Stanley Kubrick's Revolution in the Usage of Film Music: 2001: A Space Odyssey (1968)
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Stanley Kubrick’s Revolution in the Usage of Film Music: 2001: A Space Odyssey (1968)

»A Frustrating Experience«

Stanley Kubrick’s film 2001: A Space Odyssey was made based on Arthur C. Clarke’s novel of the same name.1 The director made a long search for the music: as in his earlier movies, he used the music at the set and he used pre-recorded temporary music (so called temp tracks) during the editing.2 At first, he used the following temp tracks: the symphonic poem

1Kubrick and Arthur C. Clarke actually wrote the novel 2001, A Space Odyssey together. The novel was based upon Clarke’s short story The Sentinel, which they expanded. Since Kubrick did not want to work with a classical script, the novel became the basis for filming (and was, of course, changed, during the course of filming). Later on, after the film’s premiere, it was published and instantly became a best-seller.

2The goal of both procedures (music during the filming, temporary music) was to find the right feeling for the scenes, to lead the actors during their acting, and to help the editor to find the inner rhythm of the scene while editing the picture. Temporary music helps the director, too, especially when (a partly unfinished) film has to be shown to the producers who are financing it. Producers want to see the final idea, and do not want to imagine the music (or anything else). Namely, the film music is composed,
Thus Spoke Zarathustra by Richard Strauss (for the main title), A Midsummer Night’s Dream by Felix Mendelssohn (for the scenes of space weightlessness), a Chopin waltz (Frank Pool jogging in the spaceship’s centrifuge) and Sinfonia Antarctica by Ralph Vaughan Williams (the sequence where Bowman passes through the Star Gate). Obviously, Kubrick was in a great dilemma — some sources claim that he even solicited Carl Orff to write the score (Orff’s Carmina Burana was also a temp track in 2001: A Space Odyssey). Orff politely rejected the offer, saying that he was too old.

At the end of year 1967, the director approached two composers — Frank Cordell and Alex North (with whom Kubrick had worked when he was filming Spartacus). Collaboration with Cordell was short: the composer suggested Kubrick use Mahler’s Third Symphony as a temp track. But North was far more productive: his enthusiasm was led by the thought that he would be working with the great director again. So he wrote — in only a month (with the help of the orchestrator, Henry Brandt) — 48 minutes of music! The only thing he didn’t like was Kubrick’s decision (despite persuasion and pleas) to retain some of the temporary music already used in the film.

Aware that using temporary role models and binding different musical styles (when using different music by different composers) could become a major problem, North insisted that he should compose the whole score by himself. But Kubrick was persistent (the idea of classical musical pieces in the film became almost an obsession to him), so the composer worked himself out to compose what was asked of him in keeping with the director’s models, which were already in the film. What followed was agony.

mixed with other sounds and edited only when film is almost finished — so the composer can know the atmosphere, can know which second of a scene should have an accent, and so on. Since directors mostly do not know musical language, the temporary music helps a director to communicate with a composer. The director uses the temp tracks to show what kind of music he wants. This could be inspiring for the composer, but it can also have negative influence, since it asks for a mimicry of sorts of other people’s music, that is, for the creation of a musical imitation.


4 Michel Chion considers that Kubrick’s musical decisions were influenced by the producers from the MGM film studio, which financed the movie. Chion says that «Kubrick initially intended to use classical music excerpts, and it was MGM that preferred an original score and suggested to the director that he work with North again.» (CHION, 2001: 24)

5 »I was ecstatic at the idea of working with Kubrick again (Spartacus was an extremely exciting experience for me), as I regard Kubrick as the most gifted of the younger-generation directors, and that goes for the older as well. And to do a film score where there were about twenty-five minutes of dialogue and no sound effects! What a dreamy assignment, after Who’s Afraid of Virginia Woolf, loaded with dialogue.« (from: NORTH, Alex North Comments on 2001, page 1; the same quotation can be found in the booklet of the CD Alex North’s 2001 — the legendary original score.).

6 »But somehow I had the hunch that whatever I wrote to supplant Strauss’ Zarathustra would not satisfy Kubrick (the influence of this work is clearly heard in North’s score and it really sounds as if the composer was afraid — as an imitation; observation of the author), even though I used the same structure but brought it up to date in idiom and dramatic punch. Also, how could I compete with Mendelssohn’s Scherzo from Midsummer Night’s Dream?« (from: NORTH, Alex North’s Comments on 2001, and the booklet of the CD Alex North’s 2001 — the legendary original score.)
»In any case, after having composed and recorded over forty minutes of music in those two weeks, I waited around for the opportunity to look at the balance of the film, spot the music, etc. During that period I was rewriting some of the stuff that I was not completely satisfied with, and Kubrick even suggested over the phone certain changes that I could make in the subsequent recording. After eleven tense days of waiting to see more film in order to record in early February, I received word from Kubrick that no more score was necessary, that he was going to use breathing effects for the remainder of the film. It was very strange, and I thought perhaps I would still be called upon to compose more music... Nothing happened. I went to a screening in New York, and there were most of the 'temporary' tracks.«

»The Tyranny of the Temp Track«

North was not the only film composer who had »a great, frustrating experience«. Fred Karlin and Raybourn Wright give several similar infamous examples, among them: Platoon (Oliver Stone, 1986), where only half of the composed score by Georges Delerue was used (the main theme became »Adagio for Strings« by Samuel Barber which »covered« the rest of the film); The Sting (1973) where the director George Roy Hill used recording of himself playing Scott Joplin's »Ragtime« with the composer Marvin Hamlisch having the task of adapting the music to the picture; The Exorcist (William Friedkin, 1973) where (as in 2001: A Space Odyssey) originally composed music was not used at all — instead, the director used works by David Borden, George Crumb, Hans Werner Henze, Mike Oldfield, Krzysztof Penderecki and Anton Webern; Breaking Away (Peter Yates, 1979) where fragments from Mendelssohn's »Italian« Symphony in A major and from Rossini's operatic works were used in the first part of the movie — it was only in the rest of the film that the composed score by Patrick Williams »stayed«. Something similar happened in Alien (Ridley Scott, 1979), where the »Romantic« Symphony by Howard Hanson and some excerpts from Jerry Goldsmith's earlier score for the film Freud were used.

So, there is nothing new in the way filmmakers treat film scores, especially in instances in which the director »falls in love« with the temporary music. There is also nothing new when a director uses music by a classical concert composer and this music functions well in the film scenes and becomes the inspiration for many interpretations (for example, when Jean Renoir used Mozart's German Dance in

7 Ibid.
8 SHEURER, 1998: 1. In this article Scheurer is also using the phrase »tyranny of the soundtrack« which was firstly used by Kathryn Kalinak.
9 KARLIN and WRIGHT, 2004: 30.
10 Alan Silvestri said: »A temp score is like a hammer; in the hands of a builder it's a tremendous tool, in the hands of a homicidal maniac it's a weapon of mass destruction.« (ibid.: 26) If we follow that definition, Kubrick would be both — a creative builder and a homicidal maniac.
opposition to Danse macabre by Camille Saint-Saëns in his film The Rules of the Game, by which Renoir wanted to show class differences and, as Kubrick often did, the contrast of order and disorder in the film story).¹¹

The idea of the usage of classical musical pieces in films comes from early film history — as early as the silent film. The first compilation film score was chosen and arranged by Carl Breil for David W. Griffith’s famous silent film The Birth of a Nation (1915). This score was the direct »consequence« of the classical music collections for silent film pianists, arrangers and conductors. Classical musical pieces were gathered and organized according to the atmosphere, tempo and »emotions« so the musician(s) could quickly find the music to fit the screen action (for example, Mendelssohn’s »Wedding March« from A Midsummer Night’s Dream or Wagner’s »Wedding March« from the opera Lohengrin were obligatory in the wedding scenes; Rossini’s overture to the opera William Tell was mostly used in the scenes of thunderstorms and other action sequences, and the first movement from the Beethoven’s »Moonlight« sonata was considered an excellent choice for tender night moments). Even in the early days of the cinema, there were examples of rejections of the originally composed scores (although this was rare, it was the case with Gottfried Huppertz’s score for the 1927 film Metropolis directed by Fritz Lang, which was rejected when the film was re-edited for the American market).

Kubrick’s Musical Choice

So, what was new in the Kubrick’s usage of the earlier composed classical works? Timothy Scheurer explained that »directors have been routinely making musical choices for the soundtracks of their films« but there remained an unwritten rule »within the film music community… that, as effective as a temp track can be, directors should not scrap the work of a master film music composer.«¹² Kubrick was impolite at least when he didn’t use the music composed by well known and highly respected Alex North, whose score was far from being bad or uncreative. But the director did not take the man’s, but the art’s point of view: the rejection of the composed score was necessary for his goal — it led to the kind of music he wanted.

Kubrick also broke »an unwritten rule« about the usage of the music in the film. The tradition dictated the »laws« of the classical film scoring: »invisibility«, »inaudibility«, the music as the »signifier of emotion«, »narrative cueing«, »continuity« and »unity«.¹³ When North said: »I felt I could compose music that had the

¹² SCHUEKER, ibid.: 1. On the other hand, North’s score would not have become so famous (in spite of its excellent musical ideas) if Kubrick had not rejected it.  
ingredients and essence of what Kubrick wanted and give it a consistency and homogeneity and contemporary feel<sup>14</sup> — he proved that, although he used contemporary musical language, he was still thinking traditionally, between the borders of standard «rules» of Hollywood film music (this can be heard in the 1993 recording of his 2001 rejected score, which was conducted by Jerry Goldsmith).

Hanns Eisler and Theodor Adorno raised their voices against those «rules» calling them «prejudices and bad habits». Their idea was continued by Kubrick himself who said that «in most cases, film music tends to lack originality». Kubrick’s opinion on the usage of the film music was on the scent of audio-visual connections, which either began by accident<sup>17</sup> or were interpreted as interesting experiments that should not be repeated too often.<sup>18</sup> In any case, he found what he was looking for and that was, according to James Howard, «something that sounded unusual and distinctive but not so unusual as to be distracting». His final musical selection differed somewhat from the initial one, and it contained the following works: the introduction to the symphonic poem <i>Thus Spoke Zarathustra</i> by Richard Strauss, <i>The Blue Danube</i> waltz by Johann Strauss, the Adagio from the ballet <i>Gayaneh</i> by Aram Khachaturian and the contemporary works of the Hungarian composer György Ligeti: <i>Atmosphères, Aventures</i>, «Lux aeterna» and the «Kyrie» movement from <i>Requiem</i> for soprano, mezzosoprano, two mixed choruses and orchestra.

This choice contributed that classification of the film music parallel or in contrast to the image losing its basic contours. While at first glance the relation between music and image is completely clear (the principle of the contrast or, as some say, musical counterpoint), the more we interpret them, the more we doubt our first decision. Of course, this is influenced by our own perception of the film in which the dialogue and the story are moving in the background of the visual and the fantastic (2001 was made on the edge of experimentalism and abstraction). So

<sup>14</sup> HOWARD, 1999: 110; Booklet of CD Alex North’s 2001; NORTH, ibid.: 1.

<sup>15</sup> The same principles which Claudia Gorbman called «Classical Film Music: Principles of Composition, Mixing and Editing» (see: GORBMAN, ibid.: 73), Eisler and Adorno put together as «Prejudices and Bad Habits» (see: EISLER, 1947: 3-19). They begin with — no more or less — The Leitmotif, and they continue with the chapters: Melody and Euphony, Unobtrusiveness, Visual Justification, Illustration, Geography and History, Stock Music, Clichés and Standardized Interpretation.

<sup>16</sup> HOWARD, ibid.: 11.

<sup>17</sup> Siegfried Kracauer tells an interesting story about a drunken pianist in the silent film era. Since he did not actually watch the film screen but just played, there were strange cases and combinations as the one in which «happy» music accompanied the scene where the husband forced the wife to leave the house. When they reconciled, the death march accompanied the scene (see: KRACAUER, 1971: 136).

<sup>18</sup> The 1983 re-edition of Fritz Lang’s <i>Metropolis</i> (1926), which features a contemporary rock score by Giorgio Moroder, provides an interesting counterexample of the standard practice of segregating song lyrics from dialogue and significant action. During some ‘dialogue scenes’ (intertitles were converted to subtitles for enhanced visual pacing), songs with lyrics, sung by such stars as Pat Benatar, Adam Ant, and Billy Squier, are heard on the soundtrack. They provide a choruslike commentary on what is seen, sometimes with brilliant irony. Some listeners, their primary attention divided between the lyrics and the ‘dialogue’, find this difficult to assimilate (GORBMAN, ibid.: 20).

<sup>19</sup> HOWARD, ibid.: 110.
Kubrick’s comparison of 2001 to the mystic smile of Mona Lisa also works well with the musical interpretations which grow, but which are — as the film itself — open to everyone’s subjective experience.

**Ligeti: Overture to the Film**

Many musical analysis of Kubrick’s *2001: A Space Odyssey* begin with the claim that the movie starts with the symphonic poem *Also sprach Zarathustra* by Richard Strauss. Since this music is very powerful and since it accompanies the main title, the claim is logical. But, *2001* does not begin with that musical composition. *2001* begins with a black screen and György Ligeti’s orchestral work *Atmosphères.*

If we try to explain the director’s intentions, it is possible to assume that he wanted to have an introduction to the film, just the way *Spartacus* had — imitating similar films from the Hollywood »Golden Age«, which were, as were silent movies, copying the structure of theatre works (a good example of that is the structure of *Ben-Hur*). The black screen combined with Ligeti’s music can be also interpreted as the announcement of the seriousness of what we are going to see. Possibilities for many different interpretations of the film’s structure — which was already determined by Ligeti’s *Atmosphères* — show Kubrick’s readiness to stimulate the imagination of scholars and »common« viewers. When a musician watches the movie — *Atmosphères* in the introductory part — he discovers the unusual quality of the attraction. Of micropolyphony, which is based upon gradual changing of

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20 The composer György Ligeti was widely unknown among the general public during the 1960s (as was Richard Strauss). But, thanks to *2001: A Space Odyssey*, the symphonic poem *Also sprach Zarathustra* by R. Strauss has become one of the most popular classical works of today. On the other hand, Ligeti’s compositions are still unknown — that is, they are known only to a narrow circle of music scholars. It could be said that it was also the other way around. A few weeks before the film’s premiere, Ligeti wrote to his colleague: »By the way, do you know the name Kubrick, a film director in England? I never heard of him. He is making a utopian (type of) film at the MGM studio in London, and wants to use part of my *Requiem* (Kyrie) in the film as music of the next century.« (From: PATTERSON, *ibid.*: 448) Otherwise, Kubrick asked for permission to use *Requiem*, but did not ask for permission to use Ligeti’s other works. The rights were settled only after the composer’s demand, after the film’s release.

21 Kubrick also uses *Atmosphères* in the middle section of the film, dividing into two the film’s section »Jupiter Mission — 18 Months Later«. The classical musical work again has »theatrical« function, since it »covers« the black screen, which previously bore the title »Intermission«. Due to its long duration, the film was stopped, leaving viewers the possibility to pause, stretch their legs or — listen to the music. About different interpretations of the film’s structure see: CHION, *ibid.*: 67-70.

22 »Micropolyphony« is represented by numerous lines, put together densely one above the other; they are characterized by small intervals, and they differ from each other only by the small melodic and rhythmic details, so, when they are apart, they cannot be noticed, but they are drowned into the sound of the whole, and at the same time every one of them is influential in a certain way in the whole. The micropolyphonic tissue is an almost static, barely moving sound block, inside which are constant interactions of numerous melodic lines. They are shown by constant oscillations of the sound which is, in this way, sublimate in the sound colour.« (GLIGO, 1996: 150-51).
the orchestral colours (Klangfarbenmelodie) inside the endless cluster, experienced in the darkness of the theatre completely differently than on the concert podium. The impression is that Kubrick wanted to «rivet» the viewer to the screen, to make him listen (and to admire) the music, whether he likes it or not.

Darkness inspires the imagination, so the next function of the Atmosphères is amazement. It is interesting that 2001: A Space Odyssey retains the status of the first (and almost the only) science-fiction movie, which contains more science than fiction. But the music «draws in» and that reminds one to absorb the power of the monolith (the black, smooth surface of the monolith does not reflect the light, but it absorbs it). So, it is possible that Kubrick had at the film’s beginning already put the elements in the perspective of the film’s ending (we are, together with Dave Bowman, in the monolith, so everything we are going to see is a flashback of Star-Child). That would once more round out the cyclic structure of the film.

On the other hand, the music is at the same time «absolute», because at the film’s beginning (at least when we watch the movie for the first time) we do not know anything about the film’s ending. The darkness of the theatre and the darkness of the film screen do not register anything. Knowing that, it is interesting to notice that the same music becomes very evocative in the «psychedelic sequence» at the end of the movie, when colours and shapes literally run in front of the viewer’s eyes during the sudden turn of the film into the mystic of the unknown. The reading of the music at an arbitrary level begins at the very opening, when we do not know anything about the film — except its title.

But, is the «black» overture of the 2001 really that far from tradition? I have already mentioned its connection with the theatre and the silent movie. We can also notice the almost traditional role of the film’s credits, which is overtaken by the overture, since the real main title is very short as in films close to theatre works (like Spartacus). The main title functions as an announcement: Ligeti’s Atmosphères is not an energetic or bombastic work (as is the major part of Hollywood music for the main titles), but because of the connection with the dark screen, it takes over the function of the announcement. It is the sign for moviegoers to stop talking and calm down, because the film is just beginning.

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23 «At the end of his Harmonielehre Schönberg uses the term Klangfarbenmelodie to define the succession of sound colours whose mutual relation works with the kind of logic complementary to the logic of satisfaction which is aroused when we listen to the melody of tone pitches.» (Ibid.: 143)

24 Cluster means accumulation, amassment, a great quantity. In music we think of accumulation, amassment, a great quantity of tones which are as close as the interval of the second (which is the smallest distance between tones). The easiest way to play the cluster is to push the keys on the piano with the whole hand. Some scholars think that cluster is a chord; others think that it can be qualified as a sound. «Although, morphologically speaking, a cluster is a chord, it sounds completely different. Since it has maximally dense arrangement of the tones, each of which makes a special row of harmonics which increases the density, a cluster looks like a compact tone amalgam in which specific tone pitches are lost, and only perception of the register stays: low-middle-high, that is lower-higher. But a cluster brings a new sound quality — a specific colour which is at the edge of noise. Even so-called white noise can be seen as a cluster of a maximum range.» (Ibid.: 34-36)

25 «...On the vertical axis, the superimposing of music on to images in 2001 can seem forced, rigid and graceless, but you have to either take it or leave it.» (CHION, Ibid.: 71)
Most Hollywood scores for the main titles usually give an inklung of a film’s genre, of the place and the time of the story and — as in operatic overture — they usually bring out all (or at least some) musical themes, which are going to be used in the film score. The choice to use the work of the contemporary composer György Ligeti, who broke off the connection with the musical tradition of making chords, the form and, generally, with the concept of the music as music (since his music lives on the edge of becoming sound or even noise),\(^{26}\) speaks a lot about the scientific genre of 2001: A Space Odyssey.\(^{27}\) Is not the undetermined music duration, which is in this case indefinite, the best sign of the film’s treatment of time (the last part of the film is entitled »Jupiter and Beyond the Infinite«) and the cyclic structure of the film’s form?

At first glance, it is impossible to think about musical themes. Ligeti does not use themes in the classical sense — linear melody in his works does not exist. But, nevertheless, Kubrick’s musical concept, which puts Ligeti’s works together with the monolith and around the monolith, begins the thought about the possibility of themes (?), and even makes us start thinking that some of the chosen musical works could be explained as leitmotifs...

**To Listen to Ligeti’s Requiem**

The monolith — four million years before, at the beginning at the 21st century\(^{26}\) and »beyond the infinite« — is accompanied by Ligeti’s Requiem for soprano, mezzosoprano, two mixed choruses and orchestra. Some authors immediately reacted to the traditional procedure. David W. Patterson uses citation of Michel Ciment: »Kyrie functions ‘as a musical leitmotiv for the presence of the monolith (that) reflects Clarke’s idea that any technology far in advance of our own will be indistinguishable from magic, and, oddly enough, will have a certain irrational...

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\(^{26}\) In physics, sound is defined as an oscillation of material particles. The elements of the sound are the musical tone (the regular oscillation of the material particles) and the noise (the irregular oscillation of the material particles). As opposed to the noise, the musical tone has a greater or lesser number of secondary waves — harmonics or partials. When Ligeti uses micropolyphony to draw tones near to each other, and they become so close that harmonics of particular tones cannot be recognized, the effect of his composition (because of the density) is that it comes close to noise which does not have harmonics at all.

When we talk about Atmosphères, we have to mention Harald Kaufman’s writing about »a texture of sound (which) is to be developed that will demonstrate the phenomenon of acoustically standing still.« He also compares the movement inside the static clusters with breathing (!), and breathing plays an important part in Kubrick’s sound imagination of the universe. (See: KAUFMAN, 1)

\(^{27}\) Of course, it is also possible to use Ligeti’s works in horror films, and Kubrick did so in The Shining.

\(^{28}\) It is interesting that Kubrick never (apart from the movie’s title) mentions the year 2001. So we do not know if Dr Heywood Floyd had touched the monolith or if the »Discovery« (18 months later, says the irertitle) has begun its mission to Jupiter in 2001.
quality'. «29 Timothy Scheurer continues the thought when he writes: »Obviously, Kubrick wanted the music, very much in classic leitmotif fashion, to underscore this encounter throughout the film...«.30 It is clear to Patterson that Kubrick’s musical choice (in the film with so many secrets) could not explicitly point out the tradition, so in the case of Requiem (which is the mass for the dead) Patterson searches the connection with the past (he notes that Requiem appears every time when it marks the end of an epoch: the end equals the »death« of the intellectual weakness of the apes and the »death« of the human ignorance of the universe). His conclusion is that this musical work is »in calculated opposition to the film’s narrative surface«31 which is interesting and possible, but which is unfortunately weakly supported by the argument that Kubrick, by selecting Ligeti’s Requiem, in fact chose the mass for the dead.

It seems to me — and here I agree with Michel Chion — that Kubrick did not choose musical works to strengthen the film in its »program« subtext (in almost all of the musical œuvres, the »program« is put down to the title, and does not have anything to do with the extramusical readings in the music itself).32 Kubrick’s musical selection depended only on music and its characteristics — he approached the musical works on the »absolute« level, leaving »readings« and »interpretations« to viewers. Scheurer was closer to the explanation as to why Ligeti’s Requiem in 2001: A Space Odyssey is experienced as a leitmotif. Namely, he compared Alex North’s score with the musical compositions Kubrick chose. He pointed out North’s cue »Night Terrors« which comes before the scene with the monolith and the apes. The piece is composed to underscore the night, but it does not suggest anything about the morning, which will bring a great piece of news in the prehistoric landscape — a perfectly smooth black surface.33

As opposed to North, Kubrick leaves the apes to the real sounds of the nature and doesn’t underscore them. So Ligeti’s Requiem — when it begins — is not mixed with any music which came before it. That is the reason why it disturbs the audi-

29 PATTERSON, ibid.: 453. About irrationality in music — dissonances, atonality and uncommon musical procedures, see in Royal S. BROWN’s book Overtones and Undertones (1994).
30 SCHEURER, ibid.: 6.
31 PATTERSON, ibid.: 453.
32 There is very little of the »program« in music even in the well known symphonic poem Thus Spoke Zarathustra by Richard Strauss. According to Strauss himself: »I didn’t intend to write a philosophical music or to portray Nietzsche’s great work... My intention was to honour Nietzsche’s genius which is widely known from the book Also sprach Zarathustra« (STONE, E. C., commentary from LP record Also sprach Zarathustra).
33 North’s music is modern composition which uses the principle of dividing the low wind instruments from the high strings, where the flageolets and pizzicatos of the strings contribute to the impression of uneasiness. The only problem of that excellent music is its place in the film: while underscoring of the night scene with the apes (as in earlier »ape scenes« in North’s case means leaving the picture to fantasy, Kubrick’s decision to use the real sounds of crickets, apes, and other wild animals make the sequence more realistic — not in the way of a documentary but in the way of the real, rational, existing world.
ence. The place of the music in the film is important, too: it begins when Moon-Watcher is woken up by some presence. Kubrick follows his excited reaction, during which time he does not allow the viewer actually to see what caused the ape’s uneasiness. The Requiem merely tells of an unusual and mystical something. The movement of male voices begins with an irregular curve and is expanded by the principle of adding new voices and instruments, but in such a way as never to traverse its small range. Musical movement is not experienced as the music which is added to the picture, but as the music which is the part of the picture, as if an unknown something emits strange sounds, which are on the edge of becoming noise or a scream. Requiem is felt as diegetic music!\(^{34}\)

The Voice of the Monolith

If we listen to Ligeti’s Requiem as diegetic music, as the »voice of the monolith«, it can be also read as the supplement for the parts of Clarke’s novel which were not used in the film. Namely, Clarke writes that 4 million years later humans found a monolith buried in the Moon’s surface because it had a powerful magnetic field, which marked the place where they should dig. With Ligeti’s work, it is easy to hear the magnetic field or any other kind of field or force — this is the sound which attracts. Anyway, the ape Moon-Watcher, Dr Heywood Floyd and Dave Bowman reached out to comply with some kind of unseen force and to touch the monolith (Bowman was the only one who actually did not succeed in touching it, since he was very old when it happened). In the first scene, just before the ape touching the monolith, Kubrick in a very simple and almost unnoticeable manner »turns off« all realistic sounds (the screaming and shrieking of the excited apes). Moon-Watcher is »drowned« in the Sound of the monolith and completely yields to it.\(^{35}\)

Floyd is even more helpless in front of the Sound. Together with his five colleagues, he approaches the monolith in the scene which also doesn’t have diegetic sounds — there is only the image and Ligeti’s music. The scene is filmed in the same manner as the scene of the first contact: humans are confused and awestruck,

\(^{34}\) If traditional Hollywood music had started to play at the same place in the movie, it would not have diegetic feeling. Clear melodic lines (which could also be leitmotifs), the sound of the orchestra and the harmonies would tell us that the music is nondiegetic. An accentuated dissonant chord would work as a stinger, but it would not sound diegetic at the same time. Ligeti’s music gives an impression of diegetic music because of the thick musical texture and »inner« voices and instruments, which are not treated as means for production of musical tones but as unidentified sounds.

\(^{35}\) »What we do remember from it is the feeling of its vast, continuous choral crescendo in rising and falling undulations. It can be heard either as a collective lament, owing to the continuous sliding by half-tones of the interweaving melodic parts, or as an attack or threat, because of the sense of a crowd or mass, or even as an eschatological anticipation (in other words, waiting for a sacred event), culminating in high chords.« (CHION, ibid.: 92)
they circle around the monolith (as did the tribe of apes), and the Leader (Floyd) comes in front to caress the black surface. Kubrick »copied« the scene carefully — he took care that Floyd touched the monolith at the same musical place in the \textit{Requiem} as did the ape. This is silent confirmation of the claim that time does not mean anything to the monolith, and that the 4 million years which Kubrick parted with one simple, but very famous, cut — the bone, which the ape tossed triumphantly into the air, becoming a space station — is only a moment in the indefinite time. Actually, what is the difference between the ape and the man?

\textbf{Composing by Editing}

Kubrick calls our attention to Oneness in time by the dramatic cut I mentioned, but that cut is anticipated, and then confirmed by the way Ligeti’s \textit{Requiem} is used. Namely, the first appearance of the \textit{Requiem} (the contact of the ape and the monolith) is suddenly interrupted by the filmic and musical cut. It clearly parts the shot of the monolith, which is filmed from a low angle and is put in the Monolith-Sun-Moon Constellation, and the shot of prehistoric landscape with its appertaining sounds. Michel Chion decided to use the word \textit{commutation} — switching off. The word marks the monolith which appears and disappears in a moment (»switches on« and »switches off«) and marks the music. Is this not yet one more confirmation of the narrow relation of the \textit{Requiem} and the monolith, where the notion of the leitmotif — even if it does not function at the traditional level — can signify some higher common purpose, which can hardly be understood by »common mortals«?\textsuperscript{36}

The leitmotif is a musical idea (melody, progression of chords, motif, rhythmic structure, the whole musical section), which appears simultaneously with a character, an idea, a subject, an object or a situation in a dramatic work (this principle is mostly used in operas, but also in film scores). The problem of the usage of the leitmotif notion in Kubrick’s \textit{2001: A Space Odyssey} is not only the untypical choice of music in which categories of melody, rhythm and harmony do not exist, but also the untypical approach to the content. Namely, who are the main characters in \textit{2001: A Space Odyssey}? The ape Moon-Watcher? The official businessman Heywood Floyd? The cold and inert astronauts Bowman and Poole? Or, maybe, the only emotional being in »Discovery« — the computer HAL 9000 (who is, nevertheless, a thing)? Timothy Scheurer claims that there are no heroes and heroines in the film (which is completely atypical for the science-fiction genre), and there is only the character of Dave Bowman who we follow (Bowman is really the only human who »springs out« in the film’s plot). But, there is one »but« — there is no

\textsuperscript{36} See: \textit{ibid.}: 112-19.
specific music connected to him.\textsuperscript{37} If music leads, or, if music functions as an aid in the definition of the main characters, then the only main character is — the monolith. The monolith is an object which has its own music, even its own composer. Ante Peterlić pointed out the monolith as the only starter of the action and claims that the monolith is \textit{»}almost as the character-hero\textit{«}.\textsuperscript{38} The same could be said for Ligeti’s \textit{Requiem} — it is \textit{almost} a leitmotif.

There is a confirmation of sureness-un sureness in the handling of the music and the film. The \textit{Requiem} appears at three places in the movie. Since this was pre-recorded material, it could not be changed (transformed or arranged). On the other hand, the notion of leitmotif in Wagner’s sense involves exactly transformations and adaptations of music to the situation in a drama. It is common for film scores to use leitmotifs in a simplistic manner, but I doubt that a director as great as Kubrick would have agreed to do that. The transformation of the music, that is, the procedure of his own authorship (since he selected the classical musical works and he combined them with film images in an unforgettable way, he could easily be called the author of the music, \textit{almost} the composer), was effected, but at the filmic level — by editing.

The first change is literal: the \textit{Requiem} is opposed to the silence and to real sounds, and is cut down as by a knife at the end of the scene (since Kubrick always carefully combines music with image in all other sequences, even by editing the picture \textit{to the music}, it is clear that the cut was made on purpose).\textsuperscript{39} The second change is softer: in the scene where Dr Floyd sees the monolith for the first time, the \textit{Requiem} follows another Ligeti work, \textit{»}Lux aeterna\textit{«} (Kubrick combines two vocal pieces as if he is pouring from one to the other — in this way, he hides the transition between the shot of the Moon rocket bus and the shot of monolith in the Tycho crater). The \textit{Requiem} is interrupted again, but in a different way. Scientists organize a photographic session in front of monolith (they are like tourists or like a hunter who wants to be photographed with a dead lion), but they are deeply disturbed by an unpleasant whistle. Unlike Clarke, who explains the whistle by another Constellation of planets, Kubrick doesn’t explain anything (but he does briefly show the Constellation). There is an impression that monolith does not like being photographed, although Clarke writes that the whistle is a signal (which is directed to Jupiter).\textsuperscript{40}

\textsuperscript{37} SCHEURER, \textit{ibid.}; 3.
\textsuperscript{38} PETERLIC, 2002: 188.
\textsuperscript{39} This also made Alex North bitter. He claimed that, since Kubrick chose classical musical works instead of his score, the director was forced to edit the picture to the music, and he did not allow the music to accompany the picture, as was common in cinema.
\textsuperscript{40} The relation between the whistle and Ligeti’s \textit{Requiem} is very interesting. At the beginning of the scene, the \textit{Requiem} is recognized at an unconscious level (despite its connection with \textit{»}Lux aeterna\textit{«}) as the Voice which we already know. At the end of the scene, we hear the whistle which begins in the music-Voice (Kubrick lowers the level of the music, but he does not turn it off completely). In reference to the music, the whistle sounds too artificial for us to believe that the mystic Object-Being produces the
The third interruption of Ligeti’s Requiem tells why Kubrick could not find an appropriate composer for 2001 and why not even one of three composers (Orff, Cordell, North) was good enough for the job. It could be the »grandeur-ness« or the need for absolute control or showing off in his authorship, but the fact is that Kubrick himself took the job of composer. It was surely a major assignment for the man who once played percussion instruments in high school, but Kubrick-intellectual decided to use what he did know — film editing. By selecting classical musical works he manipulated and transformed them at the editing desk. The result of his way of composing is the whole musical concept of 2001: A Space Odyssey. The compositional procedure is shown at its best at the film’s peak — Bowman’s passing through the Star Gate.

Passing Through Star Gate: Becoming the Mind

The structure discovers a lot. Ante Peterlić points out the tripartite structure of the sequence: the first part begins with the journey of the space ship in the universe where the monolith »flies« in space with the »Discovery« and other planets; the second part is the so-called »psychedelic sequence«, which is filled with the colours and shapes which move at great speed; and the third part stops abruptly in the Room furnished in the style of Louis XVI.\(^42\) The musical idea is the same as the filmic one. Kubrick used three musical works by György Ligeti in three parts of the movie. The domination of the monolith in the first part logically called for repetition of the Requiem.\(^43\) The logic is traditional (it activates the thought of the leitmotif) but the musical texture does not only function as the Voice, but also as the confirmation of the breaking of the standard time-space relation. In the »undetermined«, »inorganic« tissue of Ligeti’s Requiem Kubrick finds a way to accompany the scene with the specific musical moments. On the other hand, by compact musical texture he hides the jumps in editing by which he creates uncertainty in the relation between time and space. But he also does it the other way around: by the smoothness of the movement in the shot (the small space ship turning towards the camera) he hides sudden musical pause!

\(^{41}\) See: PETERLIC, *ibid.*: 178.

\(^{42}\) See: *ibid.*: 189-94.

\(^{43}\) In this scene the Requiem is heard for the third and last time. Otherwise, Kubrick used all the musical pieces in 2001 only two or three times, by which he avoided the traditional idea of leitmotif, which is used far more often in traditional film scores or operatic works. On the other hand, he made a kind of planned symmetry in his employment of music.
In the beginning of the second part (the »sputtering« of colours suggests unthinkable speed of movement) Kubrick does not start instantly with the new music (that would be too simple) but makes the musical transition during the moment when the spiritual Bowman, because of the speed, leaves his »frozen« body. The »frozen« shot of Bowman’s face is very short, but it is long enough for the transition: Atmosphères, which had filled the emptiness of the screen to this moment (the black screen during the »Overture« and the interruption in the middle of the movie entitled »Intermission«), become a sign for the transition from physical human to spiritual human, that is, to the condition in which Bowman himself does not know what he is (it is important to notice that we, as the spectators, are forced to accept Bowman’s perspective).

Film scholars agree on the fact that the last part of 2001: A Space Odyssey falls under subjective interpretations. But if the character himself — Dave Bowman — whose destiny Kubrick decided to follow since he was only one left as the prime-mover of the filmic action (action is also put in motion by HAL, but he is disconnected) — so: if the character himself does not know what he is, the spectator’s point of view is, once more, and in the most unusual way, put in the field of uncertainty. The spectator is »drawn« inside Bowman, into his body, his mind. Binding with the character does not stay at the level of shallowness but it enters the depth of following (the now »frozen«) bodily functions. But the function of sight is not erased, nor is the function of hearing. Although Kubrick does not show Bowman’s ear (as he shows his eye), it seems that the spectator’s ears become Bowman’s and that they are also »forced« to react, even at the first musical transition.44

Besides, when he took over the composing for the film, Kubrick added to the music the sound that is usual when static objects are passed by a vehicle travelling at great speed. The sound is added to Atmosphères which already have the contour of noise. By that, the director-composer prolonged Ligeti’s idea, and he moved the composition even more — the composition which is static from outside but extremely active from inside.45 The director let the spectator hear (not only see) the

44 Since the density of textures of the Requiem and Atmosphères are the same, and since they differ »only« by the ensemble which plays them (the Requiem is a vocal-instrumental, while Atmosphères is an instrumental piece), we do not feel the transition as a change — not even as a transition in the second part of the same composition — but as a moment in which the technician (in the way of Chion’s commutation) has switched off a channel (voices), so instead of the stereo signal we hear a mono signal. Did Bowman’s ears react to the great speed? This is another procedure by which we are drawn (by the ears) into his body, although we do not know its real, outer shape.

45 At the beginning of the musical composition, Ligeti divides the violins into 56 (!) parts, making, during the first eight bars, a chromatic cluster that spreads through 5 (!) octaves. The composer widely conquers the musical space and keeps control only by inner movement — unnoticeably adding and subtracting instruments (the impression is like listening to »sound waves«). Ligeti’s melody is a melody of sound colours (Klangfarbenmelodie).

It is interesting to note that Ligeti writes all 56 parts in detail, using traditional notation, although the same sound result could be achieved by graphic notation. Nikša Gligo comments: »Couldn’t it also be said that in the same way, ‘zwangneurotisch’, Ligeti leads himself on the leash when he painstakingly, masochistically writes down all those notes in his ‘Cluster-Kompositionen’…?« (GLIGO, 1987: 220)
colours and shapes which fascinate and move in front of Bowman’s eyes and ears — becoming, as Bowman himself, a sensitive mind without a body, which is helpless and completely in the power of something higher and impossible to understand. 46

Passing Through the Star Gate: Becoming the Sound

Categories of space and time in the music become questionable. First of all, by using music which sounds like noise, Kubrick denies musicality but also its sounding as a noise (a noise could be music and vice versa), which is a continuation of Ligeti’s way of thinking. Musical space is also extremely unusual: instead of keeping the usual range and »behaviour«, there is a denial of its most important elements — melody, harmony, tonality, rhythm. This is achieved by subtle accumulation of musical lines in the extremely wide musical space — into a static-active cluster. This is the same or exactly the opposite (it depends on the interpretation) of compression of the time which will, by surpassing the speed of light, turn Dave Bowman into an old man and foetus almost simultaneously.

Time is finally stopped when our hero Bowman, to his (and the spectator’s) great surprise, finishes his journey (his space trip) »beyond the infinite« in the Room furnished in the style of Louis XVI. 47 Except for the small space ship and the

46 Incomprehensibility, transcendence, and fascination of the culmination sequence in Kubrick’s film made many claim that 2001 is a deeply religious film. What is the monolith, but God? Here is the poetic interpretation of Croatian film director Petar Krelja: »In the succession of David’s temptations, the film brings, at its end, the one of the time funnel; pushed into it (by the will of monolith?) or sucked into it by its enormous power (with the fourth dimension of the world which we always call for), his vehicle will, carried with the speed of time itself, afford him the fearful and beautiful cannon fire of a violent light phenomenon; and his eye nerve, which is now liable to colourist changes (as Ligeti’s Atmosphères — observation of the author), will strongly experience sheaves of unreal scenes — made of tender and dreamlike (time-made?) substation.

Does that mean that a representative of the human species frees himself from his worldly sins? Does David pass through some kind of purgatory in the name of his species? Does the hero of the universe run to his catharsis of redemption? Are his traditional ideas of the basic ways of the world destroyed?« (KRELJA, 2001: 40)

Bowman’s transformation to »sensitive mind without body« gives an inkling that he can be also transformed in the »condition of monolith« which can »jump over« spaces and times as it/he wishes. What is mystic and incomprehensible is described by Chion’s notion of acousmètre (from acoustics, which refers to »sound one hears without viewing its source. Radio and telephones are acousmatic media. In film an off-screen sound is acousmatic.« — and être, to be). Acousmètre is »a kind of voice-character specific to cinema that in most instances of cinematic narratives derives mysterious powers from being heard and not seen. See acousmètrest in The Invisible Man, Das Testament des Dr Mabuse, The Wizard of Oz.« (CHION, ibid.: 188 — Glossary) The notion also suits HAL’s voice which is everywhere in the space ship, and can be used for interpretation of film’s introduction, where we see nothing, but we hear Ligeti’s music.

47 »Space Odyssey should come to an end, but the end in the room with stylized furniture from the era of Louis XVI (the epoch of the late Baroque, Classicism, and Enlightenment), that, with the scene design which is different from all shown in the film, exceeds all the viewer’s expectations...« (PETERLIC, ibid.: 193)
astronaut suit, which show that imaginary space is situated «somewhere» (in the Universe), there is the music — Ligeti's *Aventures*. This musical piece is completely different from the *Requiem* and *Atmosphères* (and yet, the director's cut, at the second shot of Bowman's coloured eye, and after the succession of «sound effects» in *Atmosphères*, is logical — image once more hides the transition in music).

This musical work is the closest to aleatory music in Ligeti's opus, and its sound also shows elements of musical pointillism.48 The result is the music which is actually transformed to sound/noise (despite the tendency of transforming music to sound in the *Requiem* and *Atmosphères*, they are still perceived as music). The progression is finished: music as sound (the *Requiem*) — music as sound and noise (*Atmosphères*) — sound (*Aventures*). The progression is almost equal to Kubrick's elimination of space and time where the end result is — nothingness? Creation? In any case, the development of Kubrick's reference to time is similar to the historic development of musical time from the changing of heavy and light beat to physical time, which is measured by a stopwatch in contemporary music, to the absolute negation (or elevation?) of time as such.49 It is probably the journey of every creative energy — it has to destroy (time, music, the man) to be able to create (infinite time, sound, Übermensch).

**Music-Sound-Silence: Diegetic or Nondiegetic?**

Pointillistic treatment of tones in *Aventures* hardly leaves any possibility for finding a difference between tone and sound.50 Most film viewers probably perceive tones/sounds in the Kubrick Room as sounds that are produced in a sound studio. Bowman's breathing, which functions as a counterpoint to music/sound for some time during the scene, helps to make the conclusion. *Aventures* are only the beginning of confusing events (Bowman watches himself as he is growing old), and those events begin exactly at the moment when it becomes clear that the hero actually hears spooky sounds whose echo rebounds from the artificial walls. In this

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48 Aleatory (*alea* = the cube) is music which permits the player to decide about the arrangement of movements, their duration, their volume, their colour, and so on. A player becomes a composer and the form of the music is often opened (that also depends of the player).

Pointillist is music which uses the tones but it perceives them as dots on the piece of paper.

49 For the explanation of the musical composition 4′33″ by John Cage, the work of music where any deliberate sound must not be produced during 4 minutes and 33 seconds, there is a quotation of the composer's way of thinking: «If you consider that sound is characterized by its pitch, its loudness, its timbre, and its duration, and that silence, which is the opposite and, therefore, the necessary partner of sound, is characterized only by its duration, you will be drawn to the conclusion that of the four characteristics of the material of music, duration, that is, time length, is the most fundamental.» (Cf. GLIGO, 1987: 58.)

50 I use the notion «sound» in the sense of «real», «natural» sounds such as the whistle of the monolith, the whistle of the locomotive, the sound of footsteps, the sound of breathing etc. If there is an undetermined sound, which cannot be connected to any source, I use the notion «noise».
case, these are real sounds — of a knife and folk that are used by some other, older Bowman — but these sounds are merged with the concept of Ligeti’s composition, so it is not difficult to suppose that — *maybe* — Bowman hears *Aventures* as the sound of the Room.

Here is an interesting question. What actually is Kubrick’s relation to diegetic and nondiegetic music? It has been shown by now that some of the musical pieces *maybe were not* nondiegetic. The same thought appeared when Ligeti’s *Requiem* sounded like the mysterious Voice (of the monolith), and *Aventures* brought the new possibility to it. There are some other musical works in *2001*, which »behave« arbitrarily in reference to its supposed nondiegetic function (which could actually be diegetic).

The least emphasized Ligeti’s music piece in Kubrick’s film, »Lux aeterna« for choir, is used in two transitional scenes. These are the scenes of the Moon bus travelling to the Tycho crater (the scenes are separated only by everyday talk of Floyd and his colleagues, which is perceived in strong opposition to his official speech at the conference). All sounds except music are »turned off« in both scenes. By doing that, Kubrick creates a contrast to the scenes with dialogue that came before it, and also creates a feeling of claustrophobia (Ligeti’s piece is based upon a vocal micro-imitation where, inside an extremely small vocal range, voices gradually »ruffle« creating *stretta*). Another feeling, parallel with this one, is the feeling of silence, which is created by switching off (*commutation*) all sounds except the music.51 In that atmosphere, Ligeti’s piece works (again) as some kind of »voice of the universe« — something what can be heard only in oneself, some kind of sound which is almost equal to the universe’s absolute silence. The closest comparison would be with underwater sounds.

Is this nondiegetic music? Or is it diegetic? Thinking about Kubrick’s movie, the possibilities are left open.

**Diegesis out of Spectator’s Reach: Gayaneh**

The Adagio from the ballet suite *Gayaneh* by the Armenian composer Aram Khachaturian is also, similarly to Ligeti’s vocal piece »Lux aeterna«, out of reach of categorization. *Gayaneh* was used for the first time in the movie during the section which Kubrick marks as »Jupiter Mission: 18 Months Later«. The scene has a tripartite structure showing »Discovery« on its journey through space, Frank Poole who is jogging in the centrifuge of the space ship, and again, the »Discovery« in space. Although the middle section creates the greatest conflict of music and im-

51 Michel Chion carefully follows Kubrick’s sound journey (symphonic music — silence — symphonic music), which comes from the scientific assumption that *nothing* can be heard in a vacuum. That also means that there is an absolute silence in universe.
age (Poole’s physical activity yields to the more dynamic music), conflict is explained by Kubrick’s decisions during filming that show that he carefully planned the music. Jeremy Bernstein wrote:

»...we learn that the music played on set during the filming of the scene where Poole is training and boxing, and which would help Lockwood to choreograph his movements, was a Chopin waltz chosen by Kubrick.«

James Howard adds that Jeremy Bernstein later watched Gary Lockwood exercise in »Discovery«, which turns in the rhythm of Chopin’s waltz. The waltz was »picked by Kubrick because he felt an intelligent man in 2001 might choose Chopin for doing exercise to music.« But Bernstein clearly avoided to suggest that Kubrick wanted to use diegetic music:

»In the finished film, this became an adagio by Khachaturian, carefully chosen and edited with respect to the image so as not to give the sense that the character is moving to the music or that he hears it — this is itself contrary to the original idea.«

But the Adagio by Khachaturian expressed the main idea of Clarke’s novel — the isolation and loneliness of the passengers, which made the writer mention some musical compositions that were listened to on »Discovery«. But Clarke writes about Bowman’s listening to the music when he stayed absolutely alone (Kubrick jumped over that part of the novel by ellipsis). Kubrick underlined the idea of loneliness, but in another place in the story. Loneliness is »heard« in the scene where we see »Discovery« for the first time — where Khachaturian’s ballet was used. This also marks the beginning of the new section and, because of the contrast of music and image, opens (once more) the possibility of different interpretations of musical text.

52 Chion writes that Gayaneh (as The Blue Danube) »refuses to stick to the image« and that it stays separated from it as a separate body (See: CHION, ibid.: 95-96).
53 From: ibid.: 18-19.
54 HOWARD, ibid.: 110.
55 CHION, ibid.: 19.
56 According to Clarke, Bowman listened to Italian and German operas, but the sound of the perfectly trained voices made his feeling of loneliness more profound. When he started to listen to Verdi’s Requiem, especially the »Dies irae« movement, he was deeply disturbed by the ominous sounding of the voices, so he decided to stop this cycle of vocal works. After that, he listened only to instrumental music. But Sibelius, Tchaikovsky and Berlioz were too emotional for his taste, so they stayed on the repertoire for only a few weeks. Beethoven stayed much longer. Finally, Bowman found his peace by listening to Johann Sebastian Bach and, sometimes, to Wolfgang Amadeus Mozart. (See: CLARKE, ibid.: 163-64)

It is interesting that Kubrick did not use any music which Clarke mentioned in his novel. It can be also noted that Chopin’s waltz was banned from the movie for the same reason Bowman did not want to listen to music from the Romantic era. It would bring too many emotions into the »frozen« state of his feelings.

57 David W. Patterson finds much more in Kubrick’s musical selection than other analysts. He points out the carefulness of Kubrick’s editing which accompanies increasing the number of voices in Khachaturian’s Adagio: when there is only one voice in the score, Kubrick shows lonely »Discovery«
On (non)Diegesis Again: The Blue Danube

Among classical musical works which open up possibilities of diegetic reading and different interpretations, it is not hard to remember the only waltz which, after »testing« as a temp track, stayed in 2001. The Blue Danube by Johann Strauss — like Ligeti’s »Lux aeterna« and Khachaturian’s ballet Gayaneh — is bound to the elegance of the universe and accompanies the docking of the space ship in which Dr Heywood Floyd travels to the wheel-shaped space station. Irving Bazelon made a famous statement: »The waltz is Muzak — an endless flow of recorded, sentimental musical pap, heard in any air terminal the world over.«58 It is possible to listen to The Blue Danube like that, because muzak is »the name for recorded background music which is played in public institutions as supermarkets, banks, aero-dromes and health institutions...«.59 It is possible to imagine that the slow movement of Strauss’ melodic lines is heard in space from the station which is Heywood Floyd’s destination, or even that it is playing on the space ship that carries Floyd. On the other hand, there is no manipulation with the volume (for further away and nearer), there is no spoken reaction on Floyd’s part or any other member of the space ship’s crew (both the sequences accompanied by the Strauss’ waltz are recorded in the manner of a silent movie — the dialogue is »switched off«) — nothing denotes that the characters are listening to a Strauss waltz. However — this is not the only thing which makes the usage of The Blue Danube in 2001: A Space Odyssey anthological.

The combination of music and image — an elegant, well known waltz from the 19th century and the scene of a routine space flight in the future — is similar to the shocking collision of the 18th century furniture and »real« time »beyond the infinite«, where Bowman has somehow arrived (the Room). But the connection between The Blue Danube and the universe provoked even more reactions than Bowman’s space »cage« (Scheurer saw one of the first projections in the 1960s, where he witnessed laughter throughout the audience, but his reaction was one of admiration: »Wow, what a stroke! Who would have thought of that?«)60 In truth, Kubrick prepared for such shock with earlier filmic procedures (with the combi-
nation of the editing of music and image — by »cutting« the monolith and Ligeti’s Atmosphères, and by the famous cut bone/space ship, with which he literally jumped over the lapse of 4 million years). But the audience was still unprepared, because shocks — after quasi »normal« narrative flow in the »ape’s« prologue — come one after the other in short succession.

**Bringing Oppositions Together**

Music for science-fiction movies was largely performed on synthesizers in the 1960s.\(^61\) It was assumed that the universe sounds »synthetic« (naiveté was even greater with sound effects such as »beep-beep«), and orchestral performances (such as the scores of Star Trek or Star Wars, or even Planet of the Apes, which was released the same year as 2001), were limited by traditional use of film music (although Jerry Goldsmith used twelve-row technique in Planet of the Apes, he had to accommodate it to film use). On the other hand, efforts were made to enrich traditional music by more contemporary musical solutions (by expanding the tonality, by freeing the dissonance etc.). According to that, The Blue Danube, with its sound of the Romantic era (the piece was composed in 1867), was the closest to the usual sound of film scores in that time.

The Blue Danube is detracted of film music’s tradition by its popularity and its cultural sign. Long before it appeared in Kubrick’s 2001: A Space Odyssey, this musical piece already had many meanings (Vienna ballrooms, rich elite, kings and queens, New Year’s concerts, and so on). Nevertheless, the film composer John Williams thinks that associations, which overload The Blue Danube, can be put aside:

»Kubrick says to us, ‘Watch the film for more than five seconds and forget those associations, and it will stop being nineteenth-century Vienna,’ and in the hand of Von Karajan the music becomes a work of art that says ‘look,’ that says ‘air,’ that says ‘float’ in beautiful orchestral terms...«\(^62\)

Here begins a row of sometimes very different interpretations, which lead in similar directions, but which also show that Kubrick, by using the music which

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\(^{61}\) In the 1960s, the synthesizer was the most popular instrument among filmmakers (this does not include composers!) because it could produce most orchestral (and other) sounds. However, the sound of the score was pale and banal (sound samples, which make it possible today for synthetic tone to sound [almost] like acoustic one, were not known). But, producers loved the synthesizer, because its usage meant a huge financial difference in the film’s budget — it meant that they paid only the composer (who, in the most cases, was the performer on the synthetic instrument), and that they did not have to pay an »army« of musicians (composer, orchestrator, copyist, arranger, a symphonic orchestra of 70 to 100 members, an orchestra contractor and, possibly, a choir and vocal and instrumental soloists — and so on).

\(^{62}\) From: PATTERSON, *ibid.*: 454.
»gets about as far away as you can get from the cliché of space music,«

63 deliberately stimulates opinions and interpretations. The director is sending the message: either the film or the music should not be taken for granted.64

Among the most interesting interpretations is the one written by Petar Krelja who told the spectators what they had feared the most — as much we respect Kubrick, Kubrick doesn’t respect us — viewers, as he brutally teaches us about truths of life.65 On the other hand, the director deeply respected the music (which does not mean that he respected composers as men, which was witnessed in the way he treated Alex North). He used the editing to follow the regular changes of musical phrases in the composition of Johann Strauss. Does this make it believable that Kubrick considered the universe ordered and not chaotic, which could be concluded from later sequences of the journey in the distant universe which is accom-

63 Ibid.

64 Interpretations begin with Kubrick’s claim, which I quoted in the main text: »It’s hard to find anything much better than ‘The Blue Danube’ for depicting grace and beauty in turning. It also gets about as far away as you can get from the cliché of space music.« (ibid.). Interpretations go further with Royal S. Brown’s explanation: »The slightly empty elegance of the waltz stands as a musically imaged metonymy of the uncluttered grace of the visuals and the matter-of-fact commercialism of the narrative. Further, the surface out-of-syncedness between the waltz’s nineteenth-century musical idiom and the futuristic iconography of the visuals allows the ‘Blue Danube’ to operate on an deeper level by suggesting that the ‘evolution’ from bellicose apes to Viennese ballrooms to outer space has more to do with hardware than with ethos.« (SCHREURER, ibid.: 7)

M. Chion pointed out that the waltz appears directly after the famous cut which throws spectators from pre-historic times to the future. He thinks that the only function of the waltz is to »fill the gap« which was made by the cut (Kubrick’s famous ellipsis), because the viewer must reflect everything that happened between the first discovery of the tool/weapon and the future, the time where there is lasting peace (not war) and where space travels are common (see: CHION, ibid.: 118). Timothy Scheurer underlines the function of commonness, since the waltz, known as a cultural artifact, shows that the man learned to live with the technology which became part of his everyday life. The conventionality of Strauss’ melody reflects a routine movement of the space ship (SCHREURER, ibid.: 7).

Other interpretations make the complex connection music-image, whose zwiefelbform does not allow the »real solution« complete. Penelope Gylliatt writes about affective isolation, drowning in the routine where all friendships and familiarities and even sexual relationships are lost. This is parallel to the unemotional clearness of the man of the future who is bound to scientific technology (see: CHION, ibid.: 27). On the other hand, M. Chion compares the scene of a »dance« of celestial bodies to an amusement park (which also shows the function of the usage of The Blue Danube waltz as the end title, which he thinks is parody) — and this is also the metaphor for sexual penetration (ibid.: 69). Otherwise, sexual penetration is similarly suggested at the beginning of the Kubrick’s 1964 film Dr. Strangelove — or How I Learned To Stop Worrying and Love the Bomb.

Radio station WRVR-FM’s D. J. Baird Sealer expressed Kubrick’s idea in the most common words: »Dancers beware! Stanley Kubrick may come to be regarded as the major choreographer of the twentieth century!« (HOWARD, ibid.: 111)

65 »Does Kubrick mock the sleepy human spirit which so easily gave itself to the fascinating effect of reached distances? Of course! It seems that a three beat measure of Strauss’ light composition, so peacefully adequate and in perfect combination with space surroundings, nevertheless points out known difficulties of the human body in the weightless condition inside the space craft; the ship’s waitress, who tries to bring food to crew members walks mechanically hard and unsurely inside the comfortable rocket — strictly in the rhythm of the waltz — and in the way of horses in parades or circuses which learned to dance in the rhythm of the beats of the piece of Viennese master of waltz.« (KRELJA, ibid.: 40)
panied by musical works by György Ligeti. Nevertheless, Kubrick's organization of Ligeti's works at the film's peak, in the Star Gate sequence, shows that the author — Kubrick — strongly ordered them and bound the «sounding chaos» of Ligeti's clusters (they are «disordered» only because they do not belong to traditional tonality system, otherwise they are perfectly ordered, which can especially be heard in sound static) to filmic structural order (which visually also implicates «disorder» — the play of sound and colours which announce the transition to absolute film). But unusual relations between order and disorder (one category affirms and negates the other) are only the continuation of the unclear relations of the diegetic and nondiegetic music, tradition and non-tradition, rationality and irrationality, counterpoint and parallel, and so on.

A Parallel World

When he used The Blue Danube for the second time (new scenes of flight through space are also filmed as silent, and this is accentuated by seen but not heard dialogue between the pilot and Heywood Floyd), Kubrick additionally played with the expectations of the audience, because he put together the moment of landing with the ending of the music. The space ship touches the surface of the Moon at the same time that the Strauss waltz touches the tonic. On the one hand, the junction of music and image suggests finality, but it is a false finality since things are just beginning to happen. On the other hand, landing on the Moon signifies that one filmic chapter came to its end and that the other one started — Floyd’s mission is going to initiate Bowman's mission and journey to the «infiniteness» of space.

It does not matter how we understand the music — it is clear that the director started to bite off pieces of tradition in the sense of creating a new relation and a new perception of film music, but it is also clear that any argument — even this one — can become an anti-argument in Kubrick’s hand. How much is Kubrick's novelty really new? How much is The Blue Danube non-traditional music when it leans to, as I have already mentioned, the music idiom of 19th century, which is common in Hollywood (even today)? Is it possible simply to say that The Blue Danube is in contrast to the image only because the centuries of the music and the image aren't the same? Could we not, in that case, proclaim as a counterpoint John Williams' Star Wars, because Williams widely uses the music idiom of 19th cen-

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66 About the usage of Ligeti's piece «Lux aeterna» during the scenes of Floyd's journey to Clavius, Patterson writes: «Dramatically, the central goal of these scenes is the realization that this 'chaos' is, in fact, ordered — that the appearance of a monolith on the moon (and by extension, on Earth previously) is not the result of chance magic but is rather the 'deliberately buried' product of intent.» (PATTERSON, ibid.: 456-57)

67 See: SCHEURER, ibid.: 8.
tury? Namely, he wrote "not typical" symphonic music to "interpret" space, he didn’t write "typical" "beep-beep" music, and, moreover, he paid homage to old film music composers from the 1930s and 1940s. Of course, the effect of music composed for film and the effect of classical music meant to be performed at a concert hall (or Viennese ballroom) are completely different and these two should not, in fact, be compared at all.

Maybe we should, for the union of The Blue Danube and wheel-like space ship, use the notion of "parallel worlds" which was used by Thomas Allen Nelson. John Williams was thinking along similar lines when he said: "... and if you go with this film, the film helps dispel all of these associations, and we’re into a new audio-visual world." It is hard to talk about contrast (or parallel) when the reaction to music is subjective, different for each viewer. It is not a coincidence when some authors consider that some musical pieces "don’t work" in the movie (as Chion thinks when he writes about the Adagio from the ballet Gayaneh, for example), because Kubrick actually wanted this ambivalence. The ambivalence provokes interpretations, and the goal is to create different views to the universe and to the uncertain future.

**Signifier with an Exclamation Mark: Thus Spoke Zarathustra**

In opposition to The Blue Danube waltz, to the movement from Khachaturian’s ballet Gayaneh, and even to Ligeti’s compositions, it seems that Thus Spoke Zarathustra by Richard Strauss is the only classical musical piece which establishes a stable relation to the visual.

The introduction to the symphonic poem (which is, by the way, different from the "rest" of Strauss’ work in the sense of tonality and in the sense of, the general way of treating musical material) opens the film like an old fanfare opened old

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68 Kubrick’s 2001 was one of inspirations to George Lucas and John Williams when they created Star Wars.

69 Nelson writes that the biggest difference between the short story (The Sentinel) and the novel by Arthur C. Clarke shows "conceptual complicity through a masterly manipulation of the inherent conflict between the temporal rhetoric of a film (i.e. plot, character, narration) and its spatial/musical rhetoric. Basically, it is a conflict between the causal logic of linear conventions (where the world is organized into straight lines and rationalized forms) and the associative logic of a creative interiority (where the world is assembled into parallel planes and imaginative shapes)..." (NELSON, ibid.: 102)

70 From: PATTERSON, ibid.: 454.

71 David Patterson’s interpretation is very interesting, since he puts the beginnings of all tonal musical works (Thus Spoke Zarathustra, The Blue Danube, Gayaneh, Happy Birthday which Floyd’s daughter sings over the videophone to her father, and Daisy Bell which HAL sings when Bowman shuts him down) together, making the regular row of harmonics. Nevertheless, it seems to me that Kubrick did not go that far and choose the musical works in order to form the row of harmonics by the beginnings of the selected works. We also saw that Patterson considered the one-, two- and three-voiced movement in Khachaturian’s Adagio as the number of awake members of the crew in "Discovery".
Greek tragedy or early operas. At the beginning of the movie, the fanfare comes after Ligeti’s *Atmosphères* (black screen), and “wakes up” the viewer by mimicking the theatre curtain or the door which open “the entrance to the story”. This is the logical beginning of a great, philosophical, atypical work of art. Even Strauss himself entitled the introduction to his symphonic poem *The Riddle of the World* as if he knew that one day some film director will try to solve it.

But, while Strauss thinks that he puts a question in the introductory part of his symphonic poem, Kubrick brings out the claim. In complete difference from other compositions he used, the director puts and leaves the sign of the exclamation mark, as the only firm point upon which the viewer can rely. The music by Richard Strauss was used like a sign by which the most important points in the evolution of Humankind are marked: the film’s main title, which announces the movie but also brings the first Constellation of Earth, Sun and Moon; the ape’s discovery that a common bone can actually be *used*; and finally, Dave Bowman’s transformation from a dying old man to an unborn foetus which/who overbridges time and space so it/he can be brought again in front of the place where it/he came from — the Earth.

Michel Chion announced musical analyses by making structural analyses of film: he sees Kubrick’s music as “markers” of film parts (these markers are signifiers, and they are, like signifiers in language, arbitrary). Every section of the movie, even the one which has no title, begins with specific music: the prologue begins (and ends) with a fanfare by Richard Strauss; an unusually sharp cut/jump in the universe, 4 million years away, begins with the waltz by Johann Strauss; the new, somewhat shorter time gap (18 months later) begins with the lonely Adagio from the ballet *Gayaneh*, and the last section “Beyond the Infinite” uses the *mix* of Ligeti’s music made by Kubrick (as an author?). It is important to point out that the film ends with the third fanfare in *Thus Spoke Zarathustra*. By doing that, Kubrick cre-

72 While considering interpretations of film structure, M. Chion found that the possibilities are numerous. Since this was a very long film, there was a custom to make it possible for audience to rest in the middle of it. So Kubrick cut it into two by an “Intermission”. If we consider only the “Intermission”, which almost has a theatrical function (a pause between the acts), the film has two parts. On the other hand, if we follow the titles which Kubrick himself put in the film (“The Dawn of Man”, “Jupiter Mission — 18 Months Later” and “Jupiter and Beyond the Infinite”), it seems that the film is tripartite. Even these three sections are arbitrary, because Kubrick did not mark with a title the biggest time gap of 4 million years (the transformation of a bone in the space ship). So, if we neglect Kubrick’s titles, and follow the presentations of time in the film, we could find three sections at other places in the film (prehumanity; events on the Moon which are led by Dr. Floyd; events 18 months later). But again, Chion finds a better way to divide up the movie — by following the story. He considers that the parts are, in fact, four. These are: events in the communion of the apes; events on the Moon; events on the “Discovery” 18 months later; and Bowman’s passing through the Star Gate. There are many different possibilities to interpret the structure of 2001, and Chion writes about the open form. But he also thinks that the part is the best one, since it is confirmed by specific selection and usage of music which he considers as “markers” and signifiers of particular filmic parts. (See: CHION, *ibid.*: 66-74)
ated the feeling of cyclic structure even in music. The beginning and ending of the film are the same, and that creates the feeling that the movie, when it finally reached its end, could start all over again.

The *Riddle of the World* appears three times in the film, so it corresponds to inner musical structure: Strauss’ famous theme (C-G-C) reaches the peak three times and it is finally resolved in classical cadence. The tripartite structure of the music reflects the structure of every scene accompanied by it, and Kubrick showed great talent for musical form.\(^{73}\) This was firstly reflected in the main title where we could see the most important collaborators on the movie (»Metro-Goldwyn-Mayer«, »A Stanley Kubrick Production«\(^{74}\)) and, of course, the film’s title. But, in mostly no other appearances does Kubrick edit the image in the way that it is explicitly bound to musical transitions (as, for example, when we have the image of ape’s hitting bones with another bone and the beats fall exactly at the musical beats of the final cadence; or as when the monolith in front of Bowman’s death bed announces the exact beginning of the first appearance of the musical theme, or when Star-Child turns to the camera exactly at the peak of the final cadence). Instead, Kubrick stresses the musical parts by movement in the shot (for example, the ape, after he watched the bone for a long time, comes near it; or gradual movement towards each other of the celestial body at the right side of the screen and the foetal membrane on the left side of the screen — only at the final cadence do we actually see that these are a foetus and Earth). Never literate, but always faithful to musical structure, Kubrick again opens up the possibility of interpretations which could, but do not have to be correct.

**Original Use of »Unoriginal« Music**

Apart from its help in understanding the film’s structure and apart from its emphasis on important places in particular scenes (we can also talk here about the similar beginnings on one musical tone — played by organ in *Also sprach Zarathustra* and played by strings in *The Blue Danube* waltz by Johann Strauss, which gave Michel Chion the idea to entitle the »musical« chapter of his great book *Kubrick’s Cinema Odyssey* — »From one Strauss to the Other«), the symphonic poem by Ri-

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\(^{73}\) M. Chion cautioned that it is always possible to operate with the numerical symbols (as is, in this case, the number three). I also think that the thesis of T. Scheurer about the three appearances of the same musical theme correspond to three film characters who touch or try to touch the monolith, is interesting, but constructed (see: SCHEURER: *ibid.*: 5).

\(^{74}\) We could argue that it is odd that Kubrick, who was egocentric, allowed in the announcing protocol the name of the studio which distributed the film (MGM) to be shown first and his own name second. But the director »corrected« this by using the music: the title »MGM« appears at the third beginning of the musical theme, and he underlined his own name by musical peaks in the cadence, leaving the space for the »peak of all peaks« in music to come together with the film’s title.
Kubrick's prefigured the Scheurer even such famous fanfare situation in 1987, a clear cm the music with Strauss. Having originality? Having unoriginal? Kubrick’s consideration for Richard Strauss and non-consideration of Alex North, are two scores, a used and rejected one, which both became famous (Strauss’ symphonic poem was largely unknown before it appeared in Kubrick’s film, and there is the question if North’s score would have achieved such attention if it had not been rejected). By comparing the two scores, Timothy Scheurer provides an important conclusion:

»Having looked closely at Kubrick’s musical choices for the score for 2001 I am convinced that his rejection of North’s score was something more than pure directorial ego. Kubrick had worked with North on Spartacus and respected him as a composer and colleague. His decision to stick with his temp track obviously fits more closely with his artistic vision of the film as a whole. And, in the final analysis, when one thinks about 2001, part of what makes the film memorable, striking, and a matter of critical curiosity and interest is the score... The audacity of Kubrick’s musical juxtapositions work brilliantly in a paradoxical fashion: The musical language of his selections in actuality does not stray far from the conventions of scoring for the classic science fiction film, but their recognizability (or lack of it in the case of the Ligeti works) allows them to simultaneously complement the action on the screen in classic film scoring fashion while also functioning in a contrapuntal fashion... ‘Kubrick, then, uses »unoriginal« film music originally, seeing music not only supportive of his visuals but also as an active participant in the creation and/or destruction of image content. Thus, music in Kubrick’s films is used inventively and narratively and flamboyantly, causing the viewer to listen so that he can see’.«

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Sažetak

**Revolucija Stanleya Kubricka u uporabi filmske glazbe:**

2001: Odiseja u svemiru (1968)


Na ovakvo je postupanje utjecala i redateljeva naglašena potreba za autorstvom koja je obuhvaćala brojne aspekte: pisanje scenarija, snimanje, montażu, produkciju i dr. Kubrick ju je s vremenom nastojao proširiti i na zahtjevnije filmske komponente, posebice na glazbu. Budući je počeo donositi skladateljske odluke (i doslovno skladati montažom), gotovo bismo mogli reći da je preuzeo ulogu skladatelja ili barem redatelja glazbe.