

LIGETI'S SONIC ODYSSEY. MUSIC AS A GATEWAY TO THE UNKNOWN IN *2001: A SPACE ODYSSEY*

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SUMMARY. Music in Stanley Kubrick's 1968 film *2001: A Space Odyssey* plays a crucial role in eliciting moods due to its sparse dialogue. Instead of using typical film score, Kubrick decided to use already existing recordings of four classical music composers. György Ligeti's compositions stand out in a stark contrast to the overall soundtrack of the film and evoke a sense of eeriness. Film's plot unfolds through four segments, each marked by an appearance of a monolith, with Ligeti's music acting as a leitmotif. Micropolyphonic textures, characterized by dense musical layering and dissonance, reflect hidden and inaudible aspects of the unknown, comparable to the vastness of outer space.

Keywords: György Ligeti, Stanley Kubrick, *2001: A Space Odyssey*, film music, eeriness

2001: A Space Odyssey, one of the most influential works by Stanley Kubrick, begins with a dark screen accompanied by a complex amalgamation of sound. The film is introduced by György Ligeti's *Atmosphères*, a composition for a full orchestra. This micropolyphonic piece creates an atmosphere that breaks away from conventional expectations associated with narrative cinema and prepares the viewers for an encounter with the unknown. Then, the black screen transitions to the title of the film against an image of the Earth, Moon, and Sun with a background of the vast expanse of space, accompanied by the opening of a symphonic poem *Thus Spoke Zarathustra* by Richard Strauss. This initial fanfare of the composition was also used as an indicator of an impending significant event, but at the same time, its tonal sound creates a striking contrast with Ligeti's dense eerie cluster. A sudden shift occurs from the unsettling and mysterious to the bold and triumphant. In just a few minutes, before any details about the film's setting are revealed, Kubrick, through his choice of soundtrack, foreshadows the film's narrative journey.

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Initially, Kubrick asked well-established Hollywood composer Alex North, with whom he had collaborated on *Spartacus*, to compose the film's score. North composed and recorded approximately forty minutes of music for the first half of the film in less than a month.² Ultimately, Kubrick decided not to incorporate any of North's compositions into the final score. Instead, he opted for already composed pieces from four different composers: Richard Strauss, Johann Strauss, Aram Khachaturian, and four works of György Ligeti: *Atmosphères*, *Aventures*, *Lux Aeterna* and the *Kyrie* movement from *Requiem for Soprano, Mezzosoprano, Two mixed choruses and Orchestra*. The inclusion of Ligeti's compositions in the film was a subject of controversy, as it is widely known that Kubrick initially sought permission to use only a single section from Ligeti's *Requiem* but did not obtain authorization for any of his other compositions. Rights were only resolved following the composer's demand, which occurred after the film had already been released.³

Regarding the film soundtrack, Kubrick aimed for "something that sounded unusual and distinctive but not so unusual that it was distracting".⁴ To achieve this, he broke two "unwritten rules" about the usage of music in film. The first issue revolves around the question of whether directors should discard the work of a master film music composer. Kubrick by choosing not to use music composed by Alex North, prioritized the artistic perspective over the composer's, deeming the rejection of composed score as essential to achieving a specific musical vision he had in mind. The second unwritten rule concerns the tradition of using music in film, which should primarily serve as a narrative cue or signifier of emotions while remaining imperceptible.⁵

2001: A Space Odyssey unfolds in four segments, each featuring an appearance of a rectangular monolith. The narrative begins with "The Dawn of Man" sequence, transporting the audience to a prehistoric savannah where a tribe of apes encounters the monolith. This event triggers a significant leap in their evolution, granting them a newfound ability to use tools as weapons. In a subsequent section, set millions of years into the future, Dr. Heywood Floyd embarks on a mission to investigate a monolith buried approximately four million years ago near a lunar crater Tycho. As Floyd and his team inspect the enigmatic object and capture photographs, it unexpectedly emits a powerful radio signal. The third segment follows the journey of a spaceship Discovery

² Gengaro, Christine. *Listening to Stanley Kubrick: The Music in his Films*. Lanham: Scarecrow Press, 2013, p. 78.

³ Ibidem, p. 93.

⁴ Paulus, Irena. "Stanley Kubrick's revolution in the usage of film music: 2001: A Space Odyssey (1968)." In *International Review of the Aesthetics and Sociology of Music*, 2009, p. 103.

⁵ Ibidem, p. 102.

One as it heads toward Jupiter, accompanied by a sentient computer HAL 9000, which turns against the human crew, jeopardizing their safety. Finally, in the last segment titled "Jupiter and Beyond the Infinite", Dave Bowman, an only survivor of the crew, eventually reaches Jupiter, where he encounters another mysterious monolith. This leads to a transcendent and mind-bending journey through a surreal and psychedelic realm, after which he lands in the Louis XVI-style decor bedroom, culminating in his transformation into the Star Child.

In the film's opening segment set on the African savannah, titled "The Dawn of Man", Ligeti's music makes its first appearance as the monolith is encountered. *Kyrie* section from the *Requiem* appears to serve as a leitmotif for the monolith's presence. Timothy Scheurer notes that there is no hero or heroine figure in the film, therefore, there is no distinctive music associated with any character.⁶ However, the only exception is Ligeti's composition which appears during encounters with the monolith, possibly implying that the importance of monolith surpasses that of human characters.

Monolith has an active role in moving the plot forward. Each of its appearances progresses human evolution through the development of technology. Its presence during three crucial stages of human evolution represents not only a source of hope but also a threat, which is represented by Ligeti's music. Scheurer notes that: "the film has a pattern: long periods of stability and order (usually underscored by the "classical" pieces) are punctuated by brief sequences of chaos and creativity (usually underscored by the Ligeti pieces)".⁷ In "The Dawn of Man" sequence when a monolith appears to the apes, they approach it with respect and reverence. Subsequently, following this encounter, one of the apes has a revelation about the potential use of bones as tools. This groundbreaking realization motivated all the apes to hunt for food, transitioning them into carnivores and subsequently improving their nutritional intake and overall development. They start to use their new tool as a weapon to intimidate another group of monkeys from a water source. This evolution, driven by the utilization of bones as weapons, underscores a notion that progress in evolution often comes at the price of suffering and distress through violence, representing a double-edged sword that alters the world in both positive and negative ways.

In the second appearance of monolith in the Tycho, lunar crater *Requiem* follows another Ligeti's composition *Lux Aeterna*. In this scene, scientists diverge from apes' instinctual behaviour when they encounter a monolith, immediately attempting to photograph it. However, they are disrupted by a jarring and

⁶ Scheurer, Timothy E. "Kubrick vs. North: The Score for 2001: A Space Odyssey." In *Journal of Popular Film and Television* 25(4), 1998, p. 175.

⁷ *Ibidem*.

unpleasant whistle, overlapping with Ligeti's composition. Through sound montage, Kubrick blends diegetic sound and music, intensifying the enigmatic encounter with the monolith in the Tycho lunar crater. Rather than allowing the voices of Ligeti's composition to reach a crescendo, they remain in the lower register as the monolith emits its high-pitched signal. This jarring sound persists uncomfortably for an extended duration, even as the voices of Ligeti's *Requiem* gently fade away.

The final appearance of Ligeti's *Kyrie* occurs in the last segment of the film "Jupiter and Beyond the Infinite", when it floats in space, just before the psychedelic Stargate sequence. The monolith's ultimate appearance is towards the end when it materializes in front of dying Bowman. However, this time, Ligeti's *Kyrie* is notably absent. For a moment, there is no music at all, until Bowman undergoes his transformation into the Starchild. The absence of Ligeti's music in this particular scene provides a stark contrast. Unlike previous encounters with a monolith, the final appearance does not evoke anxiety; instead, it represents an inviting and commanding presence. This scene serves as a resolution to the discontinuity of Stargate sequence. Dave Bowman's evolution into the Starchild brings a sense of hope, which is why it is not preceded by Ligeti's music, which might have conveyed a sense of threat and fear of the unknown. Instead, we hear the fanfare of *Thus Spoke Zarathustra* by Richard Strauss, which throughout the film announces most important points in the evolution of Humankind: the first Constellation of Earth, Sun, and Moon, ape's discovery of the tool potential of a common bone, and finally, Dave Bowman's transformation from a dying old man into an unborn foetus that transcends time and space to reach the Earth. About a symphonic poem, Strauss claimed that he intended to express "the idea of the evolution of the human race from its origin, through the various phases of development, religious as well as scientific, up to Nietzsche's idea of the superman".⁸ Symphony anchors the narrative in collective understanding of evolution and progress, while highlighting recognizable elements of human existence. Notably, the last stage of evolution by the end of the film is the only one not preceded by *Requiem*, suggesting a more promising and non-threatening future.

Patterson notes that *Requiem* is connected to the past, as it consistently emerges at the end of certain eras: the end of apes' primal consciousness, thus their detachment from the "natural" world; the end of human ignorance regarding the universe, leading to a collapse of existing paradigms in both science and religion; and the end of a human consciousness as we are familiar with it.⁹ On the other hand, Kubrick specifically selected the *Kyrie* movement,

⁸ Henry T. Finck, *Richard Strauss: The Man and His Works*. Boston: Little, Brown and Company, 1917, p. 181.

⁹ Patterson, David W. Music, "Structure and Metaphor in Stanley Kubrick's "2001: A Space Odyssey." In *American Music* 22(3), 2004, p. 453.

named after a Christian liturgical prayer, for a particular reason. From this perspective, it becomes possible to interpret the monolith as a god-like entity. During the "The Dawn of Man" scene with the apes, it serves as an object of worship. Conversely, it can also symbolize the wrath of God when monolith emits an unpleasant sound as scientists choose to photograph it instead of embracing its presence. Chion argues that giving a definite meaning to this piece would go against its intended resonance. When listening to this part of Requiem, it is difficult to determine if the sound is human or instrumental, which is an intentional ambiguity in line with Kubrick's aim.¹⁰ However, Grant points out that there is no indication that the apes are responding to music, and the scientist in the lunar crater Tycho does not seem to hear anything until an unpleasant signal occurs, leaving Ligeti's *Kyrie* with an ambiguous "diegetic status" and uncertain meaning.¹¹

Kyrie as well as *Atmosphères* and *Lux Aeterna* employ a technique developed by Ligeti, known as micropolyphony. While polyphony is a musical texture involving the simultaneous sounding of multiple independent melodies or voices, creating harmony through their overlap, micropolyphony takes this concept even further. In micropolyphony, multiple voices or lines, played in independent tempos and rhythms, are closely interwoven and layered within a short span of time, resulting in intricate and complex interactions. This technique results in a dense network of interlocking strands and the creation of dissonant sounds or cluster tones. Ligeti himself describing micropolyphony, notes that "the polyphonic structure does not come through, you cannot hear it; it remains hidden in a microscopic, underwater world, to us inaudible".¹² It is this very concept of the hidden and the inaudible that echoes an overarching theme of the unknown in *2001: A Space Odyssey*. Ligeti's micropolyphony, like vast and uncharted expanses of outer space explored in the film, serves as a gateway to the enigmatic and the undiscovered. Hidden harmonies of micropolyphony mirror the enigmatic monolith, both inviting us to explore depths of the unknown.

Ligeti's *Lux Aeterna* receives the least emphasis and is employed in two transitional scenes. These scenes depict travel to the location where the monolith has been discovered on Tycho lunar crater, separated only by a casual conversation between Dr Floyd and his colleagues. In both scenes, all other sounds are muted, a deliberate choice by Kubrick, to create a stark juxtaposition with the dialogue scenes that precede them and to evoke a sense of isolation in a vast space. This impression is intensified by Ligeti's piece, which employs

¹⁰ Chion, Michel, *Kubrick's Cinema Odyssey*, London: British Film Institute, 2001, p. 92.

¹¹ Grant, Berry Keith. "Of Men and Monoliths: Science Fiction, Gender, and *2001: A Space Odyssey*." In *Stanley Kubrick's 2001: A Space Odyssey New Essays*, ed. Robert Kolker, New York: Oxford University Press, 2006, p. 79.

¹² Bernard, Jonathan W. "Voice leading as a spatial function in the music of Ligeti." In *Music Analysis* 13(2/3), 1994, p. 227.

vocal micro-imitation within an exceptionally limited vocal range and generates a feeling of voices gradually converging or overlapping. Additionally, this silence, amplified by muting all the sounds except music, adds to the overall ambiance. As Ciment notes, “2001 presents a world of non-involvement in which each person is extraordinarily detached, imprisoned in his allotted role, living in icy solitude”.¹³

During the psychedelic Stargate sequence, Kubrick arranges two compositions by Ligeti as something of a suite. It begins with the *Kyrie* section from *Requiem* and smoothly transitions from vocal music to the instrumental piece *Atmosphères*. Within the dense orchestration of multiple instruments playing in unison, time appears to freeze, even as Kubrick, through on-screen special effects, conveys a sense of motion and velocity. Just as his vocal music strips the individuality from the human voice, Ligeti's *Atmosphères* diminishes a distinctiveness of individual instruments within the sonic complexity. The outcome is a sound that feels both familiar and otherworldly at the same time. In this sequence, an amalgamation of images and sound creates a spectacular experience. Bowman's subjectivity becomes a shared journey with the viewer on a psychedelic trip through galaxies, stars, and the unknown. The use of point-of-view shots and the deliberate emphasis on the music score facilitate this transference.

The music undergoes changes as Bowman reaches his destination. In the brightly lit bedroom, distorted samples from the music gradually evolve into whispers and laughter. What we hear in this scene is an altered version of Ligeti's *Aventures* (unlisted in film credits), very distinct from other pieces we've heard before. Music takes on anthropomorphic qualities while remaining enigmatic and unexplainable. *Aventures*, especially in an altered version of the film, makes it difficult to distinguish between tone and sound. It can almost feel like diegetic music, because “real” sounds like Bowman's breathing or the sound of cutlery being used by another, older Bowman blend with the sound of the piece. Nevertheless, neither Kubrick nor the film itself overtly expresses any meaning or justifications of this chattering music, leaving room for open-ended interpretations. As Ligeti said of *Aventures*, “I believe that the more you listen to this work, the less funny it becomes. Behind the comic surface is something deadly serious, or “eerie”.¹⁴ Fisher states that the concept of eerie is associated with the unknown and once understanding is attained, the

¹³ Michel Ciment, “The Odyssey of Stanley Kubrick: Part 3: Toward the Infinite- 2001.” In *Positif* no. 98, pp. 14-20. Retrieved from scrapfromtheloft.com/movies/odyssey-of-stanley-kubrick-part-3-toward-the-infinite-2001-michel-ciment/ [Accessed 9 February 2024].

¹⁴ Quoted in Bauer, Amy. “Are you dead, like us? The Liminal Status of the Undead in the Music of Ligeti.” In *Thanatos in Contemporary Music: From the Tragic to the Grotesque*, 2022, p. 159.

sense of eeriness fades away.¹⁵ For the eerie to be present, a sense of otherness is necessary, suggesting that mystery involves knowledge, feelings, and experiences beyond the ordinary encounters.¹⁶ Not every mystery creates feelings of eeriness. The eerie essence of outer space and the monolith in *2001: A Space Odyssey* stems from the pervasive uncertainties surrounding extraterrestrial existence and cryptic motives of the monolith. This eeriness extends to scenes with Bowman after his psychedelic journey, where plainness of the room stands in distinct contrast to the rest of the scenography, presenting an ordinary yet eerie setting. This bedroom appears to exist in a vacuum, seemingly a simulation crafted by the mysterious entity. *Aventures* enhances the overall ambiguity, intensifying the eerie quality of this entire scene.

Ligeti's musical compositions are notably unique and stand apart from the rest of the film's soundtrack. In contrast, the music composed by both Strauss and Khachaturian seems to represent our familiar world and, quite possibly, our human nature. Nevertheless, as the enigmatic monolith makes its appearance on the screen, a distinct and different musical arrangement surfaces, portraying something entirely unfamiliar, an essence of "otherness". The use of micropolyphony in Ligeti's compositions reflects hidden and inaudible aspects of the unknown, aligning with film's exploration of space and its enigmatic forces. Unsettling sound of Ligeti's music in the presence of the monolith evokes a sense of both awe and anxiety, symbolizing a double-edged nature of progress.

REFERENCES

- Bauer, Amy. "Are you dead, like us?' The Liminal Status of the Undead in the Music of Ligeti." In *Thanatos in Contemporary Music: From the Tragic to the Grotesque*, 2023, p. 157-180.
- Bernard, Jonathan W. "Voice leading as a spatial function in the music of Ligeti." In *Music Analysis* 13(2/3), 1994, pp. 227-253.
- Chion, Michel, *Kubrick's Cinema Odyssey*, London: British Film Institute, 2001.
- Fisher, Mark. *The Weird and The Eerie*. London: Repeater Books, 2016.
- Gengaro, Christine. *Listening to Stanley Kubrick: The Music in his Films*. Lanham: Scarecrow Press, 2013.
- Grant, Berry Keith. "Of Men and Monoliths: Science Fiction, Gender, and 2001: A Space Odyssey." In *Stanley Kubrick's 2001: A Space Odyssey NewEssays*, ed. Robert Kolker, New York: Oxford University Press, 2006, pp. 69–86.
- Henry T. Finck. *Richard Strauss: The Man and His Works*. Boston: Little, Brown and Company, 1917.

¹⁵ Fisher, Mark. *The Weird and The Eerie*. London: Repeater Books, 2016, p. 62.

¹⁶ Ibidem.

- Michel Ciment, "The Odyssey of Stanley Kubrick: Part 3: Toward the Infinite- 2001". In *Positif* 98, pp. 14-20. Retrieved from scrapsfromtheloft.com/movies/odyssey-of-stanley-kubrick-part-3-toward-the-infinite-2001-michel-ciment/ [Accessed 9 February 2024].
- Patterson, David W. Music, "Structure and Metaphor in Stanley Kubrick's *2001: A Space Odyssey*." In *American Music* 22(3), 2004, pp. 444-74.
- Paulus, Irena. "Stanley Kubrick's revolution in the usage of film music: *2001: A Space Odyssey* (1968)." In *International Review of the Aesthetics and Sociology of Music*, 2009, pp. 99-127.
- Scheurer, Timothy E. "Kubrick vs. North: The Score for *2001: A Space Odyssey*." In *Journal of Popular Film and Television* 25(4), 1998, pp. 172-182.