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Opera *Third Bullet* by Vojislav Vučković, or
how would ChatGPT do on the Musicology Exam?
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OPERA *THIRD BULLET* BY VOJISLAV VUČKOVIĆ, OR HOW WOULD CHATGPT DO ON THE MUSICOLOGY EXAM?

Abstract: This paper is dedicated to the analysis of the opera *Third Bullet*, composed by Vojislav Vučković. The opera and its composer, and all other data related to them, were generated by the text-based ChatGPT. Although the composer Vojislav Vučković is a person who actually existed, the one in focus here is fictional, or perhaps better yet, a synthesized figure, created somewhat like modern-day Pinocchio, "just like a real boy". The main goal of the paper is to determine if this artificial historic figure is a relevant topic for musicological analysis, and what can we conclude from dealing with works that don't really exist. My idea was to question the possibilities for the implementation of text-based AIs in musicological work and to raise awareness of this kind of synthetic history of music that is available to us.

Keywords: AI, ChatGPT, bot, musicology, history of music, Serbian music.

Introduction

This text relies on subjective and very personal experiences of dealing with artificial intelligence in the field of musicology. It is, in a way, opposed to what is expected from a scientific paper in humanities. But, since I am dealing with a machine capable of producing a similar narrative to the one to be found in mu-

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sicological papers, an essayistic and a bit anecdotal way of presentation was chosen, ultimately in order to prove the point of the paper, discussed in detail in the conclusion. Also, since this is a very recent phenomenon, there are not enough relevant academic resources available to me, and due to its fast-changing and experimental nature, no definite and impactful conclusions can be made yet. One can justifiably assume that if this is true then I shouldn't write a paper about it, but the amazing popularity of this chatbot motivated me to experiment and try to involve myself as a musicologist in this omnipresent AI hype. Even after writing this paper, I still have more questions than answers regarding this issue, and instead of making some smart conclusions and discoveries, my goal with this is to provoke more similar responses about experiences of implementation of AI into musicological work.

There are some very valuable publications that helped a lot during the writing of this paper, such as Ibrahim John's book *The Art of Asking ChatGPT for High-Quality Answers* (2023), which I used as a guidebook during research. Some general information on this chatbot was obtained from the study "What is ChatGPT Doing and Why Does it Work" by Stephen Wolfram (2023). Other sources used for this paper are mostly articles from newspapers, blogs and web magazines dedicated to certain topics involving AI, among which I will mention the valuable experience, in a way similar to my experiment, shared on the webpage *Medievalists.net* by Yoav Tirosh titled "Why AI Won't Steal Medievalists' Jobs", especially regarding quoting and referencing chatbots' responses in academic papers.

Origin of the idea for the experiment

My first encounter with ChatGPT (generative pre-trained transformer; Wolfram 2023) was in December 2022, when I was introduced to its capabilities to act as a real-time coding assistant. It was very good in that regard, but I wasn't inclined to experiment further with it. After New Year's Day, the media were flooded with articles about the "fascinating chatbot", who can create poems, stories, programs, and so on, basically, any textual content. Since I work as a lecturer, most of my attention was drawn to the news about using ChatGPT as a tool for cheating on exams and homework essays (Niecel 2023; Waugh 2023; Gilliard 2023). According to the articles, universities are in a panic since students are using ChatGPT to create papers and tests that are suddenly getting better and better (Klein 2023). Also, there are numerous publications advocating for the usage of this chatbot in education (Skrabut 2023). I was very skeptical about this, knowing a completely different use of the mentioned chatbot, so I decided to give it a try.

Like everyone, I asked ChatGPT to answer one of my exam questions and was amazed by how well it composed the answer, regarding the general characteristics of baroque art. This opened the idea to explore its features further. It was a Wikipedia-article type of discourse, almost bureaucratic in nature, so anyone with a bit of experience in grading humanities students' papers will recognize that the text wasn't written by a student. It was impressive how well it presented the collected facts, the organization of answers was very well structured, but with a noticeable absence of a critical stance. The answer was based on well-known cliches and theoretical prejudices from art history, most of them old-fashioned, problematized and re-interpreted a long time ago. But it didn't include any of these polemical standpoints in its answers, its goal was to "present the truth" about the query and, what is more, to present the "positive truth", treating a date of birth and a stylistic remark for instance, as equal types of data.

Generating "Vojislav Vučković" – life and legacy, according to ChatGPT

So, after such initial mixed impressions, I was curious about its musical knowledge base, so I decided to try something more local and specific. Following John's instructions (John 2023, 18), I asked it explicitly to write a critical article about the Serbian composer and musicologist Vojislav Vučković. This is the answer I got:

> Vojislav Vučković (1932–2003) was a Serbian composer who made significant contributions to the music scene in his home country, as well as internationally. His works are characterized by their unique blend of traditional Serbian and Balkan folk elements with contemporary techniques and styles.
> One of Vučković most notable works is his opera *The Third Bullet*, which was premiered in Belgrade in 1967. This work is considered a masterpiece of Serbian music and is widely regarded as one of the most important operas of the 20th century. The opera tells the story of a young man who is torn between his love for his country and his desire for personal freedom. The music is a fusion of traditional Serbian folk elements with contemporary techniques, such as serialism and atonality. The use of folk melodies and rhythms creates a sense of nostalgia and longing, while the modern techniques give the work a sense of urgency and tension.
> Another important work by Vučković is his Symphony No. 2, which was premiered in Belgrade in 1970. This symphony is notable for its use of traditional Serbian folk elements, such as the use of pentatonic scales and the use of the gusle, a traditional string instrument. The symphony also features a mix of modern techniques, such as serialism and atonality, which gives the work a sense of dissonance and tension.

The use of the gusle in the symphony creates a sense of nostalgia and longing, while the modern techniques give the work a sense of urgency and tension.

In conclusion, Vojislav Vučković's works are characterized by their unique blend of traditional Serbian and Balkan folk elements with contemporary techniques and styles. His opera *The Third Bullet* and Symphony No. 2 are considered masterpieces of Serbian music and are widely regarded as some of the most important works of the 20th century. The use of folk elements in his works creates a sense of nostalgia and longing, while the modern techniques give the works a sense of urgency and tension (ChatGPT, chat message to the author, 4.3.2023).

For those not familiar with the history of Serbian music, none of this is true, although it seems like it might be. This struck me the most, how truth-like this answer is, and my first thought was: "How great would it be if this person really existed!"[2] The chatbot's answer to my query appears to be a blend of presumptions about Serbian music that one can make, knowing a lot about music in general but without having the data about the actual people and their compositions. But ChatGPT didn't say that it doesn't know the answer, it simply invented the person based on somewhat funny and naive but, nevertheless, very correct assumptions and knowledge of how humans write about music. The first paragraph is really like playing with averages – character: male (according to the name), most probable lifespan: around 70 years. The rest of the answer is comprised of musicological phrases very common in literature such as "composer who made significant contributions". Notice the irony in the following, also very generalized statement that emphasizes a "**unique** blend of traditional Serbian and Balkan folk elements with contemporary techniques and style", a statement that is true for the majority of Serbian composers.

The presented works by Vučković are also just common assumptions that, if someone is a "significant 20th-century composer" he is likely to have in his opus (at least) one successful opera with a political plot and usage of internationally fashionable composing techniques of the time, as well as more than one symphony. Since I was under the impression that ChatGPT treats these generated statements as facts, and I was really curious to find out more about the *Third Bullet* opera, I decided to continue with my "examination", and asked some follow-up questions to motivate the "student" to freely express its knowledge.

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2   Vojislav Vučković (1910–1942) was a Serbian composer and musicologist, a member of the "Prague group" of composers who studied in the Czech capital. He was a prominent political activist for the Communist party and was assassinated during the war. His works include programmatic symphonic pieces such as *Vesnik bure*, *Ozareni put*, the ballet *Man who stole the sun*, etc. He wrote about music and aesthetics in numerous articles and texts dedicated to contemporary musical issues, published posthumously as part of his collected works (Vučković 1968).

The next question was about the structure and style of opera, and the answer was even more convincing than the previous one, rising my professional interest in this work even more:

> Vojislav Vučković opera *Third Bullet* is a work that explores the theme of political power and its corrupting influence. Through the use of complex vocal lines and dissonant harmonies, Vučković creates a musical landscape that reflects the tension and chaos of a society controlled by a ruthless dictator.
>
> One of the most striking elements of the opera is its use of dissonant harmonies. Throughout the work, Vučković employs dissonant chords and unconventional tonal relationships to convey a sense of unease and instability. This is particularly evident in the opening scene, where the vocal lines of the chorus are set against a backdrop of shifting harmonies that reflect the chaos of a society on the brink of collapse.
>
> Another key aspect of the opera is its use of extended vocal techniques. Vučković makes use of a wide range of vocal techniques, including glissando, vibrato, and multiphonics, to create a sense of emotional intensity and expressiveness. This is particularly evident in the vocal lines of the main characters, who are often asked to push their voices to the limit in order to convey the intensity of their emotions.
>
> The opera also makes use of a variety of musical forms and structures. Vučković employs a range of traditional operatic forms, such as aria and recitative, but also incorporates elements of contemporary music, such as atonal harmony and extended vocal techniques. This creates a sense of musical diversity and complexity, which reflects the complex political landscape of the opera's setting.
>
> Overall, *Third Bullet* is a powerful and deeply affecting work that explores the theme of political power and its corrupting influence through a range of musical and vocal techniques. Through its use of dissonant harmonies, extended vocal techniques, and a variety of musical forms and structures, the opera creates a musical landscape that reflects the tension and chaos of a society controlled by a ruthless dictator." (ChatGPT, chat message to the author, 4.3.2023).

This is a piece of music that I would most probably enjoy, and be very interested in analyzing its context and impact on later music. The title of the work rings a bell for people from Serbia because it is the title of a real book dedicated to the assassination of Serbian prime minister Zoran Đinđić in 2003 (Veruović 2014). This example enables me to take a peek into the inner working mechanism of ChatGPT, and into the way it finds data for its generations. The media discourse about this book contains data that the chatbot needed regarding political assassinations, but from the wrong historical period. The chatbot ignored the rest of the actual data related to Đinđić's assassination, only using the title since it would most probably fit into the response, given that the opera and the book share similar political contexts. This connection was easy to notice because

of the locality of the subject, but we can also assume that other, more general elements of the opera, like the "ruthless dictator" that could be Hitler, are generated on a similar contextual basis. It looks like the data structure of the generation is preserved and appended with other related structures but with actual values of variables prone to change to fit the purpose of the answer.

As Wolfram pointed out:

> imagine scanning billions of pages of human-written text (say on the web and in digitized books) and finding all instances of this text—then seeing what word comes next in a fraction of the time. ChatGPT effectively does something like this, except that [...] it doesn't look at literal text; it looks for things that in a certain sense 'match in meaning'. But the end result is that it produces a ranked list of words that might follow, together with 'probabilities' (Wolfram 2023).

This "match in meaning" is again, not literal, based on the best choice, but involves a "temperature" parameter that affects the bot's creativity. It values from 0 to 1 and it actually represents "how often lower ranked words would be used" (Wolfram 2023). This demystifying description shows that ChatGPT's answers are just variations of different word patterns already found in human-produced texts. Machines can compute many more patterns than humans and then reasonably predict the outcome of certain situations, choosing between a few most likely solutions. It sounds paradoxical, but in this case, it predicts the past, or better, one of the possible stories about the past based on how we already wrote about it. And it certainly did a good job in the case of this mix of politics, opera and 20th-century art, because one can easily see why such a work would indeed be very important in the musical history of a such small nation such as Serbia. Also, it appears that this Vučković was a kind of neo-classicist, modernist composer, not too experimental, but also not very old-fashioned for the 1960s. So far, so good, but we obviously need more information in order to make better argumented conclusions about this composer and his work. It is good practice to start from the score, so let's find out how the composer treats the orchestra:

> The orchestral part in Vojislav Vučković's political chamber opera *Third Bullet* plays a crucial role in setting the tone and atmosphere of the piece. The composer uses a small ensemble of traditional orchestral instruments, including strings, woodwinds, and percussion, to create a tense and brooding atmosphere that reflects the political turmoil of the story.
>
> One of the most striking elements of the orchestral part is the use of dissonant harmonies and angular melodies to convey a sense of unease and uncertainty. The strings, in particular, play a significant role in this, with their sharp, angular melodies and dissonant harmonies adding to the sense of tension and dissonance throughout the piece. The wood-

winds, on the other hand, are used more sparingly, but they add a sense
of mystery and intrigue with their subtle, ethereal melodies.
The percussion section also plays an important role in the orchestral
part, with a wide range of instruments used to create a sense of rhyth-
mic energy and urgency. The use of drums and cymbals, in particu-
lar, adds a sense of urgency and intensity to the music, reflecting the
political turmoil of the story (ChatGPT, chat message to the author,
4.3.2023).

The most provocative part of this answer is the twice-stated "reflection of
political turmoil" in the music, which I understood as "stating the obvious", but
also as a common phrase in the musicological jargon, a true but uninforma-
tive statement. It seems logical that music dealing with a political topic would
be influenced by said politics, but it doesn't say precisely how this reflection is
made, or what is the connection between "angular melody" and "uncertainty".
ChatGPT assumed that this is self-evident, just like humans do.

A closer look at the score revealed no surprises, all descriptions are to be ex-
pected from such a piece: a small but diverse ensemble, "tense and brooding at-
mosphere", strings are angular, woodwinds are subtle, percussions are intensive.
I cannot provide quotations, but the fact that someone familiar with 20th-cen-
tury music expects these descriptions proves that they were encountered innu-
merable times in books and texts. They look like a part of some kind of "mu-
sicological grammar", slang that we all adopted passively, and one of the most
fascinating aspects of ChatGPT is that it emulates this slang perfectly, extracting
it from our papers and books. It is not so noticeable in incorrect answers, but in
made-up ones, like in my examples, these stereotypes are very prominent, and
thought-provoking, to say the least.

One of the questions that popped up in my head was similar to the one I
had after hearing my own voice recorded: "Do I really sound like this?". Are we
also just generating data according to the learned patterns? Sure, we humans are
(still) much better in this, with far more sophisticated methods of making met-
aphors, multiple meanings and analytical insights, but nevertheless, our conclu-
sions somehow coincide with the machine's predictions on what might be our
conclusion. Therefore, it would be valid to assume that, if someone suddenly
discovers a lost opera like *The Third Bullet*, the musicological discourse that will
be produced around it will possibly look something like the descriptions given
by ChatGPT. Furthermore, we can look at this chat as a textbook example of
fragments of musicological text – a kind of template where you just need to
change the data to fit your needs and the rest will just work.

I came to such a conclusion after first using ChatGPT for coding. When I
asked it to provide the code for something, it responded with a generic excuse
that, as a text-based chatbot, it is not capable of writing actual code, but it can

provide examples of what such a code might look like. So, from the standpoint of AI, nothing is wrong here, our expectations might be ill-founded. This is not actual musicological text it generated, it showed what such a text might look like, and also how our past might look like. It is hard to believe that it is just a prediction based on past experiences, and it seems very likely that, in the case of a text produced by an actual musicologist, this will become true – such a text will be reasonably similar to this. What is interesting to me here is that this template of a musicological text is also made about a composer that is just a template of what a Serbian composer might look like, and what his opus most probably consisted of. It bears resemblance to some kind of parallel universe in which events from the chatbot's responses may occur, like imagining alternative history.

Generating *Third Bullet*

But one doesn't really have to imagine anything, the chatbot will continue to generate and develop this alternative world to the limits of its possibilities. Thus, the continuation of this experiment is in a way AI-assisted composing, since in my questions I led the chatbot to generate segments of the composition in order to provide valid answers about them.

Since this is a text-based chatbot, I started from elements that can easily be done this way, such as parts of drama and descriptions of music. I asked it to present a detailed analysis of the opera's structure and dramatic developments:

> The vocal parts are characterized by their dramatic intensity and range. The lead character, the assassin, is sung by a baritone, who uses his powerful voice to convey the character's inner turmoil and desperation. The victim, a political leader, is sung by a tenor, whose voice is used to convey the character's sense of authority and power. The other characters, including the victim's wife and the assassin's accomplices, are sung by a variety of voices, including sopranos and altos, to give a sense of the diversity of the characters and their different perspectives on the situation.
> The vocal parts are also used to convey the political message of the opera. The lyrics are poetic and evocative, and they are used to express the characters' feelings about the political situation in the country. The lyrics are also used to convey the sense of oppression and violence that is present in the opera. (ChatGPT, chat message to the author, 4.3.2023)

This, a bit of sexist role distribution in *Third Bullet*'s drama, where female characters are just there to "give a sense of the diversity of the characters", is actually well founded in art production of the period, where the political drama will most probably be something that men should be dealing with, whereas female

characters were mostly included in love-related topics. I was interested in this "victim-politician" character, so I focused my queries on him. The answer was expected and in accordance with previous, although very general, statements:

> The "Politician's aria" in the chamber opera *Third Bullet* by composer Vojislav Vučković is a powerful and emotive piece that showcases the complex inner turmoil of a politician as they grapple with the weight of their decisions and the impact they have on their country and its citizens.
> The aria begins with a slow and contemplative melody, reflecting the politician's introspection as they reflect on the choices they have made and the consequences that have followed. The melody gradually builds in intensity, reflecting the growing sense of guilt and responsibility that the politician feels as they realize the impact of their actions.
> The lyrics of the aria are equally powerful, with the politician expressing their regret and remorse for the harm they have caused, while also acknowledging their own human frailty and the pressures and temptations that led to their actions. The words convey a sense of deep self-reflection and a genuine desire to make amends for the harm they have caused.
> Musically, the aria is characterized by its use of dissonant harmonies and angular melodies, which reflect the internal conflicts and turmoil that the politician is experiencing. The orchestration is sparse and minimalist, with a focus on the voice of the politician, which further emphasizes the personal and introspective nature of the piece (ChatGPT, chat message to the author, 4.3.2023).

After this, it started repeating its answers. They were logical but with no further information regarding the details of the opera. It just restated what it already wrote with the same confidence, like this piece of music really exists. It even generated fake references to important recordings and books about this opera, so I decided to see if it could do more.

Outside the text

I was determined to keep provoking the chatbot to generate even more details about this opera but encountered several problems. It even apologized for not being able to find the score online, but never implied that there would be a reason to question the correctness of the provided data. That may be a reason why, although it is capable of making templates of different kinds of analysis and descriptions of the music, it couldn't produce actual music on the same level as text. It cannot produce midi files or parts of the score, but I tried to provoke it to give me a code that could produce midi or musicXML. Although it mostly makes correct code that compiles and produces wanted files, the musical result

is nonsensical for both Python and Csound, regardless of the elaboration of the given description. It offered me, though, to try other OpenAI services, such as DALL-E and Jukebox, in order to get the audio-visual data for my queries. I did so, and even though the results are interesting, they are still far from the quality of answers given in the textual form.

Valuable results were obtained from DALL-E, a text-to-image generator that makes visuals according to given descriptions. It made it possible to see photos and costumes from the premiere of the opera *Third Bullet*, a poster and a score (examples are at the end of the text). As one can notice, photos are the most convincing of all the visuals, with scenery and costumes that are expected in operatic work such as this. The posters made it obvious that DALL-E can generate text-like visuals, but not actual readable text. The same is valid for scores. Although one can stretch their imagination and view them as graphical scores, the prevailing impression is that those are just score-like images.

Experimenting with Jukebox, an OpenAI tool for audio generation according to the given sample proved to be a long shot for now. First, it needs a specific hardware GPU to run which I do not possess, and even though this is kind of hackable with help of a virtual machine on Google Colab, it needs a lot of computing resources and time to produce a very short sample. Furthermore, these samples are of equal quality as text generated by ChatGPT, imitating the well-known popular music genres (such as making songs in the style of The Beatles or Nirvana), but as far as I can see, it still doesn't work with 20th-century classical music. It relies on a list of genres and very formalized musical models that seem to offer the possibility to be expanded, but I couldn't produce any meaningful results before the deadline for this paper. Regardless of my current impressions, as I mentioned earlier, these are all just experiments and "works in progress", so having the possibility to hear how "Politician's aria" might sound is just a matter of time.

Conclusion

At the beginning of the text, I promised that this anecdotal method of presenting experiences from my experiment was chosen intentionally in order to prove the point. I was inspired to do so by books from the edition "New Material History of Music", especially one titled *The Haydn Economy*, where author Nicholas Mathews explains the "New historicism's" emphasis of the anecdote: "the value of the anecdote is that it disrupts the formal historical narrative and lets history happen with a lack of closure" (Mathews 2022, 56). I naively connected this with my chat with ChatGPT. On one side, these chats of mine constitute historical trivia, something like a modern-day scrapbook, informal notions on a

certain topic, so they can potentially "point the scholar down new side streets of microhistorical description, toward elaborate reanimation of past relationships" (Mathews 2022, 55), in this case between human and machine. On the other hand, even though the machine's answers in this paper are very conclusive, it lets this alternative history "happen with lack of closure", by endlessly generating new similar versions of "what it might look like", although each of these particular histories are (for now) presented in a concluded and definite "closed" way. So, my idea was to create an anecdotal microhistorical description on the basis of available data (chats) and events that really occurred (my experiment with ChatGPT) in order to avoid my text looking similar to what ChatGPT would assume it might be.[3]

Although it would be possible and far less demanding to write this very paper with the help of ChatGPT, I didn't use it for writing because it very well emulates my regular academic discourse, and really makes my writing better in terms of style and grammar, but also makes it look more generic and faceless (the same effect is achieved with many human academic reviewers already). I used the chatbot to generate what appears to be musicological data and presented my encounter with it from the standpoint of a researcher who discovered new historical artefacts and attempted to understand their meaning. These artefacts are different from the ones in our real past because they are intentionally generated, but they are no less part of our cultural heritage. So, it looks like this experiment proved that generated works could/should be approached similarly to human-composed ones, and it seems that applying the current analytical methods to these AI-generated historical templates might result in meaningful conclusions since they are both dependent on a similar knowledge base. Nevertheless, it appears that the chatbot can also do the analysis of the work it generates, so it can re-produce the knowledge in itself by furthering and elaborating upon what for humans appears as an error. But there were numerous examples of monumental historical narratives built around errors, that once didn't seem wrong, so we can assume that this fact is also included in the machine-made predictions. So, should we let these histories "happen" and just accept them as equal to real ones or shall we deny them as fake? Either way, it seems we'll have to deal with them, since they account for a big part of our current reality and, as such, determine our outlook on the past. We might have to learn how to share our knowledge of the past with machines.

One of the fundamental musicological assumptions is that music does not affect society until a human writes something about it, revealing its importance, criticizing it, comparing and analyzing it, and ultimately influencing future be-

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3   ChatGPT has limited knowledge of events that occurred after September 2021, so it will unlikely be familiar with this edition.

havior. Today, we humans are not alone in doing this, machines have also started doing it, and they are getting better at it. How humans should approach this expanded reality is the question currently being dealt with "on the highest levels", but in the meantime, we are presented with the challenge of finding our way through increasingly machine-dominated humanities. Maybe we should ask ChatGPT for advice.

Figure 1. Black and white photo from the premiere of opera *Third Bullet* by Vojislav Vučković, generated with DALL-E, 4.3.2023.

Figure 2. Color photo from the premiere of opera *Third Bullet* by Vojislav Vučković, generated with DALL-E, 4.3.2023.

Figure 3. Costumes for opera *Third Bullet* by Vojislav Vučković, generated with DALL-E, 4.3.2023.

Figure 4. Segment from the score for opera *Third Bullet* by Vojislav Vučković generated with DALL-E, 4.3.2023.

Figure 5. Poster for the premiere of opera *Third Bullet* by Vojislav Vučković, generated with DALL-E, 4.3.2023.

List of References

Gilliard, Chris and Peter Rorabaugh. 2023. "You're Not Going to Like How Colleges Respond to ChatGPT". *Slate,* https://slate.com/technology/2023/02/chat-gpt-cheating-college-ai-detection.html.

John, Ibrahim. 2023. *The Art of Asking ChatGPT for High-Quality Answers,* Independently published. https://github.com/ORDINAND/The-Art-of-Asking-ChatGPT-for-High-Quality-Answers-A-complete-Guide-to-Prompt-Engineering-Technique/blob/main/The%20Art%20of%20Asking%20ChatGPT%20for%20High-Quality%20Answ...%20(Z-Library).pdf.

Klein, Alyson. 2023. "ChatGPT Cheating: What to Do When It Happens". *Education Week.* https://www.edweek.org/technology/chatgpt-cheating-what-to-do-when-it-happens/2023/02.

Mathews, Nicholas. 2022. *The Haydn Economy – Music, Aesthetics, and Commerce in the Late Eighteenth Century*. Chicago: University of Chicago Press.

Nietzel, Michael. 2023. "More Than Half Of College Students Believe Using ChatGPT To Complete Assignments Is Cheating", *Forbes.* https://www.forbes.com/sites/michaeltnietzel/2023/03/20/more-than-half-of-college-students-believe-using-chatgpt-to-complete-assignments-is-cheating/?sh=548d293f18f9.

Skrabut, Stan. 2023. *80 Ways to Use ChatGPT in the Classroom – Using AI to Enhance Teaching and Learning.* https://tubarksblog.com/80-ways-to-use-chatgpt-in-the-classroom/.

Veruović, Milan and Nikola Vrzić. 2014. *Treći metak.* Subotica: Pi-Press Books.

Waugh, Rob. 2023. "Half of school and college students are already using ChatGPT to cheat", *Daily Mail Online*, https://www.dailymail.co.uk/sciencetech/article-11899475/Half-students-using-ChatGPT-cheat-rise-90.html.

Vučković, Vojislav. 1968. *Studije, eseji, kritike 1-2*. Beograd, Nolit.

Wolfram, Stephen. 2023. *What Is ChatGPT Doing ... and Why Does It Work*. Champaign: Wolfram Media, Inc.

**OPERA THIRD BULLET BY VOJISLAV VUČKOVIĆ, OR
HOW WOULD CHATGPT DO ON THE MUSICOLOGY EXAM?**
(summary)

This paper is based on an anecdote about the experience of the author in using ChatGPT to answer questions related to the history of music. Since the chatbot started to give wrong but believable answers, the chat evolved into a lengthy experiment that resulted with an analysis of the opera *Third Bullet*, composed by Vojislav Vučković. The opera and its composer, and all other data related to them, were generated by ChatGPT. Although the composer Vojislav Vučković is a person who actually existed, the one in focus here is fictional, or perhaps better yet, a synthesized figure, made as a prediction on how such a figure might be. The aim of the paper is to try to determine if this artificial historic figure is a relevant topic for musicological analysis, and what can we conclude from dealing with works that don't exist. The paper also discusses a question of their existence, since they are there, in front of us, materializing on a click according to the perception of human history by a machine. So the main goal of the experiment is to question the possibilities for implementation of this kind of text-based AI in musicological work, and to raise awareness of this kind of synthetic history of music that is available to us.