superior performance technique and a deep knowledge of the functioning of the duduk system, in addition to his generous, humble and friendly attitude. His and Suren's techniques are different than Ertan Tekin's and my mey teacher's because Erdem and Ertan were mey players and were playing the duduk with mey technique. We met and started playing duduk together and I decided to try Özcan's technique. Until I met Özcan, I had been practicing the duduk with the mey technique for 4-5 years. I left aside my previous technique, which I had brought to a certain level, and bought the instruments he recommended, and completely changed my technique. Özcan Gül was also a student of Suren Asaduryan, but I observed that he

added his own experiences to the information he received from Suren. I learned a lot from him, not only about playing technique, but also about tuning the instrument and how to control its tone well, and this encouraged me to make my instruments and experiments.

This technique that I learned from Suren Asaduryan and Özcan Gül is shaped in Armenia with the contribution of several players mainly Vatche Hovsepian. (Hovsepyan, 2021, p.38) is one of the most important names in duduk history and he gained a lot of respect from other players. He brought a rich and soft way of playing to duduk.

"Opinions differ as to whether some of the famous duduk players are worthy of their fame, however, there is an overall agreement that Vatche Hovsepian was the greatest of all duduk players" (Nercessian, 2001, p.38)

Chapter 2. Method and Musical Approach

2.1 Aims

My search began slowly with adopting a mindset. This mindset is to be open to all inspirations and influences, no matter what discipline and field they come from, and to be open to the new sounds that my research and findings give me and the new roles they bring, without being limited within the determined limits of my instrument.

When we become a performer who specializes and concentrates on an instrument, we embrace the limits and roles that the instrument brings. If we are a guitarist, it is inevitable to look at music through chords; if we are a percussionist, it is inevitable to look at music through rhythms, complexity and time. When you become a duduk player, being a makam-based-melody-oriented performer becomes a given to you. The same goes for traditions; a jazz musician, a classical music performer and a folk music artist can have completely different perspectives and approaches. Although I deeply respect all these shirts and roles, my instincts and curiosity forced me to wander into new lands.

My aim as a duduk player, in addition to being a melody-oriented performer, is to find contemporary techniques and expressions, to have new roles, pushing the boundaries of the instrument and to write new compositions.

2.2 Artistic Research Questions

- How to explore the contemporary possibilities of the duduk?
- How to find more expressions on the duduk?
- How to write new compositions?

2.3 Artistic Research

My aim as a duduk player, in addition to being a melody-oriented performer, is to find contemporary techniques and expressions, to have new roles, pushing the boundaries of the instrument and to write new compositions.

Scholar Darla Crispin advocates for the dual role of the artist-researcher, wherein they function both as an active participant in their artistic endeavors and as a discerning observer of their creative work (Crispin, 2015, p 56).

While doing my research, I experimented with extended techniques and electronic treatments through effect pedals and loop pedals. For extended techniques, I had a lot of

different influences from different things and different musicians. Besides the several tracks listed below, I had a great chance to open my mind more by having lectures with Jan Bang, Arve Henriksen, Bugge Wesseltoft and Anders Jormin.

Jan Bang's way of creating a texture through loops and Arve Henriksen's extended techniques on the trumpet on the track Poverty And Its Opposite - Live (Henriksen, 2008) is an important sample.

I was not directly influenced by this piece but I have been listening to this track in the past and I believe that I unconsciously got the inspiration from this extended technique of Arve. After I started to use it in my project, I noticed that Arve already used it in this track. Breathing (Henriksen, 2001)

Another musician I am influenced by is the Norwegian tuba player Daniel Herskedal. I created similar bass sounds by using harmony effects on the duduk. These two tracks of him below have been the most inspiring tracks to me:

The Lighthouse (Herskedal, 2019) Sea Breeze Front (Herskedal, 2015)

I have received the idea of "Interference" from my mentor Anders Jormin in our lessons at the University of Gothenburg. He gave me the idea of singing while playing the duduk and creating interference. I didn't use singing in my compositions but I used interference by playing two duduks.

My exploration and research into new sounds have provided me with a broad palette of expression, inspiring me to compose new pieces utilizing these sounds. I produced an album featuring these new compositions. I recorded my album "Echoes of Becoming" and released it through Jazzland Recordings on February 23, 2024. I included accomplished musicians whom I had been influenced by while maintaining the solo concept throughout the album.

In addition to serving as both an academic and musical exploration, these compositions collectively form a narrative. They are tales born from my quest for authenticity, and the inclusion of guest musicians in this project serves to harmonize with the narrative by featuring individuals with whom my path crossed during my time in Norway and my close friends, adding depth to the story of my journey.

I recorded these experiments with my professional audio recording equipment. I then listened to the recorded sounds and made observations on the use of new sounds and techniques and their placement in the music. My research method was to record, listen, develop, record and listen. Thereupon, working with the musicians I was influenced by during my master's degree helped all my previous findings to rest on a more solid foundation. I played the recordings I made to my mentors. Based on their feedback, I made changes and made new recordings. When I felt that I had reached the end of my research, I released a solo duduk album containing my new compositions and new findings. As argued by Borgdorff (Borgdorff, 2020) and (Haaland, 2020), the intertwinement of audio and text is a crucial part of this thesis as the audio answers part of my research questions.

"In the context of artistic research, the research catalogue is positioned precisely in the gap between the documentation of the work using texts, images and sound and the publication of the work as research. Something happens here that is crucial: a transposition of the work from the aesthetic realm to the epistemic realm." (Borgdorff, 2019 p.21)

In addition to the album, I publish my works in the Research Catalogue because it offers the opportunity to document all research as visual, video and audio recordings. In the "Expression" section you can see all the extended techniques and digital effects I tried and sounds I found and used in my music.

2.4 Extended Techniques

The playing technique of the duduk is unique. I have been teaching the duduk online to people from all over the world. Some of these people were players of other wind instruments like trumpet, saxophone, clarinet, flute and uilleann pipes. I had a chance to discuss the technique of their instrument with them. I also experienced how wind players

had more difficulty adapting to the technique of the duduk because the duduk has a different technique. For example, while most wind players use a lot of muscles in the mouth area and use the lips tensely, the duduk requires a relaxed lip and mouth position, inflated cheeks, vibrato through moving the jaw, and articulation through moving the jaw instead of only tonguing. I have never seen works on extended techniques for the duduk, therefore I needed to look at works on other wind instruments.

I believe exploring extended techniques will help me to have more expressions and open doors for new music. Moreover, this work may give more inspiration for further composers and encourage them to compose more for the duduk. Douglas Hill states that extended techniques can be considered *"additional vocabulary for the instrument to be used when an idea cannot be better expressed in any other way."* (Hill, 1983, p.7)

Douglas Hill also mentions *"Upon reading the accounts of many of the famous works for horn, one will find that most of them were inspired by, dedicated to, or written for a specific performer. Today we have a few horn players who have consciously continued this important tradition, but we also have a large number who ignore or denounce invention and experimentation and openly discourage composers from utilizing the numerous possibilities of our highly versatile instrument. There is hope that this attitude is changing with the rapid growth of young talent. If young and enthusiastic horn players are encouraged to be receptive to new techniques there will be an increase in our repertoire, rather than a continuation of this period of seeming disinterest."* (Hill, 1983, p.7)

2.5 Experiments and Searching for an Authentic Voice

I bought a lathe to make duduk and designed and built some of the machines myself with the support of my father. After improving my technical skills in duduk making for a while, I wanted to test and see whether it was true, as said that duduk can only be made from apricot wood. Apricot trees are very common in some regions of Turkey, Azerbaijan and Armenia. I thought that this claim about apricot trees might have arisen due to the ease of access to apricot trees. I made duduk from ten different types of wood used in instrument making. All the wood types had an okay result but I got the best result on the apricot wood. Then I worked on the dimension and tuning method and developed a dimension that would optimize my playing. This was the first step in me having a unique voice. With the

dimension I developed, I not only achieved a homogeneous volume level and a consistent timbre in every note but also had high volume and a wide timbre.

2.6 Instrument Setup

The key of A duduk is a tenor instrument and it has the most characteristic sound of the duduk, that is why I prefer to use a key of A duduk in this project. I used the key of G duduk in two of the tracks in the album. My duduk does not have a brand because I am using the duduk bodies I made and I provide my duduk reeds from different reed makers from Armenia and Turkey.

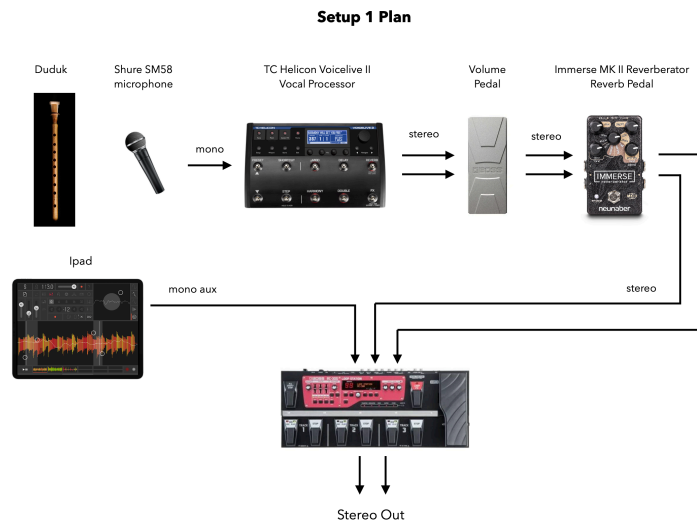
I am using two setups in this project. The main setup is Setup 1. I use Setup 2 when I want to include a piano in my performance.

Setup 1 List

- Key of A Duduk
- Shure SM58 dynamic microphone
- TC Helicon Voicelive II Vocal Processor
- Boss Volume Pedal
- Neunaber Immerse MKII Reverb Pedal
- Boss RC-300 Loop Station
- Ipad (Koala App)

Setup 2 List

- Upright or grand piano
- Key of A Duduk



Setup 2



2.7 Text Editing

In the process of writing this thesis, I initially drafted the text in both Turkish and English, subsequently undertaking the task of translation and organization utilizing the resources available on ChatGPT. The content was generated independently, without reliance on information sourced from ChatGPT. Rather, the platform was utilized for text correction and refinement.

Chapter 3. Explorations and Chapter 4. Compositions are published at:
<https://www.researchcatalogue.net/shared/8a7fa8d67d40d7d5e011560d1b038946>

Chapter 5. Reflections

This thesis is a reflection of my process of developing my voice and exploring the limits of mine and my instrument. I am a musician who comes from the tradition of the duduk, have been educated in Turkish traditional music, and applied Armenian techniques to the duduk.

My exploration started at the beginning point of the sound; in the making process of the duduk (dimension, wood type choice). The wood type and dimensions of the duduk are important factors for the tone. The inner size and size of the fingerholes make a big difference. After some experimental work on the construction of the duduk and being convinced about which wood type and which dimensions I wanted, my artistic trajectory led me towards a solo duduk performance domain, wherein I embarked upon an exploration of acoustic and electroacoustic modalities. This exploration was driven by a desire to transcend conventional boundaries inherent in the instrument and to cultivate a distinctive musical identity.

Creative process

In the realm of compositional methodology, my formal education in Turkish folk music and modal improvisations on the duduk served as a foundational framework. However, to facilitate creative expansion, I consciously endeavored to transcend the constraints of folk music paradigms. Drawing inspiration from diverse sources, notable influences include Arve Henriksen, Daniel Herskedal, Jan Bang, Eivind Aarset, Olafur Arnalds, and Erik Satie. Particularly noteworthy was Eivind Aarset's album "Dream Logic," (Aarset, 2012), produced by Jan Bang.

I have been recording all the ideas I had on the extended techniques, electronics and compositions, in my home studio and I did self-observation. It was an experimental artistic process that I recorded, listened to, observed, recorded again, and listened to. Having new sounds through extended techniques and electronics gave me a great opportunity to make new compositions. I had a lot of options and a lot of aesthetic choices. These choices shaped over time in the past five years through this artistic research.

When I started my studies at the University of Agder, I had a chance to study with musicians who have been my biggest inspirations. I showed my recorded music to them. I received observations, opinions, and suggestions from Jan Bang and Bugge Wesseltoft. And also from Arve Henriksen and Anders Jormin during my exchange at the University of Gothenburg.

Essence in the music

Besides concerning technical possibilities, I care about what music tells and what the essence of the music is. Embracing a multidimensional approach, I have actively interrogated the narrative underpinning my compositions, seeking to imbue each piece with personal significance and thematic coherence. Collaborative experiences, such as a duo project with Danish musician Sara Grabow, have further enriched my understanding of storytelling within musical contexts, fostering a nuanced appreciation for conceptual depth and thematic cohesion.

In parallel with technical explorations, my artistic journey has been informed by a profound engagement with psychological inquiry and self-awareness. I embarked upon a quest for self-discovery and belonging. Turkish psychiatrist and author Cem Mumcu has been inspiring to me with his poetic way of talking about his perspective on life. I found him through this TEDX Talk (Mumcu, 2024).

Paradox during the research

Since this research is an exploration and we have to leave home to be able to explore, it sometimes has been scary because it always includes the fear of being lost. Even though I had a traditional music background and it was a place that I could always go back to, I always carried a little amount of fear of that. But I think this fear is a good sign. If we choose not to have any fear, we will not be able to make any progress.

In conclusion, this solo exploration has afforded me a myriad of sonic possibilities, enriching my sonic palette and crystallizing my artistic vision. Through this process, I have discerned not only the sonic elements I wish to incorporate but also elucidated how they are to be employed. Furthermore, this exploration has primed me for collaborative endeavors and given versatility conducive to partnerships.

6. Final Remarks

This research has contributed to contemporary music production by highlighting the contemporary potential of the duduk. I used extended techniques and digital effects to push the limits of the instrument. I documented the techniques I used and the sounds I acquired in video and audio. Publishing the thesis as a web page is important for disseminating artistic research and making it accessible on a global scale.

This research I conducted gave the duduk advanced musical expressions and new roles. It has been documented that instead of being used only as a melody instrument, it can also be used for accompaniment and that it can have not only soft and plain expressions but also atmospheric and different expressions.

Moreover, I wrote compositions in which I could use the new sounds I discovered, recorded them and released them as an album. I have presented the album's production and composition processes in detail on this website.

I hope that the sounds I use will be adopted and used by other performers and composers and become a source of inspiration for them to take them even further.

I posit a preference for the utilization of effect pedals for electronic manipulations. Central to this preference is the recognition of equipment as a determinative factor in shaping musical output. In my experience, the utilization of effect pedals has exerted a pronounced influence on both the sonic texture and compositional dynamics of my work. I am convinced that a choice, such as Ableton Live, would yield disparate outcomes, underscoring the significance of equipment selection in engendering sonic distinctiveness.

In offering counsel to fellow researchers embarking on analogous inquiries, I advocate for the trial of divergent methodologies and equipment configurations. Embracing variability in equipment selection is posited as a means to engender a distinctive sonic identity, fostering innovation and originality within the research domain.

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