

Music and Consciousness

Author(s): Leonid Perlovsky

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MUSIC AND CONSCIOUSNESS

Leonid Perlovsky, School of Engineering, Harvard University, Cambridge, MA 02138. E-mail: <leonid@seas.harvard.edu>.

Is it not strange that sheep's guts should hale souls out of men's bodies?

—Shakespeare [1]

Abstract

The author examines the crucial role that music plays in the evolution of consciousness.

Mystery of Music

Music is an enigma. Almost no one is indifferent to it—and many of us have a positive passion for it. Whether seated in concert halls or in our living rooms, attached to our iPods or trapped in elevators and waiting rooms, we spend countless hours of our lives listening to it or making it ourselves. It's big business too: the US exports more music than guns and cars. But why is music so important to us? What role does it play in our minds? What evolutionary purpose does it serve? Explanations range from bonding military regiments together to dissipating psychological tensions. But these are not explanations at all; they just 'pass the buck' to music's military or therapeutic uses [2]. They do not explain its unique ability to touch our souls. Anybody who loves music, Bach or Gregorian chant, Beatles or Eminem, knows that utilitarian explanations only scratch its surface. Aristotle struggled with the mystery of how "rhythms and melodies, just mere sounds, remind [us of] states of soul" [3]. The evolutionary psychologist Steven Pinker prosaically opined that "music is auditory cheesecake" [4]—an undeniable treat for the senses, but essentially non-nutritious and unnecessary. Even the great Kant, who so brilliantly explained the epistemology of the beautiful and the sublime, could not explain music: "[As for] the expansion of the faculties . . . in the judgment for cognition, music will have the lowest place among [the beautiful arts] . . . because it merely plays with senses" [5].

As far back as Pythagoras, musicians, philosophers, and physicists have ventured to elucidate the principles of harmony. In the nineteenth century Herman von Helmholtz [6] explained consonances and dissonances, majors and minors, with reference to similarities or dissimilarities among overtones. With minor modifications his theory is still applied to electronic musical instruments

today. But to analyze music's acoustic qualities is not at all the same thing as to account for music's aesthetic qualities.

The Knowledge Instinct

This article proposes that the key to music's mysterious power lies in its unique relationship to the basic mechanisms of the mind. We understand the physical world in terms of ideas or concept models that reside in our mind. We have an inborn instinct to test our internal models against the external world [7]; since the world and our understanding of it are constantly changing, we are constantly refining and revising our models as well. When a mental model resonates convincingly with its real-world original, when an idea "fits," our instinct for knowledge is satisfied and we experience a sensation of esthetic pleasure. I call this cognitive mechanism "the knowledge instinct."

Two aspects of the knowledge instinct are *differentiation* and *synthesis*. In addition to concept-models of physical things, our minds contain archetypes—inborn, unconscious psychic structures, undifferentiated vague representations—emotions that are directly connected to our instincts. Before we can use these archetypes in thinking, they have to be differentiated and made conscious. This process takes millennia and its results are ingrained in language. Language models (words, phrases . . .) are accessible to consciousness, but they are most meaningful to us—emotionally related to life—when they are connected to concept-models and to archetypes of the unconscious. Following Carl Jung [8], I call this process *synthesis*. Two examples of concept-models that are connected to undifferentiated archetypes: an American flag, a Star of David. Both concept models have explicit content; both are pregnant with unconscious emotional associations. It is in this all-important process of differentiation and synthesis that music plays its unique role.

When we hear music, two distinct parts of our brains are called into play. On the one hand, music is perceived by evolutionary-old neural centers and resonates with archetypes that are directly connected to instincts, in which emotions and concepts are inextricably intertwined [9]. The instinct that imputes a martial character to trumpets and drums is similar to that which associates the roar of a leopard with danger. On the other hand, music is perceived by evolutionary-new brain centers in the cortex, where music creates new and diverse emotions—the exaltation we experience when listening to the final movement of Beethoven's Ninth

Symphony; the intellectual and emotional subtleties of "The Goldberg Variations." Thus music serves a dual purpose: it evokes new emotions; at the same time, by creating associations between conscious emotions and unconscious archetypes, it promotes synthesis or wholeness in the human psyche. Music at once differentiates and creates wholeness; it engages the human being as a whole.

As consciousness evolves, it moves along a razor's edge between differentiation and synthesis. When there is excessive differentiation, concepts lose their intuitive, emotional content and cease to engage the heart (Catholic monks who'd lost their religious vocation used the word *acedia* to describe this state of mind); when there is excessive synthesis, emotionality nails language and thinking too firmly to traditional values and a culture ceases to change. In order for a culture to sustain its creative momentum it must maintain this precarious balance. Changes in music and consciousness parallel and complement each other: they can be traced through Antiquity, the Middle Ages, the Renaissance, the Reformation, Classicism, Romanticism, all the way up until the present day. For the last two thousand years of Western culture, synthesis and differentiation have maintained their equilibrium with the help of music, which evolved along with it.

Differentiated Consciousness and Antiphonal Singing

The Old Testament prophet Isaiah foresaw an impending national catastrophe in the 8th century BCE; this created tensions in his soul which he experienced as antiphonal choruses of Seraphims. This was the first time that the principle of antiphony—split choruses answering each other back and forth—was mentioned in the Bible. It would become a foundation of psalmody in Jewish and Christian divine service: "One cried to another, and said, Holy, holy, holy is the Lord of hosts" [10]. "The words sung by the Seraphim entered the Jewish liturgy... and were later adopted by the Christian church" [11].

There are remarkable coincidences between the development of consciousness in Ancient Greece and Israel. In the 6th c. BCE the first Greek philosopher Thales repudiated myths, demanded conscious thinking, and pronounced the famous formula "know thyself." In Israel, the prophet Zechariah forbade prophecy [12], an outdated and already

dangerous form of thinking, demanding conscious thinking in its stead. But conscious thinking created a discord between the personal and the unconscious-universal and led to a feeling of separateness from the world. Tensions appeared in the psyche, which, as we've seen, were objectified by antiphonal singing. Antiphon as an *accepted* form of divine service is mentioned in the Bible for the first time in the book of Nehemiah [13] in 445 BCE, just a century after Zechariah. Split choirs symbolized the differentiated nature of the highest principles; they brought the feel of the split in the psyche closer to consciousness.

Christianity forestalled the split in the human soul; its new symbol of a suffering God, both mortal and immortal, assimilated the fundamental contradiction of human nature (between the finiteness of matter and the infiniteness of spirit, between conscious and unconscious).

The Renaissance and Tonal Music

How could music still inspire, when mysticism was giving way to humanism, when human reason became the measure of all things? To restore synthesis in the human consciousness, newer and more diverse emotions were needed. Beginning in the Renaissance a musical system of *tonality* was developed for differentiation of emotions [14]. In the 15th c. John Dunstable, according to witnesses, changed all "music high and music low," music became more consonant and euphonious [15], the better to connect differentiated emotions with the sublime.

The Reformation and Bach

The Reformation transplanted the battleground between good and evil from the heights of Heaven and the depths of Hades into the heart of the human soul. Protestants had to decide within their own minds how to reconcile the perpetual contradictions between their material and spiritual needs. The autonomy of religious symbols was lost; their unconscious contents were partly transferred into consciousness. Tensions in the human soul reached high levels. At the same time, music became unprecedentedly expressive. New musical forms were perfected in works of Buxtehude and then Bach. Polyphonic music acquired complex and sublime form in the fugue; it combined 'horizontal' melodies and 'vertical' harmonies in the space of sounds. When

hearing Bach's fugues, one ceases to argue with oneself; one either turns to God or discovers unexpected heights in oneself.

The 21st c. and Rap

Today a vast chasm yawns between the vast numbers of differentiated concepts that characterize our culture and individuals' capacities to assimilate them while preserving synthesis within their souls. The animalistic and satanic styles of some of our contemporary rockers and rappers could be better understood if we compare them to the wild choruses of satyrs in the days of the Ancient Greeks. The ecstatic dithyramb was an ancient way of creating synthesis, of connecting the sublime with the bestial, unconscious bases of the human psyche. Rap is contemporary dithyramb, restoring the connection between the conscious and unconscious. As in Ancient Greece 2,500 years ago, so today many young people are losing their bearings. By shouting words along with primitive melody and rhythms, a human being may restore synthesis, the connection of the conscious and the unconscious—the Dionysian bursts into Apollonian consciousness and reasserts itself; a riven internal world is restored to wholeness.

Consciousness, especially as it is reflected in language, strives to split the world into pieces. Music makes it whole again, in all its manifold emotionality. This is why "Music is so deeply understood by our inmost being." It is a mechanism of synthesis, a means of creating harmony and wholeness in the human soul.

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