#### Musical and Religious Experiences

### Their Relationship and Influences on Humanity

#### Richard A. Cezar

Supervised by Bettina Schmidt

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My dissertation will investigate the relationship between musical and religious experiences and the similarities that have made them such emotionally-charging phenomena. Because of the power of music and religion to promote feelings of happiness, lucidity, and escape from everyday living, both have enriched the lives of countless societies around the world for generations. This connection will be addressed from multiple perspectives. First, I will discuss music that is written for religious purposes such as rituals and prayers. Such repertoire, written to help people feel closer to their higher powers, can be important for groups and individuals in a variety of positive and negative situations and a fitting complement to the comfort that they feel from their faith. Next, I will focus on how secular music can help to establish feelings of bliss that emulate a religious experience and may lead to feelings of getting in touch with divine forces - even for people who are firmly opposed to religion. In the third section, I will present several neurologic hypotheses as to why descriptions of musical and religious experiences seem to be so similar. By comparing studies of the two in separate contexts, we will see that music and religion do in fact seem to trigger the same areas and processes of the brain, perhaps because they have similar biological functions. Finally, I will highlight that the positive experiences generated by both music and religion have been used for therapeutic purposes since they can so profoundly influence our being. Because of this, it might be possible that their combined usage may be even more beneficial in healthcare. From all of these accounts, we will have a better understanding of two parts of life that have helped to shape history and define aspects of our humanity. Music and religion have brought out many feelings of hope, introspection, and comfort that are there for us in many different situations. Because of this, it is fitting that this relationship be thoroughly studied.

The purpose of this dissertation is to provide further understanding of the similar aspects of music and religion that make them so endearing for humanity. The experiences generated by the two have enriched our history and been there for us at the best and worst of times. Many religious scholars who have pointed out the fascinating ability of religion to establish great moments of introspection, clarity, and happiness have noted that music is also very much able to create these sentiments. Regardless of whether it was written for religious or secular reasons, music can lead to states that make people feel the same way as those who are sure that a higher power is with them. There are a number of aspects regarding the relationship between music and religion that have yet to draw significant attention from researchers and even some topics that have been heavily studied still remain mysterious to us. This includes which specific parts of the two are the primary contributors to our experiences and what biological events in us allow for them to occur. I have shed light in this research on several factors that make musical and religious experiences so unforgettable with evidence indicating that the amazing feelings of such times are just as powerful now as they were in prehistoric eras. The sentiments that engulf us may not be exactly the same based on our circumstances or our own personal attributes, but in some way or other, they can be extremely touching in our lives.

Additionally, I have addressed several correlations between music and religion, specifically how they seem to produce similar responses in the brain and also in medical settings. By addressing ideas that are still very much unknown, this dissertation presents the notion that musical and religious experiences are not described similarly by coincidence. Instead, this could be due to neurologic reactions that have been embedded in us for generations. As familiarity with these processes becomes more known to us, our knowledge of them may lead to carefully-developed tactics using music and religion for therapeutic purposes. Music and religion are parts of our existence which are accessible to just about

anyone and the effects that they bring are thus common knowledge around the world. I write this work with the intent of emphasizing the connection that they inherently share.

My interest in linking musical-religious experience is one that developed gradually. As an undergraduate student, my majors of music performance and religious history were kept completely separate from each other with no intention to ever investigate any similarities between the two. The catalyst that sparked this change was when I began to visit houses of worship in order to have a better understanding of different religions and firsthand interactions with the believers who adhered. I slowly noticed that in some of these settings, the music was quite good and started to tape it with a portable voice recorder that I kept in my pocket. While I had originally done this just to analyze the repertoire using music theory, I came to realize that religious music was more than a simple complement to rituals and prayers. Instead, it was a crucial element that helped believers become absorbed in altered states of consciousness. It was also around this time that I began spending more time with my father's close friend Dr. Michael Kosok, a former college professor who had combined his interests in physics and philosophy to come up with groundbreaking ideas which he asserted had shown physical proof for the existence of God. Inspired by his background as well as my own growing interest in religious music, I started to see the relationship between my own studies and decided that I wanted to know more about how religion and its music could be used to stir up such energizing thoughts, feelings, and behaviors. In 2013, I departed the United States for University College Cork in Ireland to pursue a Master's degree in ethnomusicology. During my studies, I traveled extensively, interviewing members of many religions about the importance of music in their faith and recording music in all sorts of surroundings. From Zoroastrian gathas in London to Congolese Christmas carols at a Ugandan refugee camp, every piece was a sacred expression of individual and community and their relationships to the higher powers that they so avidly adored.

In 2014, I arrived in Bishkek, Kyrgyzstan to write my Master's thesis on the music of the city's Christian population. I had chosen this destination mainly because of its obscurity in the Western world and had no plans to turn my trip into a long-term stay, but a few weeks before finishing my work, I met Dr. Andrew Wachtel, the President of the American University of Central Asia and a fellow New Jerseyan. After a few minutes of chatting, I was shocked when he asked if I wanted to teach Music Appreciation at the university and quickly agreed. Not even knowing what such a class was, I looked at syllabi from various universities to determine that it was basically a history class. While I had assumed it was a class for music majors, I discovered upon starting it that there was no music major at AUCA and that this was actually an elective for students - most of whom were business majors looking for an easy A. As a result, the classical music lessons which I had prepared turned out to be quite boring for my students and I found myself worried that I would not have my contract renewed for the next semester.

Stuck with a syllabus that could not be changed, I began to take song requests after teaching a classical concept and together we would analyze my students' favorite selections. I started telling them that this was not a history class, but a way to get out of their comfort zone and look at things in a different way and that the ultimate goal of this class was to somehow make a change in their musical views. Not only did this save my job, but as an inevitable byproduct, I started to look at music from a different perspective myself. I came to realize that it was not only religious music that could make people feel that they had reached a higher power. Instead, any type of music, regardless of the purpose for which it had been composed, was capable of taking listeners on an incredible voyage that could help them feel the same elevation that believers felt from their faith and the musical ways of expressing it. But just as important as this, I also came to see that music - religious or secular - had a very important commonality with religion: the two could be used to make long-lasting

improvements in our lives. This was already established in various forms of intervention like music therapy and pastoral care and I started to wonder if combined musical and religious elements could produce even better therapeutic results for those in need of medical attention - and if such a therapy could be tailored to fit the belief system (or lack thereof) of anyone. My current work towards a Master's by Research in religious experience is rooted in this journey with this being an analysis of how the states bestowed by music and religion can bring out the best in us.

This dissertation is separated into two parts, each consisting of two sections. The first part concentrates on fields which are well-known topics and have been investigated thoroughly by various scholars regarding the effects of music and religion and their importance in our lives. The purpose of this part is to identify aspects of the two which have repeatedly contributed to the experiences that have impacted people for ages and highlight that these experiences can be witnessed in any religion or musical style. Religious music that accompanies various rituals and prayers will be discussed in section one. Such music, specifically designed to help enhance a religious experience, has long been a distinguished aspect of worship around the world. In fact, music has often been discussed in holy texts or by revered religious leaders. Through its usage, believers may undergo ecstatic states in which they feel that they have established a close connection with their higher powers or have acquired the wisdom that they have to offer. Even if they are in distressing situations, it can help them to maintain their devotion since the spiritual messages - mixed with the beauty of the music - can be a strong reminder of the forces who will stay with them no matter what happens. The arts have greatly lent themselves to how believers show their love for higher powers, keep their minds focused on such entities, and maintain strong connections with other members of their religious communities. But music has stood out as an especially

critical resource found in the most illustrious or humble houses of worship, giving life to so many parts of religious activity.

Section two in part one focuses on the power of secular music to produce feelings which closely resemble a religious experience amongst musicians and listeners. It might even make them feel that they have entered into a communion with their versions of a higher power, whatever their opinions on religion itself may be. This section draws attention to elements of the music and the situations under which it may be written or played that can lead up to a powerful and positive outcome. Believers who enjoy this music may feel that their favorite works help contribute to their religiosity and provide new ways to think about their higher powers. Meanwhile, those who do not find fulfillment in religion may be invigorated by such factors as identifying with a topic that is discussed in a song or being in a group with fellow music-lovers who share the same values that they uphold. Many scholars believe that all music, even that which has been written for secular purposes, has a spiritual quality to it that can be observed in the feelings that it instills and the actions that it produces. The goal of section two is to point out that secular music does in fact have the ability to trigger such episodes in which people feel just as enraptured by music that is written for religious purposes. As a result, it becomes apparent that religious experiences are indeed available through a variety of religious and secular means.

Part two highlights areas of the musical-religious connection that have not been covered extensively in academia, particularly regarding human biology. In this part, I have not only identified gaps in research, but offered my own hypotheses by reviewing a variety of information. In my work, I have seen that many bodily and mental reactions produced by musical and religious experiences are almost identical. This research may help to understand the process of registering music and religion and how this affects our psyche and well-being.

It may also be possible that future researchers who take interest in the biological connections of the two could use the ideas presented in this part of the dissertation as a basis for conducting investigations. The first section of part two addresses the idea that musical and religious experiences, often described using similar terms, could possibly be caused by the same regions and processes in the brain. In order to demonstrate this, it focuses on certain areas and the discoveries made by neuroscientists on how music and religion affect them.

Even though research into correlations is limited, there has been substantial documentation in each field allowing for many theories to be developed. When compared, it can be seen from these reports that music and religion seem to have somehow evolved into biological necessities, perhaps with some similar purposes between them.

Finally, section two will address how the combined experiences of music and religion, when administered by professionals in a controlled environment, could be of great therapeutic benefit to those suffering from a variety of medical issues. Music and religion have provided many forms of relief in the world of therapy, but similar to the case with neuroscience, there is still not much to determine if different changes will take place when the two are used together. Whether they are dealing with physical or psychological issues, believers and non-believers can both find rest thanks to a number of interventions that help them to make sense of their situations, connect with others, and feel that they are under the protection of a higher power or something like it. Music and religion may always have unanswered questions to them, but with the reality being that there are many people who need medical treatment, developments to their care must carry on and a program consisting of both musical and religious techniques could possibly be one of these tools.

My methodology consisted of extensive reviews of literature and interviews. The majority of literature for part one was academic although I also relied on non-academic

literature such as magazine and newspaper articles since some of the specific topics discussed have not yet been addressed in academia. Furthermore, these sources also allow more recent events to be discussed and often include interviews with famous musicians and religious leaders. Several books that I used are renowned works that have made great contributions to the field of religious studies for decades. The importance of music in these texts demonstrates that it is seen even by top religious scholars as an important part of religious experience. Also, many researchers attribute the importance of secular music to our natural desire for spirituality; in some cases, it has even been hailed as divine by those who play or listen to it. Applying this idea to firsthand accounts of musical ecstasy gives us a new way of looking at these events since devotion to one's favorite repertoire can emulate worship. Believers and non-believers can be moved significantly by it. The literature of both sections focused on a variety of religions and musical genres (both religious and secular) and how they have been appreciated. I also investigated the use of music and religion in both times of joy and distress and how such situations influence the way the two are perceived. I did this in order to see the similarities and differences between musical and religious preferences and how this can manifest in people. I concluded that religion and music can be an important part of the positive and negative times in our lives, helping us to feel that in some way we are not alone. This literature has also highlighted some of the most important parts of musical-religious experiences. Because they are seen in many societies, they provide further insight into what elements of music and religion are most powerful to us.

The literature of part two was almost completely based on academic books and articles. Because resources looking at the biological connections between music and religion are sparse, I mainly looked at the two in separate contexts and tried to find similar descriptions either by researchers or those who had undergone the effects of musical or religious experiences. This offers potential explanations for how music and religion impact us

and also indicates gaps in research that should be addressed. Fortunately, there was some literature that looked at the two together - hopefully a sign that research into such matters is slowly gathering interest. In reviewing these resources, I also stayed on the lookout for parts of the brain and body that seemed to consistently produce major reactions in response to musical or religious experiences in order to help determine which areas are the most sensitive to these sorts of input. Especially important in this were experiments that had been done to see how the participants reacted (physically or neurologically) to music or religion. By comparing these studies, we can see that in many cases, the effects of such stimuli were almost the same. This is especially important when considering the application of combined musical and religious interventions to therapy. My analyses of this literature hint that there are ways to create and monitor certain states amongst people that can be a useful part of improving quality of life.

In addition to collecting information from literary sources, I also conducted several semi-structured interviews, each one lasting about an hour and consisting of approximately ten prepared questions in addition to some improvised ones. I chose various people whose experiences with music and religion were important parts of their personal or professional lives. As a result of this, we have several stories of musical-religious experiences that are not available in any other studies and also biological theories for them. My work was done with the approval of the ethics committee at University of Wales Trinity Saint David and permission from everyone whom I had approached for a talk. It was also assisted by books such as *Handbook of Interview Research* by Jaber F. Gubrium and James A. Holstein and *Interviewing as Qualitative Research* by Irving Seidman. The first interview is a Skype meeting with Buddhist monk Benkong Shi who discusses the roles of music in his religion. His accounts demonstrate that music plays multiple roles in religious experiences and even though it is not the higher power that people worship, it is still coveted for its effects on

individuals and groups. The doctrines that each religion uphold may differ from one another as well as the perspectives and histories of each member, but the importance of music prevails thanks to the relationships that it can establish. As Benkong mentions, religious music can sometimes be just as gripping for those of other religions as its own members. In the second section of part one, the interview is an in-person discussion with Jan Lauren Greenfield whose experience with a secular song was such a powerful influence that she describes it as spiritual. Having had this episode in the midst of a bout with mental illness, she believes that this music was able to provide freedom from the fear and confusion that had overtaken her, allowing for the same sort of peacefulness that can come from faith.

Greenfield also describes other elements of secular music that she finds affecting and thus validates the idea that musical-religious experiences in secular music can be caused by several factors.

Since part two is more scientific than the first, those interviewed were chosen based on their experience with music and religion in terms of how they can trigger certain reactions. Dr. Petr Janata, a professor of neuroscience at University of California, Davis, was interviewed via Skype for the first section of part two. This is because he is one of the few researchers who has presented information about neurologic similarities between music and religion, most notably at a speech for the Metanexus Institute in 2007. Janata focuses on certain parts of the brain that seem to produce similar responses to music and religion and why the two might be such important stimuli for us. His ideas help us to see that music and religion have often been used in such close conjunction because they appeal to central parts of human nature. Their combined usage can thus be a great satisfaction of innate biological urges. The interview in the second section of part two was conducted via Skype with Dr. Andrew Newberg, a neuroscientist who has devoted great attention to neurotheology which specializes in the brain's responses to religious experiences. Newberg has also conducted

experiments on several participants with various mental and physical conditions to see if aspects of religion and spirituality can improve health and functioning. Some of these studies have even included music. This work makes him fitting to discuss how both music and religion can lend themselves to therapy and that their benefits can be extended to those of many cultures. Aside from pointing out how the brain incites positive reactions to musical and religious stimuli, he also explains the positive descriptions that patients have reported and how music and religion appear to be of great use in times of physical or mental turmoil. His interview provides indication of the potential that the two have to work as a combination.

The following dissertation is a culmination of my thoughts and experiences over the last few years which have made major changes in how I view the musical and religious sentiments responsible for so many of our most emotional episodes. Music and religion are indeed difficult to comprehend and the relationship between them is understandably even more complex. But as I have learned over the course of time, both are fundamental to mankind and have been behind some of our finest achievements. Musical tastes and religious beliefs may differ from place to place or person, but the unforgettable states that they have generated are a commonplace and have given countless people positive outlooks on life that have shaped their relationships with the world. Because of this universal nature, it is right that they are thoroughly studied. This can help us to find out more about ourselves and also create an opportunity to apply these effects for our medical gain. In my music class, I have played Chopin nocturnes and Enya songs and later had students tell me that this helped them through the death of loved ones or brought back joyful memories of childhood that had been long forgotten. In my opinion, the conviction of these and other musical events mirrors the religious passion which I saw in such acts as sisters of the Poor Clare's monastery in Cork receiving Holy Communion or Baha'is in India praying for the release of members of their religion held hostage in Iran. Music and religion can bring about some of our most profound

experiences capable of changing who we are and overcoming many of our problems.

Research into their combined functioning may be critical in comprehending our past and present and seeing where we are going in the future.

#### Literature Review

The usage of music and religion to help establish emotional and often life-changing emotions is a core value found in just about every corner of the globe. Because of this, their combined functioning can be seen in many valued activities that promote hope and happiness. In virtually all religious rituals, music is essential to helping believers undergo feelings of piety and closeness to their higher powers and even in secular contexts, performers and listeners (regardless of their attitudes towards religion) often describe their musical experiences with words such as "spiritual," "transcendental," or "mystical." In recent decades, developments in neuroscience have allowed us to witness an amazing amount of processes that occur in various regions of the brain, including images of its reactions to musical and religious stimuli. Comparisons of such studies hint that musical and religious experiences could share a firm biological connection that appeals to basic characteristics of the human personality. Regardless of whether or not deities actually exist, such a relationship has proven itself to be a fundamental part of our existence, truly a phenomenon ingrained in our cultures that influences our thoughts and actions. As research into the bond between music and religion continues, it should not only be used to help understand our past and present, but also be used to influence how we as a species progress into the future.

There are a number of resources which contributed greatly to my research and could also be used for setting up additional research.<sup>1</sup> This literature review will highlight three works that stand out as especially focused on topics relevant to the dissertation. *Music and Trance* by Gilbert Rouget (1985) is a premier book that gives detailed accounts of how believers from multiple countries behave during religious rituals involving music as well as characteristics of the music itself and the roles that it is thought to play in the experience.

1 See Mithen 2006; Otto 1917; Scharen 2013; Sylvan 2002.

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Mostly about various indigenous religions, it covers music used for purposes such as inducing a trance, bringing one back from a trance, and exorcisms. Having analyzed the musical rituals of many different religions and cultures, he concludes that there is no reliable way to predict one's reaction to it. Furthermore, there does not appear to be a universal music principle that can be consistently used to establish a religious experience, but there are some elements that can be seen quite often such as the use of voices and instruments together, accelerated tempo, and abrupt changes in rhythm.<sup>2</sup> Especially valuable is the large number of groups that are presented which provides insight into a diverse plethora of beliefs and practices from around the world. Rouget also pays some attention to the trances of secular music, most notably opera which he calls "one of the avatars of possession" due to its highly theatrical nature.<sup>3</sup> To support his assertion, he provides a detailed letter written by an anonymous ethnomusicologist from Benin who had attended a performance of *Elektra* in Paris. This researcher describes the event as closely resembling an African *vodun* ceremony since not only did the music organize and give structure to the performances of both, but it was the force which overtook the free will of the performers and transformed them into the characters they portrayed. 4 Part one will discuss such ideas laid down by Rouget and their relevance in various musical and religious practices.

Deep Listeners by Judith Becker (2004) is one of the few literary works that looks at both music and religion from a neuroscientific perspective, making it a particularly special resource that can help us understand our biological desire for the two. Becker devotes her book towards drawing parallels between "trancers" (those under the effects of religious

<sup>2</sup>Rouget, 81.

<sup>3</sup>Rouget, 227.

<sup>4</sup>Rouget, 242.

experiences) and "deep listeners" (those under the effects of music), hypothesizing that both are influenced by neural activities involving memory, feeling, and imagination. This will simultaneously produce physical, psychological, somatic, and cognitive reactions and in many cases, it could be impossible to see a difference in trancer or deep listener behavior. Areas such as the brainstem, hypothalamus, and ventromedial prefrontal cortex - ancient structures of the brain - are behind many of these outcomes. Additionally, repetition of events and emotions can lead to the habituation of certain neural networks. However, connections that are built as a result of this are not always permanently hard-wired meaning that change and creativity are biological norms. Becker also describes certain religious rituals involving music and how the brain's operations during such times can lead to the thoughts and feelings that practitioners encounter. One such example is a Balinese mythology ceremony in which a certain melody associated with the evil spirit Rangda strikes the participant's auditory cortex, limbic system, and frontal lobes and generates fear and hatred. Becker's studies are an especially important contribution to section three of this dissertation in which neuroscience is the chief topic.

Andrew Newberg's *Principles of Neurotheology* (2010) is a proposal of 54 standards that should be more thoroughly researched in order to further develop a field of study that comprises both scientific and theological aspects.<sup>11</sup> It is rather complex to have an informant

6Becker, 45.

7Becker, 132.

8Becker, 112.

9Becker, 113.

10Becker, 115.

 $11 Newberg, Andrew. {\it Principles of Neurotheology}. Vermont: A shgate. 2010. {\it Page 1}.$ 

<sup>5</sup>Becker, Judith. *Deep Listeners: Music, Emotion, and Trancing*. Indiana: Indiana University Press. 2004. Page 45.

rate the intensity of a religious experience or discard any potential outside sources that could have contributed. Furthermore, beliefs and peoples' reactions to them vary greatly based on a number of individual factors in their lives. 12 This is where the use of methods such as electroencephalography (EEG) and positron emission tomography (PET) become critical because of their ability to provide a more concise measurement of the effects of religious practices. 13 Throughout the book, Newberg provides in-depth information that highlights the jobs of individual parts of the brain as well the complex interweaving between them in a religious experience. For example, while the left parietal lobe is involved more with analytical and reductionist thinking, the right parietal lobe is more holistic. <sup>14</sup> Also, emotional drives are charged by areas such as the hippocampus, thalamus, and amygdala. <sup>15</sup> The autonomic nervous system's connection to the body may account for visceral feelings such as calmness, energy, and happiness and the system's arousal responses to rhythm and repetition may help explain why ritual, especially group ritual, has always been a constant. 16 Newberg argues that belief stems from four elements working together within the brain - perceptions, emotional value, cognition, and social influences. Taking the stimuli that are encountered by the five senses, the brain begins a process of interpreting this information and placing it into various categories. Based on these interpretations, emotions are generated from which thoughts and behavior arise. This neurological course which enables human beings to make sense of their world could be, in Newberg's opinion, the foundation of the solidifications of religious ideologies in both individuals and societies. <sup>17</sup> Such ideas are essential to

<sup>12</sup>Newberg, 120.

<sup>13</sup>Newberg, 123.

<sup>14</sup>Newberg, 77.

<sup>15</sup>Newberg, 78.

<sup>16</sup>Newberg, 162.

understanding both part one and two and can be used as a guide towards future studies involving therapeutic applications.

The relationship between music and religion is a complex liaison in which one's biological makeup, culture, and beliefs are important factors as well as elements of the music and religion themselves. Whether it be mass congregations or individuals in the most ornate or basic settings, the mixture of musical and religious sentiment has the power to help one feel that the world is being left behind, replaced with a full communion with a force far beyond comprehension. Research has shown that just about any religion or musical style can instigate the most awe-inspiring states which connotes the idea that the two are enduring parts of our existence that can in some way make a difference in the lives of just about anyone. <sup>18</sup> As this connection continues to attract the attention of scholars, it will surely uncover anthropological, sociological, psychological, and many other elements around which music and religion function. Such information will provide further knowledge into two parts of life held dear by human beings and thus further knowledge into the nature of our behavior.

17Newberg, 71.

<sup>18</sup> See Beck 2006; Crowe 2004; Jourdain 1997; Palmer 2010.

# Part One

## Section One: The Roles of Music in Religious <u>Experience</u>

"He who sings prays twice." 1

- Saint Augustine

There are many similarities between the realms of music and religion, two phenomena that many have said are essential and vitalizing parts of existence. Both have been found in societies throughout the world for millennia, both have been known for the great changes in emotions that they can establish, and in spite of voluminous research that has been done by scholars on the two, both have often been labeled as mysterious in terms of how their impacts on consciousness have never been fully understood. Naturally, with such abilities to alter our senses, music and religion have been used together for believers of all sorts to experience thoughts and feelings that are said to move beyond everyday life and bring one into a firmer connection with higher powers. The mythological musician Orpheus, an ancient Greek figure whose songs could enchant the entire world and even the world of the dead, demonstrates that the perceived relationship between music and the divine has been known for ages as it is written that he was the son of the god Apollo and the muse Calliope. Having attracted tremendous interest from great writers and composers like Virgil and Claudio Monteverdi, discussions into the music of Orpheus have traditionally hailed his craft as a miraculous gift given by his celestial forebears. The role of music in religious experience is one that enters

<sup>1</sup> Ellis, Christopher J. *Approaching God: A Guide for Worship Leaders and Worshippers*. Norwich: Canterbury Press. 2009. Page 82.

<sup>2</sup> Brown, Frank Burch. "Music" in *The Oxford Handbook of Religion and Emotion* edited by Corrigan, John. New York: Oxford University Press. 2008. Page 201.

into many aspects of faith. The first section of this dissertation will address the establishment of feelings of spiritual transcendence and bliss, the conveyance of knowledge, and aid in conversion as well as communal bonding amongst those of a religious group. These aspects are primary elements of religion that maintain optimism in believers and give them the hope and conviction to preserve their values even when they are put to the test. For many religions, music has been of crucial importance in these processes and shows that the use of the two in conjunction can be a compelling force that can greatly influence the course of our lives.

Becoming enraptured in a religious experience can be an unforgettable event that stirs up thoughts and emotions and can strike believers to the center of their being. In his lectures on mysticism, William James discusses the idea that such experiences generally cannot be described due to the sheer profundity of them.<sup>3</sup> Also, those who undergo such experiences tend to feel that what is going on has subdued their control and that they have come under the authority of something far greater than their everyday selves.<sup>4</sup> Rudolf Otto similarly describes how religious experiences focus on special feelings that affect one on a personal level and can drastically alter perception and attitudes.<sup>5</sup> This idea of an overtaking and indescribable experience he labels as the "numinous" - a term which he confesses is in and of itself difficult to define.<sup>6</sup> Music, with its own unique influences on our lives, can be a great contributor to such states, either helping to maintain them or even starting them off. Through this musical-

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<sup>3</sup> James, William. *The Varieties of Religious Experience: A Study in Human Nature*. Massachusetts: Seven Treasures Publications. 1902. Page 207.

<sup>4</sup> James, 208.

<sup>5</sup> Otto, Rudolf. *The Idea of the Holy: An Inquiry into the Non-Rational Factor in the Idea of the Divine and its Relation to the Rational.* New York: Oxford University Press. 1917. Page 10.

<sup>6</sup> Otto, 7.

religious combination, believers may feel that they have reached the highest spiritual levels that are obtainable on earth.

Even Otto himself proclaims that the arts are incredibly important in representing the numinous. One of his examples of this is Johann Sebastian Bach's *Mass in B Minor*, particularly the *Sanctus* which he describes as "an incomparably successful expression of Him, whose is 'the power and the glory,' an enraptured and triumphant choric hymn to perfect and absolute sovereignty. If Ironically, the relevance of Otto's statement has been demonstrated by David Hay, the former director of the Religious Experience Research Center, who read Otto's most distinguished work, *The Idea of the Holy*, only after a Bachinduced experience of his own. Having attended a presentation of the *Mass*, he found the music to be quite enjoyable, but as it progressed to the performance of *Sanctus*, an encounter with indescribable forces began:

I find this experience difficult to define. It was primarily a warning. I was frightened. I was trembling from head to foot, and wanted to cry. Actually I think I did. I heard no "voice" except the music; I saw nothing; but the warning was very definite. I was not able to interpret this experience satisfactorily until I read - some months later - Rudolf Otto's *Das Heilige*. Here I found it: "the numinous."

Such a quote can be compared to studies done on indigenous religions from around the world by Gilbert Rouget who writes that participants in rituals "become impregnated with the musical atmosphere." During such times, those involved are said to no longer be truly in touch with themselves anymore as the presence of the deity has penetrated them and brings

8 Otto, 70.

<sup>7</sup> Otto, 65.

<sup>9</sup> Hay, David. Religious Experience Today: Studying the Facts. London: Mowbray. 1990. Page 71.

<sup>10</sup> Rouget, Gilbert. *Music and Trance: A Theory of the Relations Between Music and Possession*. Illinois: University of Chicago Press. 1985. Page 65.

them under its control.<sup>11</sup> While music is not said to be responsible for the trance itself, it sensitizes one to receive the experience.<sup>12</sup> Rouget writes that while there is no exact way to predict at what time during a ritual one will experience a trance, generally it happens when music is playing.<sup>13</sup> Hay's experience at the concert shows that this sort of spiritual episode is open to anyone and it is also noteworthy that, in contrast to the irregularity that Rouget discusses, the greatest effects came at a section which Otto had described years before - a possible sign that there may be some musical elements that stand out to us more than others.

Another key element of music's role in the religious experience of transcendence is helping to establish the positive feelings that accompany such an event. Whether believers feel that they are coming into direct contact with the higher powers they worship, being exorcised of demons, being cured of a condition, or acquiring sacred knowledge, music can lend itself tremendously to the happiness of the situation, making them feel that they have reached an emotional high point. According to James, music offers certain ontological messages. <sup>14</sup> This could be especially valuable in conjunction with religion, another facet of life that can be used to begin intense analysis of who we are. Benkong Shi, senior monk at Grace Gratitude Buddhist Temple in Manhattan's Chinatown, highlights the importance of enlightenment in Buddhism and that the joy of obtaining it can sometimes be reached largely from the music of ritual:

It is powerful in that it helps the mind focus. It makes you stronger. It helps you concentrate. That's what it does more than uplift you. During a ceremony, they might say something like, "Escape suffering and attain joy" and you might stick with that and it might give you a sense of joy and bliss that you realized the meaning of that. So

11 Rouget, 69.

12 Rouget, 65.

13 Rouget, 70.

14 James, 229.

the uplifting experience doesn't come from the music, but comes from the music putting you in a state of concentration so that you can truly contemplate and experience what is being taught in the sutras and when you experience that, you have a sense of bliss.<sup>15</sup>

This sentiment that Benkong describes is reflected in James' discussion of "dhyana," the Buddhist idea of reaching a higher state of contemplation. <sup>16</sup> As is the case with other religions, his testimony shows that it is this sort of feeling and not the music itself that creates ecstasy amongst believers, but it is certainly significant in getting there.

James says that during periods of mysticism, new information can be gained by the person in such a state, the most important being theological revelations. <sup>17</sup> The importance of music on this path has been espoused by legendary sitarist Ravi Shankar who discusses the Hindu idea of *Nada Brahma* ("the sound of God") in which all of nature should seek harmony with the vibrational qualities emitted by the Creator. He and other Hindus uphold that music (especially the ragas) is a spiritual discipline which brings divine ecstasy to performers and listeners as they realize themselves and the universe as well as reach God. <sup>18</sup> Rouget's descriptions are likewise replete with stories of believers who become engulfed in fervor while participating in musical rituals, one being the steps taken by shamans to communicate with gods or the dead. <sup>19</sup> By frenetically dancing to music that may often rapidly accelerate or decelerate, Rouget says that the goal of these religious leaders is to put themselves in a state of rapture. In many cases, those who are gathered to watch the spectacle may even draw from

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<sup>15</sup> Benkong Shi. Interviewed by Richard Cezar. New York, NY. November 15, 2018.

<sup>16</sup> James, 218.

<sup>17</sup> James, 223.

<sup>18 &</sup>quot;Hindustani Classical Music" in *Asian American Religious Cultures*, *Volume 2* edited by Lee, Jonathan H.X.; Matsuoka, Fumitaka; Nakasone, Ronald Y.; Yee, Edmond. California: ABC-CLIO. 2015. Page 446.

<sup>19</sup> Rouget, 19.

the energy to go into a trance themselves.<sup>20</sup> In turn, by having others take on similar actions of the shamans, they will be strengthened in their own practice.<sup>21</sup>

Critical in the musical-religious experience is not only delighting in the presence of a higher power, but also putting faith in the idea that providence will eventually remove the burdens of one's life, especially those instilled at the hands of the wicked. Benkong, who once served at Nan Hua Temple in Bronkhorstspruit, uses a story from this time to exemplify that music can be an important tool in one's pleas for assistance:

When I was in South Africa, this shop was being robbed by three men and the woman who was the proprietor, a guy took her in the back and held a gun to her head and then began to molest her. To not freak out, she started to recite the name of the *Guanyin* [a bodhisattva associated with compassion] to rescue her or to save her. This freaked out the guy who was molesting her so he smashed her in the head with the butt of the gun and told her to shut up and then she began reciting it in her mind. So it doesn't have to be sung out loud. It can even be recited in your mind to give you solace and strength. <sup>22</sup>

As we can see, the relationship that believers may have with their higher powers can be a bond so strong that it can become the shelter in which one automatically takes refuge when even the most horrifying events occur. Through music, this link can be heightened to provide even more of a sense of emancipation. Benkong's quote has much to do with Paul Westermeyer's idea that a major component of worship is not only celebrating what a higher power has done or is presently doing, but also what will be done in the future. Westermeyer highlights that in Christian music, this expectation for justice has been upheld throughout history, but it can be observed in other religions too.<sup>23</sup>

21 Rouget, 129.

22 Benkong.

22 Delikong

23 Westermeyer, Paul. Let Justice Sing: Hymnody and Justice. Minnesota: Liturgical. 1998. Page 9.

<sup>20</sup> Rouget, 128.

Hope for freedom from oppression expressed through song can unmistakably be observed in the African spirituals of early America. Regardless of whether those enslaved actually embraced Christianity or held onto the African deities, the songs of God rescuing those in despair provided a will to survive, hinting at the notion that rescue would somehow come for them one day. As Frederick Douglass, an escaped slave who became a preeminent abolitionist, later attested, "Every tone was a testimony against slavery, and a prayer to God for deliverance from chains."<sup>24</sup> According to John Michael Spencer, slaves may have secretly taken delight in the biblical story of Moses slaying an Egyptian who had been beating an Israelite. However, to openly express this feeling would have risked exposing their desire to do the same with their masters. They therefore rejoiced in such an act by singing spirituals that discussed similar topics such as David's defeat of Goliath or Joshua's triumph at Jericho, demonstrating that believers can use religious music not specifically addressing their situations (or even their own religion) to feel great experiences of encouragement. <sup>25</sup> A similarly poignant story of religious music giving hope to those in the face of devastation comes from Josef Bor, a Czechoslovakian Jew imprisoned at Terezin concentration camp during the Holocaust and the only member of his family to survive the ordeal. Bor went on to write that he and several other inmates were at one point forced by their captors to rehearse and perform Giuseppe Verdi's *Requiem* for the pleasure of Adolf Eichmann. <sup>26</sup> The intent of this show was to entertain Eichmann with a display of Jews sounding off their own death knell, but by Bor's account, this twisted joke backfired as the beauty of the piece filled the

<sup>24</sup> Spencer, Jon Michael. *Praise & Protest: Sacred Music of Black Religion*. Minnesota: Fortress Press. 1990. Page 13.

<sup>25</sup> Spencer, 5.

<sup>26</sup> Heskes, Irene. *Passport to Jewish Music: Its History, Traditions, and Culture*. Connecticut: Greenwood Press. 1994. Page 160.

musicians with a determination to live, a particularly special line to them being, "*Libera me, Domine, de morta aeterna*" (Free me, God, from eternal death).<sup>27</sup>

Along with the positive feelings that accompany a religious experience is often the concept that the believer has acquired or become more firmly aware of knowledge that is given by a higher power. James, in his four characteristics that define mysticism, includes this noetic quality, saying that "they are states of insight into depths of truth unplumbed by the discursive intellect." Again, music can be a great assistance in this acquisition thanks to how it can make believers much more receptive. Sean Williams writes that long periods of Buddhist chanting require prolonged control over breathing and the vocal chords which can lead to a meditative state of higher consciousness. This can help explain why Buddhism emphasizes the didactic benefits of music; chanting was in fact the sole way for the Buddha's teachings to be recalled for hundreds of years. Benkong, who insists that repetition is of utmost importance in ritual, states that music can help uncover some of Buddhism's chief principles:

Buddhism, which does not believe in the Buddha's divine intervention, focuses on the mind of the individual as being the highest power, because your mind creates everything. And so music is extremely valuable in that it helps us learn how to reach our minds and to strengthen our minds and to make us focus so that we can develop ourselves and eventually become Buddhas.<sup>31</sup>

The perceived link between music and wisdom is further demonstrated by religious leaders who have made their thoughts and feelings known to their followers. One example is

28 James, 206.

31 Benkong.

<sup>27</sup> Heskes, 161.

<sup>29</sup> Williams, Sean. "Buddhism and Music" in *Sacred Sound: Experiencing Music in World Religions* edited by Beck, Guy L. Waterloo: Wilifrid Laurier University Press. 2006. Page 186.

<sup>30</sup> Williams, 172.

Saint Augustine's *Confessions* in which he describes how the truth was distilled into his heart while listening to hymns. <sup>32</sup> Likewise, his mentor, Saint Ambrose of Milan, praised the psalms which, among other benefits, were a more efficient teaching method than the use of stern discipline. <sup>33</sup> Furthermore, the Sufi philosopher Ismail Hakkai espoused that Mevlevi music (to which the whirling dervishes dance during their rituals) was to be known as "concentration music" because of its ability to help one focus on the love of God. <sup>34</sup> Today, such repertoire is also known as "wisdom music" and its chief purposes are not listening and enjoyment, but rather participation and reflection. <sup>35</sup> Also a common part of Sufism is *dhikr*, the practice of absorbing oneself into the rhythmic repetition of the names of God. Marshall Hodgson believes that the mystical ecstasy generated by this devotion is actually part of the moral process of civilization. This is because it is followed by a sense of clarity which allows believers to have deeper understanding of God and what one's role is in the world, thus entailing social benefit. <sup>36</sup>

There is ample evidence from around the world that music has long been held as a force which gives access to information that is extraordinarily difficult, if not impossible to obtain on one's own - in many instances limited to those whose spiritual abilities surpass those of the average person. Texts of ancient Greece and Rome affirm that music was an

<sup>32</sup> Saint Augustine. Confessions. New York: Oxford University Press. 1991. Page 164.

<sup>33</sup> Stapert, Calvin R. *A New Song for an Old World: Musical Thought in the Early Church*. Michigan: William B. Eerdmans Publishing Company. 2007. Page 104.

<sup>34</sup> Friedlander, Shems and Uzel, Nezih. *The Whirling Dervishes: Being an Account of the Sufi Order Known as the Mevlevis and its Founder the Poet and Mystic Mevlana Jalalu'ddin Rumi*. New York: State University of New York Press. 1992. Page 130.

<sup>35</sup> Friedlander, 131.

<sup>36</sup> Hodgson, Marshall G. S. *The Venture of Islam, Volume 2*. Illinois: University of Chicago Press. 2009. Page 212.

important part of prophecy to the pagans of the time.<sup>37</sup> Along with a pure heart and a relationship with the gods, being worked up into musical states of ecstasy was said to produce the ideal atmosphere for prophets.<sup>38</sup> Aside from making predictions, these religious leaders were also popular for their abilities to determine which deities were inflicting illness on a person, thus providing guidance on whom should be prayed to for help.<sup>39</sup> Don C. Ohadike's studies of indigenous African religions show that beliefs very similar to those of ancient days can be found in cultures of the modern world. According to Ohadike, the sacred drums of each community are instruments of language that can tell stories, teach lessons, give warnings, or even express emotions. During some sacred occasions like divination rituals, installation of chiefs, or burials of notable people, the drums are often said to reveal a message that is only understandable to those who have been initiated into the ancestral cults.<sup>40</sup> Rouget adds that, aided by drums and rattles, many African mediums are said to consult the spirits of village ancestors, answering questions for those in need as to what should be done to remedy their misfortunes.<sup>41</sup>

The relationship between music and wisdom that is otherwise unattainable is also reflected in monotheism such as in the *Zohar*, a collection of Jewish mystical writings which states, "In the highest heavens there are gates which open only through the power of song." In fact, the middle letter in "song" or "to sing" in Hebrew represents the future, indicating that

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<sup>37</sup> Quasten, Johannes. *Music & Worship in Pagan & Christian Antiquity*. Washington DC: National Associations of Pastoral Musicians. 1983. Page 39.

<sup>38</sup> Quasten, 40.

<sup>39</sup> Rouget, 195.

<sup>40</sup> Ohadike, Don C. Sacred Drums of Liberation: Religions and Music of Resistance in Africa and the Diaspora. New Jersey: African World Press Inc. 2007. Page 3.

<sup>41</sup> Rouget, 135.

<sup>42</sup> Heskes, 112.

music is related to prophesy. <sup>43</sup> These two words are also similar to the Hebrew word for "minister," which reflects that like the polytheistic religions previously described, musical vision of the future is assigned only to certain talented individuals. <sup>44</sup> This is because a minister is understood to be one in a position of power over others. <sup>45</sup> Such a person, achieving this role through the rigorous practice of self-control, is said to have escaped the physical limitations of the world and can have access to knowledge of the future. <sup>46</sup>

It is also imperative that music be analyzed in the process of bringing newcomers into a religion for, according to James, knowledge of practices and doctrines may not be enough to win them over. It is usually experience which gives "dead feelings, dead ideas, and cold beliefs" the life needed to fill people with fascination and conviction. 47 With music being a captivating force that everyone can understand, it is natural that it may play a key part in establishing this experience and can thus be an effective vehicle for promoting change. Music has been a fundamental element of the Sikh religion from its inception when Guru Nanak, the founder of the faith, commonly shared his message through song. Many artistic representations of Nanak, an accomplished musician, depict him in the midst of a performance. According to his teachings, ritual was not a path to enlightenment; the answer lay in *nam simaran*, reflecting on the name and character of God, which would drive the soul towards peace and holiness. Believing that music was one of the best ways for listeners to remember God, Nanak not only used it as his main medium for conversion, but also

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<sup>43</sup> Glazerson, Matityahu. Music and Kabbalah. New Jersey: Jason Aronson Inc. 1996. Page 49.

<sup>44</sup> Glazerson, 49.

<sup>45</sup> Glazerson, 49.

<sup>46</sup> Glazerson, 50.

<sup>47</sup> James, 113.

encouraged it as part of daily prayers amongst followers. <sup>48</sup> In his words, "The singing of God's praises is the act of highest virtue" and it has been posited that no leader from any of the other world religions has ever placed such heavy emphasis on music like him. <sup>49</sup>

The powerful contribution of music to the field of preaching was also acknowledged by Martin Luther who said that "next to the Word of God, music deserves the highest praise." In contrast to the Roman Catholic Church which upheld the Mass as a display where the laity had almost no active role or even knowledge of what was going on, Luther promoted that Christianity should be comprehensible to all and that every believer was a priest who should be fully able to join in on rituals and celebrations. With that, he was quick to take popular folk tunes well known in his native Germany and turn their secular texts into holy proclamations. It was not right, as he reportedly put it, for the devil to own all of the good music. Such works and even compositions that he came up with himself were easily comprehended by listeners, making it easier to accept the new doctrines of the Protestant Reformation. Additionally, Luther encouraged singing in one's own language instead of the Latin used in Catholicism which many found to be mysterious. In his opinion, music was created by God and originally served the purpose of spreading the gospel. Mankind may have drifted away from this goal by using music simply for self-gratifying amusement but the

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<sup>48</sup> Warnock, Paul. "The Sikh Experience of Music" in *Journal of the Indian Musicological Society*, Volume 35. 2004. Page 51.

<sup>49</sup> Warnock, 52.

<sup>50</sup> Schwarz, Hans. "Martin Luther and Music" in *Lutheran Theological Journal*, Volume 39 No 2. 2005. Page 215.

<sup>51</sup> Schwarz, 212.

<sup>52</sup> Schwarz, 215.

<sup>53</sup> Darsey, Steven F. *The God of Abraham, Isaac, and Jacob: Music and Worship*. Oregon: Wipf and Stock Publishers. 2013. Page 66.

<sup>54</sup> Schwarz, 215.

divine elements of melody, harmony, and lyrics had not disappeared; it was now time to reclaim them. These tactics employed by Luther to make Christianity more accessible to the average person were effective means to attract new followers, no small feat for a religion that drew the ire of an entity as mighty as the Roman Catholic Church. Aside from shining light on concepts that had once been shrouded in obscurity, the social link which made worship more familiar and enjoyable was most definitely a factor in Protestantism's successful development.

In addition to drawing converts into a religious group, music can also serve as a valuable tool to maintain the unity of its members regardless of whether they were born into the faith or entered voluntarily. It is James' view that mankind's tribal instincts lie at the heart of religion and with music being a cultural norm that has been universally revered in societies, it can be further surmised that the repertoire of congregations is a central and energizing reminder of the journey which believers are taking together. In the act of chanting, the Buddha noted that communal participation was a useful way to avoid placing too much importance on individual voices as each person's self disappeared in the *Sangha* (community). Benkong's attitudes towards individual and group activity in his own life could be seen as a reflection of this principle. As he says, "I think when I'm with other people, it creates catharsis and it helps me focus more. I don't get distracted as much. It also relaxes me. It makes me calmer, I think because I can just go with the flow more than being forceful or focused on myself." Such a group ritual, in his opinion, is effective at establishing many of the feelings of enlightenment that take place: "They are attainable

<sup>55</sup> Schwarz, 215.

<sup>56</sup> James, 185.

<sup>57</sup> Williams, 186.

<sup>58</sup> Benkong.

without the use of music through realization and meditation and contemplation, but I think the music supports it or reaffirms it by creating that sense of catharsis with the group."<sup>59</sup> It can be inferred from such a notion that music, religion, and social contact are biological essentials that, when used together, can bring out some of our greatest emotions which can give communities the strength to move forward.

This building of communal strength and identity through religious music can be of great help when believers are faced with challenges that threaten their way of life. For example, one of the first accounts of Christianity coming from a non-Christian source is a letter from approximately 112 CE during a time of persecutions. In this letter, the Roman governor Pliny the Younger reports learning about Christians gathering illegally in the early morning hours to sing hymns "to Christ as if it were to God." Similarly, Ohadike writes that Africans have always used music and religion to combat all forms of oppression. Music and dance have close religious ties to life in Africa, especially the drums which, upon their creation, go through a ritual process of being initiated into a clan. Because of their indispensible status in society, these ritual drums have been used for political, social, and military mobilization against hostile forces ranging from the Atlantic slave traders to the laws of apartheid.

Aside from these more extreme cases, the communal side of religious music can be an important factor in the preservation of diaspora communities away from where their religions and other cultural markers originated. The resulting experiences may serve as important

59 Benkong.

<sup>60</sup> Hobbs, Gerald. "Christianity and Music" in *Sacred Sound: Experiencing Music in World Religions* edited by Beck, Guy L. Waterloo: Wilifrid Laurier University Press. 2006. Page 64.

<sup>61</sup> Ohadike, 2.

<sup>62</sup> Ohadike, 6.

connections that believers feel towards their homelands and people in addition to their higher powers and those of their present surroundings. In her studies of Hindu Trinidadians of Indian descent, Helen Myers reports that a large part of religious gatherings goes towards singing songs devoted to the spiritual master Sai Baba. 63 Such music has been praised for a variety of reasons that are common parts of religious experience such as happiness, excitement, or deep connection to God. <sup>64</sup> But on top of this, Myers points out that it was also a key part of a movement of the 1970s and 1980s in which Sai Baba became a representative against control of Indian communities by village pandits as well as a means to reduce the risk of total assimilation into Western culture. <sup>65</sup> Regula Qureshi additionally writes that Muslim immigrants in the United States and Canada hold it as a top goal to build communities of those of the same backgrounds. 66 One of the most popular ways to do this is the *milad*, a joyous get-together that takes place to mark auspicious events and includes the chanting of hymns. One of the features that makes this a unique event is that the recitation of these hymns is open to women and in many cases is led by them.<sup>67</sup> From this gathering comes the safeguarding of values amongst those far from home and perhaps with it a sense of pride and recognition amongst those whose public roles in Islamic rituals are traditionally limited.

One important idea that needs to be addressed when discussing the proclamation of religious ideology through music (whether this is to win over converts, maintain a community, or simply teach those who are unaware of it) is that sometimes the lines may be

63 Myers, Helen. *Music of Hindu Trinidad: Songs from the India Diaspora*. Illinois: University of Chicago Press. 1998. Page 342.

<sup>64</sup> Myers, 357.

<sup>65</sup> Myers, 359.

<sup>66</sup> Qureshi, Regula Burckhardt. "When Women Recite: 'Music' and the Islamic Immigrant Experience" in *Music in American Religious Experience* edited by Blumhoffer, Edith L.; Bohlman, Philip V.; Chow, Maria M. New York: Oxford University Press. 2006. Page 28.

<sup>67</sup> Qureshi, 26.

blurred between sacred repertoire and secular entertainment; musicians, even those claiming to be very religious, have often dealt with the skepticism of other believers based on their style of music, audiences, venue choices, or how much money and fame they personally garner from their work. The issue may never be settled, but it can certainly be argued that if reflection on a higher power is a chief goal of a piece, it is religious. Perhaps the most prominent demonstration of the blending of sacred and secular comes from George Frederic Handel. Having encountered condemnation from the Church of England for writing biblical dramas like Esther and Israel in Egypt that were performed in theatres, he found himself in 1741 burdened by debt and a failing career. All of this changed when he was given a libretto based on the life of Jesus as well as a commission to compose a piece for a benefit concert. <sup>68</sup> Although still harangued by religious leaders for presenting a sacred topic in a secular atmosphere, his resulting oratorio Messiah went on to become standard repertoire that to this day has had profound spiritual effects on countless people. <sup>69</sup> A writer has even proclaimed that Messiah "has probably done more to convince thousands of mankind that there is a God about us than all the theological works ever written." Handel, who did not leave his house for three weeks while composing and was found sobbing with emotion during the process, later paraphrased Saint Paul to describe the endeavor, saying, "Whether I was in the body or out of my body when I wrote it I know not." Upon being congratulated by a lord for the

<sup>68</sup> Kavanaugh, Patrick. Spiritual Lives of the Great Composers. Michigan: Zondervan Publishing House. 1992. Page 29.

<sup>69</sup> Kavanaugh, 30.

<sup>70</sup> Kavanaugh, 31.

<sup>71</sup> Kavanaugh, 30.

great "entertainment" of *Messiah's* London premier, he answered, "I should be sorry if I only entertain them. I wish to make them better."<sup>72</sup>

Stories like these are plentiful in today's age. Beginning in the late 1930s, gospel musicians such as Rosetta Tharpe and Mahalia Jackson began taking their repertoire to secular stages, much to the chagrin of many church-goers. The Jesus Movement of the late 1960s and early 1970s furthered the combination of popular culture and Christian messages, featuring the works of legends such as Larry Norman, Kris Kristofferson, and Johnny Cash. In spite of producing music that could certainly be listened to for entertainment, the primary reason for this mission was evangelization. Although it was acceptable to attract fans who were Christian already, it was much more important to use the experience of musical ecstasy to save "lost souls" from eternal damnation. The spirit of determination was especially empowered by the conversions of mainstream musicians such as Donna Summer and Peter Green of Fleetwood Mac. Thristian musicians have since adopted a variety of genres to fit their religious agenda. While their works have great appeal to those already in the fold, the evangelist drive of the Jesus Movement remains a compelling factor.

In Buddhism, Gyosen Asakura, a Japanese priest and former professional DJ, annually hosts an event at his temple in Fukui which features religious iconographies

<sup>72</sup> Kavanaugh, 31.

<sup>73</sup> Dowley, Tim. Christian Music: A Global History. Minnesota: Fortress Press. 2011. Page 227.

<sup>74</sup> Dowley, 232.

<sup>75</sup> Howard, Jay R. and Streck, John M. *Apostles of Rock: The Splintered World of Contemporary Christian Music*. Kentucky: University of Kentucky Press. 1999. Page 55.

<sup>76</sup> Howard, 57.

<sup>77</sup> Dowley, 232.

<sup>78</sup> Howard, 59.

projected in flashing lights and sutras fused to a techno beat. Having been upset at the decrease in Buddhism amongst Japanese youth, Asakura, claiming that priests are "publicity agents" for Buddha, has made it a mission to present attendees with a service that rekindles faith in the religion and also gives representations of paradise that Buddhism says lie in the afterlife. Asked for his opinion on such acts, Benkong says, "In Buddhism, even though we have our precepts, we have a set of precepts that means you need to adjust your precepts when you are amongst other cultures or when you are unable to follow them so it gives us the right to do that." The fact that Buddhist teaching is used to justify these shows is noteworthy since it demonstrates that those in favor of more unconventional musical-religious experiences can use their principles in their arguments just as much as opponents can. Thus, even if some believers dispute such innovative behavior, it can be supported by others whose interpretation of their religious teachings deem it completely acceptable.

Even religious musicians not focusing on proselytism have presented their works to the world. This may be to simply highlight how they are proud of their religion or prove that devotion does not have to stifle creativity. One such example is Matisyahu who for many years was a devout Hasidic Jew who fervently expressed his love of God and his Jewish identity through a mixture of rap and reggae, propelling him to international celebrity amongst Jews and non-Jews alike. Although coming from a nominally Jewish family and heavy involvement in the secular world, Matisyahu (born Matthew Paul Miller) gradually came to grow in piety, leading to him eventually join the Lubavitch Chabad movement, a sect of Hasidism that promotes spiritual and ritual growth amongst less observant and non-

<sup>79</sup> Hamahata, Tomoyuki. "Illuminating Buddhism in a High-Tech Light" in *Japan News/Asia News Network*. August 17, 2017.

observant Jews. <sup>81</sup> But the music he had grown up with in his youth was still as important to him as it was before and rather than abandoning it, he began crafting catchy tunes centered around Judaism. This culminated in award-winning albums, heavy radio airplay, and international touring. As he describes it:

Before I was religious, to me music was soul. I always had headphones everywhere I went, and I looked at the world through the lens of whatever CD I was listening to. In Judaism, there's another type of food for the soul, another type of spiritual sustenance that comes through the mitzvahs and Torah learning. In Judaism, praying and learning what you love to learn changes the lens that you have, without using something external. 82

Critics wondered if the Jewish motif was just a marketing ploy, but Matisyahu proved his religious sincerity with acts such as not performing on the Sabbath or touching female fans. <sup>83</sup> As a result, even stringent Orthodox Jews came to accept him. According to Sarah Imhoff, his style of performing was a reflection of the ideals around which Hasidism was originally founded - emphasis on the ecstatic experience of prayer rather than textual study. <sup>84</sup> But more than this, by extolling positive and ethical behavior, Matisyahu insists that his work can be spiritually relevant for anyone. <sup>85</sup>

It also needs to be considered that the experiences which listeners take from a song can sometimes be more of a deciding factor in its religiosity than the musician's feelings towards it or reason for writing it. Otto distinguishes between the numinous and a milder form of it, the magical. According to him, great art purifies the magical - so much that in

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<sup>81</sup> Imhoff, Sarah. "The Man in Black: Matisyahu, Identity, and Authenticity." Page 4.

<sup>82 &</sup>quot;Matisyahu: Very Old School" in Independent. April 23, 2006.

<sup>83</sup> Gitlin, Lauren. "Matisyahu Brings Kosher Vibration" in Rolling Stone. February 14, 2006.

<sup>84</sup> Imhoff, 8.

<sup>85</sup> Imhoff, 12.

time, we may be "confronted with the numinous itself." 86 With this in mind, it could be hypothesized that the religious character of a piece may take the aspects of entertainment and raise them to a level far more invigorating - far beyond what the creator may have originally intended. Such a concept can be applied to Norman Greenbaum's 1969 one-hit wonder Spirit in the Sky which offers the reassuring message that the souls of the dead will be taken by their friend Jesus to eternal happiness in Heaven. While it may be natural to think that it is a deeply intimate conception spawned from personal experiences and feelings, Greenbaum is actually Jewish and has never been a Christian. After watching a gospel performance on television, he reports, "I thought, 'Yeah, I could do that,' knowing nothing about gospel music, so I sat down and wrote my own gospel song. It came easy. I wrote the words in fifteen minutes."87 Today, Greenbaum is content that revenues from Spirit in the Sky (still being played in movies, commercials, and television shows) have made it unnecessary for him to work, but he also points out that its fans often take great spiritual consolation from it: "I get e-mails from 9- and 10-year-old kids who say it's their favorite song. I've gotten letters from funeral directors telling me that it's their second-most-requested song to play at memorial services, next to Danny Boy."88 When discussing the nature of this song, the conviction of these listeners who genuinely view it as promising a glorious afterlife can be much more useful in calling it religious as opposed to Greenbaum's indifference. The experiences of hope for themselves and their loved ones that Spirit in the Sky provides are crucial to keep in mind as talks on popular styles of religious music continue. This and songs of a similar background demonstrate that the effect of such music on listeners can be one of authentic passion towards their higher powers.

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<sup>86</sup> Otto, 67.

<sup>87</sup> McNichol, Tom. "A 'Spirit' From the '60s That Won't Die" in *The New York Times*. December 24, 2006. 88 McNichol.

While there any many artistic styles of expression available for believers around the world to show their thoughts and feelings towards the sacred, music has proven itself to be among the most priceless and enduring styles of establishing experiences that elevate us to new heights. Asked for his thoughts on such an idea, Benkong says, "It's basically attachment. When you hear music, you get a feeling. The feeling makes you feel good and you become attached to that feeling. And you want to hear the music over and over again to instill that." Interestingly, to elaborate on this, he chooses a story not from Buddhism, but from Christianity. Although raised as an atheist, the spirit of Christmas was always a festive time of celebration and the carols that he listens to on the radio every year are a moving way to reminisce with affection on times in which unity and care became especially pronounced values that are still a part of every Christmas season:

It sort of connects me to my childhood, feeling warm and toasty inside and remembering times past and feeling the pleasure of that time, of Christmas bringing life into the world, making people joyful, sharing gifts, a savior being born - somebody who is there totally to liberate you from suffering. So I get caught up in that and I enjoy it. I see it for what it is. I see it as reinstilling in me that feeling. <sup>90</sup>

The relationship between musical and religious experience is one affecting many parts of our being, sometimes - as Benkong demonstrates - even transcending boundaries between one religion and another. With the abilities of music and religion to inspire hope, bring back memories, unite individuals, and stir indescribable emotions, their combined influence has been a marvel that has affected how believers have conducted themselves, honored their higher powers, and kept their faith even in the darkest times. The repertoire of various religions and cultures may differ from one another as may doctrinal or individual views on what music means, but its use to enliven everything from public rituals to private prayers has been a constant throughout history. Working together with belief itself, such music has

89 Benkong.

90 Benkong.

acquired a level of sanctity that has often been seen as essential to the religious experience. It has stood the test of time as a part of life capable of making ineradicable changes.

## <u>Section Two: Religious Experiences Caused by</u> Secular Music

"Music is my religion."<sup>1</sup>

- Jimi Hendrix

The use of music in religious observances has long played a part in the creation of experiences of utmost holiness and sanctity as described in section one, yet it should not be forgotten that music without religious content can be just as eloquent. This could in fact be to the point where those drawn in by it may feel the same uplift of a religious episode, perhaps with the belief that such repertoire has led them to a higher power. Even some of the most celebrated musicians in history have known of the spiritual nature permeating through nonreligious works. The sheet music of Ludwig van Beethoven's String Quartet no. 15 has written on it, "Song of Thanksgiving to God on the recovery from an illness, in the Lydian mode" while sketches of the *Pastoral Symphony* contain, "Oh Lord, we thank thee."<sup>2</sup> Likewise, Igor Stravinsky, who attributed God to his innovative Neoclassical style of composing, concludes in his discourse *The Poetics of Music* that "music comes to reveal itself as a form of communion with our fellow man - and with the Supreme Being." Such cases serve as demonstrations that the relationship between musical and religious experience is a close connection that need not be impaired by a piece's secular character. Music and religion have the power to move us to our core, not only providing new perspectives of yesterday and today, but a hope for a better tomorrow. And it is for this reason that both of these

<sup>1</sup> Ogunjobi, Rotimi. The Essential Jimi Hendrix. Warwickshire: Tee Publishing. 2006. Page 4.

<sup>2</sup> Kavanaugh, Patrick. *Spiritual Lives of the Great Composers*. Michigan: Zondervan Publishing House. 1992. Page 60.

<sup>3</sup> Kavanaugh, 191.

phenomena have been deep-seated in our societies regardless of their characteristics or what they may be encountering. To help understand why the effects of secular music are often described using religious terms, this section will focus on the importance of rhythm, lyrics, and communal listening, all of which have consistently been reported as having major impacts on the lives of many. While traditional styles of worship and prayers may not seem suitable for many people, the search for the same experiences of ecstasy, clarity, or strength often provided by faith may continue to linger. At this time, secular music may become a fitting substitute that can propel performers and listeners to sentiments that in their views match those experienced by the firmest religious believers.

There are many theories currently offered by members of religious, musical, and academic communities to explain secular music's ability to generate religious experiences. In all, it appears that it is how strongly we relate to it that determines this. Our reactions to a piece of music or for that matter, a prayer, religious text, or ritual may not always be consistent and no reactions between two people will ever be exactly the same. Instead, our backgrounds as well as what is presently going on in our lives or thoughts can alter how it makes us feel. As Ernest Bloch puts it, like a religious text or ritual, it is not the music itself, but rather our perceptions of it that make it precious to us. The repertoire is merely a means to an experience; we alone "allow it to be animated with our life." A factor that has often been cited as an important part of a secular music experience is rhythm, a captivating force in both religious and musical practices. This can provide a clue as to how listeners can be profoundly touched by music without paying attention to the lyrics or even if it has no lyrics at all. Eugene D'Aquili and Andrew Newberg point out that rhythmic repetitiveness of structured religious ritual can synchronize experiences that provide a sense of wholeness for

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<sup>4</sup> Bloch, Ernest. Essays on the Philosophy of Music. New York: Cambridge University Press. 1985. Page 93.

individuals and unity amongst groups. This harmonious atmosphere appears to begin with a stimulation of the autonomic nervous system which activates higher structures in the brain stem, midbrain, and cerebral cortex.<sup>5</sup> As a result, neuronal rhythms produce a pleasurable experience that many believers say they cannot describe. It is feasible that this is also the process that takes place when one is absorbed in the rhythm of music as will be discussed in part three of this work.<sup>6</sup>

One who knows much of the life-altering impacts of religion and spirituality as well as music is Jan Lauren Greenfield, a New York mixed media artist who credits the rhythm of a secular song with helping her through a time of personal crisis. Having been admitted to a psychiatric ward with bipolar disorder, she found herself frightened in constricting and unfamiliar surroundings with strangers suffering from a variety of illnesses. But during a music therapy class, she heard the beckoning call of *Living for the City* by Stevie Wonder, producing an effect which she describes as a miraculous:

The experience of the music was able to open a doorway or a gateway whether in the mind or the heart or to a place that was beyond just the physical space that we were in. So I think in that way, it was very literally a transcendental experience in that I was able to transcend the physical environment that I was in, the limitations of that environment. I think that in itself is a miracle. Miracles aren't parting the Red Sea. Sure that's great, but a miracle can be just a shift in perception. I think we underestimate the amount of miracles or the size or the capacity.<sup>7</sup>

Sitting in a circle with the others, moving their bodies to the music as they saw fit, Greenfield believes it was the rhythm of the song that was able to establish the experience more so than anything else:

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<sup>5</sup> D'Aquili, Eugene and Newberg, Andrew. *The Mystical Mind: Probing the Biology of Religious Experience*. Minnesota: Fortress Press. 1999. Page 99.

<sup>6</sup> Newberg, Andrew. Principles of Neurotheology. Vermont: Ashgate. 2010. Page 160.

<sup>7</sup> Greenfield, Jan Lauren. Interviewed by Richard Cezar. New York, NY. September 14, 2018.

It opens with this beat and I think that's probably the most powerful. We talk about the heart with the rhythm in ecstatic experience, in group experiences whether it's with the drum or the shaman or if it's in pop music. That music, that rhythm, that beat will sort of automatically connect to our humanness. So I think that song - not consciously, I didn't know what was happening - I think it hits on that level.<sup>8</sup>

Such a quote suggests that the feelings described by D'Aquili and Newberg in response to neuronal rhythms could be applicable to musical situations just as much as religious ones.

Just as religious experiences are often described as deeply personal and overwhelming, this event was one that also had the ability to establish an atmosphere of awe-inspiring bliss.

Although Greenfield suspects that she had heard *Living for the City* prior to her hospital stay, she says that "it was the first time I heard that song for real."<sup>9</sup>

To further exemplify the power of rhythm, Robin Sylvan discusses how beat is the central component to house, rave, and electronic dance music since it provides a "rhythmic anchor" which people can latch onto and around which they can base their movements. <sup>10</sup> To him, this is key in the musical-religious experiences of those who take to the dance floor, often describing such events in a way paralleling talks of religious overtake. A San Francisco raver reports, "It transports you. The volume, the sheer volume of the music, and just the repetitiveness of it is hypnotic. You're dancing, you're moving in time to the music and, after a while, you don't know what your body is doing." Another says, "The music definitely definitely caters to this trance, trying to put your mind into it. When it starts getting these regularly looping patterns, it goes into a state which is kind of hard to describe." <sup>12</sup> Also,

9 Greenfield.

12 Sylvan, 127.

<sup>8</sup> Greenfield.

<sup>10</sup> Sylvan, Robin. *Traces of the Spirit: The Religious Dimensions of Popular Music*. New York: New York University Press. 2002. Page 119.

<sup>11</sup> Sylvan, 127.

Neil Leonard brings up documented reactions to jazz in its earliest days and the belief that its rhythms could tap into listeners' basic instincts and fully engulf them. As a music critic described, "You simply can't resist it. I felt my blood thumping in tune, my muscles twitching with the rhythm." Leonard highlights that even those who looked upon jazz negatively because of this ability were clearly aware of the transformations that could arise; a respected New York physician claimed that because of jazz, "reason and reflection are lost and actions of persons are directed by the strong animal passions."

According to Sylvan, African possession music (from which modern styles of music, including jazz and electronic, originate) holds the rhythm of the drums as supremely important. It is through this mode that the spirits of deities are said to take full control of practitioners. In his opinion, the emphasis put on rhythm in secular styles of music stems from Africa where it served a distinctly religious function. <sup>15</sup> Robert Jourdain writes that while we may respond to musical stimuli with movements such as foot-tapping or rocking back and forth, these actions actually come from rhythm's neural rather than bodily influences. This is because it appeals to the brain's "body clocks" which are naturally set up to time our biological processes. <sup>16</sup> One of these is the interval clock which manufactures a wide range of pulses. <sup>17</sup> Even those of the ancient world showed awareness of this as demonstrated by Plato's observation that "rhythm comes from the mind and not from the body." <sup>18</sup> It is therefore

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<sup>13</sup> Leonard, Neil. Jazz: Myth and Religion. New York: Oxford University Press. 1987. Page 15.

<sup>14</sup> Leonard, 11.

<sup>15</sup> Sylvan, 127.

<sup>16</sup> Jourdain, Robert. *Music, the Brain, and Ecstasy: How Music Captures our Imagination*. South Carolina: Quill. 1997. Page 147.

<sup>17</sup> Jourdain, 148.

<sup>18</sup> Jourdain, 147.

possible that whether in a religious or secular setting, the brain's thirst for rhythm is so ingrained in our biological makeup that for us to become enveloped in it is one of the strongest experiences that we can feel. Serving as a vehicle to establish this, music is thus held in high regard by the sacred and secular worlds alike.

A strong demonstration of the experiences that can occur from wordless repertoire comes from the renowned guitar solo *For the Love of God* by virtuoso Steve Vai. This is especially because it was his goal to instill a spiritual aura in listeners through music alone. Although most of Vai's work is instrumental with little or no lyrics, *For the Love of God* has stood out as his crowning achievement that takes us on a "progressive journey through a symbolized representation of religion." Having written it four days into a ten day fast, Vai says of the process, "I do try to push myself into relatively altered states of consciousness. Because in those states you can come up with things that are unique - even for yourself." Jourdain posits that in all of human endeavors, our greatest respect is given to works that build the deepest hierarchies and in the world of art, such creations make us aware of relations far beyond normal comprehension. Musically, this is accomplished through the use of impeccable phrasing and structure laid out by the rhythm and *For the Love of God* greatly reflects such an idea. While the bass and drums remain consistent throughout the duration, the guitar embarks on an amazing and unpredictable course consisting of several techniques played at tempos ranging from slow and calming to chaotically fast. Vai reports:

The song is about how far people will go for the love of their god. When you discipline yourself to quit smoking, run faster, or play better, you have to reach deep down into a part of you. That is a profoundly spiritual event. That's when you come

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19 Fanelli, Damian. "Hear Steve Vai's Isolated Guitar from For the Love of God" in Guitar Player. March 29,

<sup>20</sup> Fanelli.

<sup>21</sup> Jourdain, 133.

into contact with that little piece of God within you. That's what I was trying to achieve with *For the Love of God* - I was trying to find that spot.<sup>22</sup>

Vast rhythmic differences are a major factor in this musical-religious experience generated by *For the Love of God* and provide evidence for Jourdain's assertion that maximum effect amongst listeners is gained through interweaving tensions created by using different musical methods. <sup>23</sup> With its peaceful beginning, Vai establishes his belief in the positive influence that religion is supposed to have on mankind. Yet as it spirals into deep confusion, he represents the perils of religious extremism that lead to hate and persecution. Finally, he returns to a serene state of reflection. Vai says that this irony is what he wished to capture how one of the most soothing parts of life can be manipulated into something so terrible. <sup>24</sup>

Furthermore, D'Aquili and Newberg hypothesize that slow religious rituals like chanting or meditation can bring the brain into a state of "quiescent breakthrough" in which the hippocampus is activated to produce a dreamlike state of unity. <sup>25</sup> But this reaction can also be sparked by the chaotic tempo of religious rituals like Sufi dancing or voodoo frenzies that stimulate the arousal system and allow for a breakthrough to occur. <sup>26</sup> Believers in such states may report hyperlucid hallucinations or mystical visions and the rituals that helped them get there are often slowly increased, protracted, and physically vigorous. <sup>27</sup> The musical development of *For the Love God* can be compared to such rituals since it also involves a path of growing complexity and stress that eventually culminates in a spiritual awakening. In

22 Fanelli.

23 Jourdain, 134.

24 Fanelli.

25 D'Aquili, 100.

26 D'Aquili, 99.

27 D'Aquili, 99.

being able to do so without words, it gives strong support to the notion that the rhythm of music can wrap listeners up in the same sort of fervor as an actual religious activity.

Also important in this study of secular music are the lyrics which can play the same sort of roles as the sacred scriptures, stories, and sayings found in the world's religions. While such religious transmissions give instruction on how to live, they can also provide positive emotions such as resilience, gratitude, and peace in a world that is often frightening and horribly unfair. While believers may feel a sense of meaning or purpose from the idea that they are under the care of a higher power, lyrics to secular songs can produce similar effects as listeners feel that such words reflect their identity or the idea that another person understands their situations. To Greenfield, one of the most eloquent parts of music is the honesty of it, including the lyrics, which often results in an uplifting experience:

I can hear a song or I can hear someone play something and it doesn't have to be the most beautiful voice or even that polished just when it comes straight from the heart. If you're acting, you're putting on a layer. When it's music, it's just like a direct explosion of that emotion unfiltered, unmasked.<sup>28</sup>

The idea of transcendence through the eloquence of lyrics is addressed by Don H. Compier who writes that the words of the Beatles drew his attention more than those of any other musicians. This deep conversation between artist and listener during the 1960s turned into what Compier calls a "global community" shining with a "grace-filled quality" far beyond that of language, nationality, race, gender, ideology, and age. <sup>29</sup> This was a foretaste, as he saw it, of Revelation 5:9 in which every tribe of the world is gathered together and because of this, a factor in the strengthening of his Christian faith. <sup>30</sup> Alan Merriam writes that lyrics possess a distinct form with a special significance and ability to function in a way different

<sup>28</sup> Greenfield.

<sup>29</sup> Compier, Don H. Listening to Popular Music. Minnesota: Fortress Press. 2013. Page 26.

<sup>30</sup> Compier, 27.

from words without music.<sup>31</sup> Also, the language is often more permissive than in regular dialogue, allowing for the expression of information not easily accessible. Because of this, they can reveal important values or goals of an individual or society and their psychological processes.<sup>32</sup> Such an analysis can be applied to Compier's argument that the human affection portrayed in songs like *From Me to You* and *All You Need is Love* can be thought of as a reminder of something much greater - the perfect love of God "that lies at the very heart of reality."<sup>33</sup> These works can even be seen as comparable to the writings of Christian mystics who have used romantic metaphors to describe God's call to the souls of the world and the joy of accepting it.<sup>34</sup>

According to John Michael Spencer, anything that can provide an inclination of a brighter future can produce the same hope generated by a religious text and musical lyrics are of course no exception. Spencer discusses the dilemmas of African Americans of the Jim Crow years facing life-threatening racism in their communities and a legal system set up in the obvious favor of whites.<sup>35</sup> During these troubling times, the blues served as a vital coping mechanism used to express core beliefs and attitudes of a society searching not only for answers but freedom from pain.<sup>36</sup> Spencer even writes that this was a secular spillover from the theological messages that had been taught in church.<sup>37</sup> In his view, the Great Black Migration of the early 1900s was seen by African Americans in search of a better life as an

<sup>31</sup> Merriam, Alan. The Anthropology of Music. Illinois: Northwestern University Press. 1964. Page 190.

<sup>32</sup> Merriam, 27.

<sup>33</sup> Compier, 27.

<sup>34</sup> Compier, 27.

<sup>35</sup> Spencer, John Michael. *Theological Music*. New York: Greenwood Press. 1991. Page 73.

<sup>36</sup> Spencer, 44.

<sup>37</sup> Spencer, 31.

exodus from the South in the same vein as the Jewish flight from Egypt. Thus, just as sacredness was attached to the event itself, so was it attached to songs like *Jim Crow Blues* by Cow Cow Davenport which boldly declares, "I'm tired of this Jim Crow, gonna leave this Jim Crow town, Doggone my black soul, I'm sweet Chicago bound." <sup>38</sup>

Another example of music providing hope in a world gone mad comes from Moe Hamzeh, a Lebanese musician who grew up dealing with the unrest of his country's civil war.<sup>39</sup> Hamzeh states that aside from having to witness the brutality of violence, the youth of Lebanon were taught to differentiate between religions and ethnicities and to take sides either for or against them. But he acknowledges that through his musical tastes, he came to question the ideologies that had been thrust upon him by society and see that there were more commonalities than differences between himself and those he had been taught to hate. Especially important in this realization was Bob Marley's *Redemption Song* which Hamzeh says was a great source of optimism because of its call for change.<sup>40</sup> A line that exemplifies this outlook is Marley's message, "Emancipate yourselves from mental slavery, none but ourselves can free our minds." These words, described by Bono of U2 as a "prophetic utterance," remind us of all that can be gained by those who stand up for what is right.<sup>42</sup> Interestingly, the line is actually taken from a 1937 speech at Saint Philip's African Orthodox Church in Nova Scotia given by black nationalist Marcus Garvey who is hailed as a prophet

<sup>38</sup> Spencer, 73.

<sup>39</sup> Levine, Mark. *Heavy Metal Islam: Rock, Resistance, and the Struggle for the Soul of Islam.* New York: Three Rivers Press. 2008. Page 146.

<sup>40</sup> Levine, 150.

<sup>41</sup> Henke, James. Marley Legends. California: Chronicle Books. 2006. Page 57.

<sup>42</sup> Henke, 57.

in the Rastafarian religion. <sup>43</sup> According to Christopher Partridge, reggae ultimately serves as a remembrance of the dark times in African American history and the ramifications present today because of it. <sup>44</sup> A downtrodden mentality amongst many African Americans is certainly one of these results, but whether or not *Redemption Song's* lyrics are aimed specifically at them, Hamzeh's situation shows that musical-religious experiences do not need to be limited to any group in particular and that anyone can benefit from heeding the call.

A vital method for bringing about a musical-religious experience through lyrics is the insertion of theological aspects into the repertoire even if it is secular overall. Many musicians have performed popular styles of music to the public with the purpose of gaining converts to a religion, maintaining devotion to it, or - at bare minimum - making it known to those who are not familiar. But even though a song's purpose may not be proselytism or anything like it, it is not to say that musicians keep their works free from religious terms or ideas. On the contrary, this technique has been a part of many songs for a variety of reasons like getting listeners to reflect on a deep concept or for artists to express their own views on religion. Michael Gilmour writes that religious language in a song can be meaningful, beautiful, and consoling even without a spiritual object - similar to how reading the Bible is a significant part of many weddings and funerals even if the majority of people involved are not particularly religious. From this, regardless of the performer or listener's faiths, the profundity of a religious idea when mixed with the power of music can play a major role in the following emotions. These depictions may sometimes challenge traditional beliefs that have long been held dear but can still find a dedicated audience if done with sincerity.

<sup>43</sup> Smith, M.G.; Augier, Roy; Nettleford, Rex. "The Rastafari Movement in Kingston, Jamaica, Part 1" in *Caribbean Quarterly*, Volume 13 No 3. 1967. Page 5.

<sup>44</sup> Partridge, Christopher. *The Lyre of Orpheus: Popular Music, the Sacred, and the Profane*. New York: Oxford University Press. 2013. Page 219.

<sup>45</sup> Gilmour, Michael J. *Gods and Guitars: Seeking the Sacred in Post-1960s Popular Music.* Texas: Baylor University Press. 2009. Page 72.

One example of this emerged in 1989 as Madonna struggled with issues such as her divorce, family, and Catholic background. Reflecting on past diary entries, she started out on a song addressing these thoughts that she never meant to share with the world. 46 What came of this was the highly controversial Like a Prayer featuring the angelic (but also sexuallycharged) sounds of a gospel choir as Madonna ambiguously uses religious rhetoric to sing of her devotion to a mysterious figure - perhaps God, but also perhaps a lover. 47 Andrew Greeley describes the song as within the tradition of "erotic mystical discourse" as Madonna transcends the Catholic guilt of her past and even evokes the same themes of the Song of Songs. 48 Madonna asserts, "It's from my heart. It's a very spiritual song. I think I was more spiritually in touch with the power of the words and music by the time I started recording."<sup>49</sup> In more recent times, Hozier's 2013 smash hit Take Me to Church tells the story of a man who compares his partner to a religion in order to express the singer's frustrated opinion that his native Ireland is dominated by the anti-homosexual repression of Catholicism. <sup>50</sup> Hozier maintains though that he is more of agnostic than an atheist and this is not an attack on faith itself.<sup>51</sup> He says, "I've always struggled with the idea of, I suppose, God. Like everyone. The song is less about God and more about what people say about God, and how people use God

<sup>46</sup> Taraborrelli, J. Randy. Madonna: An Intimate Biography. New York: Simon & Schuster. 2001. Page 161.

<sup>47</sup> Tarborrelli, 162.

<sup>48</sup> Epstein, Heidi. Melting the Venusberg: A Feminist Theology of Music. New York: Continuum. 2004. Page 91.

<sup>49</sup> Rosen, Craig. *The Billboard Book of Number One Albums: The Inside Story of Pop Music's Blockbuster Records*. Virginia: Billboard Books. 1996. Page 329.

<sup>50</sup> Patch, Nick. "Hozier Says He Hasn't Faced a Backlash to his Tune *Take Me to Church*" in *The Canadian Press*. February 6, 2015.

<sup>51</sup> Greene, Andy. "Behind Hozier's Unlikely Rise: Meet the Singer Behind the Smash  $\it Take Me to Church"$  in  $\it Rolling Stone$ . January 29, 2015.

to justify treatment of people."<sup>52</sup> He reports that in spite of some backlash, the overwhelming majority of listeners do understand this sentiment that he was trying to create.<sup>53</sup>

Additionally, one of the most passionate reasons for which people cry out to a higher power is to cope with the realities of suffering and death and the music of inner cities has demonstrated an especially keen awareness of how either can strike at any time. Indeed, some of the most moving songs that have arisen out of such dire states have addressed the agonies of violence and strife from a religious perspective - topics that will greatly impact listeners who have firsthand knowledge of these situations. Faced with disproportionately high levels of homicide, suicide, drug abuse, police brutality, and disease, many rappers since the 1990s have grieved through "requiem rap" according to Ebony A Utley. <sup>54</sup> For example, Joe Budden's song Ventilation discusses seeing a friend in a casket, deciding to kneel and pray for him, and then realizing that the only times he has ever prayed were when he was in need.<sup>55</sup> Similarly, in *Dear God 2.0*, Black Thought of the Roots asks God why the world is so ugly when it was made in His image and in Many Men, 50 Cent professes that he knows God is looking after him, but has to keep a gun close just in case. <sup>56</sup> Protection after death is also a common theme in rap and Utley writes that Now I Lay Me Down to Sleep is a prayer which has been frequently sampled by rappers such as Kid Cudi, Lil Wayne, Common, Tupac Shakur, Norega, Snoop Dogg, and Master P. This prayer does not require an in-depth understanding of religion or a religious affiliation and is also one that many have heard in childhood. Those who were not taught other prayers as they grew older often resort to those

<sup>52</sup> Patch.

<sup>53</sup> Patch.

<sup>54</sup> Utley, Ebony A. Rap and Religion: Understanding the Gangsta's God. California: Praeger. 2012. Page 18.

<sup>55</sup> Utley, 18.

<sup>56</sup> Utley, 19.

of their youth which can make this one very persuasive in a rap song since it brings the comfort of a familiar God in the face of trauma. <sup>57</sup> The use of religion to describe death and hardship (especially in the cities) is not entirely new nor limited to the world of rap. In 1970, Black Sabbath released its historical *War Pigs* in which Ozzy Osbourne sings about the military industrial complex of the Vietnam era which profited at the expense of working class populations in Britain and the United States. <sup>58</sup> As these "sorcerers" wage war as they please, the poor are sent out to suffer the actual effects of it. <sup>59</sup> However, the song concludes with a warning that on the Day of Judgment, the war pigs will beg for forgiveness before God, but be delivered over to Satan. <sup>60</sup> This and other early metal songs like it resonated powerfully with young people of the time whose encounters with economic problems often resulted in drug and alcohol addictions. <sup>61</sup>

Other than providing thought-provoking points of introspection, both religion and music can promote their followers to take part in something bigger than themselves such as living in accordance with a deity's mandates or joining a cause. Naturally, a combination of the two can be used to foster this sort of drive. As Don E. Saliers writes, "Human song that arises from a paradoxical world of beauty, injustice, and human suffering is intrinsically theological. Singing has always been at the heart of social and political movements." One example of how religious language in a secular song can spark action is Michael Jackson and

<sup>57</sup> Utley, 18.

<sup>58</sup> Levine, 11.

<sup>59</sup> Irwin, William. *Black Sabbath & Philosophy: Mastering Reality*. New Jersey: John Wiley & Sons. 2012. Page 180.

<sup>60</sup> Irwin, 180.

<sup>61</sup> Levine, 11.

<sup>62</sup> Saliers, Don E. Music and Theology. Tennessee: Abingdon Press. 2007. Page iii.

Lionel Richie's *We are the World* which was written to raise money for famine relief. The song contains a line stating that humanity must help one another as "God has shown us by turning stones into bread." Thus, asides from the splendor of the song itself, listeners are inspired to help others as it is a sacred responsibility. 64

Also, outside of the Western world is *Marhaba* (Arabic for "Welcome"), a fusion of rap, funk, hard rock, and a variety of Middle Eastern musical styles. <sup>65</sup> Its lyrics discuss the problems of societies cut off from democracy and according to Reda Zine, one of the artists behind the song, its ultimate goal is to establish a "virtual agora." <sup>66</sup> This is a space of communication and cooperation (be it in a secret location or on the Internet) where musicians, religious activists, bloggers, and others can enter into dialogue with each other. <sup>67</sup> Such an agora is especially important not only in Middle Eastern countries where oppressive governments ban public expression, but also in Western areas where Muslims are harassed or discriminated against because of their beliefs. It is a strong counter to the humiliation and hopelessness that drive many young Muslims today to religious extremism or terrorism. <sup>68</sup> But aside from this political message, *Marhaba* has also been hailed as "deeply religious" as the refrain of the song is a call of welcome to a Sufi saint who enters into the presence of his devotees. <sup>69</sup> In fact, Zine reports that its inception began after fasting on the first day of

<sup>63</sup> Gilmour, 75.

<sup>64</sup> Gilmour, 75.

<sup>65</sup> Levine, 16.

<sup>66</sup> Levine, 17.

<sup>67</sup> Levine, 17.

<sup>68</sup> Levine, 18.

<sup>69</sup> Levine, 17.

Ramadan.<sup>70</sup> Therefore, while the song can influence anyone who deals with social inequality, it might have an especially strong connotation to Muslims not only because they are familiar with the situations discussed, but because the spirit which is addressed is one of their own religion. The desire to improve society as the song suggests may potentially be more prominent because of this.

An important idea to keep in mind when discussing either lyrics or the music itself is that the perceptions of both can change over the course of time. Because of this, repertoire can become much more or less of a spiritual experience depending on how performers and listeners are personally developing in their lives. According to David Nantais, a former Jesuit, our musical experiences can always evolve through repetition. In his view, music-lovers often replay what they find beautiful or consoling and as this happens, it begins to absorb into their "autobiographical musical soundtrack." Music or lyrics become linked with life events, making us more aware of our thoughts and emotions. Greenfield, although claiming that replaying *Living for the City* has not made her able to recreate the same effects that she experienced in the hospital, believes this notion can be seen with other repertoire that she finds special:

I think Bob Dylan is probably the best example of that for me, because he is such a narrative poet. In terms of lyrics, for sure. I've found that every stage of life, he's got an album for or I'll go back and listen - I just listened to *Abandoned Love* and thought, "Oh, that has a whole new meaning to me."<sup>73</sup>

70 Levine, 16.

72 Nantais, 67.

73 Greenfield.

<sup>71</sup> Nantais, David. *Rock-A My Soul: An Invitation to Rock Your Religion*. Minnesota: Liturgical Press. 2011. Page 67.

Nantais likens this to Saint Ignatius Loyola's *Spiritual Exercises*, a manual of prayer directives and advice to help Catholics improve their spiritual lives.<sup>74</sup> Ignatius places great emphasis on repetition in his work which Nantais stresses does not imply mindlessly saying something over and over again, but rather contemplating a prayer or idea - engaging or even wrestling with it until it penetrates the soul.<sup>75</sup> As this experience take places, all aspects of the psyche are affected from thoughts to impulses to moods and Ignatius says that this response is necessary. In fact, prayers that go on without emotion should be cause for concern that they are not being done correctly.<sup>76</sup> Our musical growth over the course of time is just as subject to these changes as our spirituality. As Greenfield has shown, secular repertoire to which we frequently listen can acquire new levels of vibrancy as we apply them to new ways of thinking, behaving, and experiencing the world.

Finally, it should be considered that the musical-religious experiences felt by performers and listeners need not be completely limited to the music, but a number of factors that are occurring at the time it is being played. Many scholars have cited the importance of enjoying music in a communal setting, particularly concerts, stating that the effect is amplified by bonding with other people, similar to the bonds of religious communities that section one addressed. Reflecting on the hospital, Greenfield believes that her musical-religious experience would have been attainable even if she had been on her own, but notes the beauty of observing the actions of those with her:

I can remember seeing other people dancing and it was like we were all dancing alone in our living room. It was that carefree. There was just no self-consciousness. I was

74 Nantais, 61.

75 Nantais, 65.

76 Nantais, 70.

aware that other people were doing it and having those moments too. Just joy with themselves and that's how I was. <sup>77</sup>

Such an event did seem to have religious overtones to it - "If you looked at the scene from above, it definitely could have looked like a church group." To Charles Taylor, concerts have a modern day religious significance to them as mankind has always longed for revelry or as he calls it, "the festive." Throughout history, religious gatherings of many kinds have been jovial social events with just as much emphasis on entertainment as the reason for the occasion itself. As an example of how strong this wish for a good time can be, Taylor points out how Christian reformers throughout the Middle Ages and beyond tried to repress many of the activities that went along with religious events, but were unsuccessful. This atmosphere of communal happiness at concerts is very much in the same spirit of many of these believers brought together under religious contexts while enjoying the event.

On a neurological level, Newberg stresses that the brain seems to have an inherent desire to fit in and one of the most significant modes of accomplishing this is through mirror neurons which help us to mimic the behavior of those nearby. Being in a situation where this is not achievable can lead to depression, anxiety, and feelings of imminent danger. Newberg's research into this field has led to his opinion that this biological motivation can be behind the great feelings of harmony that come from public religious acts, but it can also be applied to those together in a musical setting. Judith Becker further suggests that the brain

77 Greenfield.

78 Greenfield.

79 Taylor, Charles. A Secular Age. Massachusetts: Harvard University Press. 2007. Page 517.

80 Taylor, 517.

81 Newberg, 80.

gravitates towards rhythmic entrainment, the synchronization of independent entities. <sup>82</sup> She maintains that large groups moving in similar ways thanks to rhythmic entrainment are a prime catalyst for a musical-religious experience. <sup>83</sup> For not only do we feel emotions from the music, but also the act of being united with others - a great source of satisfaction to our basic instincts. <sup>84</sup> An experiment conducted by Becker involved a group of Pentecostals who were studied while listening to music in their church as well as alone in an office. The results showed more of an increase in emotional arousal in the church, providing indication that group connection is a part of who we are and why a group musical event can be so incredible whether it is religious or secular. <sup>85</sup>

Along with the bonding of those in the audience, another aspect to consider at a live event is the role of the performer whose abilities, according to Leonard, resemble those of the shaman whose place in society dates back to paleolithic times. The key powers of this religious leader, still valued in hunting and food-gathering communities, are to evoke elation in followers and communicate with the gods. Reonard confirms that a semblance of this sort of relationship can be seen at a concert by describing King Oliver's 1923 performance in Chicago where visiting musicians onstage with him looked on in fascination and "entranced dancers performed Dionysian gyrations" behind him. It is apparent that depictions such as these are alive and well in the musical situations of today. Sylvan says that MCs who initiate

82 Becker, Judith. *Deep Listeners: Music, Emotion, and Trancing*. Indiana: Indiana University Press. 2004. Page 127.

<sup>83</sup> Becker, Judith. "Rhythmic Entrainment and Evolution" in *Music, Science, and the Rhythmic Brain: Cultural and Clinical Applications* edited by Berger, Jonathan and Turow, Gabe. New York: Routledge. 2012. Page 49.

<sup>84</sup> Becker, "Entrainment," 66.

<sup>85</sup> Becker, "Entrainment," 63.

<sup>86</sup> Leonard, 35.

<sup>87</sup> Leonard, 36.

call and response dialogue between themselves and the crowd at rap concerts establish feelings of ecstasy that resemble African American churches led by charismatic ministers. Ralso, DJs who oversee raves put great care and meticulous work into creating "peaks" throughout the course of the show where the energy of the crowd and the music builds up to a maximal point where bliss is at its highest levels. Many DJs have even said that as they perform, they feel that they have lost total control of themselves and are being guided by holy forces using them to project a message out into the world. The renowned DJ Frankie Knuckles, known as the "Godfather of House," compares his craft to a church service because of the personalities that join together into one in a dynamic similar to worship.

According to Max Weber, the "exemplary prophet" is one who preaches by personal example so that others can obtain salvation by acting in the same way. <sup>92</sup> Leonard believes that musicians who capture their audiences can be compared to these prophets who, like the shaman, have been given magical powers from the divine and are allowed to convey a sacred message through fascinating displays. <sup>93</sup> There are no demands placed on those who pay attention; it is more of an inspirational model serving as a vessel for a higher power to appeal to those seeking religiosity. <sup>94</sup> It can be inferred that the ideas of rhythmic entrainment and mirror neurons that are said to hold together the audiences at concerts also apply to the relationship between performers and listeners. Thus, we can hypothesize that the command of

<sup>88</sup> Sylvan, 207.

<sup>89</sup> Sylvan, 128.

<sup>90</sup> Sylvan, 130.

<sup>91</sup> Sylvan, 120.

<sup>92</sup> Weber, Max. The Sociology of Religion. Massachusetts: Beacon Press. 1963. Page 55.

<sup>93</sup> Leonard, 36.

a musical leader who captivates us and raises us to higher levels is much more effective when we are in the same physical space.

As devotion to the cultural heroes of music develops in society, followers joined in their thoughts and feelings tend to formulate subcultures that center around their idols and the music they produce. In such groups, there may not only be unity in the choice of music, but in life philosophies leading to a conformity of dress, mannerisms, language, or even with whom one associates. The feeling of inclusion can be a great confidence boost to those involved in a musical subculture. Even though it can be well-maintained on one's own (especially now that the Internet and other forms of mass media are so readily available), to be with others who share a similar lifestyle in a communal setting like a concert may be perhaps the greatest validation to one's entire existence. Sylvan theorizes that this is possibly the highest form of musical ritual in which followers come together to rejoice in the sounds and also celebrate the connection to a world where they feel they belong. <sup>95</sup> All of this can be easily paralleled to a religion in which believers feel transcendence through their faith in a higher power and also validation that there are others like them.

This draw to a musical subculture can be particularly compelling to teenagers who are, as Sylvan says, in one of the most important transition stages of their lives and normally go through some sort of rite of passage in which they transform into adults. <sup>96</sup> During this time, they may enter into a temporary alternative community described by Victor Turner as a "communitas" which develops their social identities. <sup>97</sup> Fuelled by hormones and a growing

94 Leonard, 37.

95 Sylvan, 4.

96 Sylvan, 8.

97 Turner, Victor. "Introduction" in *Celebration: Studies in Festivity and Ritual* edited by Turner, Victor. Washington DC: Smithsonian Institution Press. 1982. Page 21.

rebellious nature, intense experience often becomes a chief goal for them resulting in activities like body mutilation or drugs, but also tightly-knit musical subcultures. <sup>98</sup> Many of these groups, aside from offering the pleasures of communal bonding and popular music, place no emphasis on reintegrating back into society as one grows older. According to Sylvan, it is for this reason that music remains a constant means of expressing one's disobedient energies of youth. Sylvan believes that these subcultures preserve the elements of the African musicoreligious complex from which modern styles of music originate. <sup>99</sup> With them also lives remnants of European pagan music which eventually formed the classical music that combined with African styles in colonial America. <sup>100</sup> With both of these ancestral cultures using music to create an ecstatic communion with deities, the musical subcultures that grow from the genres of today are in a way participating in rituals that brought the same experiences to those of long ago. It is no wonder that Spencer says that religion is still a vibrant part of the world today, just in a different structure:

Religion's relocation to the nightclubs includes the weekly oscillation of secularists to the rite and ritual of the Friday and Saturday night function. Its relocation to the concert coliseums and music festivals includes weekly, annual, or seasonal excursions to sacred gathering centers where groups of people find themselves in more comfortable spaces. The purpose of these events is to maintain cultic bonds and to achieve heightened forms of community that reaffirm mythologies and theologies and generate the kind of cosmological orientation and spiritual empowerment needed to sustain the members of these groups until subsequent gatherings. <sup>101</sup>

From these accounts, it can be seen that secular music can certainly serve as a gateway to some of the highest echelons that we are capable of experiencing, often comparable to reports coming from those who claim to have felt the influence of divine

98 Sylvan, 8.

99 Sylvan, 9.

100 Sylvan, 10.

101 Sylvan, 79.

contact. Looking back, Greenfield sees her music therapy class as similar to that of a trip to Nepal in which the spiritual atmosphere of the country overtook her emotions and brought new lucidity and restoration to her life:

In general, I think I was in a more heightened, ecstatic, manic state both in Nepal triggered by travel and then also at that time in the hospital triggered by my brain. So I was more open to those types of experiences and a willingness and an ability to feel and hear the music and the people. <sup>102</sup>

As the sounds of Stevie Wonder absorbed into her spirit, she became aware of an idea that religion had brought to her in Nepal: "I'm going to be okay and we're all going to be okay and we're all okay." With this thought comes the idea that it does not necessarily matter if a piece of music is sacred or secular; repertoire not written with any religious objectives can provide many reactions that can radically alter our very nature, often the same changes that could happen as a result of a religious experience. In these situations, it also appears not to make a difference what one thinks about higher powers as a variety of people from around the world have reported undergoing such states. Secular music has continuously proven itself able to make us think, feel, and act in ways that can leave us with experiences that may never be forgotten. It is an art form that has long been cherished by so many, believers or not, who often see its effects as on the same level of the most intense experiences of faith.

102 Greenfield.

103 Greenfield.

## Part Two

## Section Three: Possible Neurologic Connections Between Musical and Religious Experiences

"All human experience is brain-based, including scientific reasoning, mathematical deduction, moral judgment, and artistic creation, as well as religious states of mind."

- Jeffrey L. Saver and John Rabin

The preceding sections of this dissertation have dealt with issues to which many theories and ideas have been offered thanks to the work of scholars who have devoted considerable amounts of time to them. These next two will now address topics that are only beginning to be established in the world of research. Hopefully, more attention will be devoted to these fields in the future so that our understanding of the relationship between music and religion may continue to grow. As has been noted, many firsthand accounts of musical and religious experiences have been described almost identically. We can assume from this that there are perhaps related processes taking place in the brain when we are undergoing these occurrences that sometimes produce life-changing effects. With these phenomena being major factors in the content of who we are as individuals and societies, both have attracted the interest of neuroscientists who have used modern technology to see how their registration in the brain influences our thoughts and feelings. Yet in spite of these developments, few studies have so far looked into any possible neurologic similarities between music and religion. Researchers who have studied the neuroscience of the two both stand firm that they are hard-wired into our brains and thus central to our human identities. Evidence from prehistoric times even indicates that music of the earliest days may have had a religious function; primitive drawings found on the walls of caves (usually believed to have

<sup>1</sup> Rabin, John and Saver, Jeffrey L. "The Neural Substrates of Religious Experience" in *Journal of Neuropsychiatry*, Volume 9 No 3. 1997. Page 1.

been part of prehistoric religious rituals) tend to be in places with the best acoustics, hinting that our ancestors saw their repertoire as having an element of divinity to it.<sup>2</sup> This section will attempt to draw focus on areas that should be further investigated by neuroscientists - the temporal lobes, autonomic nervous system, limbic system, and frontal lobes. While all of these have been rigorously studied in the separate contexts of music and religion, there has been almost no crossover between them. But as will be described, these stimuli appear to be processed similarly and when studies are carefully analyzed, we can begin to see that the reason for comparable descriptions of musical or religious experiences could be deeply related to neurologic activity.

The temporal lobes which attach meaning and significance to events are a part of the brain that truly deserve the attention of neuroscientists interested in this field.<sup>3</sup> They are also linked to memory, language, and abstract thought.<sup>4</sup> Furthermore, the temporal lobes can produce dominating emotions like those described in part one that can overtake those in the midst of a musical or religious experience. This could be due to short-term electrical abnormalities that do not correspond with real sensory input.<sup>5</sup> One of the few researchers to delve into the neurologic connections between music and religion is Dr. Petr Janata from the Center for Mind and Brain at University of California, Davis. Asked for his opinion on the importance of the temporal lobes, he elaborates on how this activation appears to be behind such states:

<sup>2</sup> Millbower, Lenn. *Training with a Beat: The Teaching Power of Music*. Virginia: Stylus Publishing, LLC. 2000. Page 15.

<sup>3</sup> Brown, Ariel; Durso, Raymon; Harris, Erica; McNamara, Patrick. "The Chemistry of Religiosity: Evidence from Patients with Parkinson's Disease" in *Where God and Science Meet: The Neurology of Religious Experience, Volume 2* edited by McNamara, Patrick. Connecticut: Praeger. 2006. Page 2.

<sup>4</sup> Newberg, Andrew. Principles of Neurotheology. Vermont: Ashgate Publishing. 2010. Page 73.

<sup>5</sup> Seybold, Kevin S. *Explorations in Neuroscience, Psychology, and Religion*. New York: Routledge. 2016. Page 80.

It's the case of the anterior temporal lobes being connected to the ventral regions of the frontal lobe that are really important for emotion. And so what seems to be going on is that the balance of activity in some of these brain networks gets a little bit out of whack and it just seems that the anterior temporal lobes - a lot of memory content is stored in those regions and are coupled to these emotion regions. You sort of have the ingredients for really ramping up memory and emotion.<sup>6</sup>

Janata's work provides some of the rare insight into the musical-religious parallels and the emotional aspect of the temporal lobes that makes up such experiences is essential in them. In spite of a lack of integration between fields, research conducted by other neuroscientists has also been helpful in uncovering how the temporal lobes change the attitudes of people in musical or religious situations.

According to David E. Comings, there are no pain receptors in the brain which has allowed for the temporal lobes to be directly stimulated. Studies have shown that this stimulation has resulted in vivid experiences of God, leaving the body, and re-living past experiences. Andrew Newberg also reports that the most complex forms of hallucination have stemmed from a simultaneous activation of the temporal lobes in conjunction with the amygdala and hippocampus. Such findings can be compared to musical experiments involving the temporal lobes which demonstrate that they play a major role in emotional events. In fact, a lack of their functioning can suppress some aspects of them. A study performed on a group of people with unilateral temporal lobe excisions exposed them to a variety of music and asked them to describe the emotional nature of it. While repertoire that was calm, sad, or cheerful was identifiable to them, they responded with uncertainty to works that were frightening. This indicates that the unilateral temporal lobes seem to play a part in

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<sup>6</sup> Janata, Petr. Interviewed by Richard Cezar. Davis, California. October 31, 2018.

<sup>7</sup> Comings, David E. "The Neurobiology, Genetics, and Evolution of Human Spirituality: The Central Role of the Temporal Lobes" in *NeuroQuantology*, Volume 8 No 4. 2010. Page 479.

<sup>8</sup> Comings, 480.

<sup>9</sup> Newberg, 171.

the sensory of danger.<sup>10</sup> While music can certainly bring about feelings of fear, such a powerful emotion has also been described by Rudolf Otto's principle of *mysterium tremendum* and perhaps this part of the temporal lobes is also critical in establishing such feelings in a religious context.<sup>11</sup> This may especially be the case for believers whose religions espouse that their wrongdoings can be met with swift and thorough divine retribution.

There are numerous and very memorable cases of people who have undergone profound musical or religious experiences as a result of either brain damage or an innate medical condition related to the temporal lobes. A fascinating story told by Oliver Sacks is that of Dr. Tony Cicoria who was struck by lightning in1994. The damage was minimal and after a few weeks of minor memory problems, he felt that he was completely back to normal. But suddenly out of nowhere came the most bizarre changes in lifestyle. Although not much of a music-lover before getting struck, Cicoria became infatuated with listening to and playing the piano, resulting in buying many albums and beginning to take lessons. Even in his dreams he would see himself performing onstage. In spite of the drawbacks (such as getting a divorce from his wife who was not happy with the obsessive transformation), Sacks reports that his routine still revolves around going to work and then coming home to his beloved music. What is more is that while Cicoria describes himself as nominally Catholic before the lightning strike, he says that he has become "very spiritual" ever since and has read

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<sup>10</sup> Baulac, Michel; Beckett, Christine; Gosselin, Nathalie; Hasboun, Dominique; Noulhiane, Marion; Peretz, Isabelle; Samson, Severine. "Impaired Recognition of Scary Music Following Unilateral Temporal Lobe Excision" in *Brain*, Volume 128 No 3. 2005. Page 628.

<sup>11</sup> Otto, Rudolf. *The Idea of the Holy: An Inquiry into the Non-Rational Factor in the Idea of the Divine and its Relation to the Rational.* New York: Oxford University Press. 1917. Page 12.

<sup>12</sup> Sacks, Oliver. Musicophilia: Tales of Music and the Brain. New York: Vintage Books. 2007. Page 3.

<sup>13</sup> Sacks, 5.

every book he can find on near-death experiences.<sup>14</sup> He even speaks of his musical journey in a religious way, stating that he may have been "saved" from the event solely for music which he believes "comes from Heaven."<sup>15</sup>

Cicoria chose not to submit to scans that might have been able to tell what was happening in his brain. However, Sacks says that he has seen such sudden love for music develop in those with temporal lobe epilepsy which could provide a valuable clue since religious experiences linked to this condition are common. Steven C. Schachter even highlights that epilepsy was referred to as the "Sacred Disease" in ancient Greece because of how sufferers would often feel that they were blessed with divine presence - ideas that are still reported to this day. Woman in whom Schachter expresses great interest suffered a head injury and several years later began to have bouts of ecstasy that often took on a religious nature. One that stands out from the others came about as she watched a morning sunrise. As she describes:

Triple haloes appeared around the rising sun. Suddenly the sunlight became intense. I experienced a revelation from God and all creation glittering under the sun. The sun became bigger and engulfed me. My mind, my whole being was pervaded by a feeling of delight. <sup>19</sup>

Electroencephalography (EEG) conducted on this woman showed a deformity in her left temporal lobe region and subsequent treatment for temporal lobe epilepsy soon stopped the

15 Sacks, 6.

16 Sacks, 17.

17 Sacks, 8.

18 Schachter, Steven C. "Religion and the Brain: Evidence from Temporal Lobe Epilepsy" in *Where God and Science Meet: How Brain and Evolutionary Studies Alter Our Understanding of Religion, Volume 2* edited by McNamara, Patrick. Connecticut: Praeger. 2006. Page 178.

19 Schachter, 173.

<sup>14</sup> Sacks, 7.

ecstatic episodes.<sup>20</sup> Reports such as these provide strong evidence that the temporal lobes do indeed appear to play a role in the thoughts, feelings, and descriptions of those who have been greatly influenced by music or religion. Not everyone who goes through such experiences may be an epileptic or be altered as poignantly as those previously discussed, but the fact that the temporal lobes were consistently involved and their impacts reported in similar ways shows that research into this region could be especially fruitful.

The autonomic nervous system (ANS) is also a part of the brain that has been frequently investigated in the neuroscientific worlds of music and religion. This is the most basic part of the nervous system as it is responsible for maintaining baseline bodily function. Furthermore, it assists in the overall functioning of the brain, including the generation of emotions, and Newberg and Eugene D'Aquili have posited that it is "required for the generation of the mystical mind." The ANS is divided into the sympathetic nervous system which triggers arousal and the parasympathetic nervous system which triggers quiescence, two norms of musical and religious experiences described in the preceding section. Arousal of the ANS and the resulting emotions are highly adaptive responses since they prepare us to handle environmental changes that could be harmful. As Janata puts it, the experiences that we have with music and religion could be a form of this reaction.

Interactions with environments are much more successful when we can predict how our environments are going to behave and when we can detect deviations from those predictions when unexpected stuff happens. And so there's a whole lot of brain

<sup>20</sup> Schachter, 173.

<sup>21</sup> D'Aquili, Eugene and Newberg, Andrew. *The Mystical Mind: Probing the Biology of Religious Experience*. Minnesota: Fortress Press. 1999. Page 23.

<sup>22</sup> Newberg, 122.

<sup>23</sup> Thompson, William Forde. *Music, Thought, and Feeling: Understanding the Psychology of Music, Second Edition.* New York: Oxford University Press. 2014. Page 182.

processing orientations that help to guide those expectations and there are parts of the brain that respond very vigorously when those expectations are violated including parts of the brain that talk to our autonomic nervous system and help generate arousal.<sup>24</sup>

This statement does not necessarily mean that we become afraid when music or a religious act does not go as planned. Rather, because of the ANS, such events capture our attention.

In music, the concept of "chills" has drawn the interest of many researchers such as Judith Becker who points out that such a profound state appears to stem from arousal of the ANS. <sup>25</sup> Having received neural activity from areas such as the brain stem, basal forebrain, and ventromedial prefrontal cortex, it triggers physical reactions such as increased heart rate, perspiration, and faster breathing which are also normal in a religious experience. Various parts of the brain ascribe memories and meaning to these impulses and thus an appropriate behavior arises. Becker proposes that in a religious ritual setting, such a process gives participants the ability to propel themselves into "trance consciousness." <sup>26</sup> In her estimation, ANS activation that occurs during musical trance is predominantly driven by joy, rage, and fear while feelings like solace, humility, and peace (although they can occur after a trance) do not seem to trigger or sustain them. A potentially important idea that could demonstrate the neurologic similarities between music and religion is her theory that those who experience music in a religious context could perhaps undergo a stronger ANS arousal than those who do so without it. <sup>27</sup> It is true that other stimuli can produce such effects, but Janata offers his opinion on why it is the musical experience that is so frequently described in religious terms:

<sup>24</sup> Janata.

<sup>25</sup> Becker, Judith. *Deep Listeners: Music, Emotion, and Trancing*. Indiana: Indiana University Press. 2004. Page 11.

<sup>26</sup> Becker, 56.

<sup>27</sup> Becker, 52.

I think it probably has something to do with the fact that music is a really rich and satisfying sensory input for which, however, the meaning is a lot more ambiguous or open to interpretation and interaction. [In movies] Typically the narrative is very clearly defined in most cases. Other things like chocolate, while it's very pleasing, it's also fairly constrained. It's not quite as complex in the experience of it over time. It doesn't really unfold like our experience with music. So I think that music creates this kind of rich world.<sup>28</sup>

Such an idea emphasizes the complexity of music which is also a fundamental aspect of religion and might be further evidence of why they are processed by the brain as they are. If Becker's hypothesis about music and religious ritual is eventually confirmed, it would be essential proof of the bonds between music and religion and the suggestion laid out by Janata could help explain it.

According to Newberg, D'Aquili, and Vince Rause, the ultimate goals of ritual are "the transcendence of self, and the blending of the self into some larger reality." Most of the time, however, it provides a much milder feeling like a sense of closeness to a higher power or other participants. They hypothesize that this state of transcendent unity is put into effect by the ANS with the help of the hypothalamus. Studies have shown that behaviors taking place in a religious ritual can improve immune system functioning as well as lower blood pressure, heart rate, respiration, and stress hormone levels. Because the ANS and hypothalamus both regulate these processes, there is reason to think that their assertion is correct. Newberg, D'Aquili, and Rause point out that the highly repetitive and rhythmic nature of music, an important factor outlined in section two, also drives the ANS to act in

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<sup>28</sup> Janata.

<sup>29</sup> D'Aquili, Eugene; Newberg, Andrew; Rause, Vince. *Why God Won't Go Away: Brain Science and the Biology of Belief.* New York: Ballantine Books. 2008. Page 80.

<sup>30</sup> D'Aquili, God, 80.

<sup>31</sup> D'Aquili, God, 86.

such a way, drastically altering the brain's ability to define the limits of the self. <sup>32</sup> They even cite a Pittsburgh jazz concert featuring the recorded sounds of wolves howling that led to everyone in the room howling at the top of their lungs. <sup>33</sup> This was not a religious gathering (even though it did take place in a cathedral), but the authors believe that there was a degree of spirituality in it due to the connection of those united in ecstasy. <sup>34</sup> Lenn Millbower demonstrates that this sort of spiritual connection brought about by music is a widespread view since many Native American, Asian, and African societies uphold that musical performances imitate the harmony of the cosmos. Thus, those involved in the act increase the harmony between the universe and themselves. <sup>35</sup> Janata, reflecting on the notion that music is a phenomenon for which we are biologically programmed, also brings up the idea of connection with others:

Musical types of activities do a lot to facilitate social bonding so there's an evolutionary argument to be made there that if you engage people in activities that increase social bonding, that they are going to be better able to confront the challenges of their environments, their worlds.<sup>36</sup>

Like Newberg, D'Aquili, Rause, and Millbower, he is quick to mention the spiritual side of this: "It's particularly that sense of unity which then translates over to religious experiences. You feel like you are one with the universe. You feel like you are one with nature. You feel like you are one with everybody else in the room with you."<sup>37</sup>

<sup>32</sup> D'Aquili, God, 79.

<sup>33</sup> D'Aquili, *God*, 78.

<sup>34</sup> D'Aquili, *God*, 79.

<sup>35</sup> Millbower, 16.

<sup>36</sup> Janata.

<sup>37</sup> Janata.

When discussing the autonomic nervous system, it is important to pay attention to the limbic system which helps it to issue emotional responses. One of the earliest evolved parts of the brain, the limbic system is associated with feelings such as happiness, sadness, anger, fear, and love. Through a series of neural connections, stimuli such as thoughts and experiences are transferred to it from the cerebral cortex where they receive their emotional value. In effect, it seems that its activation is the force that turns information encountered by the brain into conscious understanding. Millbower believes the limbic system inspired Franz Liszt to say that music is the embodied and intelligible essence of feeling, capable of being apprehended by our senses.

Two parts of this system which have been studied by music and religion neuroscientists alike are the amygdala and hippocampus. The amygdala is primarily concerned with control and meditation of higher-order emotional and motivational functions. Additionally, it is to a degree involved in attention, learning, memory, and quiescence. After analyzing incoming stimuli, the amygdala activates other areas of the brain so that the appropriate behavior can be taken. <sup>42</sup> In terms of religion, Newberg states that during a religious ritual, the amygdala's attention-sustaining qualities appear to be behind the mild fear response often referred to as "religious awe." <sup>43</sup> He also hypothesizes that an overstimulation

<sup>38</sup> D'Aquili, 27.

<sup>39</sup> Newberg, 78.

<sup>40</sup> Newberg, 171.

<sup>41</sup> Millbower, 27.

<sup>42</sup> D'Aquili, 39.

<sup>43</sup> Newberg, 163.

of it can suppress believers' ability to think rationally about a higher power and produce frightening thoughts of one who is authoritative and punitive.<sup>44</sup>

The amygdala's creation of fear (regardless of how powerful the sentiment) is possibly the closest demonstration of how it reacts similarly to music. In 2001, AJ Blood and Robert Zatorre used positron emission tomography (PET) to observe how music influences amygdalar activities. Having provided participants with their favorite works, they found that cerebral blood flow decreased in the amygdala as it increased in areas allowing for "chills" like the ventral striatum and the insula. Since then, other studies have shown that music deemed unpleasant by participants increases the amygdala's activities. It will react on a milder scale to chord changes that the listener finds to be unexpected. Also, a notable 2006 study used functional magnetic resonance imaging (fMRI) to monitor participants looking at sad or frightening pictures both in silence and while sad music was being played. The amygdala only responded to the latter. Investigations such as these support the idea that music can induce "real" emotions, not just the illusions of them. In fact, Anthony Storr, with music and the amygdala in mind, states, "What seems certain is that there is a closer relation between hearing and emotional arousal than there is between seeing and emotional arousal."

<sup>44</sup> Newberg, Andrew and Waldman, Mark Robert. *How God Changes Your Brain: Breakthrough Findings from a Leading Neuroscientist*. New York: Ballantine Books. 2009. Page 43.

<sup>45</sup> Koelsch, Stefan. "Neural Correlates of Music Perception" in *Language, Music, and the Brain: A Mysterious Relationship* edited by Arbib, Michael A. Massachusetts: MIT Press. 2013. Page 162.

<sup>46</sup> Thompson, 15.

<sup>47</sup> Koelsch, Stefan. Brain and Music. New Jersey: Wiley-Blackwell. 2000. Page 217.

<sup>48</sup> Koelsch, Brain, 223.

<sup>49</sup> Koelsch, 163.

<sup>50</sup> Storr, Anthony. Music and the Mind. New York: Simon & Schuster. 2015. Page 26.

This information could be useful in understanding the relationship between music, religion, and the brain since the two are phenomena placing great emphasis on that which cannot be seen, but rather must be felt in order to be experienced correctly.

The hippocampus helps to regulate survival instincts such as ingestive, reproductive, and defensive behaviors as well as autonomic, hormonal, and immune system processes. <sup>51</sup> It is also involved in the production of memory, a critical part of musical and religious experiences. <sup>52</sup> During its encounters with various stimuli, that which is registered as benign is suppressed and emotionally strong information (positive or negative) is processed into long- term memory by it. <sup>53</sup> James B. Ashbrook and Carol Rausch Albright maintain that without it, storage of useful memories would not be possible. <sup>54</sup> Brain images suggest that the right prefrontal cortex integrates current perceptions and ideas with the memories that have been put together by the hippocampus. <sup>55</sup> While it does not generate emotions itself, these sorts of interactions influence state of mind. <sup>56</sup> Attaching a spiritual significance to this research, Ashbrook and Albright believe that it is through long-term memories that people confront themselves with who they truly are. <sup>57</sup> Saint Augustine also suggested a similar notion, believing that the image of God was based on self-knowledge and introspection rather

<sup>51</sup> Juslin, Patrik N. and Sloboda, John A. *Handbook of Music and Emotion: Theory, Research, Applications*. New York: Oxford University Press. 2010. Page 322.

<sup>52</sup> Newberg, 77.

<sup>53</sup> Koelsch, Stefan. "Striking a Chord in the Brain: Neurophysiological Correlates of Music-Evoked Positive Emotions" in *The Emotional Power of Music: Multidisciplinary Perspectives on Musical Arousal, Expression, and Social Control* edited by Cochrane, Tom; Fantini, Bernardino; Scherer, Klaus R. New York: Oxford University Press. 2013. Page 242.

<sup>54</sup> Albright, Carol Rausch and Ashbrook James B. *The Humanizing Brain: Where Religion and Neuroscience Meet.* Ohio: Pilgrim Press. 1997. Page 93.

<sup>55</sup> Newberg, 77.

<sup>56</sup> D'Aquili, God, 46.

<sup>57</sup> Albright, 92.

than abstract thought. As he proclaimed, "Great is the power of memory, an awe-inspiring mystery, my God, a power of profound and infinite multiplicity!"<sup>58</sup>

Janata uses music in a religious setting to show how the power of memory can lead to experiences that can differ greatly from one person to another:

If that's something you regularly do and you really love singing in church, then all those experiences - let's say when you hear a hymn maybe you sang or when you hear a choir singing hymns - that elicits all these memories of strong connectedness that you had with other people. That explains why a person has a stronger response to that whereas somebody who hasn't had those experiences, they might hear the hymn and think, "Oh that's really lovely. That's nice. The harmonies and the voices are really nice." But they're not going to have the same strong experience, because it doesn't trigger that whole host of reactions by virtue of having stimulated memories. <sup>59</sup>

This explanation points towards the notion that the activities we encounter, whether they be musical, religious, or a combination of both, are heavily influenced by the hippocampus and give us the ability to formulate experiences that can be highly personal and emotional based on what we have thought, felt, and been through in the past. To further the importance of memory in religion, Newberg states that the hippocampus can store memories of emotions that took place during religious experiences, allowing them to be reproduced under similar circumstances in the future. Additionally, brain abnormalities that interfere with the process of the right prefrontal cortex integrating with memories via the hippocampus can result in delusional thinking. <sup>60</sup> Kevin Seybold adds that memory is a key part of forgiveness, an act that is one of the most treasured values in virtually all religions. It is because of the hippocampus that people are able to generate the feelings of compassion and love that imitate the same feelings of the higher powers that they worship. As he puts it, if we cannot

60 Newberg, 77.

<sup>58</sup> Albright, 92.

<sup>59</sup> Janata.

remember the wrongs done to us, then we are not filled with a desire for revenge - nor can we curtail them. <sup>61</sup>

Studies in music have shown that the hippocampus is involved in memory for pitch, timbre, melody, and rhythm and also that musicians display greater engagement of the hippocampus than non-musicians during melody recognition tasks. <sup>62</sup> But perhaps more important than this in terms of experience is the idea that the hippocampus could be the gateway to the subconscious mind. Guerino Mazzola writes that human beings do not have controlled access to the contents of their long-term or emotional memories. He hypothesizes that music may be the stimulus that allows for the hippocampus to tap into these memories and gives them the opportunity to surface. <sup>63</sup> It could be for this reason that people's musical experiences can be so different from each other regardless of education and culture. <sup>64</sup> Religion is also a passionate affair which places just as much emphasis on the individual as the society. With such a nature, Mazzola's theory could also be applied to a religious experience and the hippocampus' reaction to it.

Located directly behind the forehead, the human frontal lobes are far bigger and more powerful than even our closest primate relatives. <sup>65</sup> With this region being heavily involved in planning and the pursuit of long-term goals, it is responsible for our abilities to be consciously aware of time, envision possible scenarios, understand cause and effect, and

<sup>61</sup> Seybold, 134.

<sup>62</sup> Brown, Rachel M.; Penhune, Virginia B.; Zatorre, Robert J. "Expert Music Performance: Cognitive, Neural, and Developmental Bases" in *Music, Neurology, and Neuroscience: Evolution, the Musical Brain, Medical Conditions, and Therapies* edited by Altenmuller, Eckhart; Boller, Francois; Finger, Stanley. Massachusetts: Elsevier. 2015. Page 71.

<sup>63</sup> Mazzola, Guerino. *The Topos of Music 1: Theory: Geometric Logic, Classification, Harmony, Counterpoint, Motives, Rhythm.* New York: Springer. 2018. Page 528.

<sup>64</sup> Mazzola, 529.

<sup>65</sup> Albright, 134.

empathize with others. <sup>66</sup> No other part of the brain either receives more input or sends more output. <sup>67</sup> Because of their decision-making roles, the frontal lobes also try to fit our actions into an overarching meaning. As a result, they are involved in the formation of ethical, philosophical, and religious systems. <sup>68</sup> Studies suggest that they might be the seat of compassion. <sup>69</sup> Patrick McNamara writes that self-awareness is espoused by most of the world's religions and the frontal lobes enable belief to flourish. To demonstrate this, he highlights that family members of those with frontal lobe damage report that they no longer know who these people are. <sup>70</sup> These sufferers may even become obsessed with a delusional belief system that no amount of evidence can hinder. McNamara goes on to say that the drive to engage in religious thought or behavior could be because of an innate desire to activate the frontal lobes and this inclination may be the same in music also. <sup>71</sup> This is because such an activation could aid in the development of elements that are well-known in music and religion such as moral insight, creativity, and social skills. <sup>72</sup>

In 1934, Andrew Arthur Abbie speculated that the frontal lobes give mankind the ability to express itself at its highest artistic levels. In recent times, it has been observed that there is truth to this idea.<sup>73</sup> For example, in her studies of the musical rituals of traditional

66 Albright, 137.

67 Albright, 136.

68 Albright, 138.

69 Newberg, 92.

70 McNamara, Patrick. "Religion and the Frontal Lobes" in *Religion in Mind: Cognitive Perspectives on Religious Belief, Ritual, and Experience* edited by Andresen, Jensine. New York: Cambridge University Press. 2001. Page 246.

71 McNamara, 248.

72 McNamara, 249.

73 Levitin, Daniel J. *This is Your Brain on Music: The Science of a Human Obsession*. New York: Plume. 2007. Page 210.

Balinese mythology, Becker reports that it is through the frontal lobes that participants link the spirit Rangda with evil and this part will activate when they hear music associated with her. As a result of this and the community's traditions of how to act, they will go into a chaotic trance in which they feel that they are engaged in battle with a vicious spirit with fire coming from its eyes. Becker compares this sort of experience to Pentecostal Christians who feel that they are so "knocked out" during the ecstasy of their rituals that they cannot remember their actions afterward.

While there are not many studies available to compare the effects of musical and religious experiences on the frontal lobes, one that helps is an experiment done by Newberg on a group of Charismatic and Pentecostal women. Using single positron emission computed tomography (SPECT), Newberg and his colleagues observed neural activities that took place both as the women sang songs and also engaged in speaking in tongues (glossolalia), an activity in which believers say that they are communicating with God in incomprehensible languages. Results showed a drop in blood flow in the frontal lobes whereas blood flow in the amygdala (the emotional part of the brain) increased. Newberg states that the decrease in frontal lobe activity during glossolalia is understandable since the participants described the act as one in which there was a lack of intentional control. It is worth comparing this research to a PET study of musicians who played two-handed major scale exercises as well as a section from Bach's *Italian Concerto* which they had memorized. Results showed that

<sup>74</sup> Becker, 115.

<sup>75</sup> Becker, 112.

<sup>76</sup> Morgan, Donna; Newberg, Andrew; Waldman, Mark R.; Wintering, Nancy A. "The Measurement of Regional Cerebral Blood Flow During Glossolalia: A Preliminary SPECT Study" in *Psychiatry Research: Neuroimaging*, Volume 148 No 1. 2006. Page 67.

<sup>77</sup> Morgan, 68.

<sup>78</sup> Morgan, 69.

frontal lobe blood flow actually decreased more so during the Bach piece than while playing the scales. Neuroscientists think this was because the prolonged period of complex performance had allowed the musicians to "lose themselves" in the work. <sup>79</sup> The response of decreased blood flow in the frontal lobes has also been seen in scans of jazz musicians who improvised at the piano. It can thus be posited that, like believers who get lost in the frenetic act of speaking in tongues, musicians who get absorbed into their performances are aided by the frontal lobes to block out any distractions that would cause them to second guess themselves and divert them from the atmosphere that they are creating. <sup>80</sup> This could be yet another reason why musical-religious experiences can often be very similar in terms of how those involved feel that they are temporarily out of contact with their everyday surroundings, brought into an auspice that fully captivates them.

But in contrast to the outcomes of the women speaking in tongues, Newberg and D'Aquili observed brain activities in Buddhist monks engaged in meditation and found that when the monks had reached a heightened experience, there was a suppression of blood flow to the amygdala (where fear is generated) and the parietal lobe (where spatial and temporal consciousness are generated). Meanwhile, activity in the frontal lobe had risen, indicating an increase in attention on the act as the rest of the world faded away. Another SPECT study conducted by Newberg on Catholic nuns praying revealed virtually identical consequences and from this, we can assume that religious experience is not limited to any particular faith nor the intentions of the participants. Similar results come from a group of Japanese college

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<sup>79</sup> Harre, Rom; Pfordresher, Peter; Tan, Siu-Lan. *Psychology of Music: From Sound to Significance, Second Edition*. New York: Routledge. 2010. Page 201.

<sup>80</sup> Harre, 201.

<sup>81</sup> Alper, Matthew. *The God Part of the Brain: A Scientific Interpretation of Human Spirituality and God.* Illinois: Sourcebooks Inc. 2006. Page 136.

<sup>82</sup> D'Aquili, God, 7.

students majoring in piano performance. <sup>83</sup> Having been given some short pieces by Chopin, Mozart, Schumann, and Clementi, brain scans were taken as they performed the repertoire. <sup>84</sup> Unlike the Bach and jazz performers discussed previously, these students showed an increase in frontal lobe activity as had been observed with the monks and nuns under Newberg and D'Aquili's supervision. <sup>85</sup> This may have been because the work used for the study was slightly difficult for the students even though it was within their capabilities. <sup>86</sup> These different reactions in the frontal lobes provide supporting evidence that there are several ways in which music and religion are experienced even though the overall sensations may have many of the same attributes. Whether the frontal lobes increase in activity because participants are concentrating more thoroughly or decrease in activity because they are letting themselves go, it appears that the effect of a musical or religious experience on the brain and body is a feeling of escaping the norm and entering into a new state that blocks the penetration of interruptions.

In spite of being parts of daily existence since time immemorial, the mysteries of music, religion, and the brain continue to perplex the academic and scientific worlds and even with the modern research and technology that has provided critical information on them, there is still much work to be done. With the resemblances between musical and religious experiences and indications that such events seem to involve similar processes and regions of the brain, it becomes apparent that they play critical roles in our lives - many of which seem to be the same. From social bonding to teaching, mankind has used the two to improve its

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<sup>83</sup> Abo, Masahiro; Hashimoto, Keiji; Ohashi, Masahiro; Okamoto, Takatsugu; Seta, Hiroshi; Tategami, Shoko. "Examination by Near-Infrared Spectroscopy for Evaluation of Piano Performance as a Frontal Lobe Activation Task" in *European Neurology*, Volume 55 No 1. 2006. Page 16.

<sup>84</sup> Abo, 17.

<sup>85</sup> Abo, 19.

<sup>86</sup> Abo, 20.

place in the world and also to set its sights on something better; one of the strongest demonstrable comparisons of music and religion's impacts on human beings are the nourishing senses of hope and encouragement that they have to offer. Janata believes that the processes that take place in the brain are just about the same when such experiences are underway:

My guess is that however hope manifests in the brain, it's going to be unique to that feeling of hope. I think one can arrive there by different ways and so the patterns of brain activity that might precede that moment of hope may differ as to the function of how one's getting into that state. But once one is in that state, I expect that it would look pretty similar irrespective of how you got there.<sup>87</sup>

The search for this and other neurologic connections between music and religion needs to progress so that we may have further understanding as to why they have such indescribable effects on us. We have little information so far as to why these parts of the brain seem to process musical and religious experiences as they do. In time, some ideas may be validated or debunked, but with music and religion being key to our humanity, it is of the essence that more is done to see how these enduring phenomena produce neurologic reactions that greatly alter our states of consciousness.

87 Janata.

## Section Four: Similar Therapeutic Benefits of Musical and Religious Experiences

"The shaman, whether referred to as a 'medicine man,' 'witch doctor,' or by any other term, is the prototypical healing figure and music therapist, and has always been a multidisciplinary practitioner - a holistic healer."

- Joseph J. Moreno

In contrast to the previous section which is more about the search for further understanding of music and religion, this will now discuss how the power of musical and religious experiences can be directly applied. The inspirational experiences generated by music and religion can do more than instill us with positive thoughts and feelings; such episodes can provide an important way of reframing our mentalities that improves our health and enables us to endure medical challenges. Because of this, musical and religious techniques are now commonly used for therapeutic purposes around the world with many documented cases of improved health, functioning, and ability to cope. As a result, careers such as music therapy, spiritual cognitive therapy, and hospital chaplaincy have become respected fields that are continuously researched and refined. Because of the benefits that musical and religious styles of intervention can instill to a variety of patients, perhaps a combination involving aspects of the two would be even more helpful.

Ironically, history indicates that this was once the norm. Researchers interested in the history of religion hypothesize that in prehistoric times, diseases were most likely thought to be the result of a spell or as an atonement for a sin against a tribal god. Hence, the use of music might very well have been administered to provide treatment, selected by a medicine

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<sup>1</sup> Moreno, Joseph J. "The Music Therapist: Creative Arts Therapist and Contemporary Shaman" in *Music: Physician for Times to Come* edited by Campbell, Don. Illinois: Quest Books. 1991. Page 171.

man based on the nature of the condition.<sup>2</sup> In the ancient world, the therapeutic link between music and religion was upheld in societies such as Egypt and Babylonia where healing ceremonies often included music and religious rituals.<sup>3</sup> In Greece, hymn specialists were found in sacred temples where music was prescribed for illnesses. For such reasons, music was praised by those such as Plato who described it as the medicine of the soul.<sup>4</sup> As noted in the first part of this dissertation, the importance of both sacred and secular music has stayed consistent because of their awesome abilities to impact listeners. Additionally, many practices with religious backgrounds such as yoga and meditation have integrated into the secular world with their advantages being felt by those of many different belief systems. It may therefore be possible to develop a therapy using both musical and religious elements to assist anyone in need regardless of their views on faith. This section will demonstrate the similar gains that can be brought about by musical and religious experiences when faced with physical conditions, psychological conditions, and preparation for death. While the therapeutic gains of music and religion are well-known, there is still little mixture and perhaps using both of them - either at the same time or separately - can be of great assistance in many medical situations.

One of the most common ways in which musical and religious experiences have been applied in medicine is in the treatment of physical illnesses. In roughly the last 150 years, more than 250 studies have been done on the relationship between religion and medicine in matters such as cardiovascular disease, hypertension, stroke, cancer, and colitis. The vast majority state that at least an average level of religiosity improves the severity of such

<sup>2</sup> Davis, William B. and Gfeller, Kate E.. "Clinical Practice in Music Therapy" in *An Introduction to Music Therapy: Theory and Practice, Third Edition* edited by Davis, William B.; Gfeller, Kate E.; Thaut, Michael H. Maryland: The American Music Therapy Association, Inc. 2008. Page 18.

<sup>3</sup> Davis, 19.

<sup>4</sup> Davis, 20.

conditions and maintains overall health ( with behaviorally-strict religions such as Seventh-Day Adventists and Mormons having the best health of all). According to Jeffrey S. Levin, this could be because such thoughts, actions, and experiences could defeat loneliness and fear and provide the hope and satisfaction that one is loved and cared for by a higher power in addition to religious communities or anyone else who offers support. Musical experiences can also reap medical effects that alleviate various ailments. For example, singing or playing a wind instrument can help increase or maintain respiratory levels. This is an important part of recovery from issues like cardiac disease, congestive obstructive pulmonary disease, and asthma which impair respiratory functioning. Don Campbell even points out that cancer (a disease that he professes is strongly connected to emotions) can be treated with music thanks to how it can influence malignant growth and possibly dissolve tumors.

Dr. Andrew Newberg, director of research at the Marcus Institute of Integrative

Health and a physician at Jefferson University Hospital, has devoted considerable attention to
the neuroscience of various mental states, particularly those which have stemmed from
religious thought and activity. Additionally, he has performed several case studies in which
patients suffering from numerous conditions were given a variety of interventions, often
including elements of music or religion. Asked to elaborate on musical and religious

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<sup>5</sup> Levin, Jeffrey S. "Investigating the Epidemiologic Effects of Religious Experience: Findings, Explanations, and Barriers" in *Religion in Aging and Health: Theoretical Foundations and Methodological Frontiers* edited by Levin, Jeffrey S. California: Sage Publications. 1993. Page 5.

<sup>6</sup> Levin, 10.

<sup>7</sup> Campbell, Don. *The Mozart Effect: Tapping the Power of Music to Heal the Body, Strengthen the Mind, and Unlock the Creative Spirit.* New York: Avon Books. 1997. Page 67.

<sup>8</sup> Norton, Kay. Singing and Wellbeing: Ancient Wisdom, Modern Proof. New York: Routledge. 2016. Page 22.

<sup>9</sup> Campbell, 241.

applications in response to illness, Newberg points out that bodily responses to stimuli come from the brain and that by processing such input, it can begin the task of recovery:

A lot of this would be going on on the level of the autonomic nervous system that connects itself to the brain particularly through a very central structure called the hypothalamus that then also has connections with the limbic system, the amygdala, and the hippocampus which help us with our memories, help us with our emotional processes. That's where the therapeutic tie-in I think starts to occur. You get these kinds of processes that affect different parts of the brain that are involved in our overall sense of emotions, our sense of well-being and that's probably how there's different practices like music and religious practices that will help out in terms of therapeutic settings. <sup>10</sup>

The emphasis on these parts of the brain laid out by Newberg has been discussed in the previous section due to how they are behind some of our most moving musical and religious experiences. It is apparent from this quote that it is also paramount in helping promote calmness and self-control that can allow the body to repair itself. Also, in cases where patients' conditions require a medical procedure, these comforts can make them more confident and accepting of the event and thus more cooperative. For example, Harold Koenig points out that religious belief usually increases adaptability to circumstances due to the confidence that it can provide. Furthermore, belief that a higher power is watching tends to promote making good decisions which can make patients much more willing to go through procedures that they know are for their benefit. These sorts of emotions have also been reported by hospital staff at Saint Luke's/Roosevelt Center in New York City who say that cancer patients listening to music before their chemotherapy treatments are less anxious and

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<sup>10</sup> Newberg, Andrew. Interviewed by Richard Cezar. Villanova, Pennsylvania. February 20, 2019.

<sup>11</sup> Koenig, Harold G. *Medicine, Religion, and Health: Where Science and Spirituality Meet.* Pennsylvania: Templeton Foundation Press. 2006. Page 67.

the festive atmosphere may even inspire them to sing or dance. 12

A good example of the effectiveness of both musical and religious experiences in improving health comes from Meeting Point, an NGO in Kampala, Uganda founded in 1992 by AIDS activist Noelina Namukisa. Today, it offers medical, spiritual, economic, and psychological care for women, girls, and children suffering from the disease as well as the stigmas associated with it. In an interview with medical ethnomusicologist Gregory Barz, she states that faith is a key principle in the strength and courage needed not only by those afflicted with AIDS, but also the workers who cater to them. Especially important in this are religious activities that bring everyone together to worship a loving God. She points out, "We are Catholics, and since we started we now have a Catholic priest, and we go together on Fridays to visit patients. We go read the Bible together." Praying is the most significant part of the job for Namukisa when it comes to working with her patients. As she says, "The first thing is a prayer because we know that without God nothing can go ahead." However, religion is not the sole source of comfort at Meeting Point. Barz states that music is also a valuable asset that can rejuvenate life and heighten spirituality. Namukisa highlights this uplifting effect on those she looks after:

You know, music makes women happy. They feel at home when they sing, when they dance. They feel that even if they are sick they can "put on the music, put on the drums," and as you know, we can really dance! I don't know how I can express it, Gregory, but you have seen it happen. You have seen women walk in sick and then hours later dance, jumping high in the air, feeling a fresh breath of life! I feel that

15 Barz, 167.

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<sup>12</sup> O'Connor, Patrice. "Kaleidoscope of Palliative Care" in *The Next Step Forward: Music Therapy with the Terminally Ill* edited by Martin, Jenny A. New York: Calvary Hospital. 1989. Page 84.

<sup>13</sup> Barz, Gregory. Singing for Life: HIV/AIDS and Music in Uganda. New York: Routledge. 2006. Page 164.

<sup>14</sup> Barz, 165.

<sup>16</sup> Barz, 167.

music - singing, dancing, drumming - is one of the best ways we have of maintaining our community of women and supporting them in their attempts to live positively with AIDS rather than being merely HIV positive.<sup>17</sup>

The musical and religious benefits of this situation, styles of intervention that are beloved by Meeting Point patients and those who minister to them, exemplify Newberg's discussion of how reactions of bliss can be caused by stimuli of arousal or quiescence. <sup>18</sup> The calming aspects of the prayers mixed with the frenetic nature of the music are both treasured parts of helping those with AIDS to recuperate, highlighting not only the importance of music and religion in therapy, but also that they can be administered in a variety of ways. As a result, musical or religious therapies that are fast, slow, or a combination of both can be used which could widen the amount of people who are helped.

Physical handicaps are another issue that a musical-religious therapy might be able to address. Whether they are caused by illness, aging, surgery, accident, or some other event, the limitations of such conditions can keep people from enjoying cherished parts of life or cause the misery of having to be reliant on others for basic functioning. With people living longer and longer, it must be assumed that the number of those living with physical disabilities will continue to rise. <sup>19</sup> Koenig writes that the disabled turn to religion for strength more so than those without them. <sup>20</sup> The hope that comes from these beliefs often leads to greater motivation to exercise which can speed up recovery; research on a group recovering from hip fractures showed that those with greater religiousness walked longer distances at discharge time. <sup>21</sup> Such improvements may be further aided by music which has the rare ability to so

<sup>17</sup> Barz, 169.

<sup>18</sup> Newberg.

<sup>19</sup> Koenig, 146.

<sup>20</sup> Koenig, 147.

<sup>21</sup> Koenig, 148.

widely activate the brain's neural networks. Because rhythm is connected to the priming and timing reactions of the motor system, music can create stable templates for the temporal organization of motor responses and thus help trigger sensorimotor reactions. As a result, recovering muscles can work more efficiently when operating in conjunction with it.<sup>22</sup>

Whether disabilities are permanent or not, religious tools can help to reframe the situation in a more positive light such as with Ray S. Anderson's suggestion of visualizing spiritual symbols, pictures, rituals, or words that convey trust and love. <sup>23</sup> Although research on the subject it still lacking, it appears that even young people whose debilitations strike at the prime of life have these same improvements when religious and spiritual factors come into play. <sup>24</sup> For example, a young man left a paraplegic after a motorcycle accident reports that he invited God into his new circumstances to guide him. <sup>25</sup> Now with a successful career, he says, "I felt like part of me had wings and I was lifted by an invisible breath so that I could see my situation from a different perspective. I gained a vision for what I might do within the limitations of my physical disability, and found a new hope for my life. "<sup>26</sup>

A 2007 interview of disabled people mentioned that many members of the group believed that they could also transcend their suffering through the arts, including music. As one of them discusses, "Meaning in life can be transformed by the creative process." This

25 Anderson, 145.

26 Anderson, 146.

<sup>22</sup> Leins, Anne K.; Mertel, Katherine; Thaut, Michael H. "Music Therapy for Children and Adults with Physical Disabilities" in *An Introduction to Music Therapy: Theory and Practice, Third Edition* edited by Davis, William B.; Gfeller, Kate E.; Thaut, Michael H. Maryland: The American Music Therapy Association, Inc. 2008. Page 154.

<sup>23</sup> Anderson, Ray S. *Spiritual Caregiving as a Secular Sacrament: A Practical Theology for Professional Caregivers*. New York: Jessica Kingsley Publishers. 2003. Page 153.

<sup>24</sup> Koenig, 154.

spark of creativity may be a byproduct of the innovative thinking that is often required of the physically disabled in order to work around their limited abilities and could offer another way for a more optimistic mentality. Furthermore, connection with others has often been described by the disabled as essential to spirituality and participation in musical or religious groups could be significant in experiencing such states. Even those who view religion skeptically have such favorable views towards communal acceptance. The physical exertion of attending and participating in such groups may also be effective in preventing the worsening of a physical disability. It may be for this reason that, according to Koenig, those who attend houses of worship have lower disability rates. Those who are physically disabled, in contrast to popular belief, tend to do whatever it takes to get there instead of forfeiting the chance and staying home.

Regardless of how it originated, pain can be one of the greatest stresses to those afflicted with physical problems. While such anguish may sometimes even be completely unrelenting, musical and religious styles of therapy can potentially help to create an atmosphere that is much more manageable. Newberg again uses biology to help explain how these interventions can make a difference:

The brain is always balancing itself so the more you have pain, then the more your cortical areas shut down, but if you can get it so that the cortical areas - the frontal lobes and things like that - can turn on, then the sensory areas of the pain start to calm

<sup>27</sup> Boswell, Boni; Glacoff, Mary; Hamer, Michael; Knight, Sharon; McChesney, Jon. "Dance of Disability and Spirituality" in *Journal of Rehabilitation*, Volume 73 No 4. 2007. Page 37.

<sup>28</sup> Boswell, 37.

<sup>29</sup> Boswell, 38.

<sup>30</sup> Koenig, 148.

<sup>31</sup> Koenig, 149.

<sup>32</sup> Koenig, 150.

down. Whether that's mediated through music, through meditation, there's a lot of different ways of doing that, but those kinds of approaches can be very effective.<sup>33</sup> With this quote in mind, it becomes apparent that the experiences of music and religion are not merely for our enjoyment, but as evidence points to, significantly valuable sources of release from our pains no matter how severe. Researchers conducting a 2010 study in Belgium interviewed a group of people who had been struggling for years with chronic pain. The vast majority of these sufferers reported that they almost never went to any house of worship, but still identified as Christian or having some sort of spiritual inclination.<sup>34</sup> Results concluded that the greatest levels of life satisfaction came from those who not only had a spiritual side to them, but saw their faith as a central part of their lives. This may have to do with a number of factors such as religious practices and prayers that can help sufferers to feel that they are accompanied by a higher power and facilitate coping. Also, the idea of a just world in which everything happens for a reason can help to see the pain as a challenge which provides an opportunity for spiritual or psychological growth. <sup>35</sup> Siang-Yang Tan adds that those in pain can be inspired by religious figures who went through trials and tribulations of their own. Stories such as Saint Paul's thorn can serve as an example to help sufferers understand that a lack of faith is not causing their dilemmas. Instead, they can be comforted that a reason for it lies beyond their comprehension and imitate the forbearance demonstrated by their religious heroes.<sup>36</sup>

<sup>33</sup> Newberg.

<sup>34</sup> Dezutter, Jessie; Hutsebaut, Dirk; Luyckx, Koen; Robertson, Linda A. "Life Satisfaction in Chronic Pain Patients: The Stress-Buffering Role of the Centrality of Religion" in *Journal for the Scientific Study of Religion*, Volume 49 No 3. 2010. Page 510.

<sup>35</sup> Dezutter, 514.

<sup>36</sup> Tan, Siang-Yang. Managing Chronic Pain: Strategies for Dealing with Back Pain, Headaches, Muscle & Joint Pain, Cancer Pain, Abdominal Pain. Illinois: Intervarsity Press. 1996. Page 94.

In addition to religion, musical experiences have also been observed to offer improvement for those in pain. A 2013 study indicates that music can also give those in pain what they need to endure. In this work, a group of hospital patients were given a music therapy session in which they listened to several pieces while imaging that they were in a safe place.<sup>37</sup> Another group was simply left alone to relax.<sup>38</sup> Afterwards, postintervention research showed that the music therapy group reported a significantly greater decline in pain.<sup>39</sup> Furthermore, other pain management techniques such as medications may leave sufferers feeling that they are not in control of their bodies, especially with the side effects that sometimes accompany the treatment. However, through music they may feel that they are not helpless, but rather active participants who can address their issues. 40 Such an outlook appears to also be a factor in spirituality as demonstrated by the Belgian participants. Regardless of what the belief might be, it seems that the idea of being able to appeal to and trust a higher power relieves the feeling of being a slave to one's condition. Similar to Tan's idea of relating to those depicted in religious texts, Kay Kaufman Shelemay writes that religious songs that are sung in trying times can be much more effective if the composer has an inspiring story to which patients can relate. To demonstrate, she tells the story of Saint Yared of the Ethiopian Orthodox Church who formulated the corpus of the church's liturgy while under divine inspiration. Tradition upholds that he once became so hypnotized by this music he did not know that a spear had pierced his foot. Shelemay professes that Ethiopian Orthodox who sing

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<sup>37</sup> Degolia, Peter A.; Gutgsell, Kathy Jo; Harris, Mariel; Margevicius, Seunghee; McLaughlin, Beth; Mecklenburg, Janice; Schluchter, Mark; Wiencek, Clareen. "Music Therapy Reduces Pain in Palliative Care Patients: A Randomized Controlled Trial" in *Journal of Pain and Symptom Management*, Volume 45 No 5. 2013. Page 825.

<sup>38</sup> Degolia, 826.

<sup>39</sup> Degolia, 827.

<sup>40</sup> Degolia, 823.

today can not only benefit from the music, but the idea that the power of God which undermined Yared's pain can do the same for them.<sup>41</sup>

Mental illnesses, although not always as apparent to outsiders as physical debilitations, can be just as excruciating - maybe even more so at times. Thankfully, musical and religious interventions have also found their way into this field. One example of this can be observed by those haunted by past traumatic events. In the treatment of this, Jill E.

Bormann and Doug Oman emphasize the importance of mantras, the ritualistic repetition of a holy name or concept that is found in many religions. This can be done in just about any situation throughout the day. Bormann and Oman maintain that repeating a religious term does not have to imply accepting a faith and that those who choose to keep their recitations completely free of them can choose a word or phrase that has the same sort of significance. From this, anyone can benefit from the relaxation states that mantras can trigger and their physical and psychological effects. This can be observed in a 2001 to 2002 study on a group of veterans suffering from post traumatic stress disorder. After a period of recitation, it was found that daily functioning had significantly improved with the positive outcomes being more prevalent amongst those who had engaged in the most sessions.

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<sup>41</sup> Shelemay, Kay Kaufman. "Thinking About Music and Pain" in *Pain and its Transformations* edited by Coakley, Sarah and Shelemay, Kay Kaufman. Massachusetts: Harvard University Press. 2007. Page 203.

<sup>42</sup> Bormann, Jill E. and Oman, Doug. "Mantram, or Holy Name Repetition: Healing Power of a Portable Spiritual Practice" in *The Healing Power of Spirituality: How Faith Helps Humans Thrive, Volume 1* edited by Ellens, J. Harold. California: Praeger. 2009. Page 84.

<sup>43</sup> Bormann, 85.

<sup>44</sup> Bormann, 88.

<sup>45</sup> Bormann, 91.

<sup>46</sup> Bormann, 94.

The release from trauma through uttered sounds can also be seen in the recovery of Maria, a German woman who had been born with cleft lip in 1939. 47 Growing up at a time in which being deformed could make one a target of Nazi atrocities, she trained herself to stay practically silent - even years after the war when she had an operation and learned to speak. In order to give her the freedom of expression, a music therapist started her on a course of intoning several crescendoing emissions. Although it was at first terrifying for Maria to violate the principle that had once kept her alive, she eventually gained the confidence to communicate thanks to the musical repetition that taught her she would not be punished for making noise. <sup>48</sup> Carol L. Schnabl Schweitzer additionally pays attention to Nathaniel Anthony Ayers, a former Julliard student who was reduced to homelessness because of his struggles with schizophrenia. By spending his time playing music near a statue of Beethoven in a Los Angeles park, Schnabl believes that Ayers' repertoire was an anchor which provided stability in his life and his repetitive performances parallel the idea of religious ritual.<sup>49</sup> In time, he was able to stop sleeping on the streets and move into a shelter. As is the case with the trauma cases previously described, the use of repetition - an important part of both music and religion - has played a major role in this progress. 50

Aside from more extreme cases of mental illness, a combination of musical and religious techniques may also be useful in helping to alleviate the struggles of conditions that are much more common such as depression and anxiety. Even altruistic behavior (a normal

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<sup>47</sup> Campbell, 278.

<sup>48</sup> Campbell, 279.

<sup>49</sup> Schnabl Schweitzer, Carol L. "Text and Tune, Speaking and Listening: Musical Resources in Pastoral Care" in *Pastoral Psychology*, Volume 60 No 3. 2011. Page 318.

<sup>50</sup> Schnabl Schweitzer, 319.

mandate of most religions) has lowered depression and anxiety rates.<sup>51</sup> With music's ability to lower stress hormone levels in the blood, religious repertoire may help to reinforce this concept of a loving higher power when used in conjunction with these acts.<sup>52</sup> While there has been success with religious methods, ways to help those without strong beliefs must also continue to evolve. Gerry Cox discusses how religious rituals can give order to one's life and thus a way to handle the stresses of daily life. This relief can be of great help to those suffering from anxiety or depression, but Cox reminds us that any activity which supports belief can be classed as a ritual, highlighting that Native American practices such weaving could serve to remind them of the spiritual connection that they had with the earth. This is because all of their materials originated from there.<sup>53</sup>

Gregory P. Fields likewise espouses that yoga, a religiously-based practice that is now heavily used in the secular world, can create a state of "discriminative knowledge," an enlightened sense of self that leads to freedom from the troubles with which one may feel strained. As a result, those with depression or anxiety may experience renewed coherence about their lives and which direction they need to go. With these ideas in mind, it should be considered that listening to or playing music could accompany a religious or non-religious ritual (such as yoga which often includes chanting mantras) or even serve as the ritual itself in order to provide the peace that Cox describes. This musical-religious combination in therapy is slowly starting to grow as demonstrated by the University of Massachusetts

<sup>51</sup> Koenig, 50.

<sup>52</sup> Campbell, 72.

<sup>53</sup> Cox, Gerry. "The Native American Patient" in *Health Care & Spirituality: Listening, Assessing, Caring* edited by Gilbert, Richard B. New York: Baywood Publishing Company, Inc. 2002. Page 109.

<sup>54</sup> Fields, Gregory P. *Religious Therapeutics: Body and Health in Yoga, Ayurveda, and Tantra*. New York: State University of New York Press. 2001. Page 84.

<sup>55</sup> Fields, 94.

<sup>56</sup> Fields, 93.

Medical Center where patients with anxiety are encouraged to listen to music and engage in meditation. Often replacing the need for tranquilizers and other mood-altering drugs, this can help to overcome negative feelings about oneself and shows that religiously-influenced intervention can be administered without imposing belief.<sup>57</sup>

Another psychological issue that has become a mainstream problem around the world is that of addiction. From drugs to food to sex to gambling, there are indeed many stimuli to which one can develop a dependence, rapidly turning into a nightmare in which there is no control. One of the most popular systems that has been used in recent decades to assist those afflicted with addictions is the twelve-step program in which participation in a group offers opportunities for listening and expression as well as guidance from others. A fundamental idea laid out in these groups is that of the "Higher Power," a superior force which cares for participants and gives them the fortitude to keep going in spite of any difficulty. 58 This begins with their admission that they are powerless over their addictions and in need of something beyond their everyday means. <sup>59</sup> In these programs, the Higher Power does not have to be viewed as a spiritual entity which is actually watching. Instead, it can be any concept, feeling, person, object, or community which participants find suitable to their needs. <sup>60</sup> As a result, in spite of sometimes using religious imagery in their discussions, members of any faith (or lack of it) can partake in group activities and reap the benefits of a compassionate support network . According to Wendy Dossett, the journey of despair and introspection of those on the road to recovery echoes the mystical structures of many religious traditions that culminate in a

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<sup>57</sup> Campbell, 231.

<sup>58</sup> Dossett, Wendy. "Addiction, Spirituality, and 12-Step Programmes" in *International Social Work*, Volume 56 No 3. 2013. Page 373.

<sup>59</sup> Dossett, 373.

<sup>60</sup> Dossett, 372.

vision of ultimate reality. <sup>61</sup> In fact, the term "spiritual awakening" was used to describe the improvements of participants in early texts of Alcoholics Anonymous, one of the first twelve-step programs. <sup>62</sup>

As such a transition takes place, the benefits of music could be a fitting complement to the help that addicts feel coming from their Higher Power - perhaps music could even serve as the Higher Power itself. A decline in motivation is one of the biggest downfalls of many undergoing recovery and music therapy has been shown to help keep enthusiasm going even in the most distressing moments. This could largely be due to music's ability to influence natural opiate levels in the blood stream. Tsvia Horesh writes that many of the drug addicts with whom she works listen to music obsessively to fill the void of withdrawal. She points out that music can play a variety of roles in the recovery process such as validating emotions, relieving tension and loneliness, and stimulating feelings of mental and physical ecstasy. According to Newberg, turning to religion or spirituality can be of great help in the fight against addiction, but secular interventions like music can also ease the pain:

When people become addicted, they have a lot of very negative ideas about themselves. They feel like they are immoral and doing the wrong thing and turning to a religious or spiritual tradition that aids in feeling better about themselves - aids in the process of self-forgiveness - those things can be very effective as part of that whole therapeutic process. It certainly seems very reasonable to make that connection and again whether it is music, whether it is some other type of secular thing that people do - it could be motorbiking, it could be surfing, it could be hang gliding, it

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<sup>61</sup> Dossett, 375.

<sup>62</sup> Dossett, 372.

<sup>63</sup> Dijkstra, Irene T.F. and Hakvoort, Laurien, G. "'How to Deal Music'? Music Therapy with Clients Suffering from Addiction Problems: Enhancing Coping Strategies" in *Music Therapy and Addictions* edited by Aldridge, David and Fachner, Jorg. Pennsylvania: Jessica Kingsley Publishers. 2010. Page 93.

<sup>64</sup> Horesh, Tsvia. "Dangerous Music: Working with the Destructive and Healing Powers of Popular Music in the Treatment of Substance Abusers" in *Music and Altered States: Consciousness, Transcendence, Therapy, and Addictions* edited by Aldridge, David and Fachner, Jorg. Pennsylvania: Jessica Kingsley Publishers. 2006. Page 128.

<sup>65</sup> Horesh, 129.

could be playing sports - it could be becoming religious. Those are all different aspects of what can help people to transform out of that addictive process.<sup>66</sup>

The methods that addicts choose to help themselves are, in his opinion, largely shaped around what they find personally significant in their lives and for which they have genuine love:

It really does depend a lot on how we look at the individual and what that individual is doing with the various problems that they are facing. I think that is where turning to things like music or religion can be helpful, because they are more constructive, more positive, can provide that sense of meaning and purpose in a person's life in a way that is generally more acceptable within society.<sup>67</sup>

As Newberg indicates, with music and religion (or elements of religion that have been fitted for secular purposes) being common forms of relief and expression which can offer strong experiences of joy, their application may help to alleviate the pressure of addictions as more meaningful alternatives are discovered. Furthermore, many religious communities have started twelve-step meetings that offer spiritually-based support in an environment that is neither punitive nor judgmental. From this, the religious principles to which the participants adhere can be of great nourishment in the struggle and if they belong to the congregation that is hosting the group, other members can act as a surrogate family that monitors their behaviors and gives them the encouragement to avoid relapse. Such comfort can also derive from music therapy groups where music-listening, improvisation, and discussion of the repertoire provide an enjoyable atmosphere and communal support.

Finally, it needs to be addressed that not all health situations will end in improvement or recovery, but rather with the patient's demise. This is a reality which may be

67 Newberg.

<sup>66</sup> Newberg.

<sup>68</sup> Koenig, Harold G. and Weaver, Andrew J. *Pastoral Care of Alcohol Abusers*. Minnesota: Fortress Press. 2009. Page 17.

<sup>69</sup> Koenig, Alcohol, 34.

<sup>70</sup> Horesh, 138.

uncomfortable for many to think about or discuss, but with death being a part of human existence, it should be noted that music and religion can help to ease the negative emotions endured by one reaching the end. Sioned Evans and Andrew Davison write that an important concept at such a time is that of the "good death." Surveys have revealed that this includes principles such as understanding what is going to happen, being treated with dignity, and having access to spiritual and emotional care. Naturally, as life draws to a close, thoughts of the future can be a primary rumination. At this point, the ideas that believers have cherished can become particularly special. Christine Longaker stresses that dying believers should cling to scriptures, prayers, hymns, or meditations that are important to them. If they do not have any or do not follow a specific religion, they should be encouraged to say their own prayers with passion. He lisabeth Kübler-Ross also upholds the well-known ideas of confession and absolution in some religions that can make patients much more relieved about their encroaching fate.

Since hearing is the last sense to leave the body, music can be just as important in the final stages of life as various religious activities to which the dying can listen. <sup>76</sup> Mary Adamek and Joey Walker state that "music may be comforting for a patient at end-of-life, as the bond between music, emotions, and spirituality is strong" and religious repertoire has

<sup>71</sup> Davison, Andrew and Evans, Sioned. *Care for the Dying: A Practical and Pastoral Guide*. New York: Canterbury Press. 2014. Page 29.

<sup>72</sup> Davison, 30.

<sup>73</sup> Longaker, Christine. Facing Death and Finding Hope: A Guide to the Emotional and Spiritual Care of the Dying. New York: Doubleday. 1997. Page 115.

<sup>74</sup> Longaker, 114.

<sup>75</sup> Kübler-Ross, Elisabeth. On Death and Dying. New York: Scribner Classics. 1969. Page 270.

<sup>76</sup> Froehlich, Mary Ann. "Music Therapy with the Terminally Ill Child" in *Music Therapy with Hospitalized Children: A Creative Arts Life Approach* edited by Froehlich, Mary Ann R. New Jersey: Jeffrey Books. 1996. Page 211.

often been used to bring a good death to believers.<sup>77</sup> As he was on his deathbed, family and friends of Wolfgang Amadeus Mozart gathered around him to sing selections of his *Requiem* with him even joining in.<sup>78</sup> According to Islene Runningdeer, singing before death has long been a part of Native American culture not only for comfort, but also as a prayer for the soul.<sup>79</sup> Often improvised, these pieces help keep focus on spirituality at a time when the feeling of helplessness can threaten it.<sup>80</sup> This mentality was affirmed by Chief Aupumut of the Mohican tribe in 1725:

When it comes time to die, be not like those whose hearts are filled with the fear of death, so when their time comes, they weep and pray for a little more time to live their lives over again in a different way. Sing your Death Song, and die like a hero going home.<sup>81</sup>

As we can see, these musical and religious methods can be useful in helping believers feel that they will soon be meeting their higher powers or experience whatever positive future that their faith promises for the dead.

Like any of the other situations previously discussed, not everyone who is dying may be religious or believe at all. Still, there are ways in which they can feel greater satisfaction and fulfillment as they reach the end. Patrice O'Connor asserts that religious care can be spiritual, but spiritual care does not necessarily have to be religious. Rather, anything that makes one feel restored wholeness, closeness to a transpersonal source of meaning, and less

81 Runningdeer, 22.

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<sup>77</sup> Adamek, Mary and Walker, Joey. "Music Therapy in Hospice and Palliative Care" in *An Introduction to Music Therapy: Theory and Practice, Third Edition* edited by Davis, William B.; Gfeller, Kate E.; Thaut, Michael H. Maryland: The American Music Therapy Association, Inc. 2008. Page 358.

<sup>78</sup> Campbell, 217.

<sup>79</sup> Runningdeer, Islene. *Musical Encounters with Dying: Stories and Lessons*. Pennsylvania: Jessica Kingsley Publishers. 2013. Page 22.

<sup>80</sup> Runningdeer, 23.

pain can be classed as a spiritual experience. <sup>82</sup> Longaker pays attention to acts that bear similarity to religious rituals such as healing relationships and purifying regrets. <sup>83</sup> Even to simply have the dying discuss their lives and their best attributes can carry the same sort of spiritual cleansing that leaves them ready. <sup>84</sup> Meditation is another technique which Longaker recommends for the non-religious, writing that it is designed to "connect us to our innermost essence of wisdom." <sup>85</sup> Just relaxing the body and clearing the mind can help to facilitate acceptance and not fight the inevitable anymore. <sup>86</sup> Music can certainly contribute to these states thanks to how it can produce fruitfulness of spirit as well as reassemble, reconstitute, and review life patterns. <sup>87</sup>

Newberg agrees that it is possible for the dying to feel a catharsis through a variety of means and that music can be a powerful way to keep a positive outlook on one's existence. As he says, "Music ties us back to life and ties us back to our memories. The songs that were played at your wedding and your graduation, these are all things that tie us back to who we are as people." Secular music can indeed take a profoundly spiritual turn on the eve of death as demonstrated by Joey Ramone who requested that U2's *In a Little While* be playing at the moment he died of cancer in 2001. Bono reports that the song is about a man with a hangover feeling guilty about having to go home to his wife, but Ramone's reflection of it in his situation had allowed him to turn it into a gospel song - a song about a man going home to

<sup>82</sup> O'Connor, 82.

<sup>83</sup> Longaker, 114.

<sup>84</sup> Longaker, 115.

<sup>85</sup> Longaker, 64.

<sup>86</sup> Longaker, 64.

<sup>87</sup> O'Connor, 86.

<sup>88</sup> Newberg.

God. <sup>89</sup> Newberg points out that this sort of revelation aided by secular means can stir the emotions just as much as faith, aided by the conviction of the person who is dying:

You should be just fully engaged in life and doing the things that you need to do and doing whatever it is that you do as best as you possibly can and sort of optimizing your own being. There are lots of ways of doing it in a secular fashion and as far as we know can be as equally effective as taking a religious or spiritual perspective and music can certainly be part of that too.<sup>90</sup>

Another important issue amongst the dying is the idea of presence. This does not have to mean that words are spoken, but that the person does not feel isolated. Because of its universal nature, music can help establish this notion of presence as it can stimulate the senses to invoke images, emotions, and thoughts. <sup>91</sup> O'Connor writes, "Music at its best is pure beauty; and there is only one being that is pure in the universe and that being is God, and he who has experienced music has taken his first steps toward God." <sup>92</sup>

One of the most painful end-of-life scenarios is the death of children. Whether it be a slow or sudden loss, it can be an especially harrowing occasion when the departed is one whose life was only beginning and so many hopes for the future are taken away. Studies show that dying children often develop an awareness of how serious their situations are even if nobody directly conveys it to them. <sup>93</sup> In fact, according to Kübler-Ross, they may even experience a "clear moment" in which they proclaim that deceased loved ones are waiting for them - even if they have not been told that these people have died. <sup>94</sup> It should thus be

91 O'Connor, 83.

<sup>89</sup> Stevenson, Gregory. "Letters" in *Teaching the Bible: Practical Strategies for Classroom Instruction* edited Gray, Patrick and Roncase, Mark. Georgia: The Society of Biblical Literature. 2005. Page 342.

<sup>90</sup> Newberg.

<sup>92</sup> O'Connor, 86.

<sup>93</sup> Papadatou, Danai. "Childhood Death and Bereavement Across Cultures" in *Death and Bereavement Across Cultures, Second Edition* edited by Laungani, Pittu; Murray, Colin; Young, Bill. New York: Routledge. 2015. Page 156.

considered that children close to death, although their understanding of the world may be limited, can still benefit from both musical and religious interventions. Full comprehension of such tactics may sometimes not even be necessary to work with them. For example, in Sikhism, the *shabads* are sacred songs based on scripture that can be sung at any time. Because they do not have to be understood to receive God's grace, they can be effective sources of solace to dying children. <sup>95</sup> Also, many Buddhist traditions do not require parents to formally teach rituals as this is usually done through family life. Because of this, their children may not see themselves as overly religious. <sup>96</sup> Still, their upbringing can often make them aware enough to be comforted by such practices as meditation, chanting, and looking at depictions of the Buddha. <sup>97</sup> Buddhism views suffering as an opportunity to abandon negative states of mind and although this may be difficult for children to understand, these rituals can help to make them feel more at peace. <sup>98</sup> Paul Nash notes that in nonreligious cases, simply talking about what gives meaning to one's life can be just as special, perhaps spiritual in and of itself. <sup>99</sup>

In her work as a music therapist, Claire Flower reports that she has seen many dying children and their families feeling that there is a "moment of vitality" in which the healthy

<sup>94</sup> Kübler-Ross, Elisabeth. *On Children and Death*. New York: Macmillan Publishing Company. 1983. Page 210.

<sup>95</sup> Parkes, Madeleine; Sidhu, Surinder; Sohal, Parkash. "Care of a Sikh Child and Family" in *Multifaith Care for Sick and Dying Children and Their Families: A Multidisciplinary Guide* edited by Hussain, Zamir; Nash, Paul; Parkes, Madeleine. Pennsylvania: Jessica Kingsley Publishers. 2015. Page 157.

<sup>96</sup> Munnings, Keith and Parkes, Madeleine. "Care of a Buddhist Child and Family" in *Multifaith Care for Sick and Dying Children and Their Families: A Multidisciplinary Guide* edited by Hussain, Zamir; Nash, Paul; Parkes, Madeleine. Pennsylvania: Jessica Kingsley Publishers. 2015. Page 42.

<sup>97</sup> Munnings, 41.

<sup>98</sup> Munnings, 45.

<sup>99</sup> Nash, Paul. "Engaging Health and Religious Care Together" in *Multifaith Care for Sick and Dying Children and Their Families: A Multidisciplinary Guide* edited by Hussain, Zamir; Nash, Paul; Parkes, Madeleine. Pennsylvania: Jessica Kingsley Publishers. 2015. Page 193.

child hidden under the symptoms returns. <sup>100</sup> Mary Ann Froehlich even writes that music can turn the focus away from death, replacing it with a "celebration of life" which brings mirth to all and leaves lasting memories. <sup>101</sup> This does not have to involve making major changes to the styles of therapy; the ones that are used for other situations can work just as well. <sup>102</sup> Such a mentality can be compared to the increased satisfaction and happiness that children may experience thanks to practices revolving around the thought of a higher power. Whether it is one who provides love and will take the deceased to a better place or even simply the ideas of love and compassion themselves, paying attention to a force greater than ourselves can be a soothing approach that could be combined with music to bring extra solace to them. Losing a child can be one of the most tormenting woes of life, but as there are already strategies in place to address it, it is of utmost importance that they be further improved to make the transition even gentler.

After death, friends and family of the departed may struggle to return normal as they are faced with the grief of a loved one's absence or unanswerable questions about why they had to leave and where they are now. Again, a combination of musical and religious experiences could be used by the bereaved to remember those who have died and provide the strength that they need to carry on with living. Dennis Klass espouses that continuing bonds between the living and dead is inherently spiritual. He outlines that those who grieve often find consolation through linking objects, religious devotion, memories, and integrating the

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<sup>100</sup> Flower, Claire. "Living with Dying: Reflections on Family Music Therapy with Children Near the End of Life" in *Music Therapy with Children and Their Families* edited by Flower, Claire and Oldfield, Amelia. Pennsylvania: Jessica Kingsley Publishers. 2008. Page 182.

<sup>101</sup> Froehlich, 210.

<sup>102</sup> Froehlich, 210.

<sup>103</sup> Klass, Dennis. "The Death of a Child" in *Religion, Death, and Dying, Volume 2* edited by Bregman, Lucy. California: Praeger. 2010. Page 9.

deceased into the self. These are obvious parts of religious life, but Klass mentions that those without faith can also experience emotions similar to those who think that a loved one's spirit is still somehow present. For example, objects associated with a dead person take on the same function as relics of a saint. Similarly, an anniversary of a death may be treated as a holiday and involve rituals deemed as momentous. As Klass says, "Heaven seems to be a reality in the heart as much as it is a place in the sky."

One of the most important times and places to begin this process is at the funeral which provides a sociological, psychological, and philosophical resource for the bereaved to accept their loss and decide how to proceed. When a dying parent is leaving young children behind, the impending death is often kept a secret from them. Likewise, child participation in funerals or other rituals involving death is often limited if it happens at all. However, while all of this is usually done to protect them from being traumatized, it is now understood that it can be beneficial to them if they have some means of saying goodbye. Newberg also stresses the importance of funerals as a way to mourn, but also begin the process of moving forward. Music and religion have been a part of many of these events to facilitate this:

Many of the prayers and things that are uttered at funerals include music and it is part of what engenders those feelings. You have sad music to help people express the sadness of that moment or maybe you have uplifting music to remind people that life goes on or a little bit of both that takes you from one side to the next. <sup>108</sup>

105 Klass, 15.

108 Newberg.

<sup>104</sup> Klass, 12.

<sup>106</sup> Nichols, Jane and Nichols, Roy. "Funerals: A Time for Grief and Growth" in *Death: The Final Stage of Growth* edited by Kübler-Ross, Elisabeth. New York: Simon and Schuster, Inc. 1986. Page 94.

<sup>107</sup> Papadatou, 160.

As rough as it may be, the expression of grief is a norm that is evidently not to be suppressed and music could be a fitting part of the religious styles of coping discussed since its remarkable sentiments it can be applied to many situations. Repertoire that reflects a person's life can be played at a funeral and used in times of upset. 109 The same may be applicable to compositions or recordings of musical activities left behind by the deceased. 110 These keepsakes can be especially beneficial to children who usually need concrete evidence to accept the loss of a loved one and help them keep the memories alive. 111 Again, how mourners reflect on a song does not always have to parallel what its original meaning is. This can be seen in These Are the Days of Our Lives written by Roger Taylor of Queen about his children. In spite of this being the topic, its performance by Freddie Mercury as he was in the final stages of AIDS in 1991 has made it more known to the world as a swansong in which he bids farewell to his fans and reminds them that he still loves them. 112 As a result, it offers consolation and provides an elegant legacy to one who for decades has been missed by so many. These instances indicate how the bereaved have several means to live life once again while at the same time remembering those they have lost and imagining that, whether there is an afterlife of some kind or not, the conditions with which they were once afflicted have ended. These resources, both musical and religious (or religiously-based) may be a useful part of the grieving process when used together.

The effects of music and religion have been great sources of hope and liberation for us, so much that their manifestations have the potential to make vast changes in our health for the better. Therefore, the therapeutic gains of musical and religious experiences should

<sup>109</sup> Nichols, 95.

<sup>110</sup> Froehlich, 210.

<sup>111</sup> Papadatou, 160.

<sup>112</sup> Langthorne, Mark and Richards, Matt. *Somebody to Love: The Life, Death and Legacy of Freddie Mercury*. California: Weldon Owen. 2016. Page 352.

continue to be researched, including how patients react when the two are used in close conjunction. Through committed work, such a therapy may be able to harness their abilities to elevate our emotions and make them readily available in a controlled environment.

Reflecting on the ancient integration of music and religion applied to medical needs,

Newberg discusses how modern research can investigate this relationship in a more thorough manner, hopefully producing findings that work in the therapeutic world:

2,000 years ago it was more of a guess that these things would be helpful and they felt that they were. But today you can design a study and say, "Okay, I'm going to just do religious therapy, I'm going to just do music therapy, I'm going to combine the two of them," and you can see if they work and how well they work and in what contexts they work. So there is the ability now to not only find ways of bringing them together the way they were thousands of years ago, but to find the best ways of bringing them together. All of these approaches are looking for that overall ability to bring these things together with the goal of making them as effective as possible and to help as many people as possible. 113

In spite of the fact that the modern styles of medical deduction that he describes were not available in the ancient days, Newberg is also quick to mention that the importance of musical and religious intervention in the ancient world does point to an awareness of human aspects that are just as valid now as they were back then:

We're learning more and more about ourselves and in the healthcare setting we've learned that we can't just take care of the biological person. We need to understand the social and the psychological and spiritual aspects as well. So looking at how music and religious ideas come together within us I think is very important. 114

As has been shown throughout this dissertation, the powers of music and religion can in some way make a significant difference in the lives of just about everyone and it is this widespread quality that makes them potentially such an effectual tool for those who battle the difficulties of life from which nobody is immune. This section has pointed out that many of these gains can be long-lasting and meaningful as they help patients tap into a part of themselves that

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<sup>113</sup> Newberg.

<sup>114</sup> Newberg.

feels they are above any of their issues and can deal with any of their ramifications. Such cases described here will hopefully provide ideas for planning, developing, and testing a new method of treatment that use the two together since their influences have many similarities in terms of how they penetrate the mind and body so well. Music and religion have brought out some of the finest aspects of our humanity by raising us to new levels of courage, understanding, kindness, and love. The incorporation of these sentiments and experiences into the medical world as much as possible should remain a goal towards which we continuously strive.

The data and stories within this dissertation have highlighted the experiences of music and religion that have been with us for generations. In part one of my work, I have shown how music can lend itself to the optimism that both believers and non-believers can feel, making it an important part of their personal and public activities. At the same time, I have described that the effects of religious experiences can also fill us with new levels of encouragement and that those who describe their episodes religiously often do not need to subscribe to a particular (or any) religion in order to undergo such events - especially when music helps to establish them. By highlighting a variety of religions and musical genres from different parts of the world and time periods, this research demonstrates that the desire for musical and religious fulfillment has remained a constant throughout the history of mankind and just about any belief or preference can cause such experiences to occur. The influence of music, lyrics, and community can provide us with the belief that we are not alone and that our existence in some way has purpose and direction, similar to the inspiration that can be drawn from the belief that we are under the care and supervision of a higher power.

Because of the experiences that music and religion can thrust upon us, their combined usage in religious life can reinforce the ideas that believers hold dear, making them feel that the entities that they venerate have penetrated their being and given them such beautiful gifts as wisdom and comfort. Even if this is only a temporary sensation, it may be all that is necessary for devotion to be maintained. Secular music is also able to bring about such effects in some way. Whether one is a believer or not, the expressiveness of such repertoire can create moments of lucidity and bliss along with the same sorts of transcendence of a religious experience and the notion that contact with superior forces is established. In both the cases of religious and secular music, the connection with others can often be just as important as those who revel in their cherished works also become more in touch with those who uphold the same opinions and beliefs. As they delight in the same joys or undergo the

same hardships, the bonds between may help them to remember who they are and the causes for which they stand united. This is a crucial part of maintaining both religious and secular ideologies and demonstrates mankind's intense inclination for social contact as music and religion are able foster.

In part two, I have raised the idea that the similar effects which music and religion have upon us and the similar descriptions of these experiences can be due to correlations in how our bodies and minds react to them. Furthermore, I have paid attention to how these effects have been used to promote better living and overcome physical and mental problems. Especially important in this work has been the use of interviews which have brought up ideas seldom discussed in academia. In discussing music and religion with those familiar with how we register them, their importance has become more apparent. These are not mere tools for our entertainment or relief, but parts of our nature which help to elevate us above our most perilous disturbances, maintain our bonds with others, and keep our minds focused on our higher powers - whatever we understand them to be. The field requires further analysis, but by comparing studies of music and religion, I have observed that the brain appears to some degree process the two in the same regions with the same sorts of neurologic results. This could be because the biological roles that they play are fundamentally similar and inherent to our survival and progression as a species. The therapeutic responses that spring from musical and religious intervention also point towards how such experiences seem to appeal to the human condition. We have extracted elements of the two for medical purposes and my research into musical and religious therapies in separate contexts and has indicated that the brain and body's responses to them are extremely effective at combating many issues that plague us. In many cases, the improvements that take place are described by patients in the same way and even the observable results that medical professionals have encountered indicate music and religion's biological similarities that can affect our health. The

improvements that can be generated do not seem to be limited by one's religion or musical tastes. Just as how musical-religious experiences have been found throughout the world, the examples I have provided hint that the therapeutic gains are just as accessible.

There is still much work to be done on the study of musical-religious experiences, namely regarding the scientific aspect, including how such information can be applied to medicine. As has been discussed in part two of this dissertation, there are comparable neurologic and therapeutic reactions to music and religion which point towards an inherent link that the two share. To address this possibility, more research should be done that compares specific brain and body responses to music and religion to see how they are registered by us. It could also be of use to see how peoples' likes and dislikes about music and religion are biologically manifested since it could help to understand how societies or even individuals in close contact can differ from one another. Therapeutic applications of the two could take place after gathering the information about volunteer patients, including their musical and religious outlooks. Again by comparing separate research, the most effective elements could be selected and then tested to see what comes when they are combined. Aside from this, it would be useful to see if certain keys, rhythms, tempos, meters, and other musical elements are more effective than others in establishing a musical-religious experience in people. The same could be done with certain types of prayers, rituals, and other religious traditions. Although neuroscientific methods could provide in-depth evidence of this, it should not be forgotten that to simply talk to about people about their experiences could also help draw parallels. Perhaps there are some parts of both music and religion that are so resounding to our human qualities that their effects can be seen in cultures that at first appear to be completely different from each other. These similarities could reveal much about what biological traits we share as a species or even what part they play in our survival and

growth. Additionally, it could further enhance therapy if it is known which aspects are the most beneficial to us.

The information of this dissertation has come from a variety of literary sources (academic and popular readings) and interviews with those whose lives have been directly affected by music and religion. This has provided a foundation on which I can continue my research and my next aim is to start planning a doctoral project in which the combined usage of musical and religious interventions are tested in a medical setting in order to see if the therapeutic ideas discussed here do lead to reports of improved health, moods, and functioning. If this happens, I would like to study brain scans to provide biological validation for this since it is from the brain that all of our bodily processes are regulated. It is my hope that if patients start to talk about getting better, neuroscientific research on changes in their brains can provide evidence for why this is taking place. The benefits of music and religion do not necessarily have to be limited to any specific group. Through careful planning and creative precision, the therapeutic aspects of both may somehow be captured and applied to the unique situations of every individual. Religious and secular music both have the ability to radically alter our thoughts and feelings and elements of religion that offer comfort and peace can be tailored for the needs of both religious and non-religious communities. Because of this, such a potential therapy should not be seen as trying to proselytize or to change one's attitudes towards music or religion. Instead, it could be a valuable commodity that respects everyone's backgrounds and predilections and assists the other parts of a treatment program.

The experiences that music and religion have implanted on the world have provided indicators of how poignantly we can be elevated, enough that even the most troubling of pains and worries may be temporarily reduced or gone. These sentiments that influence us today are surely of the same nature that inspired the awe of our ancestors and allowed

musical and religious expression to progress throughout history. As these fields become more discussed from scholarly perspectives, including their biological aspects, we will have more knowledge about some of humanity's basic inclinations and how the drive for experiences of uplift has shaped who we are. We may thus be able to further develop strategies that maximize such powers for our self-improvement, especially important for those with conditions which make daily existence a burden. Music and religion are universal in our world and regardless of conflicting opinions about them that are bound to arise, it is important that we focus on the positives which they offer. Their relationship is one that has nurtured great hope and stamina for many and may possibly continue to bring even more constructive outcomes to an even wider audience if we meet the challenge with dedication and ingenuity. May we always remember this.

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# <u>Interviews</u>

Benkong Shi. Interviewed by Richard Cezar. New York, NY. November 15, 2018.

Greenfield, Jan Lauren. Interviewed by Richard Cezar. New York, NY. September 14, 2018.

Janata, Petr. Interviewed by Richard Cezar. Davis, California. October 31, 2018.

Newberg, Andrew. Interviewed by Richard Cezar. Villanova, Pennsylvania. February 20, 2019.

Transcription of Interview Between Richard Cezar and Jan Lauren Greenfield

- \* = Prepared question
- \* RC: You have written a book and you talk about your background and experiences and one of the points that you made is being in a situation where there was a Stevie Wonder song playing and it had a very profound impact on you. Could you describe some of that situation with what was going on in your mind what you were thinking and feeling?

JG: It was 2004 or 2005 and I was let into the hospital in the psych ward on the eighth floor and it was the first time I'd been there. They had all these different group therapies and one of them was music therapy and I want to say that there were different experiences in there, positive and negative, but in general it was a positive experience. I remember there was an old boombox and the therapist turned the music on and it was the first time that we could move our bodies and sort of forget where we were, forget that we were sort of imprisoned for lack of a better word. At least for me to feel that sort of freedom and transcendence.

\* RC: You said that the Stevie Wonder song had a particularly resonant reaction to you. When that song turned on, what was going on in your mind?

JG: I don't know if I was thinking that much honestly. I don't think there was a lot of thought process. There's a quality to that music and song that is obviously incredible so if it was another song, I don't know if I would have had that experience. But I think it was just music and movement and sort of a connection to things beyond that room and those walls.

RC: Was that the first time you ever heard that song?

JG: I can't remember. I don't think so. It was the first time I "heard" that song though. It was the first time I heard that song for real - like a deep listening.

RC: Were you doing coordinated movements or anything you wanted?

JG: Just a circle. It was free movement.

\* RC: When you wrote the book and you talked about that experience with the group and the song, you used religious words. You said "transcendental" and "miracle." Why did you feel it was appropriate to use spiritual terms to describe something that really was not in and of itself spiritual?

JG: I really think it was though in a way a spiritual experience. The experience of the music was able to open a doorway or a gateway whether in the mind or the heart or to a place that was beyond just the physical space that we were in. So I think in that way, it was very literally a transcendental experience in that I was able to transcend the physical environment that I was in, the limitations of that environment. I think that in itself is a miracle. Miracles aren't parting the Red Sea. Sure that's great, but a miracle can be just a shift in perception. I think we underestimate the amount of miracles or the size or the capacity.

- \* RC: I would like to know, what was especially powerful about the song to you? Perhaps the rhythm or the text or the melody or a combination?
- JG: I think it was a combination. It opens with this beat and I think that's probably the most powerful. We talk about the heart with the rhythm in ecstatic experience, in group experiences whether it's with the drum or the shaman or if it's in pop music. That music, that rhythm, that beat will sort of automatically connect to our humanness. So I think that song not consciously, I didn't know what was happening I think it hits on that level. And the tone of his voice, personally I just like it.
- \* RC: You said in your book that you had been to Nepal before this happened and you said that was also a very moving experience to be in that sort of spiritual environment. Looking back, do you see a similarity between the religious things you were exposed to in Nepal and that time in the group?
- JG: How do I answer that? Nepal to me it's a country and culture that sort of accepts things beyond what we can just see. There's sort of an acceptance of God as part of the fabric of culture and it's not in this big sort of God in the sky way. It's like we do *pujas* every day and there are temples everywhere. It's like part of your daily mundane life in a way. That to me is an incredible shift in just living in a society. Whereas here for the most part in America, that doesn't exist. Our holidays and gods are saved for a Christmas tree or it's separate. It's not part of it. I find that disconnect to be hard and part of some of the ailments of society and civilization that disconnect from something other than ourselves. Not just on an individual level, but on a cultural level. In the hospital, I was very afraid right before I was moved through triage onto the locked floor, because I had *One Flew Over the Cuckoo's Nest* nightmares. When I was in there, I met people who were ill and not going to function in society, but I also met people who were just dealing with brain disorders and needed a time out. Lovely, gentle, vulnerable people. Being in that space a group therapy in a space with people who are more open, more connected in some way, more vulnerable there's some similarity somehow.

RC: How would you say the feelings you got in the music class compared to the feelings that you had in Nepal?

- JG: I think I was in a pretty ecstatic state to begin with. I was diagnosed in an manic state and mania you know has a lot of similarities to an ecstatic state. I for a long time felt like, "Oh, can this be a mystical experience or was this just a crazy brain?" and then I realized it can actually be both. Why does it have to be one or the other? It can actually exist together. Light is a wave and a particle. In general, I think I was in a more heightened, ecstatic, manic state both in Nepal triggered by travel and then also at that time in the hospital triggered by my brain. So I was more open to those types of experiences and a willingness and an ability to feel and hear the music and the people.
- \* RC: You talked about being with other people who were going through things of their own. Some people say that part of the musical experience is sharing it with others. It's sort of like when people get together for a holiday or go to church. Do you feel that part of the feeling that you got in that class was because there were other people with you?
- JG: There's that sort of grounded transcendent experience that people have when they're in a group of people maybe chanting *kirtan* or shamans or even at church and then there's that

thing that I was feeling which was that plus an ungrounded mania. So I think there are these sort of ecstatic transcendent group experiences often with music. This was a little bit different, because I was really in my own trip. I was not in a well-grounded place so I just want to make that distinction too. At that point in time, no. I think if I was by myself in a room with the music, I think I would have had just as much of an experience just because of where I was coming from.

RC: So you believe you are capable of having such a profound effect on your own?

JG: Yes.

\* RC: I want to ask some things about the music itself - the Stevie Wonder song. The text of the music is not that optimistic. I don't know if you've looked at it before, but it talks about the difficulties of growing up in the city as a poor African American. In spite of that sort of negativity, it had a very uplifting effect on you. How do you think that was?

JG: I think any time you are making art - Stevie seems to be taking a situation that I can't necessarily relate to other than I grew up in the city and sure I had different hard times - when you sort of take that pain and you transform it into art, into music or a painting or dance, that in itself is like a love and creation for humanity, a miracle in itself. Lyrically, any time there is a New York City reference, having grown up in New York, it's a hook for me on a personal narrative. But I do remember being there. It was more about the beat and the feeling and the tone of the voice than the actual lyrics. I wasn't necessarily listening deeply to the lyrics at that time.

\* RC: Regardless of whether it's the lyrics or the music itself, one thing that happens when we listen to music - it also happens in a religious setting also - is we can have a profound connection with the performer. It's like we know them. What was that like?

JG: I don't have that with musicians. Like that Beatlemania. There's no transference. I feel no strong connections. I mean Bob Dylan, but that's more just as a fan.

\* RC: When somebody hears a song that's important to them, one of the things that makes it so special is that it fits their autobiography. It's telling something that they can relate to. Was there something about that song that made you think, "This is me. This is really describing what's going on in my life"?

JG: I wasn't listening to the lyrics so much. It was more like the rhythm and the voice, but probably like, "Yeah, we're all in the city. We're in the middle of New York City as this happening."

RC: But those emotions can come without words. You can listen to a song that has no words at all and still feel like that's me, that's describing how I feel.

JG: I don't think it was such a strong identification. I think it was in lesser terms an escape and a release and in a more elevated way a transcendence of that time and place. Not in terms of I'm identifying strongly with it. Just - I could almost travel on the music out of this place which was great.

\* RC: Many people who listen to music are trying to fulfill something, like something is missing and they're searching for it. One of the guys who I'm reading about said that all people are looking for something beyond themselves. They may not get it from religion, but many times get it from music. Was there something about that song that fulfilled you or gave you something you wanted?

JG: It must have. I don't know how to put it into words. I guess the simplest way to say it is music is medicine. I was there in the hospital to be looked at by all these doctors and get pills and stuff and some of the best medicine that I got actually was the music and the music therapy which is interesting.

RC: Would you say at that time it was like you were not in the hospital?

JG: Transcendent is the best way to describe it.

\* RC: Many people who talk about their musical experiences talk about them very similarly to what people report during a mystical experience - a sense of wholeness or a connection to a higher power of some sort. You said that you had a spiritual leaning even before you went in. Did you feel that you had a unity with something higher during that time?

JG: I do. I'd had it before and I had it then, but there's times in life when I feel more strongly connected. There's a stronger connection to let's say God, awareness, unity. In some moments, it's harder to feel that just because I'm caught up in my mind or identifying with ego and small me and whatever's going on and in some moments, it feels easier to stay in that awareness or that unity. That music in that moment was definitely a stronger connection.

\* RC: How about since then in your everyday life?

JG: I have a meditation practice, a physical yoga practice. I love chanting like *kirtan*, the sacred calling back and forth. I find that whenever I do that, there's sort of that heightening that can come. Even pop music, pop culture. Sometimes I'll just listen to a song on repeat, because it's doing something for me. It's usually more emotional than spiritual, but maybe those two are connected and it's giving me like a medicine of what I need from that.

\* RC: There's a Jesuit priest who wrote a book on rock and roll and says it's a really spiritual thing. He says it's very connected to the Jesuit idea that if you're reading a prayer and there's something about it that's important to you, you read it again and again. Not for repetition, but to really contemplate it and see how your views change. He says that's something people do with music. Over time they think about it in different ways. Has that happened?

JG: I think Bob Dylan is probably the best example of that for me, because he is such a narrative poet. In terms of lyrics, for sure. I've found that every stage of life, he's got an album for or I'll go back and listen - I just listened to *Abandoned Love* and thought, "Oh, that has a whole new meaning to me." I just thought it was a beautiful song and it's like wow, just that love that only lasts and you know you're going to leave it. So definitely.

RC: How about that Stevie Wonder song?

JG: I've listened to it a little bit. It doesn't have that effect. Sometimes. I guess it depends. But in general, no. For some reason that's hard to recreate. It's interesting - one of the projects I'm

working on writing is about Woodstock. That was a religious experience for a lot of people and that was sort of the transcendent power of music, the whole festival and Swami Satchidananda giving a speech on the power of music and art. I think it's just fascinating.

RC: You were in this group and sitting in a circle and there was a lot of movement going on. That's something that happens in many religions - a feeling of being taken over physically. Did you feel at the time that you weren't in control?

JG: No, I definitely was in control. If you looked at the scene from above, it definitely could have looked like a church group. It's interesting to think about it like that. I felt very safe somehow. So whether it was the circle, whether it was the teacher, whether it was the relationships I had formed with the people in there, there was a sense that this was a safe place to sort of allow that opening, for that moment and that joy to come through. It was a joyful experience.

\* RC: You've given some of your explanations as to why you called that time in the class "transcendental" or "a miracle." Many people use those terms, maybe more so than other styles of art. Music seems to have that effect. In your opinion, why do you think that music and spirituality have this sort of innate connection with each other?

JG: I thought about this a little bit. Because music is - if I could have any skill, it would be to sing - it just moves people so quickly and so together. It could shift a whole energy, tens of thousands of people pretty quickly. I think followed secondly by comedy actually, whether you can make people laugh or cry - which music can do pretty quickly. Because of the time. Let's say if it's live music, there's something in the live connection I guess. I don't know why, but I definitely agree with that. I can hear a song or I can hear someone play something and it doesn't have to be the most beautiful voice or even that polished just when it comes straight from the heart. If you're acting, you're putting on a layer. When it's music, it's just like a direct explosion of that emotion unfiltered, unmasked. I think it has something to do with that, the human experience maybe.

\* RC: How does that compare to a spiritual experience?

JG: I go to synagogue, not regularly but often. I've spent time in Israel in a little bit more religious environments too, celebrating holidays. I traveled to Nepal and spent time in other cultural-religious ceremonies and experiences - some shamanic, some native traditional, some with medicine. So I've been in a fair amount of religious experiences. It's very similar. The feeling of being in one is very similar to what I had in the classroom.

RC: I want to get back to the class. When that group was going on, you said you were on your own, but was there a sense, even if it was only temporary, of being okay?

JG: Absolutely. I'm going to be okay and we're all going to be okay and we're all okay. I can remember seeing other people dancing and it was like we were all dancing alone in our living room. It was that carefree. There was just no self-consciousness. I was aware that other people were doing it and having those moments too. Just joy with themselves and that's how I was.

RC: Did you experience that in any of the religious things that you've done?

JG: Definitely, within a sense of community.