7-28-2022

Music: Seeking Pleasure, Emotional Language, Ritualized Communication

Jillian N. Gerlach
Montgomery County Community College, jgerlach@ursinus.edu

Music: Seeking Pleasure, Emotional Language, Ritualized Communication

Jillian Gerlach, Interdivisional Studies

Introduction: Music in My Life

Music has always been a central part of my life. When I was a child, I would watch Disney movies and other movie musicals religiously, always singing along. From fourth grade to twelfth grade, I participated in chorus at my school, in addition to one semester in college. I have always enjoyed listening to music and singing and dancing along, usually in the privacy of my room. On the other hand, my family is always sharing music – new and old. We frequently stop dinnertime conversations to listen to a song that was mentioned. Inevitably, singing and dancing ensue. Beyond our discussions about music, my parents and I have attended several stage musical productions and large popular music concerts together. My brother took me to my first major concert. These events are memorable bonding experiences.

I am only scratching the surface of all the minute ways that music factors into our lives. We may not be in a family band, but music plays a significant role in our lives and relationships. What I want to know is whether other people experience this bonding power of music.

The following sources shed some light on this topic. Half of these sources explain three key theories: the pleasure instinct, communicative musicality, and what I term 'prelinguistic ritual syntax.' The other half facilitate better understanding of these theories through application.

The Pleasure Instinct: Why We Crave Adventure, Chocolate, Pheromones, and Music

Summary

Beginning Chapter 1, Wallenstein asks the question, "Why does pleasure exist?" (Wallenstein 3), which he thinks is rarely posed beyond academia – most people seek pleasure, not think about it. Pleasure is an ancient phenomenon, many experiences generate pleasure, and the characteristics of pleasure are similar cross culturally. Pleasure and happiness are enduring philosophical subjects. Wallenstein describes pleasure as a biological urge to consume temporary

things, but happiness as a consciously created, culturally influenced, intellectual concept. He introduces the theory of "the pleasure instinct" (Wallenstein 3), the evolutionary adaptation utilizing pleasure to ensure survival and reproduction. Wallenstein points out that the modern world is different from the environment in which our foraging ancestors evolved the pleasure instinct, but pleasure endured, so modern humans constantly seek pleasure, often unsuccessfully. He thinks studying the environmental discrepancy will benefit humans today (Wallenstein 3-5).

Wallenstein assures readers that genetic evolution through natural selection does not mean that we lack control of our lives, merely that unconscious urges for pleasure influence our choices. He thinks understanding this fact gives us the knowledge and power to override those urges. Wallenstein thinks more should be studied on how the brain and genes influence interests and feelings. According to him, innate preferences are observed in infants. In the book, Wallenstein outlines the origins of pleasure from both evolutionary and developmental perspectives. The human brain uses pleasure to guide individuals toward self-directed sensory activities that encourage normal brain development. This inclination toward pleasure-seeking persists beyond infancy, childhood, and adolescence, and influences adult behaviors. Wallenstein thinks investigating pleasure through evolutionary science will reveal essential answers that have widespread implications on human nature (Wallenstein 5-9).

Chapter 3 discusses neurogenesis, synaptogenesis, synaptic pruning, and self-stimulation. According to Wallenstein, most of the one hundred billion neurons that make up a human brain are created during the first half of pregnancy. During this period, neurons begin to make connections with other cells. This process is called synaptogenesis. Each neuron forms dendrites, which receive information from other cells, and an axon, which sends information to other cells. Cells communicate electrochemically through these connections, or synapses. Synapses are the physiological structure from which are derived the senses, as well as the cognitive functions of the brain. Between the middle of pregnancy and the age of two years, synaptogenesis is at its height. Wallenstein conveys that several theories exist to explain how synapses find the cells to which they should connect. The most widely accepted theory among neurobiologists is that synaptogenesis "works primarily through competition" (Wallenstein 43). Genes determine the general structure of the brain, following a precisely timed and arranged progression. Recently, neuroscientists are finding that experience is the final step in synaptogenesis. Genes tell synapses

the general address of their destinations, but synapses must complete the task. They interact with stimuli and extend into the exact, needed place for the child's environment (Wallenstein 42-44).

After synaptogenesis concludes in an area of the brain, the activities governed by that area emerge, but humans produce twice as many synapses during early childhood as they will need in adulthood, so the process of synaptic pruning is essential to successful brain development. In synaptic pruning, the brain utilizes the individual's experiences to select which synapses to reinforce and which connections to remove, which leads to a reduced ability to perform other brain activities. For example, humans lose the ability to perceive sounds that they rarely encounter. Neuroscientists have discovered that regularly activated synapses survive the purge. Active synapses hinder the growth of nearby synapses and spur biochemical activity that secures their own connections. Hindered synapses spur biochemical activity that destroys their connections. Like neurogenesis and synaptogenesis, synaptic pruning begins in the evolutionarily older parts of the brain and ends in the evolutionarily younger parts of the brain, so the activities governed by these areas emerge in a similar order. Synaptic pruning generally continues until an individual is in their early twenties. According to Wallenstein, brain activities formed through synaptogenesis and synaptic pruning include language and sound localization (Wallenstein 44-45).

From infancy to adolescence, humans engage in self-stimulating behaviors that guide the development of the brain on a regular path. Wallenstein's main point in the book is that this physiological necessity utilizes the evolutionarily older limbic system of the brain to encourage pleasurable sensory experiences that stimulate proper brain development. These developmental stages can be observed cross-culturally in humans. The emergence of self-stimulating behaviors follows the development of the corresponding areas of the brain (Wallenstein 46).

In Chapter 7, "The Evolution of the Lullaby," Wallenstein states that all human cultures make music and that music shares characteristics across cultures. He outlines the three major scientific theories for the origin of music. The most popular theory among psychologists is that music is a coincidental byproduct of the characteristics of modern human brain functions. This theory posits that these brain functions evolved because they were evolutionarily advantageous, but that the byproduct of music does not provide an evolutionary advantage. The second theory is that music is evolutionarily advantageous, primarily because it promotes social cohesion, and

that musicality developed through natural selection. Wallenstein states that this theory is controversial because it is mediated by group selection, which scientists generally believe to be an unsupported concept. The third theory is that musicality and music are the result of sexual selection because they increase reproductive success through attracting mates. In this theory, the premise is that the ability to make music requires that resources be redirected from behaviors that ensure survival, so it displays the fitness of the individual because they possess the additional resources to expend. Wallenstein posits his own theory that music and musicality originated to fulfill the necessity that humans be exposed to specific sounds in the earlier, developmental stages of life so the brain can grow and mature properly and successfully (Wallenstein 95-99).

Wallenstein explains that although enculturation is an important determinant of musical preferences, recent research within the last few decades has found evidence that certain sounds affect the emotions of listeners in consistent, universal ways. The author further explains that music appears to adhere to a "universal grammar" (Wallenstein 100) similar to that of spoken language as defined by the linguist Noam Chomsky. Ray Jackendoff, a psychologist, and Fred Lerdahl, a musicologist, conducted research that developed this theory of a universal musical grammar. They defined music as being composed of sequences of notes with discrete pitches to which listeners apply mental rules about the meanings of the feelings they produce. Wallenstein states that music utilizes "recursion" (Wallenstein 101), or repetition, of limited rules and features to create pieces of increasing length, variety, and complexity (Wallenstein 99-102).

According to Wallenstein, infants prefer specific qualities of music that are present in music cross culturally. For example, four-month-old infants, as well as adults, prefer music composed of consonant intervals, as opposed to dissonant intervals. An interval is the distance between two adjacent notes in a sequence of notes. A consonant interval is one in which the notes in the sequence relate to each other with small, simple ratios or fractions of whole numbers. Additionally, humans of all ages, as well as rhesus monkeys, a species of primate, can recognize transposed melodies that use the diatonic scale, which has seven notes (Wallenstein 102-103).

Wallenstein details how infants are sensitive to the emotional characteristics of speech, such as intonation. These emotional traits of speech are even more prominent in lullabies and what the author calls "motherese," (Wallenstein 103) both of which have similar sonic qualities

and appear in almost all cultures. The author describes motherese – the speech used by parents with their infant – as using repetition and simple successions of pitches, both of which are characteristics shared by lullabies (Wallenstein 103-104).

Wallenstein goes on to provide an example of how a 2003 study of rats determined that early exposure to white noise – sound without pattern or distinctions – causes abnormal development of the auditory cortex, the part of the brain that processes sound stimuli. Essentially, the organized sound of music acts as a calibrator for the brain, ensuring proper development. Additionally, this study determined that abnormal brain structure could be reworked into a normal state with later exposure to patterned sound. The brain requires certain experiences but is malleable (Wallenstein 104-105).

The development of the mammalian auditory cortex is controlled by sequential gene expression. The auditory system in primates develops convergently. Four weeks into gestation, the ears and cochlea have begun to form, and twenty-five weeks into gestation, most of the cells in the brainstem that will process auditory stimuli have formed. Twenty-seven weeks into gestation, fetuses begin to hear. This ability is indicated by "auditory-evoked potential" (Wallenstein 106), or an electrical response in the brain as measured by electrodes, that is coupled with other sings that the fetus can hear sounds, such as moving, stopping movement, or blinking eyes in response to sounds. Wallenstein explains that fetuses and infants are most attentive to sounds that change in pitch, such as motherese and lullabies, in contrast to sounds like white noise, which have no structure or pattern (Wallenstein 105-107).

According to Wallenstein, research indicates that auditory stimulation during gestation helps other areas of the brain, specifically those that govern language, memory, and emotion. Mammals that are not exposed to proper auditory stimulation during infancy, childhood, and adolescence possess a limited range of hearing as adults. These adults have difficulty discriminating between sounds of different pitches that fall within their limited range of hearing, as well. These adults also have difficulty localizing sounds – determining the direction from which a sound has traveled (Wallenstein 107-108).

Commentary

Wallenstein explains the complexities of neuroscience in an understandable way. He delineates the practical implications of neurological processes and functions on human life, specifically sensory experiences like listening to music. He discusses synaptogenesis, synaptic pruning, self-stimulation, experience-expectant stimuli, auditory-evoked potential, and motherese. I think it is important to my topic to understand how synapses are formed and refined. These processes determine to what sounds we are attuned, which affects what sounds we create and what sounds we seek out. Wallenstein's main assertion is that the brain uses the instinct to seek pleasurable sensory experiences to properly calibrate itself.

The universal musical grammar that Wallenstein mentions is similar to Malloch and Trevarthen's theory of communicative musicality, especially the grammatical approach as explained by Klempe. Both explanations describe pitch and rhythm as the grammar of music that conveys feelings. The recursive quality of music that Wallenstein mentions is similar to the repetition, division, embedding, and modification in Staal's theory of prelinguistic ritual syntax.

Scientists have not developed a unified answer to the question: how did the brain components that give rise to musicality develop? Several answers have been proposed with varying support. They are natural selection (most supported), sexual selection, and group selection (least supported). My personal theory for the origin of music is that musicality, or innate musical ability, is activated and nurtured through enculturation and its social benefits have survival and reproductive advantages. Essentially, I am inclined to think that a combination of the four theories described by Wallenstein is the best explanation of the origin of music.

"The Human Nature of Music"

Summary

Malloch and Trevarthen present their thesis, which comprises several parts. They theorize that music derives from the feeling of being an embodied consciousness that senses the external world, anticipates certain experiences, and responds to stimuli with patterned behaviors. These patterned behaviors are communicative musicality. They theorize that the patterned movements and sounds exchanged between infants and caregivers are the basis of cultural manifestations of music and dance. They theorize that children seek harmonious interactions with caregivers and

other people in which meaning is mutually shared and understood. They theorize that communicative musicality helps individuals develop emotional strength to heal. They theorize that communicative musicality parallels patterned brain activity in response to stimuli. They theorize that communicative musicality predates and is a prerequisite for linguistic syntax (Malloch and Trevarthen 1-2).

The authors define communicative musicality as expressing internal feelings with external movement and sound. Communicative musicality is the inherent human ability to control bodily movement and vocalizations through space and time and in relation to other people. Communicative musicality allows people to arrange and rearrange movements and sounds to convey infinite feelings and experiences. The authors describe the characteristics of communicative musicality: pulse, quality, and narratives. Pulse is patterned movements and sounds through time. Pulse utilizes proprioception, or the felt sense of bodily movement, to predict or plan movements. Quality is the emotive indicators of movements and sounds that influence our perception of space and time. These indicators include vocal timbre and the shape and speed of bodily movements. Narratives are individually and collaboratively created patterns of pulse and quality that express experience. (Malloch and Trevarthen 2-3).

The authors explain that music and communicative musicality are the external expressions of the internal experience of our predictive mental ability. The authors describe Russell Meares' definition of the self: it requires awareness to exist; it is shaped, continuous, and unified; and it experiences itself in the context of feelings of embodied consciousness. The authors propose that musicality has its origins in the earliest single cell organisms that react to stimuli with patterned behaviors (Malloch and Trevarthen 3-4).

The authors declare that communicative musicality develops during gestation and infancy. They assert that understanding infant cognition and behavior is the foundation to understanding human cultural evolution. Infants initially lack language to learn from caregivers, but communicative musicality allows them to learn immediately (Malloch and Trevarthen 4).

The authors describe their discoveries about the development of infant musicality from previous case studies. Infant vocalizations are synchronized with caregiver vocalizations. These vocalizations can follow the rhythmic patterns of human walking. Infants conduct caregiver vocal melodies with anticipatory bodily movements. Humans possess the ability to sense

melodic vocal shapes with the felt sense of their bodily movements. This ability precedes the ability to replicate or respond to others' vocalizations. Despite differences in musical style between cultures, caregivers instinctively produce "baby songs" (Malloch and Trevarthen 7), or melodies comprised of verses with four lines, to engage reciprocally with infants. Solitary infants, away from caregivers, respond to recordings of baby songs with surprise, the appearance that they think a person is present, smiling, and then moving and vocalizing with the music (Malloch and Trevarthen 7-9).

The authors assert that children seek to learn their surrounding cultural manifestations of communicative musicality – the "musical culture" (Malloch and Trevarthen 9). The learning of a musical culture follows regular patterns of development, much like language acquisition. Throughout this musical development, "repetition and variation" (Malloch and Trevarthen 11) are integral to the experimental process of learning. When children's natural expressions of communicative musicality are unreciprocated, they withdraw from experimentation. With respect to music education, the authors propose that the best practice is to balance encouragement of children's natural expressions of communicative musicality and teaching them a musical culture (Malloch and Trevarthen 9-12).

The authors assert that communicative musicality helps individuals develop emotional strength and heal. They explain that humans possess the ability to sense in their own and others' vocalizations and movements a quality of intentional expression directed toward others that seeks reciprocation. These shared movements express awareness of shared feelings of being. When communicative musicality does not receive response or reciprocation, individuals subdue or sublimate expression. Communicative musicality is hopeful and optimistic. The authors discuss "Affect attunement" (Malloch and Trevarthen 14), which is communication between partners of the mutually created qualities of vocalizations and bodily movements that express the shared feelings of the relationship. The authors note that the internal feeling of being can be expressed and observed in the qualities of vocalizations and bodily movements – volume, pitch, and bodily looseness and openness (Malloch and Trevarthen 12-15).

The authors explain that communicative musicality emerges from the right hemisphere of the brain. This emotional area of the brain guides individual development. Essentially, the self is derived from the brain responding to stimuli. The authors propose that communicative musicality

is the basis of language. Essentially, communicative musicality and music engender cooperation and coordination, which are prerequisites for transmitting thoughts and ideas through language. The authors assert that the ability to sense time and its rhythms is a result of the rhythmic, synchronized processes of the brain. (Malloch and Trevarthen 15-16).

The authors present the philosophical underpinnings of their theory of communicative musicality, specifically the concept of "human vitality" (Malloch and Trevarthen 16). Malloch and Trevarthen reason that communicative musicality is the natural human language that derives from consciousness (Malloch and Trevarthen 16-17).

Commentary

Malloch and Trevarthen's theory of communicative musicality proved to be extremely relevant background knowledge for my topic of using music to communicate and bond with family. Essentially, communicative musicality is the expression through bodily movements and vocalizations of the internal experience of being a conscious body sensing the external world and moving within space and through time that is shared with other conscious bodies with the intent to connect, understand, synchronize, and receive an affirmative response. Communicative musicality is shared by all humans. The authors describe communicative musicality as reciprocal, requiring engagement from all parties to sustain momentum. The ability of the receiver to understand the feelings being conveyed or even to derive their own meaning from the message is essential to successful communication. The musical interaction is incomplete without a responsive audience. Communicative musicality serves a biological function that ultimately facilitates the development of language, logic, and thought. This theory could be used to explain all forms of human expression and communication.

The authors assert that communication, which the article describes as the sharing between individuals of the rhythms of biological processes, must precede language – the sharing of meaning, thoughts, and ideas. Much like communication in Malloch and Trevarthen's theory, Staal asserts that ritual, or patterned activity, must precede language. Additionally, this prerequisite physiological communication evokes Wallenstein's concept of the instinct toward pleasure. This instinct depends on the brains and bodies of infants and caregivers possessing the innate ability to transmit information without language. The authors discuss research that produced evidence to support the position that babies have innate, prior knowledge - a mind - at

birth, with which to help construct new knowledge based upon experience. Essentially, this position contends that one's mind is derived from one's body, not separate.

The authors explain that repetition and variation are fundamental features of music, especially for musical development during childhood, as well as important for language acquisition. Those two features are reminiscent of Staal's rules of ritual: repetition, embedding, and modification, which form the prelinguistic syntax found in rituals. I contend that there is an overlap between communicative musicality and prelinguistic ritual syntax, primarily that they both are prerequisites for language.

My understanding of one of the authors' later assertions in the article is that the durations of simple baby songs match the cycle durations of certain brain processes, that the songs trigger these processes because they are similar, and that the similarity is indicative of the intent of nature to use the songs as a 1:1 code to activate these processes. This assertion could fit with Wallenstein's pleasure instinct. Are the sensory experiences that the brain seeks pleasurable because they resemble the rhythms of brain processes?

"How to Understand Communicative Musicality?"

Summary

Hroar Klempe reviews *Communicative Musicality: Exploring the Basis of Human Companionship*, edited by Australian music therapist Stephen Malloch and British psychologist Colwyn Trevarthen. Klempe provides a broad overview of the book, as well as background information to place in their historical context the concepts found in the book. The author states that generally, the disciplines of music and psychology have remained unentangled, mainly due to their mutual complexities. He asserts that the book primarily discusses how music is essential to human communication, bringing together these two complex fields of study. According to Klempe, the editors present two conflicting conclusions: musicality is a progenitor to linguistic ability, but music and language are difficult to differentiate. The author's main takeaway from the book is that music is different than language (Klempe 260-261).

Klempe describes the arguments presented in the book. The editors present the older psychological explanations that human thought is problem-solving and human communication follows logical rules. Then, the editors present newer, conflicting research: infants interact with objects in a game like manner and share "musical nonverbal communication with their mothers" (Klempe 261). Infants engage in communicative musicality. Their arguments fall within the realm of evolutionary psychology and, with respect to the sociocultural domain of musicology, phenomenology. These arguments combine to form the theory of communicative musicality. Klempe asserts that it is practically impossible to determine whether music or language evolved first, but research into the order in which individuals develop musicality and linguistic ability seems to consistently indicate musicality is expressed first. According to Klempe, the editors seek to define the communicative and expressive characteristics of music that distinguish it from language. Most of the book attempts to answer the question: what are the characteristics of musicality? (Klempe 261-262).

Klempe outlines the theoretical approaches described in the book. The *phenomenological* explanation presented in the book is that music is a language that can refer to a multitude of external meanings, but mostly refers to itself. Music's only essential meaning is itself. The book presents the *grammatical* explanation, which is that music is arrangements of discrete pitches each sounded for discrete durations of time, which create rhythm. Pitch and rhythm are the grammar that governs the musical language. In the book, the *semiotic* explanation is presented: music is a language that assigns symbols to meanings. This model defines music as the auditory expression of meaning that is intended by the composer, intended and executed by the performers' movements that make sounds, and dependent upon the context in which the music is composed and performed. The intent and execution of the performer is the focal point of this model (Klempe 262).

Klempe points out several problems he perceives in the book's theory. Firstly, music is defined as a distinct form of expression and communication from that of language, but the editors appear to, often unintentionally, metaphorically describe music as a language. Conversely, Klempe assesses that the three explanations of music – phenomenological, grammatical, semiotic – can be interpreted as defining music as something other than a language. The phenomenological explanation asserts the inherently mutable meaning of music. The

grammatical explanation focuses on the tangible, discrete, finite characteristics of pitch and rhythm. The semiotic explanation considers music a sensory experience. Neither of the three explanations define music as primarily a medium of inherent meaning. Klempe insists that the fourth essential characteristic of music, which in his opinion is obvious yet often overlooked, is harmony, and to a similar extent, polyphony, both of which are not treated as such in the book (Klempe 262-263).

Klempe concludes his essay by returning to the definition of music. Based on the background knowledge he provides, the author thinks the theories presented in *Communicative Musicality*, specifically the theory that music is different than language because it lacks logical meaning, are relatively well supported by the evidence. His main critique of the book is that the editors neglect to fully explore the integral aspect of music that is harmony. Klempe explains that music often combines pitches as harmonies to create contextual meaning and that the origin of musical harmony may be found in the harmonious exchanges between mothers and infants (Klempe 265).

Commentary

I think that the theory of communicative musicality is important to understand for my topic. It was helpful to read this review before reading the related article by Malloch and Trevarthen, discussed prior. The summary and explanations in this essay made that article easier to understand. I want to read the book *Communicative Musicality* in the future.

My main comment on the essay is a question: is music only the auditory expression of meaning or is it also the auditory perception of meaning? Do listeners only perceive the intended, internal meaning of music or does perceiving music also give it meaning? According to Klempe, the semiotic model of communicative musicality defines music as the auditory expression of meaning intended by the composer, intended and executed by the performers' movements making sounds, and dependent upon the context in which the music is created and performed. Based upon my understanding of his explanation, the perceived and intended meaning of the listener or audience – how they hear the music – should be part of the music and the context. I think that the perception and intent of the receiver are essential to music.

I understand Klempe's final point of the essay to be that the harmonious qualities of music may be deeply intertwined with its communicative qualities. I think he is saying that communication is like harmony.

"The Bare Facts of Ritual"

Summary

Jonathan Zittell Smith explains that religion tends to transform coincidences into rituals. Smith describes the sacred space of a temple as a "focusing lens" (Smith 475) through which events are imbued with meaning and communication between natural and supernatural is made clear using rituals. He explains that mundane things are made sacred only by their association with sacred spaces. Smith asserts that rituals are created by choosing to what to assign meaning and how to limit the assignment of meaning. This arbitrary limiting of the assignment of meaning aims to control the extent of ritual to ensure a finite, manageable system of logic (Smith 474-476).

Smith contends a major function of religion is to rationalize human behavior with varying degrees of discrepancy. Some rituals imply beliefs or values not observed or apparent in relevant everyday behaviors (Smith 476). Smith draws an important distinction between human societies. In agricultural societies, hunting is viewed as a special activity in which the hunter must defeat an enemy. In foraging societies, hunting is viewed as a normal, everyday activity that is necessary to survival. The same activity can be assigned different meanings when in the context of different cultures (Smith 477). Smith provides an example of the rationalizing function of ritual by discussing the ritual aspects of bear hunting in the cultures of Siberian peoples. While explaining the steps of the hunting process, he asserts that the values expressed in the ritual rules and recitations of the hunting process do not coincide with the actual behaviors enacted during the hunting process (Smith 477-480). Smith declares that ritual is performed to create a "controlled environment" that removes the keenly sensed coincidences of everyday life (Smith 480). Ritual pertains to everyday activities and enacts plausible outcomes, but these outcomes are generally unlikely to occur in everyday life (Smith 480).

Smith proposes a similar interpretation of sympathetic magic. Instead of the generally accepted interpretation that sympathetic magic operates under the premise that similar things are the same thing and connection endures after separation (essentially, 'like makes like'), the author proposes that sympathetic magic presupposes that the magic or ritual is unlike the everyday activity it seeks to enact perfectly through environmental control. He proposes that ritual practitioners understand that reality cannot be manipulated and that this understanding is the reason they perform ritual (Smith 481).

Smith explains that the perfect scenarios expressed in ritual provide meaningful ideas on which to focus while performing everyday activities. The outcomes of everyday activities are unpredictable, so ritual provides a consistent goal to which to aspire. Rituals imbue meaning into everyday activities (Smith 481).

Commentary

Smith explains his understanding of the nature of ritual. He asserts that ritual is an expression of the urge to assign meaning to bring order to the external world. He declares that ritual functions to rationalize human behavior, to explain the discordance between values and behavior.

Although Smith and Staal agree that ritual functions to create order, they disagree on the mechanism. Staal contends that ritual lacks meaning, unlike everyday activities, and creates order within time through structured, perfect activity. Essentially, Staal thinks that lack of meaning creates order. My understanding is that Staal possibly thinks that meaning creates chaos and randomness. Smith contends that ritual creates order by giving meaning to everyday activities in the form of idealized, aspirational scenarios. Essentially, Smith thinks that meaning creates order. He asserts that anything and everything can be meaningful in certain contexts. Meaning is not inherent, therefore it can be chosen and bestowed. The power to imbue meaning is in the hands of the believer.

My main insight while reading Smith's essay was a development of my personal theory of music. I contend that songs are rituals in the sense that they use the repetition of notes and words to convey a message. Songs reiterate the point through recurring melodies and lyrical refrains. Sounds are intentionally selected and arranged from a larger selection of sounds – the

outcome is not left to coincidence. The song itself is, becomes, and creates a '*sonic sacred space*.' The mind of the songwriter could also be considered a sacred space in this context, as well as that of the listener.

"The Meaninglessness of Ritual"

Summary

Frits Staal's thesis is that ritual is about perfect action, not symbolic meaning. When asking brahmins why they perform rituals, Staal mostly received answers related to tradition, morality, duty, immortality, social status, economic benefits, and competition. When asking questions about the symbolic meaning of ritual components, scholars have received specific, simple answers, but these are rare. Most answers refer to the command of tradition. Staal explains that a defining characteristic of Indian religion is proper ritual performance (Staal 484-485).

According to Staal, Indian literature abounds with ritual analysis. Earlier Vedic texts depict gods as frequent ritual practitioners. Staal differentiates two types of Vedic ritual: domestic and traditional. Domestic rites, or rites of passage, such as those relating to birth, death, and marriage, have relatively obvious functions. Traditional rites have relatively unclear functions. Some mentioned in Vedic texts occur over a thousand years. Staal calls these "purely theoretical" (Staal 485). One later Vedic text defines ritual as comprising three parts: the offering, the god, and the denial of benefits. Staal notes the contradiction between the stated point of ritual – to gain something – and denying the benefits. The distinction between required and optional rites compounds this contradiction. Staal explains another problem: no immediate effect is perceived after ritual is performed. Vedic philosophers reasoned that the effects of ritual are felt after death. To explain this delay, they devised the concept of *karman*: the result of every action is felt in the afterlife or the next life (Staal 485-486).

Scholars have proposed many theories explaining the existence of ritual: ritual reenacts myth, recreates social structure, or relays cultural values. Staal asserts that these theories lack support – myth, social structure, and cultural values can be communicated through language, so ritual is extraneous. Staal criticizes the circular logic of defining ritual as travel from the natural

state to the supernatural state. Ritual facilitates travel, but those states are defined as differentiated by ritual. He thinks those states are defined beyond ritual, but difficult to define. Staal asserts that this definition provides no deeper insight; it merely states the obvious (Staal 486-487).

Staal contends that "Ritual is pure activity" (Staal 487) that lacks external meaning. Value is inherent to ritual, not tied to external entities. Everyday activities focus on the outcome. They may fail, but failure is relatively acceptable, though undesired. Ritual focuses on itself, and the desired outcome of ritual is perfect performance. Ritual is designed to be infallible, so ritual calms the practitioner. Ritual and everyday activities are generally kept separate (Staal 487-488). Staal explains how some anthropologists have encountered the meaninglessness of ritual, but they did not realize the importance. He explains how Van Gennep, in *Rites of Passage*, noticed that aspersion rites, sprinkling liquid onto something else, are performed in different contexts, and realized that the meaning of these rites can only be determined in relation to their context. Staal notes that other mammals exhibit behaviors like aspersion rites: marking territory with urine and other bodily fluids (Staal 488).

Staal asserts that rituals have beneficial social and cultural side effects that explain why they persist, but not why they began. Conversely, rituals are generally either intensely protected or abruptly relinquished. Staal believes this fact is on account of their meaninglessness (Staal 488-489). He explains that some psychologists and anthropologist note the similarities between ritual and obsessive compulsion. These scientists propose that anxiety drives both activities. They propose that rituals perpetuate anxiety because there is no way to know whether they have been performed correctly, implying ineffectuality and meaninglessness (Staal 489).

Staal states that rituals can resemble non-ritual activities, as well as other components of religion and culture. In other animals, often a behavior is ritualized because the intended outcome of the behavior has changed. In humans, generally a behavior is ritualized because the intended outcome of the behavior is removed. Staal's example relates to the ritual treatment of fire, a very early form of human ritual. Initially, humans could not make fire, could not preserve fire, and did not know how to use fire. Then, humans discovered how to use fire, so they devised ways to preserve it. Eventually, humans discovered how to make fire, but they still insisted upon preserving fire. This insistence led to the ritualization of fire preservation. The manmade fire and

the preserved fire were viewed as fundamentally different in nature, therefore humans believed they should be kept separate (Staal 489).

Staal thinks self-awareness is what distinguishes humans from other species. He thinks that early humans first possessed awareness of the external world and the ability to communicate with other humans, and then they acquired the awareness that they could influence the external world through their actions. In response to the anxieties caused by this realization, humans created ritual. Eventually, in response to the further anxiety caused by the realization that ritual lacks meaning, humans developed justifications for ritual, joined ritual to religion, and infused ritual into many parts of daily life (Staal 490).

Staal asserts that the literature lacks detailed, quantitative analysis of ritual, mainly because people consider ritual unimportant. According to Staal, Levi-Strauss' conception of ritual as comprising repetition and division, and Hubert and Mauss' observation that rituals possess beginnings, middles, and ends, are the extent of research (Staal 490). Staal analyzes Vedic *srauta* rituals to determine their rules. He explains that these rituals form a hierarchy in which each step is more complex than and assumes the proper performance of the former. "Embedding" (Staal 491) prior steps within the current step creates complexity and modification. Each ritual comprises smaller rites. Embedded rites are often already condensed or modified, so modification also generates complexity. Context can also modify ritual (Staal 490-492).

Staal reiterates that language is systematically attaching meaning to sound. He asserts that linguistic syntax is complex, excessive, repetitive, and illogical, which makes language an inefficient form of communication. Staal states that fundamental ritual rules, specifically embedding and modification, resemble linguistic syntax. He explains that one could conclude that ritual rules derive from linguistic syntax, but he thinks linguistic syntax derives from ritual rules. Staal gives the example that other animals perform rituals but lack language. He asserts that ritual sounds – chants, mantras, recitations, prayers, spells – adhere to syntax, but frequently lack meaning, and are understood without translation. Ritual and structured sound are perfect action done for their own sake. Mysticism – altered states of consciousness, spiritual experiences, shamanism – lacks language. Ritual is used to enter this mental state that exists beyond language. Staal thinks that mysticism predates ritual and language (Staal 493-494).

He thinks a theory of ritual will most likely be complex, much like ritual. He makes the philosophical point that the meaningless of things or life does not change their nature or reduce their value. Meaning and value are not synonymous (Staal 494).

Commentary

Staal's essay is relevant to my topic. He explains his reasoning that ritual lacks meaning. He asserts that ritual is best defined as perfect activity without consequence. He defines two rules of ritual, embedding and modification, how they resemble linguistic syntax, and how they may predate it.

Essentially, I propose that Staal's theory of prelinguistic ritual syntax resembles Malloch and Trevarthen's theory of communicative musicality. Both theories assert that their object, ritual and music, respectively, lacks inherent meaning. I note that Staal makes a key distinction between meaning and value: a thing can lack meaning, or reference to an external thing, but still possess value, or reference to itself. Both theories contend that humans use patterned behavior, bodily movements and vocalizations, respectively, to engage with the present, others, and the external world. Both theories propose that their object predates and influences language.

Additionally, Wallenstein's theory of the pleasure instinct could explain the origin of ritual, in addition to that of music. The innate urge to seek pleasurable sensory experiences to calibrate the developing brain could be considered activity with innate value. Ritual may be a form of self-stimulation using highly repetitive sensations.

On a personal note, Staal mentions in his essay that a common explanation given by practitioners for the persistence of their rituals is that they are tradition. This phenomenon relates to my experience of my family sharing music because we have done so for a long time. Sharing music has become a tradition.

"Associations Between Shared Musical Engagement and Parent-Child Relational Quality: The Mediating Roles of Interpersonal Coordination and Empathy"

Summary

Wallace and Harwood investigate how musical engagement between parents and children facilitates the practice and development of coordination and empathy and how those behaviors influence the quality of their relationships. The authors begin with the broad statement that music and dance are "inherently communicative" (Wallace and Harwood 202). They explain that people generally have their first shared musical experiences with their parents and that shared musical experiences have been important to communication throughout human history. According to the authors, researchers in the field of communication have not done much investigation into the communicative properties of music (Wallace and Harwood 202-203).

The authors define two types of *shared musical engagement*: structured musical engagement and casual musical engagement. *Structured musical engagement* is composing and performing pieces of music and dance. *Casual musical engagement* is watching and listening to pieces of music and dance made by others, as well as singing and dancing along. Discussing pieces of music and dance is also a form of casual musical engagement (Wallace and Harwood 203-204).

The authors define the *mediating variables* of the process they studied: interpersonal coordination and empathy. These mediating variables manage the effects of the *predictor variable*, shared musical engagement, on the *dependent variables*, indicators of relationship quality (Wallace and Harwood 204, 208-209).

The authors explain that *interpersonal coordination*, when two or more people align or harmonize their behavior, can be conscious in activities that have a desired outcome, or it can be unconscious physical behavior, like leaning in when someone talks to you. When two or more people are physically and mentally synchronized, the *mirror neurons* in their brains are activated – they feel a sense of similarity or oneness with each other, which can lead to feelings of compassion. The phenomenon known as *entrainment* occurs when certain aspects of music, such as the beat, encourage people to move their bodies in sync with the music. In social situations involving music, people also entrain, or move their bodies in sync, with others (Wallace and Harwood 204-205).

The authors delineate the different kinds or components of *empathy*. *Cognitive empathy* is the ability to understand the causes of another person's emotional state, part of which is the ability to assess how one would similarly react in a similar situation. *Affective empathy* is the

ability to feel the emotions of others, while still understanding the emotions are originally someone else's and that you are a separate person from them. *Associative empathy* is the ability to feel the emotions of others as if they are one's own, effectively feeling as though one is the other person. The authors declare that music is primarily an emotional, as opposed to logical, form of communication. This emotional aspect of music produces measurable effects in the brain (Wallace and Harwood 205).

The authors believe that shared musical engagement between parents and children can positively affect the quality of their relationships (*relational quality*). The authors separately investigate five relational outcomes that are commonly studied in the field of interpersonal communication. *Support* is defined as a feeling about whether, how much, and in what manner one can rely on another for assistance and counsel. *Depth* is defined as a feeling about the importance, stability, and safety of a relationship. The authors further define relationships with depth as ones in which the partners generally lack a sense of guilt for seeking support from the other partner. *Conflict*, specifically what the authors refer to as "harmful conflict" (Wallace and Harwood 206), is described as the experience of anger or uncertainty toward the partner. Although general conflict is inevitable, harmful conflict has strong, enduring, negative effects on relationships. *Relational Closeness* is defined as the perception of similarity with a partner. Relational closeness positively correlates with support, depth, and less conflict. *Shared Family Identity* is defined as the perception of being a member of a group of similar people. Shared family identity also positively correlates with support, depth, and less conflict. Importantly, relational closeness and shared family identity can exist without the other (Wallace and Harwood 205-206).

The authors broadly summarize earlier research relating to musical engagement and parent-child relationships. From birth till the beginning of adolescence, children are normally closest to their parents. They depend upon their parents for support and seek to conform to the norms and shared identity of the family group. During this period, children first interact with music – in the form of lullabies and musical games – with their parents. Musical characteristics are even present in other communication between parents and children who cannot yet speak. During adolescence, children often perceive the parent-child relationship to be defined by less support, depth, relational closeness, and shared family identity, and greater conflict. Their

perception often returns to a more positive one in young adulthood. During adolescence, children interact with music at a higher rate than any other age group, listening to music their peers like and listening to music that is different than the music their parents like. They are also more likely to create and perform music with peers (Wallace and Harwood 206-207).

The authors predict that shared musical engagement between parents and children will positively influence the child's perception of the quality of their relationship. The authors predict that this positive influence will be mediated by empathy and interpersonal communication. They predict that this positive influence will be stronger with structured musical engagement than with casual musical engagement. The authors predict that this positive influence will be stronger with shared musical engagement that happen after the age of 13, during adolescence, than with shared musical engagement that happens between the ages of 6 and 13, during childhood (Wallace and Harwood 207).

The authors discuss the results of their study. They think the results demonstrate that shared musical engagement correlates with increased relational quality outcomes. Cognitive empathy and interpersonal coordination mediate these positive effects. Generally, the effects of both kinds of shared musical engagement within both age ranges correlated to increased relational quality, but to varying degrees. The authors think future research should be conducted on the effects of the child's age during shared musical engagement on relational quality, because their results demonstrated differences between the effects of each age range, although these differences were nonsignificant. Structured musical engagement had nonsignificant effects on relational quality – opposite to the authors' prediction. One possible explanation for this lack of effect provided by the authors is that the participants may have partaken in significantly more casual musical engagement within both age ranges. The authors were unable to measure the effects of structured musical engagement because the variable appeared so infrequently. They think a more diverse sample population – one with more instances of structured musical engagement – may lead to different results. The authors propose that structured musical engagement may demand greater focus on the music than on communication and relationships. Affective and associative empathy had no mediating effects on the other variables. Only cognitive empathy had a mediating effect. The authors propose that shared musical engagement may require more coordination, cooperation, and compromise than empathy. Additionally, the

three types of empathy appear to be connected to each other and may act together to influence relational quality (Wallace and Harwood 212-213).

The authors discuss the implications of their study. They think the results show that music can be used to build other kinds of relationships, such as those between spouses, schoolmates, grandparents and grandchildren, and people from different cultures. They found that interpersonal coordination was a stronger mediating variable than empathy. The authors think research should be conducted on the mediating effects of other, non-musical activities that require interpersonal coordination (Wallace and Harwood 213).

The authors acknowledge several limitations to their study. The study was cross-sectional: the data was collected at one time and from a relatively small sample of the population. They acknowledge their sample did not include enough males, musicians, and people of diverse ethnicities. The authors acknowledge the possibilities that the current quality of parent-child relationships affects participants' memories of childhood and adolescence, that memories of participants with a positive relationship with their parent are biased toward those that relate to music, or that participants' memory in general is poor. The authors recommend that future studies should incorporate data collection over time or a focus on differing levels of musical engagement. They recommend future study of musician parents with musician children, as well as parents' perception of parent-child relational quality. The authors recommend researching the correlations between shared musical engagement and relational quality in the context of chosen interpersonal relationships and the mediating effects of empathy and interpersonal coordination in this context (Wallace and Harwood 213-214).

Commentary

Wallace and Harwood essentially studied the exact phenomenon in which I am interested based upon my personal experiences with my family. Their article was helpful because it provided me with the terminology currently used in the field of communication studies, with which I was unfamiliar. If I were to study a similar phenomenon to that of the authors, I now have their study design to reference to guide the design of my own.

The mediating variables in the study were interpersonal coordination and empathy. In relation to those variables, the authors define entrainment: when music encourages people to

move their bodies in sync with music and with each other. In my mind map, I mention the similar experience of feeling physically and emotionally connected to others through music. Entrainment must be what I have experienced, and it must facilitate or be facilitated by interpersonal coordination and empathy.

With respect to Wallace and Harwood's hypotheses, my hypothesis based upon personal experience is that casual musical engagement can be just as beneficial as structured musical engagement. My experiences support their hypothesis that the positive influence will be stronger with shared musical activities that happen during adolescence than with those that happen during childhood because many important activities I mention in my personal essay are during adolescence and later.

"'Music's a Family Thing': Cultural Socialisation and Parental Transference"

Summary

Reeves discusses his study of the effects of parental cultural capital level on if, how, and to what extent UK parents encourage their children to play musical instruments. The author defines cultural capital as socioeconomic status determined by level of educational attainment. Cultural capital can be low, medium, or high. These categories roughly correspond to lower, middle, and upper class, respectively (Reeves). To quote the author's explanation of his study: "The key question under examination here is: what are the reasons that parents offer for why they encourage musical practice?" (Reeves 495).

The author derives the following conclusions from the interviews he conducted. Parents with low cultural capital did not actively encourage music lessons but were generally open to them if their children showed interest. These parents were not biased toward musical activities or non-musical activities, so they allowed their children to direct their musical or non-musical activities themselves. Parents with medium cultural capital often actively discouraged music lessons, while actively encouraging academic work. These parents generally believed that cultivating academic success was more valuable than cultivating musical ability because they generally believed that academic success was more likely to ensure the retention or increase of their children's cultural capital as adults. These parents directed their children's musical or non-

musical activities. Parents with high cultural capital generally actively encouraged both activities, while giving their children the freedom to choose to take music lessons if they were interested. Like low cultural capital families, these parents allowed their children to direct their musical activities, but they also actively encouraged academic work, like medium cultural capital families. These parents generally actively encouraged their children to partake in activities, both musical and non-musical (Reeves).

Commentary

Reeves' article is interesting, although the topic that he studied is only tangentially related to my topic. The article discusses the nature and role of music within the social context of family, but it deals with whether and why parents encourage or do not encourage their children to learn to play musical instruments. Conversely, my topic is mainly inspired by my experiences making music and, to a greater extent, listening to music, especially as a secular family ritual that creates, maintains, and strengthens social bonds.

"…And House Music Was Born: Constructing a Secular Christianity of Otherness"

Summary

Liam Maloney theorizes that the semi-religious philosophy of house music and earlier disco music has general inspiration from Christianity, roots as far back as racial segregation in the 1930s, and more immediate origins within the Civil and Gay Rights movements. Maloney contends that this semi-religious philosophy predates those of the American rave, club, and EDM subcultures. He asserts that the first clear example of this semi-religious philosophy appeared in 1984 (Maloney 231-232).

Maloney explains that house music's most distinct predecessor is disco music because they espouse similar social ideologies. He outlines the social forces that influenced the development of disco, detailing the musical conventions it adopted from gospel and other Black musical genres (Maloney 233-237).

Maloney asked interviewees about their opinions on the assessment of disco and house as primarily rooted in gay culture. Most people Maloney interviewed agree that house and disco are

closely related and relatively similar. They agree that house music was borne out of disco and that disco was influenced by gospel. Several people Maloney interviewed believe that accepting different genders and sexualities was considered normal in the house community. People Maloney interviewed often articulated the origin of house music as the Black experience in a segregated Chicago in the 1980s. Redlining blocked Black communities from public funding, so the Black church assumed the responsibility to educate its youth in music. In this way, gospel had a more direct influence than disco in the formation of house (Maloney 237-240).

Maloney states that house music is the result of the interaction between the Black Church and gospel music, the Civil and Gay Rights movements, and disco music's acceptance of diversity. He details the musical characteristics shared by house and gospel, specifically mentioning that skillful, emotive vocalists are key to house music and similarly important to disco and gospel. He asserts that house music derives lyrical themes from gospel through disco and musical stylings more directly from gospel. Recordings from 1984 to 2000 best represent early house music. According to Maloney, house music's lyrical content is the clearest example of its semi-religious philosophy. For example, a lyrical theme found in even house music's earliest iterations asserts that spirit is essential to house music. House music embodies a feeling only house music can express. The lyrical themes in house music can exist alone, or together in various combinations, but some lyrical themes are more unclear. House music's lyrical themes, derived from explicitly religious and more secular ideologies, indicate a flexible, semi-religious philosophy. House music straddles the religious and the secular, using religious sounds and themes to create a new sonic basis for a secular community (Maloney 240-243).

Despite house music's roots in gospel music, the genre replaces worship of God with worship of house music and its community. House music elevates itself to the level of deity. The music references itself as a tool to achieve happiness. House music seeks to keep the positive, social aspects of Christianity, while abandoning its rules. This inclusiveness may be informed by the ideology in gospel music (Maloney 243-244).

The musical characteristics, lyrical content, and expressed values of house music develop from the intersecting experiences of race, religion, and sexuality. House music is both a refuge from the exclusivity of the Black Church and an affirmation of the Church's teachings of inclusivity. House music is an affirmation of Blackness in a white world and an affirmation of

gayness in a Black Christianity that sometimes excludes gay people. House music's inclusivity is the product of the ideologies of gospel and disco, the Civil and Gay Rights movements, and the Black Church in Chicago. Groups that felt excluded from the mainstream culture, such as Black and gay people, created a culture where inclusion is the norm. Many of house music's originators derived religious themes from the Black Church that raised them (Maloney 244-245).

Commentary

Although my topic is not specifically about musical subcultures, many people experience music through membership in musical subcultures, so my research would be incomplete without knowledge of that experience. Also, by applying Malloch and Trevarthen's theory of communicative musicality and Staal's theory of prelinguistic ritual syntax to this article, I was better able to understand those theories.

The lyrical theme in house music about the importance of feeling in house music – the importance of feeling the music – resembles the phenomenological approach within communicative musicality that Klempe extrapolates from Malloch and Trevarthen's *Communicative Musicality*. This approach asserts that music is a language that is mostly self-referential. Its only essential meaning is internal. Maloney explains that the 'feeling of house' is indefinable "and lacks description beyond the terms of the music itself" (Maloney 242). House music refers to itself to gain meaning.

Additionally, Malloch and Trevarthen's theory of communicative musicality asserts that musicality, and by extension, music, is the embodiment through sound and movement of internal experiences of feeling and sensations of being a conscious body in spacetime. These feelings or sensations are prelinguistic, they predate language and logic, so they are difficult to explain with words, hence the use of musicality to convey them. Maloney mentions a view among some experts that house is "something that can be understood only if you embody [it]" (Maloney 243). Music, specifically house music, sonically embodies feelings and sensations that cannot resonate with or be understood by those who do not have those same feelings or sensations residing within them. The communicative capacity of music fails without receptive listeners. House music's philosophy as manifest in this lyrical theme of the 'feeling of house' encapsulates within music itself the concept of communicative musicality.

The self-referential quality of house music's religiously inspired lyrical content supports the phenomenological approach within communicative musicality, as well as Staal's prelinguistic ritual syntax. As Klempe describes it, the phenomenological approach states that music creates meaning by referring to itself, much like house refers to itself in its lyrics. In that theory and Staal's theory, meaning and order are found within the thing itself – music or ritual, respectively. Both theories describe scenarios that hinge upon a circular pre-logic.

I contend that the various ways that music can reference itself fall into the categories of ritual rules mentioned by Staal: repetition and division, as conceived by Levi-Strauss; a beginning-middle-end structure, as observed by Hubert and Mauss; and embedding and modification, as articulated by Staal. Pieces of music are temporal and finite, so by default they have beginnings and ends, in addition to the internal structures that further divide musical pieces into distinct parts. Self-reference within a song can be achieved through repetition of musical phrases and lyrics. Verses in songs repeat the melody but modify the lyrics. Remixes, covers, and parodies of songs are forms of modification. Self-reference between songs can be achieved by sampling, interpolating, mashups, and medleys – these are forms of embedding. DJs combine and alter songs, which resemble embedding and modification. Essentially, I propose that the features of music adhere to Staal's rules of ritual.

"Religion and Music"

Summary

Reverend Robert B. Whyte considers himself an amateur musician and musical theorist – not an expert. He believes talking about music cannot convey its true nature, music can do and be many different things, and the best music effectively conveys the most intense feelings (Whyte 18). Being a reverend, Whyte refers to the Bible, specifically the Old Testament, to delve into the history of music in religion (Whyte 18-19). He discusses "the religious effects of music" (Whyte 19). According to Whyte, vocal music features more prominently in the New Testament (Whyte 19, 21). He asserts that religious music facilitates spiritual inspiration and social unity (Whyte 21).

Whyte believes music can bring out the best and worst in people – it can be used for good or ill. He believes music is one of the best things to exist and that creating vulgar music is the worst use of music. Whyte discusses profane music. He thinks people should avoid vulgar music because it lacks virtue. Conversely, Whyte insists withholding judgment regarding music. He provides this example: within twenty years after the debut of *Fire Bird* by Russian composer Igor Stravinsky, the public went from shock to contentment with the style. Whyte asserts the public often judges artworks more fairly after time has passed, allowing thorough assessment. People often react negatively to unfamiliar things, but current distaste does not always equal future praise. Whyte calls readers to understand religion and music's intimate connection (Whyte 21).

Commentary

Although my topic is not specifically about religious music or music in religious settings, much music falls into those categories, so my research would be incomplete without knowledge of that perspective. Whyte provides the perspective of a religious official on the role of music in Christianity. He also discusses the role of religion in music, as well as the distinctions he makes between religious and secular music. I was better able to understand Malloch and Trevarthen's theory of communicative musicality, specifically the phenomenological, grammatical, and semiotic approaches, as outlined by Klempe, by applying it and them to this essay.

The phenomenological approach within the theory of communicative musicality defines music as lacking inherent meaning. Similarly, Whyte defines music as undefinable. He acknowledges that music can be used in different ways and valued for different reasons.

The grammatical approach within the theory of communicative musicality explains that pitch and rhythm convey meaning in music. Similarly, Whyte's strong distaste toward what he considers the harsh, chaotic sounds of jazz in comparison to more pleasant-sounding music, alludes to a perception that the former sounds engender negative reactions in listeners. Whyte seems to believe that certain sounds elicit certain feelings, which coincides with my understanding of the grammatical approach.

The semiotic approach within the theory of communicative musicality asserts that context affects the meaning of music. Similarly, Whyte asserts that sometimes it takes time for people to

thoroughly appreciate or judge music. He uses Stravinsky's *Fire Bird* as an example. The initial context in which the music was heard was conducive to a negative reaction, but as the passing of time changed the context, the public came to appreciate the work. Additionally, Whyte emphasizes the importance of skilled musicians to guide the future of music, declaring that "[They translate] into sound that which is dimly perceived by silent multitudes" (Whyte 21), much like how the semiotic approach emphasizes the intended meaning of the performer.

An Autobiography, Igor Stravinsky (excerpt)

Summary

During an anecdote, Stravinsky takes a brief tangent into his thoughts about the musicality of Russian folk poetry. He notices that the arrangement and rhythm of the words possess a musical quality. The composer assesses that the effect of the sound of the words, as opposed to that of the linguistic meaning of the words, on the feelings and awareness of the listener is like that of music. He thinks that music lacks the ability to express thoughts, feelings, or meaning. Stravinsky asserts that any expressive qualities humans attach to music are not inherent to its nature (Stravinsky 53-54).

Stravinsky continues, explaining that music is primarily a tool to fully experience or gain full awareness of the present moment. He states that music is a way for humans to embody the present. The composer believes that the primary function of music is to create order, especially of time. He considers the only defining characteristic of order to be structure or "construction" (Stravinsky 54). Stravinsky states that order generates a feeling in people that is different than the feelings we experience during everyday activities (Stravinsky 54).

Commentary

In this autobiographical excerpt, Stravinsky makes statements that allude to Malloch and Trevarthen's theory of communicative musicality and Staal's theory of prelinguistic ritual syntax. I think that Stravinsky's experience as a composer grants him some authority on the topic of music.

I understand Stravinsky's first point to be that enculturation or socialization preserve the artificial, superficial meanings applied to music. Language creates meaning and mediates transmission. As Malloch and Trevarthen assert, communicative musicality predates language and logic, so any meaning applied to music is arbitrary and superimposed. Staal discusses the generally mutual exclusivity of rituals and everyday activities. Staal's main point is that "Ritual is pure activity" (Staal 487) lacking inherent meaning, unlike everyday activities. Ritual focuses on itself, so ritual has inherent value. Stravinsky acknowledges a similar distinction between the feelings people experience in response to the order found in music and the feelings they have during everyday activities. I contend that both music and ritual lack external meaning but possess internal value.

Stravinsky's explanation that music functions to fully embody the present aligns with Malloch and Trevarthen's explanation that the origin of communicative musicality is the experience of being a conscious body sensing itself and external objects within space and through time. According to Staal, ritual occurs in the present, so it requires complete focus. Essentially, Stravinsky states that music occurs in the present, so I contend that music requires complete focus.

Stravinsky's final point that music functions to create order within time through structure is reminiscent of Staal's theory of prelinguistic ritual syntax. I understand Stravinsky's use of "construction" (Stravinsky 54) or structure to mean musical characteristics like melody, chords, and rhythm – the intentional patterns in music. I propose that the elements of music resemble Staal's basic rules of ritual: repetition, division, embedding, modification.

To condense Stravinsky's ideas, music lacks the inherent ability to express meaning but serves the purpose to embody the present by creating order through structuring time, much like ritual. I contend that they must be somehow related.

Conclusion

Based upon the major theories I learned about during this project – the pleasure instinct, communicative musicality, and what I termed prelinguistic ritual syntax – my current working theory of music is that it is a pleasurable, emotive, ritualized form of communication. Both

musicality and ritual are outward expressions of internal feelings that seek to create order, meaning, and connection. Both phenomena may be mediated by the human brain's instinct to seek pleasure.

With respect to the future, I think that researchers should expand the scope of what is studied as ritual to encompass religious, secular, public, private, group, and individual activities. For example, I think that how my family listens to music functions as a secular, private, group ritual.

I conclude my project with more questions than I had when I began it. Are prelinguistic ritual syntax and communicative musicality synonymous? Did communicative musicality predate prelinguistic ritual syntax or vice versa or did they develop concurrently? Did communicative musicality influence the development of prelinguistic ritual syntax or vice versa, or did they not influence each other's development? Essentially, if music and ritual both predate language, then are they synonymous with each other or were their separate developments merely simultaneous?

Acknowledgements

I want to thank my mentors, Meredith Goldsmith and Nathan Rein, for helping me to realize my project.

I also want to thank the following people for making my project happen: Lauren Wynne, Patricia Lott, Timothy Brown, Lynn O'Brien, Fred Goldstein, Terri Sullivan, Stephen Buss, Rick Kohn, and Diane Skorina.

Bibliography

Klempe, Hroar. "How to Understand Communicative Musicality?" *Integrative Psychological and Behavioral Science*, vol. 43, no. 3, 2009, pp. 260–266, https://doi.org/10.1007/s12124-009-9096-9.

Klempe reviews *Communicative Musicality: Exploring the Basis of Human Companionship*, edited by music therapist Stephen Malloch and psychologist Colwyn Trevarthen. The author provides a broad overview of the book, as well as background information to place in their historical context the concepts found in the book. He states that generally, the disciplines of music and psychology have remained unentangled, mainly due to their mutual complexities. He asserts that the book primarily discusses how music is essential to human communication, bringing together these two complex fields of study. According to the author, the editors present two conflicting conclusions: musicality is a progenitor to linguistic ability, but music and language are difficult to differentiate. Klempe's main takeaway from the book is that music is different than language. I think that the theory of communicative musicality is important to understand for the topics of music, ritual, and family. It was helpful to read this review before reading the related article by Malloch and Trevarthen, "The Human Nature of Music." The summary and explanations in this essay made that article easier to understand.

Malloch, Stephen, and Colwyn Trevarthen. "The Human Nature of Music." *Frontiers in Psychology*, vol. 9, 2018, art. 1680, https://doi.org/10.3389/fpsyg.2018.01680.

Malloch and Trevarthen present their thesis, which comprises several parts. They theorize that music derives from the feeling of being an embodied consciousness that senses the external world, anticipates certain experiences, and responds to stimuli with patterned behaviors; these patterned behaviors are communicative musicality. The patterned movements and sounds exchanged between infants and caregivers are the basis of cultural manifestations of music and dance. Children seek harmonious interactions with caregivers and other people in which meaning is mutually shared and understood. The authors theorize that communicative musicality helps individuals develop emotional strength to heal, parallels patterned brain activity in response to stimuli, and predates and is a prerequisite for linguistic syntax. The authors reason that communicative musicality is the natural human language that derives from consciousness. This theory could be used to explain all forms of human expression and communication. Malloch and

Trevarthen's theory of communicative musicality proved to be extremely relevant background knowledge for my topic of using music to communicate and bond with family.

Maloney, Liam. "…And House Music Was Born: Constructing a Secular Christianity of Otherness." *Popular Music and Society*, vol. 41, no. 3, 2018, pp. 231–249, https://doi.org/10.1080/03007766.2018.1519099.

Maloney theorizes that the semi-religious philosophy of house and disco music has inspiration from Christianity, roots as deep as racial segregation in the 1930s, and origins within the Civil and Gay Rights movements. He contends that this semi-religious philosophy predates those of the American rave, club, and EDM subcultures. He asserts that the first clear example of this semi-religious philosophy appeared in 1984. Although my topic is not specifically about musical subcultures, many people experience music through musical subcultures, so my research would be incomplete without knowledge of that experience. Also, by applying Malloch and Trevarthen's theory of communicative musicality and Staal's theory of prelinguistic ritual syntax to this article, I was better able to understand those theories.

Reeves, Aaron. "'Music's a Family Thing': Cultural Socialisation and Parental Transference." *Cultural Sociology*, vol. 9, no. 4, 2015, pp. 493–514, https://doi.org/10.1177/1749975515576941.

Reeves discusses his study of the effects of parental cultural capital level on if, how, and to what extent parents encourage their children to play musical instruments. The author defines cultural capital as socioeconomic status determined by level of educational attainment. Cultural capital can be low, medium, or high, which roughly correspond to the categories of lower, middle, and upper class, respectively. The article is interesting, although the topic it covers is only tangentially related to my topic. Reeves discusses the nature and role of music within the social context of family but deals with whether and why parents encourage or do not encourage their children to play musical instruments. Conversely, my topic is mainly inspired by my experiences making music and, more so, listening to music, especially as a secular family ritual that creates and strengthens social bonds.

Smith, Jonathan Zittell. "The Bare Facts of Ritual." *Readings in Ritual Studies*, edited by Ronald L. Grimes, Prentice Hall, 1996, pp. 473-483.

Smith explains his understanding of the nature of ritual. He asserts that religion tends to transform coincidences into rituals – mundane things are made sacred only by their association with sacred spaces. Smith asserts that ritual is an expression of the urge to assign meaning to bring order to the external world. The assignment of meaning is arbitrarily limited to ensure a finite, manageable system of logic. Smith contends that a major function of religion is to rationalize human behavior – to explain the discordance between values and behavior. He also proposes that ritual practitioners understand that reality cannot be manipulated and that this understanding is the reason they perform ritual. The outcomes of everyday activities are unpredictable, so ritual provides a consistent goal to which to aspire. My main insight while reading Smith's essay was a development of my personal theory of music.

Staal, Frits. "The Meaninglessness of Ritual." *Readings in Ritual Studies*, edited by Ronald L. Grimes, Prentice Hall, 1996, pp. 483-494.

Staal's thesis is that ritual is about perfect action, not symbolic, external meaning. Staal asserts that rituals have beneficial social and cultural side effects that explain why they persist, but not why they began. He states that rituals can resemble non-ritual activities and other components of religion and culture. He thinks self-awareness is what distinguishes humans from other species and that in response to the anxieties caused by this realization, humans created ritual. Staal states that fundamental ritual rules, specifically embedding and modification, resemble linguistic syntax. He explains that one could conclude that ritual rules derive from linguistic syntax, but he thinks linguistic syntax derives from ritual rules. He thinks a theory of ritual will most likely be complex, much like ritual. Staal's essay proved to be relevant to my topic of music, ritual, and family.

Stravinsky, Igor. *An Autobiography*. Norton, 1998, pp. 53-54, https://www.google.com/books/edition/An_Autobiography/lU4sUj0ihiIC?hl=en&gbpv=1&pg=PA53&printsec=frontcover.

In this excerpt, Stravinsky takes a brief tangent into his thoughts about the musicality of Russian folk poetry. He makes statements that allude to Malloch and Trevarthen's theory of communicative musicality and Staal's theory of prelinguistic ritual syntax. Stravinsky's first point is that music lacks the inherent ability to express meaning. He contends that enculturation or socialization preserve the artificial, superficial meanings applied to music. Language creates

meaning and mediates transmission. Stravinsky's next point is that music functions to embody the present by creating order through structuring time, much like ritual. I contend that music and ritual must be somehow related. I think that Stravinsky's experience as a composer grants him some authority on the topic of music.

Wallace, Sandi D, and Jake Harwood. "Associations between Shared Musical Engagement and Parent-Child Relational Quality: The Mediating Roles of Interpersonal Coordination and Empathy." *Journal of Family Communication*, vol. 18, no. 3, 2018, pp. 202–216, https://doi.org/10.1080/15267431.2018.1466783.

Wallace and Harwood investigate how musical engagement between parents and children facilitates the practice and development of coordination and empathy and how those behaviors influence the quality of their relationships. The authors begin with the broad statement that communication is inherent to music and dance. They explain that people generally have their first shared musical experiences with their parents and that shared musical experiences have been important to communication throughout human history. According to the authors, researchers in the field of communication have not done much investigation into the communicative properties of music. Wallace and Harwood essentially studied the exact phenomenon in which I am interested based upon my personal experiences with my family. Their article was helpful because it defined the terminology currently used in the field of communication studies, with which I was unfamiliar. Also, one can reference their study design to guide the design of one's own study.

Wallenstein, Gene. *The Pleasure Instinct: Why We Crave Adventure, Chocolate, Pheromones, and Music*. John Wiley & Sons, 2009, pp. 3-9, 42-46, 95-109.

Wallenstein explains the complexities of neuroscience in an understandable way. He delineates the practical implications of neurological processes and functions on human life, specifically sensory experiences like listening to music. He discusses synaptogenesis, synaptic pruning, self-stimulation, experience-expectant stimuli, auditory-evoked potential, and motherese. I think it is important to my topic of music, ritual, and family to understand how synapses are formed and refined. These processes determine to what sounds we are attuned, which affects what sounds we create and what sounds we seek out. Wallenstein's main assertion is that the brain uses the instinct to seek pleasurable sensory experiences to properly calibrate itself.

Whyte, Robert B. “Religion and Music.” *Music Educators Journal*, vol. 32, no. 6, 1946, pp. 18–21, https://doi.org/10.2307/3386907.

Whyte provides the perspective of a religious official on the role of music in Christianity. He also discusses the role of religion in music and the distinctions he makes between religious and secular music. Although my topic is not specifically about religious music or music in religious settings, much music falls into those categories, so my research would be incomplete without knowledge of that perspective. Also, I was better able to understand Malloch and Trevarthen’s theory of communicative musicality, specifically the phenomenological, grammatical, and semiotic approaches, as outlined by Klempe, by applying it and them to this essay.