

How can elements of raga music influence a signature sound?

An artistic research project on incorporating ragas into contemporary music composition

HARSHA JEROME SENAVIRATNE

SUPERVISOR Ingolv Haaland

University of Agder, [2023]

Faculty of Arts Department of Popular Music



i

Acknowledgments

I wish to express my sincere gratitude to all who contributed to completing my master's thesis. Firstly, I sincerely thank my supervisor Ingolv Haaland for his invaluable guidance and unwavering support throughout my research journey. I am also deeply grateful to Jan Gunnar Hoff, whose musicality and personality inspired and motivated this project and beyond.

I would also like to acknowledge the generous contributions of the former and present musicians who played a crucial role in this project:

Henrik Bakka Torbjørn Kamfjord Eriksen Morten Georg Gismervik Hannah Torres Lærum Carsten Omholt

Furthermore, I thank Henrik Andreas Alsmark and Andreas Vidhammer for their excellent help mixing the recordings. Their exceptional artistic and engineering skills were crucial to the success of this project.

Lastly, I extend my gratitude to my mother for her unwavering support, Runar Nylende Huse, Adrian McAllister, and all my fellow students and colleagues who took the time to discuss my thesis with me. A special mention goes to my partner Mathilde, whose creative inputs and boundless patience were invaluable in shaping the final outcome of this project. Without the support of these fantastic individuals, this project would not have been possible.

Table of Contents

1.	Intr	roduction	1
1	.1	Background	2
1	.2	Research Questions	3
2. Method			
2	.1	Artistic Research	4
2	.2	Program Music	7
3. Theory			
3	.1	What is Sound?	9
3	.2	Signature Sound	11
3	.3	Cultural Context and Tradition in Music Production	16
http 4.		ww.researchcatalogue.net/shared/22ebe81dea435da49e054ba9ee7f51d0 ga	web
4	.1	Composition Structure	web
4	.2	Characteristic Elements in Raga	web
4	.3	Raga's Influence on Musicians	web
	4.3.1	John Coltrane	web
	4.3.2	2 John McLaughlin	web
	4.3.3	3 Miles Davis	web
5.	Cor	nposing	web
5	.1	My Signature Sound as a Pianist	web
5	.2	My Signature Sound as a Composer	web
5	.3	Case: Tsunami	web

5.4	Case: Second Chancewe		
5.5	Case: Ammawe		
6. Reflection			
6.1	Sound20		
6.2	Compositional Process		
6.3	Methodological Factors24		
6.4	Cultural Aspects		
7. Final Remarks28			
References			
Scoresweb			

1. Introduction

Having received five years of instruction in Eastern music at a private Sri Lankan school, the piano has been my instrument of choice since my first year in high school. Upon moving to Norway, I actively participated in musical ensembles featuring multiple instruments while delving deeper into music theory during my classes. This newfound knowledge enabled me to arrange and compose music, which has been a fulfilling creative outlet. In high school, I developed a passion for jazz and joined the Molde Youth Big Band. Collaborating with other instrumentalists has been the most rewarding aspect of my musical journey, mainly when performing pieces I have composed, arranged, or created. Fortunately, I have had the opportunity to work with Jan Gunnar Hoff since arriving in Kristiansand in 2018. As a pianist and composer, Hoff's eclectic fusion of musical genres and cultures has greatly inspired me, encouraging me to take risks and incorporate my experiences from Sri Lanka into my artistry.

This study is a part of my artistic research project for my master's thesis, in which I explore the use of ragas in composing. Specifically, I focus on how they can be used to create my signature sound in compositions. Ragas are complex structures with many instrumentational possibilities and different moods. With around 83 ragas in Indian classical music (The Times of India, 2016), this thesis focuses on Raga Bhairav and Bhairavi. I intend to examine the concept of sound and how I have used this knowledge to develop my signature sound.

My ambition is to compose music that reflects the two distinct cultures which have shaped my identity; the traditional and vibrant folk music of Sri Lanka and the modern jazz music I have encountered since relocating to Norway in 2011. I aspire to devise something unique and demonstrate how my cultural history has impacted me in novel ways. However, as I have observed through dialogue amongst my peers, I acknowledge a need for information and recognition of my home country, Sri Lanka, and the need for more comprehension of its long-standing musical heritage. Consequently, I plan to construct a bridge between my past and present lives through music, with the ideal of the musical product as an artistic merging of these two cultures.

1.1 Background

A signature sound in music is the unique and recognizable sound that distinguishes one artist from another. This sound often results from musical elements such as melody, rhythm, instrumentation, and style, shaped by the artist's cultural background, personal experiences, and artistic vision (Baur, 2019). A signature sound is essential for artists to establish their identity and stand out in a highly competitive and crowded music industry.

Music is an integral part of human culture, with its evolution and development being influenced by various factors such as technology and social and cultural contexts. Contemporary composers have embraced diverse musical traditions and styles as music evolves to create new and unique sounds (Sound Infusion, n.d). One way to incorporate traditional elements into contemporary music is by using scales, rhythms, melodic patterns, and instruments from various cultural and musical traditions.

Incorporating elements of traditional music into modern compositions is an essential aspect of contemporary music production. With globalization, the world has become increasingly interconnected, and music has become a vital tool for bridging cultural gaps and promoting cross-cultural understanding. By incorporating traditional music elements into contemporary compositions, composers can create a new musical language that reflects the diversity and richness of the world's cultural heritage. Furthermore, it allows musicians unfamiliar with certain cultures to explore and engage with traditional music from other cultures. Through this process, contemporary music can serve as a gateway to traditional music and inspire a renewed interest in traditional musical styles and traditions.

1.2 Research Questions

The proposed master's thesis investigates incorporating traditional music elements into modern compositions, an essential aspect of contemporary music production. Integrating traditional music elements, particularly those found in raga music, can enhance the signature sound of modern compositions. In addition, the thesis aims to explore how new compositions based on raga scales can impact the composer's artistic expression.

This research recognizes the potential influence traditional music can have on contemporary music production and the creative process of individual artists. However, integrating elements of traditional music into modern music production may present ethical and cultural challenges that require careful consideration. Addressing these concerns is crucial to ensure that conventional music elements are incorporated respectfully and responsibly.

Therefore, my research questions are:

- How can raga scales influence a signature sound?
- How will new compositions based on raga scales influence an artistic expression?
- What ethical and cultural challenges arise when incorporating elements of traditional music?

The thesis aims to contribute to the ongoing artistic research discourse on incorporating traditional music into contemporary music production. By exploring these research questions, the thesis intends to provide insight into the potential advantages and challenges of integrating traditional music elements into modern compositions. Furthermore, the thesis advocates for cultural exchange and understanding by merging diverse musical traditions.

2. Method

This master's thesis is an artistic development work. In this chapter, I will discuss what is included in the concept and terminology of artistic development work and its relation to other research. Furthermore, I describe the concept of program music.

2.1 Artistic Research

Artistic development work encompasses various activities that amalgamate artistic endeavors and scholarly research. The Universities and Colleges Act permits universities and colleges to undertake research and professional and creative development activities at a high international level. Section 1-1, b) of the Act explicitly states the purpose of the legislation, which is to facilitate the pursuit of research and creative development at a level comparable to the international standard. Since the Act was passed in 1995, research and innovative development have been legally regarded as similar activities. (Act Relating to Universities and university colleges, 2005). Malterud et al. (2015. p.7) stress the importance of research as a fundamental responsibility of higher art education. The aim is to ensure the highest quality of artistic practice, meeting the same quality standards and academic achievements as other scientific activities (Lossius & Mortensen, 2017).

Malterud et al. (2015) have referred to Professor Henk Borgdorff as elucidating in detail how artistic methods and processes can facilitate the progression of artistic development work, emphasizing that this is a crucial characteristic of such research.

We can justifiably speak of artistic research ('research in the arts') when that artistic practice is not only the result of the research but also its methodological vehicle when the research unfolds in and through the acts of creating and performing (Borgdorff, 2012, p. 147).

In 2007, the Jørgensen Committee, which the Ministry of Knowledge established, proposed the following definition: "Artistic development work encompasses artistic processes that culminate in a publicly available art product. This may include an explicit examination of the process and presentation of the art product" (Malterud et al. 2015. p. 11). The Jørgensen committee has highlighted three key points to consider when engaging in artistic development work. Such as:

- 1. Publicly available It must be assumed that the artistic development work is made publicly accessible for others to evaluate and assess the progress that has been made.
- 2. Reflection Reflection is essential to the artistic process, as evidenced by the committee's emphasis on experimentation. All artistic activities involve trial and error, where specific experiments are kept or discarded depending on their effectiveness in achieving the desired result. The success of each experiment is then measured against this desired outcome.
- This reflection must be made explicitly, which implies that the results of a development work must be expressed verbally in a report that outlines the entire reflection process. This explicit reflection should be sufficient in demonstrating its validity and purpose without being connected to a tangible product. If this is achieved, the reflection can be presented as an independent research work (Malterud et al. 2015. p. 5).

An artist-researcher combines an internal perspective and an objective view from the outside when undertaking research. This individual applies systematic methods and objectives to balance creative work and written reflection. This combination of creative practice and analytical writing allows the artist-researcher to comprehensively understand the research subject and generate meaningful insights and conclusions. Henk Borgdorff's typology categorizes research into three distinct types, namely "Research on the arts," "Research for the arts," and "Research in the arts" (Borgdorff, 2012, p. 37). "Research on the arts" pertains to research where the researcher maintains a distance from the research subject, as is commonly seen in academic research fields such as musicology and music history. "Research for the arts" is concerned with producing works of art. "Research in the arts" focuses on reflective practices and has a performative perspective where the artist's practice is fundamental to the research and its outcomes. The interplay of training, experiences, history, and influences is the basis for the artist's research and will significantly impact their outcomes (Borgdorff, 2012, pp. 37-39). This distinction between the roles helps understand

the different approaches to art research. This distinction is highly relevant to the creative development initiatives of Norwegian art education institutes. Following the general conception of a researcher and their responsibilities, a theorist may pursue the first and third activities without requiring the production of the artwork and simply by observing. Following Borgdorff's notion of intertwinement, the integration of sound and text is essential. This is demonstrated in composer Ingolv Haalands PhD published as a standalone webpage "I have applied sound as the text, replacing sentences with sound as part of the answer to the research questions. The combination of written text and sound is a way of contextualising artistic practice into artistic research" (Haaland, 2020, p.1.) Hence my decision to publish this thesis in the Research Catalogue.

This thesis falls under the "Research in the Arts" category, following the perspective presented by Henk Borgdorff. Providing a comprehensive overview of my history, experiences, artistic practice, and influences alongside relevant theoretical frameworks is critical. This approach will establish a solid foundation for my research endeavors. The primary objective of this thesis is to develop my artistic practice while also creating a resource that is accessible to both experts and non-experts in the field. Therefore, I aim to produce a piece of work that is both informative and practical, which will contribute to advancing knowledge within the field.

In conclusion, artistic development work combines practical creative work with an academic context to create new knowledge. The interplay between artistic expression and the process of its achievement is considered a valuable contribution to scientific knowledge. By combining the theory of academia with art practice, artistic development work can provide deeper insights into the creative process. The artist's reflection and insight into their craft can be communicated implicitly or explicitly through various media. Implicit communication is often achieved through the artistic product, while explicit communication is typically expressed through supplementary sources such as written text. This written text is often used to provide external viewers with a deeper understanding of the art and the creative process behind it. In this way, an artist can offer outsiders a more comprehensive perspective than what can be gleaned from the artistic expression alone.

2.2 Program Music

Program music is a genre of instrumental art music that utilizes a non-musical program to portray a scene, poem, artwork, event, or any other concept. This program is often provided in concert programs before the performance, allowing the audience to make connections between the music and the program (Brathole, 2022). Hjalmar Borgstrøm, a Norwegian composer, was particularly fond of program music (Guldbrandsen, 2022). Consequently, it is reasonable for me to consider approaching the issue from a programmatic musical perspective. Several European composers, such as Héctor Berlioz, Franz Liszt, Richard Strauss, and Richard Wagner, championed this genre of music. However, it never gained traction in Norway. Despite this, several of Hjalmar Borgstrøm's program musical pieces became renowned; Borgstrøm's music is deeply entrenched in his ideology, philosophy, and aesthetics. He elected to compose his program music as it enabled him to convey himself in the most potent manner (Aschim, 2016, p. 21).

Program music is instrumental music linked or united with a representation or allusion to a conceptual subject which helps the composer create the content of his work, and in many cases, create the appropriate musical form to embrace this content or the title of his composition. This content, therefore, furthers the fantasy of the musician of the composer, motivates the form, and at the same time, guides the listener in a determined way (Pujadas, 2016, p.119).

Aschim's master thesis references Roger Scruton's assertion that Franz Liszt was the first to coin the term "program music". Scruton claims that Liszt, in this connection, defined a program as a preface added to a piece of instrumental music through which the composer aims to protect the listener from an incorrect poetical interpretation and draw his attention to the poetical notion of the entire work or a specific section. Furthermore, Scruton observes that program music diverges slightly from absolute music, marked by its endeavor to represent objects and occurrences (Aschim, 2016, p. 21). This implies that program music may also convey certain atmospheres and feelings. "A leitmotif can represent people, typical situations, recurring actions, etc. It is never a rigid melody but is used flexibly with rhythmic and intervallic changes as the dramatic context requires" (Tronshaug & Tørnquist, 2010, pp. 164-165).

As a composer, I relate to Borgstrøm's approach, believing music can convey a message and express emotions words cannot. I can tell stories and evoke personal emotions by incorporating programmatic elements into my compositions. I am particularly interested in exploring how specific program music concepts, such as musical themes and motifs, can enhance my signature sound as a contemporary composer. By incorporating program music elements into my work, I can create music that sounds pleasing and resonates with listeners on a deeper level.

3. Theory

In this chapter, I explain this project's theoretical and artistic basis. This includes both theories that have been acquired in connection with the implementation of the project.

3.1 What is Sound?

Thomson's (2021) article proposes that a musical sound is a tone characterized by a regulated pitch and timbre. This is created through the periodic vibrations of instruments, which the performer primarily controls. However, it is more complex than asserting that certain sounds are automatically musical and others are not. Any sound, ranging from the melodious jingle of a bell to the sharp bang of a door, can be incorporated into the auditory structure of music.

In the article, *En drøfting av analytiske perspektiver i tilknytning til soundbegrepet* by Tor Dybo (2002, p.15), defined sound where he refers to citations by Cappelen and Lars Lilliestam.

According to Cappelen's music lexicon, "sound" is used in Norwegian jazz, pop, and popular music to refer to a different sound image characterized by the ensemble, instrumentalist, or singer. This individual sound is determined by a combination of arrangement technique, personal voice or instrument treatment, and rhythmic and melodic elements, strongly emphasizing timbre. However, there currently needs to be comprehensive terminology to analyze sound (Dybo, 2002, p.16).

In contrast, Lars Lilliestam suggests that "sound" has different meanings depending on the context in which it is used. For example, in the context of music, "sound" refers to a total sound image, which includes elements such as instrumentation, playing styles, timbre, singing style, rhythm, harmony, and balance of instruments (Dybo, 2002, p.17).

Lilliestam notes that a musician's sound encompasses their notes and unique characteristics. While Cappelen's citation emphasizes the importance of sound in specific genres, Lilliestam's citation provides a broader and more detailed explanation of the various elements contributing to a sound image in music. Overall, both citations address the concept of sound in music, with Cappelen's citation providing a more focused perspective on the term "sound" within specific genres. In contrast, Lilliestam's citation takes a broader approach.

As an instrumentalist, shaping one's signature sound differs from that of vocalists. Combining amplifiers, effects pedals, and various instruments is a joint for guitarists and bassists to achieve personal expression during performances. In contrast, pianists need this opportunity and are subject to the piano quality provided at each venue. This often leads to challenges, such as using a digital piano due to an out-of-tune or poorly-maintained instrument. Esteemed instrumentalists, such as Tigran Hamasyan, Herbie Hancock, and Esbjørn Svensson, are recognizable for their distinct playing styles. However, the challenge for pianists lies in developing a signature sound that reflects their expression. This thesis will explore my journey in discovering their unique sound as a pianist.

In the book "Rock: The Primary Text: Developing a Musicology of Rock" (Moore, 2001), Allan F. Moore aims to develop a conceptual framework for analyzing rock music. One key aspect of this framework is the concept of sound. According to Moore, sound is a fundamental aspect of rock music that needs to be more noticed or analyzed. He argues that sound can convey meaning in ways different from lyrics or other forms of musical expression and that sound should be given greater attention in analyzing rock music. Moore suggests that sound in rock music can be analyzed in several ways. First, he notes that the physical properties of sound, such as pitch, timbre, and rhythm, can be essential elements in creating the overall sound of a rock song. These elements can convey emotional or affective qualities central to the music's meaning. Second, Moore emphasizes the importance of considering sound's cultural and social context in rock music. He notes that different rock music styles are often associated with other artistic movements or subcultures and that the sound of a particular rock song can be linked to broader social and political issues.

Finally, Moore argues that sound in rock music can be analyzed through other elements of the piece, such as lyrics or instrumentation. He suggests that studying the relationship between sound and other aspects of the music can provide insights into the music's overall meaning and affective impact. Moore's framework for analyzing rock music emphasizes the importance of sound in conveying meaning and emotion in rock music. As a result, scholars

and listeners can develop a deeper understanding of this crucial musical genre's cultural and social significance by focusing on sound as a critical element of rock music.

The present discourse holds relevance to the current master's thesis, which aims to explore how elements of raga contribute to creating a signature sound. This text underscores the significance of analyzing sound in music to understand its cultural and social relevance comprehensively. By utilizing Moore's analytical framework, one can delve into the analysis of raga music and assess how the physical properties of sound, cultural and social context, and the interplay between sound and other musical elements culminate in creating its distinctive signature sound. Such an approach can enable a deeper understanding of raga music and its broader cultural and social context.

3.2 Signature Sound

The signature sound is a unique style of music that distinguishes a musician from others. It is a result of the personal interpretation and musical experiences that a musician has accumulated over time. Musicians with a signature sound often have a loyal fan base, making their music easily recognizable. In this chapter, I will explore the concept of signature sound in music and how it is developed over time.

"The Jazz Language: A Theory Text for Jazz Composition and Improvisation" (Haerle, 1980) is a comprehensive guide that aims to help musicians develop their unique sound by exploring the language of jazz improvisation. Haerle emphasizes the importance of understanding the underlying theory of jazz music to create a personal style that is both expressive and technically proficient.

One of the critical aspects of developing a signature sound as a jazz musician, according to Haerle, is the ability to combine different musical elements in a coherent and personal way. This involves a deep understanding of harmony, melody, and rhythm and the ability to improvise and adapt to different musical situations. Throughout the book, Haerle provides numerous exercises and examples demonstrating how to incorporate different musical elements into one's playing and develop a unique sound. For instance, he discusses the importance of exploring other harmonic options and experimenting with different chord voicings to create a distinctive harmonic palette. He also emphasizes the importance of developing a personal approach to improvisation, which involves a combination of technical proficiency and creativity (Haerle, 1980, p.16).

Haerle introduces the concept of "licks" to develop one's musical vocabulary. He suggests transcribing and practicing other musicians' solos but also encourages players to adapt and personalize these licks to create unique phrases and ideas. "The Jazz Language" is a valuable resource for any musician looking to develop a personal style in jazz improvisation (Haerle,1980, p.19). Haerle emphasizes the importance of understanding the theory and language of jazz music. His practical exercises and examples make this book essential for cultivating their unique musical voice.

Goodrick's (1987) book, "The Advancing Guitarist," offers a comprehensive guide to help guitarists develop their unique sound through technical proficiency, creativity, and personal expression. In the book, Goodrick stresses the importance of building a solid foundation in music theory and technique to create a technically proficient and expressive style.

According to Goodrick, one of the key aspects of developing a signature sound as a guitarist is the ability to navigate the fretboard. Goodrick introduces the "grid system," a visualization technique that allows players to explore new harmonic and melodic possibilities and develop a unique approach to playing the guitar. Goodrick emphasizes the importance of creativity and personal expression in creating a signature sound, encouraging players to explore different musical styles and genres and incorporate elements from these styles into their playing. He also suggests experimenting with different scales, modes, and chord progressions to develop a unique harmonic palette.

Throughout the book, Goodrick provides numerous exercises and examples demonstrating how to incorporate different musical elements into one's playing and develop a unique sound. He stresses the importance of creating a personal approach to improvisation, which requires technical proficiency, creativity, and a deep understanding of the music being played. Goodrick's focus on the importance of understanding music theory and technique, along with practical exercises and examples, makes this book an essential tool for those seeking to cultivate their unique musical voice. Some of the concepts in the book, such as the grid system, which involves visualizing the fretboard as a grid of squares to navigate the guitar fretboard, can be adapted to the piano by visualizing the keys similarly. In addition, the book's emphasis on developing a solid foundation in music theory and technique also applies to pianists, as these are essential elements for any instrumentalist to master. However, it is important to note that some of the techniques and exercises presented in the book are geared toward guitarists and may not be directly transferable to the piano. Nonetheless, pianists interested in developing their unique sound and style can still benefit from the broader concepts and ideas presented in "The Advancing Guitarist" and adapt them to their instrument.

"The Advancing Guitarist" by Mick Goodrick and "The Jazz Language: A Theory Text for Jazz Composition and Improvisation" by Dan Haerle aim to assist musicians in developing their unique sound and style. However, there are some differences between the two books. The Advancing Guitarist is exclusively for guitarists, while The Jazz Language applies to various jazz instruments. The Jazz Language also covers a broader range of topics, including harmony, melody, rhythm, and form, whereas The Advancing Guitarist focuses more on exercises and techniques. Both books emphasize the significance of creativity, personal expression, and a solid foundation in music theory and technique. Improvisation is also a common theme in both books, with guidance on developing improvisational skills and techniques to create a unique style. Both books encourage musicians to explore different genres and styles to expand their musical vocabulary and develop a distinctive play approach.

Ravi Shankar, a renowned sitar player, and composer, is known for revolutionizing Indian classical music and introducing it to the Western world (The Times of India, 2016). In his book "Raga Mala" (Shankar, 1997), he provides insights into the intricacies and nuances of Indian classical music, including the importance of thoroughly studying each raga or musical mode. By mastering these nuances, musicians can develop their own unique sound within the context of the traditional raga system. While Shankar does not explicitly focus on developing a signature sound, his emphasis on studying the fundamentals and intricacies of Indian classical music can certainly inform and inspire musicians seeking to create a distinctive and recognizable style.

In "Raga Mala," Shankar shares his experimentation with different playing techniques and approaches. He emphasizes the significance of exploring various techniques and strategies to

find one's unique voice and style. Additionally, Shankar stresses the importance of practice and dedication in developing a signature sound, highlighting that persistence and commitment are crucial in achieving a distinctive and recognizable sound.

Shankar's examples of developing a signature sound in "Raga Mala" underscore the significance of studying each raga thoroughly, experimenting with different techniques and approaches, and practicing diligently. By focusing on these elements, musicians can create a distinctive and recognizable sound that is uniquely theirs. Therefore, Shankar's insights can serve as a valuable guide for aspiring musicians seeking to develop their own unique style and sound.

Tigran Hamasyan is an Armenian jazz pianist and composer who has gained international recognition for his unique and innovative approach to music. His music is characterized by a fusion of traditional Armenian folk music with jazz and other contemporary styles, resulting in a distinctive signature sound.

One of the key elements of Hamasyan's signature sound is his use of complex rhythms and time signatures. He frequently employs irregular time signatures such as 5/4, 7/8, and 9/8, which are common in Armenian folk music. These intricate rhythms add a sense of unpredictability and excitement to his music, allowing him to explore various moods and emotions. Tigran Hamasyan attributes much of his musical style to Armenian folk music, stating that "a lot of it comes from folk, especially Armenian folk music." This influence is apparent in his approach to arranging jazz standards. In addition, his notes incorporate elements of odd meters, polyrhythmic songs, and dances, all of which he has studied since discovering Armenian music (Jazzwise, 2020).

Hamasyan also incorporates extended techniques into his piano playing, including percussive strikes on the keys, prepared piano, and glissandos. These techniques help to create a rich, textured, dynamic, and expressive sound. In addition to his piano playing, Hamasyan is known for his distinctive singing style. His vocal performances frequently incorporate Armenian folk singing techniques such as melisma and microtonal inflections. This unique approach to singing adds yet another layer of texture and complexity to his music. Hamasyan's signature sound is also characterized by using electronic and experimental sounds. He frequently incorporates synthesizers, samplers, and other electronic instruments into his compositions, creating a hybrid sound that blends traditional acoustic instruments with modern technology (Schumann, 2020).

Hamasyan's innovative approach to music earned him critical acclaim and numerous awards, including the prestigious Thelonious Monk International Jazz Piano Competition in 2006 (Westphal, 2006). In addition, he has released several acclaimed albums, including "Mockroot" (2015) and "An Ancient Observer" (2017), which showcase his signature sound and his ability to blend diverse musical influences into a cohesive and compelling whole. Tigran Hamasyan's signature sound is characterized by a fusion of traditional Armenian folk music with jazz and other contemporary styles, complex rhythms, the use of Armenian folk instruments, virtuosic piano playing, and a willingness to experiment and push boundaries. Hamasyan's music reflects his deep respect for his Armenian heritage while demonstrating his commitment to innovation and originality.

The examples of Ravi Shankar and Tigran Hamasyan demonstrate the importance of studying a musical tradition's fundamentals and intricacies while experimenting with new techniques and approaches to develop a signature sound. Shankar emphasizes the significance of mastering the nuances of each raga or musical mode. At the same time, Hamasyan draws inspiration from traditional Armenian folk music and blends it with jazz and contemporary styles. Both musicians highlight the importance of practice, dedication, and persistence in achieving a distinctive and recognizable sound. These insights can serve as a valuable guide for aspiring musicians seeking to create their own unique style and sound. As demonstrated by the success of Shankar and Hamasyan, mastering the fundamentals and experimenting with new techniques can lead to innovation and critical acclaim in the music world.

3.3 Cultural Context and Tradition in Music Production

Music production is deeply influenced by cultural context and tradition. The practices, values, and beliefs of a particular culture shape the creation and consumption of music. Cultural context can include many factors, such as historical events, religious practices, social structures, and geographical location. Musical traditions are also a critical aspect of cultural context, providing a set of conventions and stylistic elements that shape musical expression (Markos, 2022). Music is an integral part of daily life in many cultures and has a specific purpose or function, such as accompanying rituals or expressing emotions. For example, in African music, rhythm is often used to convey messages or tell stories (Vallena, 2021). In Western classical music, harmony and melody are emphasized to create a structured and harmonious composition (Rich, 2019).

Musical traditions also play a significant role in shaping the production of music. These traditions can include instruments, scales, or rhythmic patterns unique to a particular culture. For example, the pentatonic scale is standard in Chinese music and creates a distinctive sound recognizable worldwide (Gutierrez, 2023). Navigating cultural context and tradition in music production requires understanding music's cultural and historical roots and an awareness of contemporary musical trends and innovations (Treloyn, 2016). It is essential to honor the tradition of a particular musical style while also allowing for experimentation and exploration of new musical expressions.

One approach to navigating cultural context and tradition in music production is to draw on the principles of a particular musical style while also incorporating elements from other musical genres and cultural contexts. African music is rooted in African societies' traditions and cultural practices. African music is characterized by a rhythmic complexity that reflects African societies' complex social structures and cosmologies. The use of drums and other percussion instruments, which have a long history in African culture, is a fundamental element of African music. Moreover, the call-and-response form of African music, in which one musician or group sings or plays a phrase, and another responds with a different word, reflects the communal nature of African societies (Pizà, 2023, p.3-6). Similarly, Indian classical music is deeply rooted in India's cultural and spiritual traditions. For example, the raga, a melodic structure that forms the basis of Indian classical music, reflects the spiritual and philosophical underpinnings of Indian culture. Likewise, the use of microtones, intricate ornamentation, and improvisation, integral to Indian classical music, is also informed by the cultural and philosophical values of Indian society (Pizà, 2023, p.44-57). Western music, on the other hand, has evolved in response to changing cultural, social, and technological factors. As a result, western music has been influenced by various cultural traditions, including African, Indian, and Middle Eastern music (Thomas, 2023). Moreover, musical notation, unique to Western music, has enabled Western composers to create complex and intricate musical compositions that are impossible to perform without a written score.

Cultural context and tradition play a significant role in shaping musical styles and genres. The interplay between the cultural context and practice informs the creation of new musical expressions while preserving a particular society's cultural heritage. The examples of African, Indian, and Western music illustrate how cultural context and tradition have influenced the development of musical styles and genres. As music continues to evolve and adapt to changing cultural and technological factors, it is essential to recognize the role of cultural context and tradition in shaping musical expressions.

In conclusion, the importance of developing a signature sound in music production cannot be overstated. This involves navigating the complex interplay between cultural context and tradition while allowing for experimentation and innovation. Cultural context encompasses many factors, including historical events, social structures, religious practices, and geographical location, while tradition provides a set of conventions and stylistic elements that shape musical expression. Developing a signature sound that is innovative and rooted in tradition requires understanding a musical style's cultural and historical roots and an awareness of contemporary musical trends and innovations. The examples of African, Indian, and Western music illustrate how cultural context and tradition have influenced the development of musical styles and genres. As music continues to evolve and adapt to changing cultural and technological factors, it is crucial to recognize the role of cultural context and tradition in shaping musical expressions. Ultimately, navigating cultural context and tradition in music production requires a delicate balance between honoring the tradition

of a particular musical style while also allowing for experimentation and exploration of new musical expressions.

The fourth and fifth chapters are published at:

https://www.researchcatalogue.net/shared/22ebe81dea435da49e054ba9ee7f51d0

6. Reflection

In the introductory chapter, I formulated research questions that center around the following themes: How can raga scales influence a signature sound? Further, how will new compositions based on raga scales influence an artistic expression? Finally, what ethical and cultural challenges arise when incorporating elements of traditional music? The following sections of this work will explore these topics in greater detail.

6.1 Sound

My dissertation thesis delves into the artistic processes involved in my work, offering a comprehensive and detailed analysis of each step taken to create the outcome. The thesis thoroughly explains the artistic decisions and their reasoning by presenting an in-depth view of the various techniques and methods used throughout the creative process. This highlights the significance of sound in music and how it can contribute to a musical piece's overall meaning and emotional impact. As an instrumentalist, a pianist can develop a signature sound that distinguishes them from others and, therefore, may be easily recognizable to the audience. To create a distinctive signature sound, a pianist can use different analytical frameworks and explore diverse musical traditions while experimenting with various techniques. The examples of Ravi Shankar (Shankar, 1999) and Tigran Hamasyan (Jazzwise, 2020) demonstrate how mastering one's craft, exploring diverse musical traditions, and experimenting with different methods can lead to a unique and recognizable sound.

I have always been fascinated by the different sounds and emotions that can be conveyed through music. Creating a signature sound is essential to any musician's journey, as it is the result of musical experience, distinguishing them from others. While writing this thesis, I have realized that there are different ways to influence a signature sound that reflects my musical sensibilities, cultural background, and individuality. I agree that the physical properties of sound, such as pitch, timbre, and rhythm, contribute to the overall sound of a musical piece (Thomson, 2021). Therefore, I need to be conscious of how I play and its effect on the music. One of the challenges that pianists face is the instrumental quality provided at

each venue. However, this can be overcome by exploring different pianos and experimenting with various techniques to create a unique sound that is not solely dependent on the instrument's technical quality.

I have studied comprehensive guides such as "The Jazz Language" (Haerle, 1980) and "The Advancing Guitarist" (Goodrick,1987) to develop my technical proficiency, creativity, and personal expression. These materials have provided valuable insights and techniques for creating a unique sound and style as a jazz musician. They emphasize the importance of a solid foundation in music theory and technique, creativity, and personal expression in compositions. Musicians can benefit from these books' practical exercises, examples, and broader concepts and ideas. While some techniques and exercises are specifically for specific instruments, the overarching principles can be applied to various jazz instruments, including the piano. Developing a unique sound and style requires a deep understanding of the language of different music genres and the ability to combine different musical elements in a personal and expressive way.

The examples of Ravi Shankar and Tigran Hamasyan provide valuable insights into how I have been influenced in creating my artistic expression. Ravi Shankar's approach, rooted in understanding the nuances of each piece and practicing diligently, has taught me valuable lessons in discipline and persistence (Shankar, 1999). On the other hand, I have learned from Tigran Hamasyan's approach, which involves experimentation and a willingness to push boundaries. His fusion of traditional Armenian folk music with jazz and different contemporary styles, and incorporation of electronic and experimental sounds, serve as a strong example of creating a dynamical and expressive signature sound (Schumann, 2020).

Influential factors that have contributed to developing my signature sound are my Sri Lankan background and my diverse musical training. Growing up in a family that highly valued Sri Lankan culture and music, I was exposed to traditional Sri Lankan folk music at a young age. This cultural immersion has dramatically impacted my musical style, and I often incorporate Sri Lankan melodies, rhythms, and modes into my compositions.

In addition to my cultural background, my musical education has also significantly shaped my signature sound. I received extensive training in Eastern music in Sri Lanka, and after moving to Norway, I pursued studies in jazz. This diverse musical background has enabled me to draw on various musical styles and techniques and blend them innovatively. Furthermore, my creativity and experimentation in intertwining raga elements into my compositions, specifically raga Bhairavi and Bhairav, have been crucial in developing my signature sound. I have also incorporated aspects of Sri Lankan folk music and jazz in my improvisational techniques, allowing me to take risks and explore new sounds.

Exploring Indian classical music has deepened my understanding and appreciation of different musical traditions and expanded my range of musical influences. As a composer, I strive to create a unique and recognizable expression by integrating raga elements, intending to reflect on my cultural background and individuality. This process has involved using different analytical frameworks, studying comprehensive guides, and experimenting with various techniques. Developing a signature sound is a challenging but rewarding process that has enabled me to expand my musical limits and express my musical sensibilities.

6.2 Compositional Process

As an artist, I have gained knowledge and expertise in various genres and cultural contexts, which has helped me develop a diverse and dynamic compositional style. I have continued to learn and explore different styles, experiment with more unconventional structures, and infuse elements of improvisation and non-traditional techniques. Collaborating with other musicians, attending concerts, and exploring different genres have helped me stay motivated and inspired.

In addition, bending or breaking the rules of music theory can enable me to create unique and innovative sounds that reflect my style. The influence of ragas on jazz music has been critical to its evolution. Jazz has incorporated elements from diverse musical genres, resulting in its distinctive sound. Ragas have served as a source of inspiration for jazz musicians, who have integrated raga scales into their improvisations and compositions. Indian classical music, particularly the raga scales, has inspired John Coltrane (Clements, 2009, p.157), Miles Davis (Aceves, 2021), and John McLaughlin (Rodriguez, 2021), who integrated non-Western scales and modes into their music, demonstrating the universal quality of music that transcends

cultural and geographic barriers. Incorporating ragas into jazz and fusion music has inspired generations of musicians to experiment with non-Western musical elements.

I incorporate raga scales in my compositions to create a unique sound that reflects my style. For example, in "Tsunami" (5.3), I employed raga elements derived from Bhairavi and Bhairav ragas, using specific trills, rhythms, and melodic patterns throughout the composition. In "Second Chance" (5.4), I exclusively use raga elements in the improvisation section, focusing on Bhairavi and Bhairav ragas. Finally, in "Amma"(5.5), I incorporate raga elements in the final section of the composition and my improvisational work, again focusing on the ragas, as mentioned earlier. Across all three compositions, I utilize the drone effect, a common feature of raga music, to add depth and texture to the overall sound. This experimentation with ragas has allowed me to create innovative and authentic music, reflecting my experiences and emotional state.

The piano is my primary tool for composing, and I experiment with different harmonies and voicings to find suitable accompaniments. Once I develop a melody and harmony, I notate everything in Sibelius and Logic Pro to organize my ideas and experiment with synthesized sounds. Incorporating ragas into new compositions presents several challenges that must be addressed, including mastering the intricate melodic and rhythmic structures of raga scales, instructing band members who may be unfamiliar with raga music, and avoiding cultural appropriation or offense.

However, when relocating to Norway to collaborate with Nordic jazz musicians, there are additional obstacles to overcome, such as cultural and musical differences between Eastern and Western music and finding suitable musicians with similar visions. Bridging this gap requires an open-minded approach, exploration of new styles, and learning about Nordic jazz music and culture. Clear communication, sharing recordings and written music, and a defined project vision are critical to ensure successful and meaningful musical collaboration. Utilizing these strategies makes it possible to create a fusion of Eastern and Western musical traditions that combines the best of both worlds. How would my compositions be when you have more traditional instruments playing the same melodies like tabla and sitar?

Incorporating traditional instruments like tabla and sitar into my compositions can add unique and rich textures and timbres to the music. It can also enhance the cultural authenticity and

depth of the composition. The interaction between the traditional and Nordic jazz instruments can create exciting harmonies and rhythms, resulting in a fusion of different musical traditions. Ultimately, the specific sound and effect of incorporating these instruments into my compositions will depend on how I utilize them and my personal style and approach to music. I anticipate experimenting with these techniques in my forthcoming compositions. I anticipate experimenting with these techniques in my future compositions.

In conclusion, my exposure to diverse musical genres and cultures has been instrumental in shaping my compositional style. I draw inspiration from other composers and use various techniques to enhance my composition process, including incorporating ragas. This experimentation has allowed me to create music that reflects my style and experiences while pushing the boundaries of what is possible in music.

6.3 Methodological Factors

This thesis explores the concept of artistic development work, a methodological approach that combines artistic expression with scholarly research. While the nature of artistic development work is challenging to define precisely, integrating artistic practice into research can offer new insights and approaches to complex problems, leading to a more comprehensive understanding of research questions.

This highlights the importance of publicly available art products, reflection, and explicit reflection expressed verbally in defining artistic development work, as proposed by the Jørgensen Committee. Additionally, it mentions Henk Borgdorff's distinction between the roles of art researchers, which include "research on the art," "research for the art," and "research in the art." Various studies, such as Malterud et al. (2015), Lossius and Mortensen (2017), and Haaland (2020), support the concept of artistic development work. The interplay between artistic expression and the process of achieving it can contribute significantly to scientific knowledge. The artist's reflection and insight into their craft can be communicated implicitly or explicitly through various media.

Furthermore, this emphasizes that integrating artistic practice into research can offer new opportunities for unconventional thinking and catalyze innovation. It provides a more holistic understanding of the research question beyond theoretical or empirical analysis. It can produce novel and original findings that traditional research methods may not capture.

Regardless of the challenges associated with defining artistic development work, its integration into the research process can lead to valuable and enriching contributions for researchers in diverse fields of study. Combining theory with art practice can deepen insights into the creative process, enabling exploratory and innovative approaches to complex problems. Ultimately, the concept of artistic development work offers an alternative form of research that can enhance our understanding of creative processes and their applications beyond the arts.

6.4 Cultural Aspects

The production of music is heavily influenced by cultural context and tradition. The practices, values, and beliefs of a particular culture shape the creation and consumption of music. Cultural context includes historical events, religious practices, social structures, and geographical location (Markos, 2022). Musical traditions provide a set of conventions and stylistic elements that shape musical expressions, such as rhythm in African music, harmony and melody in Western classical music (Vallena, 2021, Pizà, 2023, p.3-6), and the pentatonic scale in Chinese music (Gutierrez, 2023). Navigating cultural context and tradition in music production requires understanding music's cultural and historical roots and an awareness of contemporary musical trends and innovations. One approach is to draw on a particular musical style's principles while incorporating elements from other musical genres and cultural contexts, as done by contemporary musicians like Anoushka Shankar has pioneered a unique approach to incorporating traditional Indian sitar and raga elements into contemporary Western music styles, resulting in a more diverse and eclectic musical landscape in the album "*Breathing Under Water*" (Shankar & Kale, 2007).

Cultural context and tradition significantly shape musical styles and genres, as exemplified by African, Indian, and Western music. The interplay between cultural context and practice informs the creation of new musical expressions while preserving cultural heritage. However, this process presents ethical and cultural challenges, such as the issue of cultural appropriation, which erodes cultural identity and perpetuates harmful stereotypes. Therefore, musicians must be aware of the cultural significance of the musical elements they incorporate and use them respectfully and culturally appropriate. Another challenge is maintaining authenticity and honoring the tradition of a particular musical style while still allowing for experimentation and exploration of new musical expressions.

I am keenly aware of these challenges when incorporating raga elements into my compositions. Combining elements from traditional music styles and genres requires sensitivity and respect for cultural heritage while allowing experimentation and innovation. Therefore, it is crucial to recognize the role of cultural context and tradition in shaping musical expressions and navigate this delicate balance between honoring tradition and allowing for experimentation.

The creation and consumption of music are significantly influenced by cultural context and tradition, which shape a particular culture's musical expressions, values, and beliefs. Musicians with multicultural backgrounds and experiences bring a unique perspective and innovative approach to the music industry as they can navigate cultural contexts and traditions with a fresh outlook. Multicultural musicians challenge traditional boundaries by creating innovative sounds with diverse musical influences. They collaborate with artists from different backgrounds to create unique and groundbreaking music. However, navigating multiple cultural contexts presents challenges such as avoiding cultural appropriation, respecting cultural norms, and effectively communicating with musicians from different backgrounds. Therefore, an open mind and willingness to learn and collaborate effectively are essential.

What new knowledge am I bringing to the music field? Having the Sri Lankan folk music background and the Norwegian Nordic jazz background? And the identities connection?

As a musician and composer with a multicultural background, I have the possibility to bring a unique perspective to my compositions and performances. I often reflect on the equality of these cultures and how others perceive them. The economic and social conditions in Sri Lanka, including the civil war, have limited opportunities for traditional Sri Lankan

musicians, affecting the country's music scene. Nevertheless, my diverse musical experiences and collaborations with musicians from different cultures and backgrounds have enabled me to explore and incorporate various musical elements while providing new opportunities for cultural exchange. To navigate the delicate balance between honoring tradition and allowing for experimentation, I approach my compositions with a deep respect for the musical traditions of my culture. I spend time researching the history, cultural context, and traditional practices of the music I want to incorporate into my compositions. By doing so, I can better understand the cultural significance of musical elements and use them respectfully and appropriately.

My compositions often incorporate traditional Sri Lankan rhythms and melodic patterns while incorporating jazz harmony and improvisation techniques from my Nordic background. My cultural identity and unique experiences inform my artistic expression, allowing me to draw from diverse musical genres and experiment with new musical expressions. In terms of the impact of my research on the music industry, it can inform and influence musical productions by highlighting the importance of cultural sensitivity and respect in incorporating musical elements from different cultures and traditions. One specific example of how my research can inform and influence musical productions is by exploring the impact of raga scales on artistic expression. By studying the effects of raga scales on a signature sound and the impact of new compositions based on raga scales, musicians and producers can gain new insights into how to use traditional musical elements in innovative ways. This research can inspire new musical expressions that honor cultural heritage while exploring new musical frontiers.

My research on the influence of raga scales on a signature sound and the impact of new compositions based on raga scales on artistic expression explores the interplay between cultural context, tradition, and innovation, providing new insights and knowledge to the music field. I aim to highlight the significance of cultural sensitivity and respect in incorporating musical elements from different cultures and traditions. My multicultural background and research on the interplay between cultural context, tradition, and innovation provide new insights and knowledge to the music industry. By incorporating diverse musical elements and collaborating with musicians from different backgrounds, I strive to create a varied and eclectic musical landscape that honors cultural heritage while exploring new musical expressions.

27

7. Final Remarks

My research project has contributed to contemporary music production by highlighting the potential of raga music in shaping a unique signature sound for composers. By exploring theoretical frameworks on sound, signature sound, and cultural context in music production, I have provided a strong foundation for understanding the role of raga music in contemporary composition. Furthermore, the investigation into raga music's history, composition structure, and characteristic elements has also demonstrated its influence on legendary musicians such as John Coltrane, John McLaughlin, and Miles Davis.

Through case studies of my compositions, I have illustrated how raga elements, such as melodic improvisation, rhythmic structures, and tonal relationships, can be effectively integrated into contemporary compositions to create a distinct sound that reflects the artist's individuality and cultural background. Furthermore, documenting the compositional process with audio and video extracts provides a practical approach for artists interested in incorporating raga music or other cultural traditions into their compositions. Publishing the thesis as a webpage is way of disseminating artistic research and make it accessible on a global scale.

Is it possible to approach and research a topic differently than this dissertation? Indeed, there are multiple methods and approaches available for research. For example, another perspective is that a more comprehensive scholarly analysis and case studies of successful composers incorporating raga musicians could demonstrate its potential in shaping a signature sound. While my research has limitations, mainly its focus on specific raga elements that may only apply to certain genres of music, it serves as a reminder of the significance of exploring cultural traditions and contextualizing musical practices in developing an original and distinctive artistic voice. Therefore, I recommend further exploration of raga music and other cultural traditions in contemporary music production to develop more diverse and dynamic musical landscapes.

However, the methods and techniques used in this study were chosen based on their relevance to the research questions and the project's scope, where the intertwinement of

sound and text is essential. Overall, my artistic field of interest has been the driving force behind this work, intending to contribute to the growing field of artistic research.

To incorporate raga music or other cultural traditions into their compositions, artists can start by studying the history and characteristic elements of the music they want to include. This can help them understand how these elements can be used in a contemporary context. Experimentation with different rhythmic and tonal structures can also help artists develop a unique signature sound that reflects their cultural background. Collaboration with musicians from different cultural backgrounds can bring fresh perspectives and help create a more diverse and dynamic musical landscape.

As artists, pushing boundaries and exploring new ways of creating and shaping our signature sound is crucial. With a better understanding of cultural traditions and a willingness to experiment and integrate diverse influences, we can develop new forms of musical expression that enrich our creative lives and engage audiences in exciting new ways.

References

Aceves, R. (2021, May 03). *East Meets West: Indian Classical Music and Jazz*. Sfjazz. https://www.sfjazz.org/onthecorner/east-meets-west-indian-classical-music-and-jazz/

Act relating to universities and university colleges. (2005). *Act relating to universities and university colleges*. (LOV-2005-04-01-15). Lovdata. https://lovdata.no/dokument/NLE/lov/2005-04-01-15

Aschim, S.H. (2016). *Form eller mening*? [Master's thesis, University of Oslo]. DUO research arkiv. <u>http://urn.nb.no/URN:NBN:no-54622</u>

Baur, B. (2019). *How to Find Your Artistic Identity and Signature Sound*. Music connection. https://www.musicconnection.com/artistic-identity-signature-sound/

Borgdorff, H. (2012). *The Conflict of the Faculties*. Leiden University Press. <u>https://library.oapen.org/viewer/web/viewer.html?file=/bitstream/handle/20.500.12657/32887</u>/595042.pdf?sequence=1&isAllowed=y

Brathole, E. (2022, 05. July). *Programmusikk*. Musikkparken. https://www.nrk.no/skole/musikkparken/programmusikk-1.13164515

Britannica, T. Editors of Encyclopaedia (2023, February 17). *John McLaughlin*. Encyclopedia Britannica. <u>https://www.britannica.com/biography/John-McLaughlin</u>

Chaudhary, S. (2021, June 08) *History of Ragas: How Music Alters Our Mood*. Homegrown. <u>https://homegrown.co.in/homegrown-explore/history-of-ragas-how-music-alters-our-mood</u>

Clements, C. (2009). John Coltrane and the integration of Indian concepts in jazz improvisation. [Doctoral dissertation, City University of New York Graduate Center]. Jazz research journal. <u>https://journal.equinoxpub.com/JAZZ/article/view/12431</u>

Cohoon, M. K. (2012). *An Exploration into North Indian Classical Music: Raga, Alif Laila, and Improvisation*. [Master's thesis, University of Maryland.]. Digital repository University of Maryland. <u>http://hdl.handle.net/1903/13148</u>

Coltrane, J. (1965). A love supreme. [Album]. Jowcol Music.

Coltrane, J. (1965). Psalm. [Song]. A love supreme. Jowcol Music.

Coltrane, J. (1966). Ascension. [Album]. Impulse! - AS-95.

Coltrane, J. (1966). Meditations. [Album]. Impulse! - A-9110

Coltrane, J. (1969). Selflessness: featuring my favorite things. [Album]. Impulse! AS-9161.

Courtney, D. (2021). *Rag Bhairavi*. Chandrakantha. <u>https://chandrakantha.com/raga_raag/bhairavi/bhairavi.html</u>

Daniel, R. T. (2023, March 30). *Western music*. Encyclopedia Britannica. <u>https://www.britannica.com/art/Western-music</u>

Davis, M. (1970). Bitches Brew. [Album]. Columbia.

Dybo, T. (2002). En drøfting av analytiske perspektiver i tilknytning til soundbegrepet. In Jonnson, L (Ed.), *Musikkvitenskaplig Årbok 2002*. (pp. 15-53) Department of Music, NTNU.

Esbjörn Svensson Trio. (2003). Seven Days of Falling [Song]. *Seven Days of Falling*. ACT (4)

Goodrick, M. (1987). *The advancing guitarist: applying guitar concepts & techniques*. Hal Leonard.

Guldbrandsen, E. E. (2022, 29. June). *Hjalmar Borgstrøm*. I Store norske leksikon. https://nbl.snl.no/Hjalmar Borgstr%C3%B8m

Gutierrez, K. (2023, January 27). *The Chinese Musical Scale*. Brightstar musical. https://brightstarmusical.com/the-chinese-musical-scale/

Haerle, D. (1980). *The jazz language: a theory text for jazz composition and improvisation*. Studio PR Warner Bros. Publications.

Hamasyan, T. (2015). Mockroot. [Album]. Nonesuch Records.

Hamasyan, T. (2017). An Ancient Observer. [Album]. Nonesuch Records.

Hamasyan, T. (2017). Markos and Markos [Song]. An Ancient Observer. Nonesuch Records

Harmonium. (2013, Augast 14). *Ragamala: Vol. 1 Bhairav and Bhairavi*. Harmonium. <u>https://harmoniummusicblog.wordpress.com/2013/08/14/ragamala-vol-1-bhairav-and-bhairavi/</u>

Hindemith, P. (1941). *The Craft Of Musical Composition Theoretical Part – Book 1 (4th ed.)*. Schott & Co., Ltd., London

Haaland, I. (2020). *Intercultural Musical Collaboration: Towards A Global Sound*. [Doctoral dissertation, University of Agder] Department of Popular Music, University of Agder. <u>https://globalsoundphd.uia.no/</u>

Ivory Research. (2019, December). *Jazz Exotica* – Indian Music and Jazz. https://www.ivoryresearch.com/samples/jazz-exotica-indian-music-and-jazz/

Jairazbhoy, N.A. (1971). *The Rags of North Indian Music: Their Structure and Evolution*. Lok Virsa, Islamabad. <u>https://www.indianculture.gov.in/ebooks/rags-north-indian-music-their-structure-and-evolution</u>

Jayasuriya, A. (2021). *Pandith Amaradeva, A Sri Lankan Icon: His Life, Music and the Sinhalese Cultural Revival.* [Doctoral dissertation, UNSW Sydney]. Unsworks. <u>https://unsworks.unsw.edu.au/entities/publication/3989d2e8-e3f8-49c0-8baf-c9af6b3f7670</u>

Jazzwise. (2020, October 08). *Tigran Hamasyan: "I think an artist's job is to awaken something that's unconscious,*" Jazzwise. <u>https://www.jazzwise.com/features/article/tigran-hamasyan-i-think-an-artist-s-job-is-to-awaken-something-that-s-unconscious</u>

Lossius, T. & Mortensen, J. (2017, 30. October). Ph.d. i kunstnerisk utviklingsarbeid - behov for en oppklaring. Universitetsavisa.no. <u>https://www.universitetsavisa.no/ytring/phd-ikunstnerisk-utviklingsarbeid-behov-for-en-oppklaring/146319</u>

Mahavishnu Orchestra. (1971). Meeting of the Spirits. [Song]. Inner Mounting Flame. CBS.

Mahavishnu Orchestra. (1976). Lotus Feet. [Song]. Inner Worlds. Columbia.

Malterud, N., Lai, T., Nyrnes, A. & Thorsen, F. (2015). Forskning og utviklingsarbeid innen fagområdet kunst: 1995–2015: 20 år med kunstnerisk utviklingsarbeid. https://www.uhr.no/_f/p1/i276102cc-6251-4224-81d0-2029453909f3/2015forskning_og_utviklingsarbeid_innen_fagomr_det_kunst.pdf

Markos. (2022, December 19). *The Mahavishnu Orchestra And The Birth Of An Electric Genre*. Boysetsfire. <u>https://www.boysetsfire.net/how-cultural-traditions-have-influenced-musical-genres/</u>

Markos. (2022, November 05). *How Cultural Traditions Have Influenced Musical Genres*. Boysetsfire. <u>https://www.boysetsfire.net/how-cultural-traditions-have-influenced-musical-genres/</u>

Meditation (2021, July 26). *Rudra Veena: evolution of the instrument and Lydian mood of the Yaman raga*. Music Tales. <u>https://musictales.club/article/rudra-veena-evolution-instrument-and-lydian-mood-yaman-raga</u>

Moore, A., & Martin, R. (2018). *Rock: The Primary Text: Developing a Musicology of Rock* (3rd ed.). Routledge. <u>https://doi.org/10.4324/9780429490170</u>

National Institute of Open Schooling. (2019) *Hindustani music theory*. National Institute of Open Schooling. <u>https://www.nios.ac.in/online-course-material/secondary-courses/hindustani-music.aspx</u>

Nettl, B. (2022, January 31). *Raga*. Encyclopedia Britannica. <u>https://www.britannica.com/art/raga</u>

Pizà, A. (2023, February 16). *Listening to The World: A Brief Survey of World Music.* Academic works. <u>https://academicworks.cuny.edu/gc_pubs/751/</u>

Pratyush. (2010). Analysis and Classification of Ornaments in North Indian (Hindustani) Classical Music. [Master's thesis, University Pompeu Fab]. SCRIBD. https://www.scribd.com/document/445067713/Pratyush-Master-Thesis-2010#

Pujadas, M.P. (2016). *Pure and Programme Music in the Romanticism*. Google Scholar. https://books.google.no/books?id=7ONBDAAAQBAJ&pg=PA119&dq=program+music+the sis&hl=en&sa=X&ved=2ahUKEwjvgdG81ab9AhVT2SoKHU15ALsQ6AF6BAgIEAI#v=on epage&q&f=false

Rich, A. (2019, May 09). *Harmony*. Encyclopedia Britannica. <u>https://www.britannica.com/art/harmony-music</u>

Rodriguez, R. (2021, Juni 06). *While touring the US, Ravi Shankar left a gentle footprint on jazz*. Scroll. In. <u>https://scroll.in/magazine/995954/while-touring-the-us-ravi-shankar-left-a-gentle-footprint-on-jazz</u>

Rohm, C.F. (2017). *Ragas for the Western Flute: A Discussion of Compositions and Performance Practice of Repertoire Inspired by Indian Classical Music.* [Doctoral dissertation, University of Maryland]. Digital repository University of Maryland. <u>https://drum.lib.umd.edu/handle/1903/19500</u>

Rossi, M. (2013, September 09). *The Influence of Indian Music on Jazz*. Sessionville. <u>https://sessionville.com/articles/the-influence-of-indian-music-on-jazz</u>

Schumann, S.C. (2021). *Asymmetrical Meter, Ostinati, and Cycles in the Music of Tigran Hamasyan,* Music Theory Online. https://www.mtosmt.org/issues/mto.21.27.2/mto.21.27.2.schumann.php#Beginning

Shankar, A. & Kale, K. (2007). *Breathing under water*. [Album]. Manhattan Records.

Shankar, Ravi. (1999). *Raga mala*. Welcome Rain Publishers. https://archive.org/details/ragamalaautobiog00shan/page/n7/mode/2up

Sound Infusion. (n.d). *The Incredible Role of Music in World Culture*. Sound Infusion. <u>https://soundinfusion.io/the-incredible-role-of-music-in-world-culture/</u>

Team Next Travel Sri Lanka. (2021, October 27). *The Wonderful History of Sri Lankan Music*. Team Next Travel Sri Lanka. <u>https://nexttravelsrilanka.com/music-sri-lanka/</u>

The Collaborative Music Education Series. (2014, October 02). *Brian Moore: Teaching Music Composition* [Video] Youtube. <u>https://www.youtube.com/watch?v=bWGMsm5IZTM&t=331s</u>

The Times of India. (2016, September 29). *Indian classical music roots and ragas*. The Times of India. <u>https://timesofindia.indiatimes.com/indian-classical-music-roots-and-ragas/articleshow/54540906.cms</u>

The Times of India. (2016). *Indian classical music: Different kinds of ragas*. India Times. <u>https://timesofindia.indiatimes.com/indian-classical-music-different-kinds-of-ragas/articleshow/54540966.cms</u>

The Times of India. (2016). *Meet the Indian classical music legends*. India Times. <u>https://timesofindia.indiatimes.com/Meet-the-Indian-classical-music-legends/articleshow/54541120.cms</u>

Thomson, W. E. (2021, May 12). *Musical sound*. Encyclopedia Britannica. <u>https://www.britannica.com/science/musical-sound</u>

Tingen, P. (2021, October 07). *Miles Davis and the Making of Bitches Brew: Sorcerer's Brew*. Jazztimes. <u>https://jazztimes.com/features/profiles/miles-davis-and-the-making-of-bitches-brew-sorcerers-brew/3/</u>

Treloyn, S. (2016). *Music in Culture, Music as Culture, Music Interculturally: Reflections on the Development and Challenges of Ethnomusicological Research in Australia.* Voices: A World Forum for Music Therapy, 16(2). <u>https://doi.org/10.15845/voices.v16i2.877</u>

Tronshaug, H.J.H. & Tørnquist, S. (2010). Musikk i perspektiv 1. Bergen: Fagbokforlaget.

UN Office for the COHA. (2004, December 31). *Tsunami disaster - Sri Lanka Summary situation report 26 - 31 Dec 2004*. Reliefweb. <u>https://reliefweb.int/report/sri-lanka/tsunami-disaster-sri-lanka-summary-situation-report-26-31-dec-2004</u>

Vallena, C. (2021, October 18). *The Significance Of Sound And Music In African Culture*. Africa. <u>https://www.africa.com/the-significance-of-sound-and-music-in-african-culture/</u>

Westphal, M. (2006, September 19). Armenia's Tigran Hamasyan Wins 2006 Thelonious Monk International Jazz Piano Competition. Playbill. <u>https://playbill.com/article/armenias-tigran-hamasyan-wins-2006-thelonious-monk-international-jazz-piano-competition</u>

Wheatcroft, J. (2022, September 22). *Show-stopping techniques you can learn from Paco de Lucia, Al Di Meola and John McLaughlin*. Guitarworld. https://www.guitarworld.com/lessons/paco-de-lucia-al-di-meola-john-mclaughlin-techniques