
NEW WORKS

Article received on September 16th 2021

Article accepted on November 4th 2021

Original scientific paper

UDC 780.616.433:780.653.3

78.01/.02

78.071.1 Ѓъатовић А.

DOI 10.5937/newso2158117L

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POSTHUMAN ‘TRANSFORMATION’ INSIDE/ON THE WEB ANA GNJATOVIĆ: *ARACHNE’S DREAM* FOR PIANO AND LIVE ELECTRONICS**

Abstract: The aim of this paper is to analyse Ana Gnjatović’s work, *Arachne’s Dream*, written for piano and live electronics. The work premiered in 2019 on the initiative of Nataša Penezić, a pianist to whom this work has been dedicated. Based on the idea of the sound realization of a spider web phenomenon (within an electronic medium), I will try to analyse the development path and the creation process this piece undergoes, by taking into account the extra-musical impulses as a source of inspiration. Apart from the web motif itself, taken as the basic motif which is further developed throughout the piece, the author’s inspiration also stems from other models (which remain in close connection with the web phenomenon), from the ancient Greek myth of a weaver called Arachne, and Kafka’s work “The Metamorphosis”, to Roland Barthes’ “The Pleasure of the Text”. All of these ‘threads’ create a foundation for further music/sound representation, based upon the interaction between an electronic part, and the pianist’s actions.

Keywords: a spider web, a piano, electronics, *The Myth of Arachne*, Kafka, *The Metamorphosis*, posthuman

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** The article is the result of research within an accredited scientific research organization, the Faculty of Music, where scientific work in the field of musicology was supported by the Ministry of Education, Science, and Technological Development.

Once upon a time, I, Zhuangzi, dreamed I was a butterfly, fluttering hither and thither, to all intents and purposes a butterfly. I was conscious only of my happiness as a butterfly, unaware that I was Zhuangzi. Soon I awakened, and there I was, veritably myself again. Now I do not know whether I was then a man dreaming I was a butterfly, or whether I am now a butterfly, dreaming I am a man. Between a man and a butterfly there is necessarily a distinction. The transition is called the transformation of material things.¹

Arachne's Dream for piano and live electronics was composed by Ana Gnjatović² in 2019. Her inspiration stems from the project, realized on the initiative of the pianist, Nataša Penezić, whose idea was to perform the pieces of music inspired by insects and birds.³ Taking this idea as a starting point,

¹ According to: Hans-Georg Möller, "Zhuangzi's 'Dream of the Butterfly': A Taoist Interpretation", *Philosophy East and West*, Vol. 49, No. 4, October 1996, 439–450.

² Ana Gnjatović (1984) graduated from the Department of Composition at the Faculty of Music, University of Arts in Belgrade, in 2008 in the class of full professor Milan Mihajlović. She finished her PhD studies in composition at the same institution. She has attended various composition master classes and workshops, working with composers Georges Aperghis, Chaya Czernowin, Brian Ferneyhough, Beat Furrer, Louis Andriesen, G.F. Haas, and Ivan Fedele, among others. She was a prize winner of the Summer Academy ISA05 (2005) and of the 7th Pre-art Composition Competition (2013), winner of the FoM Belgrade 'Josip Slavenski' Award (2010), finalist of the 4th International Biennial of Contemporary Music in Koper (2014).

Her pieces have been performed throughout Europe, in Israel, Mexico, USA and Japan, and have been programmed at festivals such as the International Review of Composers, KoMA, 'Harpichord – Living Art', Wratislavia cantans (PL), Espresso (ME), Ankara Music Festival (TR), MusMA Festival, Culturescapes (CH), International Harp Festival 'Harp Connection', Festival de Wallonie (BE), MUSLAB (MX), MA/IN MAtEra INtermedia festival (IT), Belgrade Saxperience. She collaborated with the ensembles Sentieri selvaggi, Garth Knox and Rohan de Saram, soloists of the OENM, the Wrocław Philharmonic Choir, pre-art, the RTS Symphony Orchestra, among others. She is currently employed as an associate professor at the Faculty of Arts, University of Kosovska Mitrovica, where she teaches music analysis. At the doctoral program Multimedia Arts of the University of Arts in Belgrade she teaches courses in techniques and technologies of music and creation of multimedia artwork. In her recent artistic research, she explores the extension of instrumental performance through the use of electronics, speech, movement and video.

³ The concert was held on 23 November 2019 at the BUNT 7.0 Festival, under the title "Insects and Birds". Apart from the piece, *Arachne's Dream*, dedicated to the pianist, different authors were also presented: Jasmina Mitrušić (cycle *Insectarium*), Olivier Messiaen (*The Catalogue of Birds*, 2nd Book), Jonathan Harvey (*Tombeau de Messiaen*), Joanna Bailie (*Artificial Environment*). The programme was performed in Novi Sad at the end of

the composer decides to assign a sound quality to a soundless, yet visually (tangibly) striking and quite peculiar phenomenon, a spider web.⁴ So fragile, but powerful, the web is simulated within an auditive context. As a result, the phenomenon is transformed (or *metamorfosed*) into a 'new aggregate state'. In other words, she strives to analyse the *possibilities of the impossible*⁵ within the world of sounds/listening, by using the web as a paradigm of reference. Although the idea for this music piece came as the result of a concert performance and collaboration, and was finally realized through mutual interaction (which is mentioned later in the text), the work itself brings continuity in the sphere of the author's sound 'experiments', and microsounds, in particular, which re-examine the limits of human perception.

Arachne's Dream is a continuation of my research on the sounds that exist somewhere behind (behind music, behind the expected, behind the conscious), on smaller and hidden sounds, which, inconspicuously coexist with humans, thus naturally contributing to the totality of the acoustic ecology of our surroundings, performance or some music piece. I attempt to shake the listener's perception, by augmenting and positioning sounds at the forefront. Insects and spiders are tiny creatures which produce micro sounds, heard from a human perspective. However, I have been interested in the sounds produced by spiders, heard from the auditory perspective of a creature encapsulated in its web.⁶

2019. The video of the concert can be accessed via the link: https://www.youtube.com/watch?v=KpGSYG_C-Yg (accessed on 26 August 2021). I will use this performance as a relevant material for further analysis, since the actual score has still not been realized.

⁴ I refer to the conversation I had with Ana Gnjatović on 15 March 2021. On this occasion, I thank the composer for her time and patience, and particularly for the valuable information and explanations she provided regarding this piece and its creation. I am also immensely grateful for the comments she made once she read the draft of this paper.

⁵ I refer to the syntagm of Salomé Voegelin which, based on the idea of Maurice Merleau-Ponty, expands on the opinion regarding the potential perception of unfamiliar phenomena. She includes inaudible sounds (or the sounds people can't hear on their own, or without a 'medium'), so as to emphasize that these and similar sounds should be the subject of perceptive analysis since they hold an important place in the world of listeners. Salome Voegelin, *Sonic Possible Worlds* (revised edition), New York/London, Bloomsbury Academic, 2021, 158.

⁶ Ana Gnjatović, *A Review of the work 1*, a manuscript. 'Tiny', 'micro' sounds, barely audible to the human ear, are a subject of the composer's research. Her project "My garden without me" is a representation of her fascination with insects and spiders, and their world of sounds. It is an archive of works, or different artistic views on a biophonic world of small, tiny species which inhabit a small-leaved lime, or species which are endangered or extinct. This kind of post-antropocentric, or posthuman motif can be recog-

Considering the (electronic) sounds to be the ‘threads’ weaving *the web*, meant not only the sound research was guided by the idea of a spider web formation, but it also involved a search into the narrative, mythological, literary and theoretical sources which would ‘wrap’ the sound output into additional layers of meaning. That being said, it seems like the author also regards the work as interdisciplinary research,⁷ which is not solely based on the examination of the material aspects of a sound itself, even though the piece, *Arachne’s Dream*, focuses on this principle. Therefore, (my) ‘story’ about this piece starts somewhere ‘above’ the sound, within the spheres where the sound primarily does not belong, yet which will reach ‘the inner space’, and *transform* into the sound itself. I perceive those spheres as lines which merge, intersect, *intertwine*, and touch each other in Ana Gnjatović’s delicate world of sounds.

*You drowning in it, yet you can’t resist ...*⁸

The bizarreness and obscenity of the web phenomenon, along with its “nice and silky texture”⁹ fascinated the composer and inspired her to create a peculiar sound equivalent. Apart from its various peculiarities, it’s quite interesting to delve deeper into the invertebrates’ sensory perception of the world: they feature eight legs, covered in tactile organs in a form of tiny spikes, or hair – the spikes are the receptors of chemically-induced sensations and air vibra-

nized in the work *Arachne’s Dream*. You can find out more about the project via the link: <http://www.treebarkrecipes.com/about.html> (accessed on 19 August 2021). Also, you can listen to a part of the show where the composer discussed the project on “the sounds we don’t perceive, or dedicate our attention to”: <http://87.237.203.129/page/radio/sr/story/24/radio-beograd-2/4390098/.html> (accessed on 10 August 2021).

⁷ In the description of the work the author said that she discovered the model of a spider web “after brief research... (with the hope that the concept of the concert won’t be destroyed by the fact that spiders are not insects)”. Ana Gnjatović, *A Review of the Work I*, a manuscript.

⁸ Ana Gnjatović, *A Conversation*, (15 March 2021).

⁹ *A Conversation* (15 March 2021). The threads of a spider web consist of a “biomaterial of extraordinary mechanical characteristics, obtained through a combination of firmness, toughness, strength and elasticity...” According to: Svetlana V. Dmitrović, “New Nanostructured Composite Spider Silk Based Materials: Preparation, Structural, Morphological, Luminescent and Magnetic Properties of the Materials”

Retrieved from: https://www.pmf.ni.ac.rs/download/doktorati/dokumenta/disertacije/2019/Dis_UNI_Svetlana_V_Dmitrovic_2019.pdf (accessed on 19 August 2021).

tions. Moreover, spiders possess lyriform organs which are also assumed to be a part of the auditory system of organs.¹⁰ Even though they do not have ears, or any hearing organs, whatsoever, spiders can still recognize different auditory sensations.¹¹ Truly inspired, the composer's intention was to comprehend more thoroughly the imperceptible, yet not entirely soundproof world of spiders.¹²

However, the intriguing part about spiders (and what in this case leads to further research and analysis) lies in the fact that some species have got organs (glands) which create silky threads.¹³ The threads form a multifunctional, elastic web which has various forms and purposes, the most important of which is to create a perfect prey-catching mechanism. Despite the fact that their web represents a perfect system for survival, it is still always at risk of destruction, and apart from other spiders, humans pose the biggest threat.¹⁴ Even though the author doesn't emphasise it, using sound to depict the web could also be analysed from a post-anthropocentric world view, the focus of which is not on the human world as we know it, but one where humans are

¹⁰ J. W. S. Pringle, "The Function of the Lyriform Organs of Arachnids", *Journal of Experimental Biology*, 32/2, 1955, 270–278. <https://doi.org/10.1242/jeb.32.2.270>.

¹¹ The latest studies have shown that some spider species react to sounds, or the sound waves of certain, lower frequencies, as well as to vibrations. <https://www.sciencemag.org/news/2016/10/video-even-without-ears-jumping-spiders-can-hear-you> (accessed on 19 August 2021). Also, analyses in the field of bioacoustics indicate that "every living organism produces an acoustic footprint", even a microscopic one, such as a virus. See more: Bernie Krause, *Wild Soundscapes: Discovering the Voice of the Natural World*, New Haven – London, Yale University Press, 2016, 54.

¹² On the other hand, most spiders have still got eight eyes (though some species don't have eyes at all), in spite of bad eye-sight. Rudy Jocqué, Ansie Dippenaar-Schoeman, *Spider Families of the World, Tervuren*, The Royal Museum for Central Africa, 2006, 14.

¹³ The threads are an actual protein which becomes firmer when in contact with air. They could also be thinner, thicker, drier or stickier. Marjan Komnenov, „Taksonomija i zoogeografija paukova (Arachnida, Araneae) Republike Makedonije”, PhD thesis, Univerzitet u Novom Sadu, PMF, Departman za biologiju i ekologiju, 17 <https://nardus.mpn.gov.rs/bitstream/id/37495/Disertacija.pdf> (accessed on 19 August 2021).

¹⁴ It is well-known that the threads spiders produce have been used for various purposes throughout history. Ancient Romans used the cobweb to heal wounds, while people, such as the Aborigines, used them for fishing or food procurement. With the advance of technology and industry, the threads of a spider web are used as a model for the production of new materials. According to: Christina Allmeling, Christine Radtke, and Peter M. Vogt, "Technical and Biomedical Uses of Nature's Strongest Fiber: Spider Silk", Wolfgang Nentwig (Ed.), *Spider Ecophysiology*, Heidelberg, Springer, 475.

aware of the life “we share with many different others, here and now”.¹⁵ On the other hand, a contemporary man, partially focused on the aforementioned fact, finds himself caught in *the web* which warns and ‘strangles’, and yet it seems that finding ‘a way out’ is one of the crucial questions we tend to ask nowadays. Even though it may seem quite challenging to sense who has been caught in the web built by Ana Gnjatović, *Arachne’s Dream* represents a place where we focus on the sound itself, as well as on its position in the biosphere. In other words, it leaves us contemplating the relationship between sound, nature, animals, and humans in the age of Posthumanism.

Timidly ‘invading’ the sphere of zoology (aware of my lack of knowledge in this field), my intention was not only to show how fascinated we are by spiders and their peculiar characteristics, but also to emphasize the potential for an artistic analysis and transposition of their unique characteristics in the field of sound, which is a topic I will expand on later in this paper. Firstly, I will point to some extra-musical ‘threads’ which create a sound inside *the web* of *Arachne’s Dream*, thus shaping it through a mutual interaction.

*O guilty and shameless one! For evermore shalt thou live and hang as now, thou and thy descendants*¹⁶

The work got its title from the myth of Arachne, a mythological character whose name is directly connected with the etymology of the Greek word „ἀράχνη” (“arachne”) which stands for a spider or a spider web.¹⁷ The ability of some spiders to weave a web has undergone a mythological transposition and transformation, whereas the ancient myth of Arachne,¹⁸ a well-known weaver of extraordinary skill who “weaved fabrics, translucent as air, made from threads, light and silky as clouds”¹⁹ has been a reference model for the

¹⁵ Rozi Brajdoti, *Posthumano*, Beograd, Fakultet za medije i komunikacije, Univerzitet Singidunum, 229.

¹⁶ Myth of Arachne, according to Ovid’s *Metamorphoses*. Nikolaj A. Kun, *Legende i mitovi Stare Grčke*, Beograd, Admiral Books, 2011, 33.

¹⁷ Robert Steven, Paul Beekes, Lucien van Beek, *Etymological Dictionary of Greek*, Vol. 1, Leiden/Boston, Brill, 2010, 123. The term *arachnids* is used to denote creatures which resemble spiders, or some similar groups of arthropods where spiders belong (including scorpions, ticks and mites).

¹⁸ The author refers to the myth, represented in the Sixth Book of Ovid’s *Metamorphosis*.

¹⁹ Nikolaj A. Kun, *Ibid.*, 33. This myth has had an influence on the creative ideas of other artists. Some examples are the painting by Diego Velasquez and Peter Paul Rubens,

composer's inspiration.²⁰ According to the mythological narrative, Arachne, convinced of her extraordinary weaving skills, challenges the goddess Athena to a weaving contest.²¹ Although her work would prove to be "the pinnacle of perfection", which "in terms of beauty certainly didn't fall behind Athena's work", Arachne ended up being punished for her audacity to emphasize the weaknesses and misdeeds of the mighty gods.²² Athena destroys her work, while poor Arachne decides to hang herself, in return. However, a different scenario ensues when the goddess decides to spare her life and work (seeks revenge and imposes a different kind of fate on her): Athena will take the noose off her neck, but in order to prevent her from opposing her any longer, she will have her dangling and weaving for all eternity: "Sprinkled with a potion, made from magical herbs, Arachne's body immediately shrank in size, her voluminous hair fell off and she was transformed into a spider".²³ Having lost her human form, Arachne went through a physical change in order to reach her moral transformation, and her (indecent) behaviour which did not conform to any norms, thus leading to "dehumanization" became a metaphor, symbol, message, but also a paradigm and a model for future narrative forms (just like the myth itself, based on the idea of transformation, variation, or actualization of the established, archetypal narrative).²⁴ The motif of transformation and transmutation of the existing state stands in contrast to the *ex nihilo* concept of creation. It's important to note that transformation in

or the poem *Arachne* by William Empson. The children's poem, *The Spider and the Fly* by Mary Howitt is another example which the author initially used as a segment of the electronic part, only to remove it afterwards, because of its naive connotation and the result itself. *A Conversation* (15 March 2021).

²⁰ Apart from the myth itself, Ana Gnjatović has also been inspired by the text "Tracing Arachne's Web: Mythic Methods and Femin(ine)ist Fictions" by Kristin M. Mapel Bloomberg, published in the book with the same title by the University Press of Florida, 2001, 1–15. She has also been inspired by the text: "Weaving and Writing: Censorship in Arachne", <https://web.colby.edu/ovid-censorship/censorship-in-ovids-myths/weaving-and-writing-censorship-in-arachne/> (accessed on 20 August 2021).

²¹ Ovid refers to Minerva.

²² A notable example is Zeus' (Jupiter's) abduction of Europa and Persephone. According to: "Weaving and Writing: Censorship in Arachne", <https://web.colby.edu/ovid-censorship/censorship-in-ovids-myths/weaving-and-writing-censorship-in-arachne/> (accessed on 20 August 2021).

²³ *Ibid.*, 34.

²⁴ See more: Laurence Coupe, *Myth*, London/New York: Routledge, 2009. Cf. Claude Lévi-Strauss, *Myth and Meaning*, London/New York: Routledge, 2005, 17.

this sense does not only refer to the subversion of a primary model, but it also aims at establishing some similarities between the initial form and the results of metamorphosis, thus creating a form of continuity, without a complete interruption.²⁵ New connections arise at this point, while the author establishes a continuity by further ‘weaving new threads’: the natural phenomenon and the myth acquire their literary upgrade in the form of a new narrative regarding multifaceted transformation, which, again, makes us reconsider the anthropocentric boundaries.

*Was he a beast, that music should move him like this?*²⁶

According to Ana Gnjatović, Kafka’s story, “The Metamorphosis” (*Die Verwandlung*, 1915) starts where the myth ends. The story is about a merchant traveller, Gregor Samsa who, resembling enormous vermin “awoke one morning from his troubled dreams”, while his “many legs, miserably thin in comparison with his size otherwise, flickered helplessly before his eyes”.²⁷ This physical characteristic which Kafka’s protagonist shares with spiders (even though, unlike spiders, he turns into an insect), the composer perceives as a model for establishing a sound metaphor, so, in collaboration with the pianist, Nataša Penezić, she chooses certain segments of Kafka’s text, and uses them as a sound-narrative layer of her work. The segments (which could be used as ‘borderlines’ to define a three-part music form) are as follows:

“He would have needed arms and hands to raise himself; but instead of those, he had only these many little legs”;²⁸

“His little legs went whirring away as they bore him to his meal”;²⁹

“He soon discovered that he was no longer able to move at all. He wasn’t

²⁵ The idea was presented by a writer, Olga Tokarczuk. She refers to Ovid’s *Metamorphoses*. Olga Tokarčuk, “Transfugijum”, *Bizarne priče*, Transl. by Milica Markić, Beograd, Službeni glasnik, 2020, 92.

²⁶ Franz, Kafka, *The Metamorphosis and Other Stories*. Transl. by Joyce Crick, Oxford, Oxford University Press, 2009, 66.

²⁷ *Ibid.*, 29.

²⁸ *Ibid.*, 32. Ana Gnjatović and Nataša Penezić use their own, somewhat different translation (“Биле су му потребне руке да се на њих ослони, а имао је само мноштво ножица”). Source: correspondence with the author.

²⁹ *Ibid.*, 46. “Ножице су му трепериле док је ишао према храни”. Source: correspondence with the composer.

at all surprised; rather it seemed to him to be unnatural that up till now he had actually been able to move about on these thin little legs.”³⁰

The selection of the text was led by thinking about the sound itself, sound representation, or musical contextualization of the chosen text, inspired by a bizarre motif of spindly legs (which in Kafka's ghastly perception belong to an insect whose identity and awareness correspond to a human being, to the extent that it even has its own reaction to music/sound).³¹ Nevertheless, the selected parts of the text open up topics which lie 'behind' the sound 'surface', and follow the previously mentioned 'threads' of a creatively-poetic inspiration. Having in mind all of the above-mentioned aspects of Kafka's text, and the layers of meaning of the entire story, the author's choice of this story is quite an ingenious one, since Kafka's narrative can be observed through the actualization process of archetypal ideas (myth), and furthermore, through the lens of a modernist/contemporary reading. Based on the modernist questions on the role of human beings and their status within the world/society, (re)territorialisation that befell Arachne,³² in this context, could also influence Kafka's protagonist. Concerned about the state of the human being at the moment, followed by a symbolic story about transformation into a non-human form,³³ acquires a new kind of 'solution' within (the piece) *Arachne's Dream*: “The worst part about being transformed into an invertebrate creature (arachnids, insects, bugs) appears to be the fact that we clearly remember that we used to be humans, yet, we are only vaguely aware that we no longer are.”³⁴

³⁰ Ibid., 70. “Брзо је схватио да се уопште не може померати. Није га то чудило, било му је чудније и необичније што се тим танким ножицама икада могао кретати”. The translation used in the piece is by the author. Source: correspondence with the composer.

³¹ Taken from the Preface by Ranko Sladojević. In: Franc Kafka, *Preobražaj. Osuda. Pismo oци*, transl. by Zlatko Gorjan i Zlatko Matetić, Sarajevo, Svejtllost, 1992, 12.

³² I refer to Gilles Deleuze and Félix Guattari for whom the transformation into an animal in Kafka's work *The Metamorphosis* represents an example of human deterritorialization. Gilles Deleuze and Félix Guattari, *Kafka*, Sremski Karlovci/Novi Sad, Izdavačka knjižarnica Zorana Stojanovića, 1998, 25, 44, 63. In the broadest sense, deterritorialization represents movements which bring about changes. It also means breaking free from fixed relationships, thus opening up for new forms of organization. See: Јелена М. Степанов, “Делезов и Гатаријев концепт ризома кроз архитектуру, уметност и дизајн”, *Култура*, 150, 2016, 303–318, <https://scindeks-clanci.ceon.rs/data/pdf/0023-5164/2016/0023-51641650303S.pdf> (accessed on 5 September 2021).

³³ Жил Делез, Феликс Гатари, op. cit., 13.

³⁴ Retrieved from: <https://www.anagnjatovic.com/arachnes-dream.html?fbclid= IwA->

While Kafka's transformation into an animal may represent a way out, or "a line of escape",³⁵ the author's self-reflective criticism, with a touch of nostalgia, points to a different, rather pessimistic outcome: "As the number of threads grows, so does the feeling of discomfort, to the point when the web starts to unwrap around, and strangle us, as if we were in a nightmare."³⁶ Just like the dream itself, we are left in a dilemma on the borderline with reality, since there is no balance between the here and there.³⁷ *Arachne's Dream* prompts us to ask who is standing on the edge of danger, who will be lured into the web, who overstepped the (moral) boundaries by transforming into an 'invertebrate':³⁸ it seems the answer could be a human being? Intertwined in music, these threads will certainly offer possible answers, which will also open up some new questions, in return. Be that as it may, it is important to mention one more source of the composer's inspiration.

It's about the segment, taken from the text by Roland Barthes "The pleasure of the text" ("Le Plaisir du Texte"). The following excerpt brings us back to the beginning: to a spider web the metaphorical influence of which carries the 'key' to the process of creation, analysis and interpretation of the text/musical text, a process which still leads to liberation (of the one who is writing, reading, composing, or listening):

Text means *Tissue*; but whereas hitherto we have always taken this tissue as a product, a ready-made veil, behind which lies, more or less hidden, meaning (truth), we are now emphasizing, in the tissue, the generative idea that the text is made, is worked out in a perpetual interweaving; lost in this tissue – this texture – the subject unmakes himself, like a spider dissolving in the constructive secre-

R1UHvZQIe_15njoOZCXN9-HdPm0EbDxqrAdMZUwyiYqO2R-qG8ltw52_3M (accessed on 26 August 2021).

³⁵ Жил Делез, Феликс Гатари, op. cit., 65.

³⁶ Retrieved from: https://www.anagnjatovic.com/arachnes-dream.html?fbclid=IwAR1UHvZQIe_15njoOZCXN9-HdPm0EbDxqrAdMZUwyiYqO2R-qG8ltw52_3M (accessed on 26 August 2021).

³⁷ I was inspired by a short story by Jorge Luis Borges, "Dreamtigers". The writer describes his own passion for tigers which manifests in his dreams. He dreams of tigers, yet, not the ones he always longs to see in real life. Dreams are not a place where we can reach indefinite power, or perfection. Instead, Borges' story leads us to believe they represent a place of weakness. Horhe Luis Borhes, *Kratke priče*, transl. by Krinka Vidaković Petrov, Beograd, Izdavačka radna organizacija, 1979, 105.

³⁸ I use the term metaphorically here so that it refers to gullible people, poltroons, and people without character (According to: *Речник српској језика*, Нови Сад, Матица српска, 2007, 79).

tions of its web. Were we fond of neologisms, we might define the theory of the text as an *hyphology* (*hyphos* is the tissue and the spider's web).³⁹

As I have mentioned, Ana Gnjatović does not choose extra-musical centres for random contemplation, yet, she rather prudently and skilfully uses them to find a common thread for all models. She creates an immutable poetic frame in this way, which acquires its final form through its own sound realization. Even though Kafka's text assumes a hegemonic position, since it is used both as a sound, and a dramatic material, all of its elements, the ones which seemingly remain behind the sound, as well as the sound itself, play a crucial role, and act in an undeniable synergy.

*My idea was to use the electronic sound/part to gradually weave a spider web which feels both gentle and silky, yet, at the same time, a little bit uncomfortable.*⁴⁰

I have already pointed out that creating and materializing a spider web as a model, or depicting the effects of this natural phenomenon in sound has been the starting point for the realization of this work. The composer does not perceive the web from a distant point of view in order to represent this phenomenon, on the contrary: Ana Gnjatović is curious to find out how the web sounds from the inside, "from the perspective of someone who has been caught in the web",⁴¹ someone who is painstakingly trying to escape and survive. Listeners are presented with the process of creation and the existence of the web itself; *the web* produces its sound before us, it acts, its threads, "trembling silently in a high pitch for a long time", 'wrap around us', while making us contemplate the symbolism of the author's words and sound solutions.⁴² Even though the web and "the everlasting persistence of weaving something gentle and intricate, yet predictable (and predictably predatory)",⁴³ represents the prominent motif the composer develops, she also singles out two additional elements as equally important: "not only the tiny legs (the limbs, as

³⁹ Roland Barthes, *The Pleasures of the Text*, Transl. by Richard Miller, New York, Hill and Wang, 1975, 64.

⁴⁰ Retrieved from: https://www.anagnjatovic.com/arachnes-dream.html?fbclid=IwAR1UHvZQIe_l5njoOZCXN9-HdPm0EbDxqrAdMZUwyiYqO2R-qG8ltw52_3M (accessed on 26 August 2021).

⁴¹ From the correspondence with the composer.

⁴² *Ibid.*

⁴³ Ana Gnjatović, *A Review of the Work 1*, a manuscript.

creators of small sounds) which are scurrying away, but also the legs which listen”; “the vibration which gradually spreads and transfers itself through the web, slowly swallowing all other sounds on which she feeds and grows”.⁴⁴

Having this in mind, we can distinguish between the three lines which simultaneously create a path of development. The first one is made of the electronic part, whereas the duration of the entire piece equals the duration of one electronic part (around 10 min.) First of all, the electronic segment which has partially been recorded in advance (and the composer presented it live) represents a sound loop other elements are ‘glued’ onto, thus symbolising the web and all that happens inside of it. What’s more, according to the author, the *main* excerpt which stands as a separate layer at ‘the foundation’ of the work, predicts the dramaturgy of the entire work with its peculiar sound narration.⁴⁵ This vibrating, electronic ‘weaving’ has been realized in accordance with a contrasting principle: on the one hand, the composer uses a material based on long-sounding aliquots (shaped by various effects), presented in continuity with the intention to establish an analogy with the threads inside the web. The author explains this procedure: “The spider web starts forming from one tone and its aliquot content, so as to be succeeded each minute by the following, lower tone of the chromatic scale, with its aliquot content creating layers over the already existing sounds”.⁴⁶ The author has created an almost ghastly atmosphere of secrecy by using a different combination of aliquots within a ‘systematic’ sequence, ranging from high frequencies which have an almost negative effect, such as the sound of creaking, to the lower ones which lead us into the ‘depth’ by gradually intensifying and lowering dynamic tension.⁴⁷

On the one hand, the sounds, glued onto the long-sounding ‘threads’, represent repetitive, ‘micro’ sound signals, such as the sound of scratching, constant tapping, knocking, or ‘smaller’ and shorter sound models representing legs which ‘fall into’ the web and wiggle inside of it. On the other hand, there are also sounds of a shorter duration, yet more massive and dynamically accentuated, circulating in a chromatic scale, since there is no way out of the web. The sound effects, which account for the second layer of the elec-

⁴⁴ Ibid.

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ Some interesting lighting effects contributed to the atmosphere during the debut performance of the work on the stage of the “Ivo Lola Ribar” cultural centre. Colourful beams of light penetrated the darkness of the hall, reaching the performers on stage.

tronic part, are made of the sound samples, marked inside the piano, since “the intertwined piano strings resemble a spider web in some way, while the act of striking the strings resembles weaving”.⁴⁸ Nataša Penezić’s improvisations were recorded on an amplified piano. She used various techniques of playing (fingertips, nails, open hand, finger-drumming), while using wood, chords, or pegs as a source of sound. With such techniques, the sound/piano itself becomes a place where a double metamorphosis happens: the standards of the piano sound, produced so far by using the keyboard, have been upgraded by playing within/on the instrument itself. They have also become ‘disguised’ and acoustically treated through electronic modification. During the recording of these actual sounds which have become a subject for further processing and distribution through the MIDI instruments (which Gnjatović herself does for this occasion), the composer has applied a specific recording technique of close proximity,⁴⁹ by making direct contact between a microphone and the inside of a piano.⁵⁰ The use of microphones will make the inside transform into the outside, ‘the other’ into ‘familiar’, small into augmented, while the *possibility of the impossible* becomes imaginable – the “porous surface of a microphone leads us into another world where directions take different turns, while normative positions and relations are called into question”.⁵¹

The result of the engagement and interaction between the author and the pianist, Nataša Penezić, represents the other thread of the piece. The creative ‘partnership’ came as a result once they arranged to prepare and perform the piece together, by using live electronics,⁵² which furthermore implied they would actively listen to, select and translate the text. They would also test and

⁴⁸ Ana Gnjatović, *A Review of the Work 1*, a manuscript.

⁴⁹ Ana Gnjatović (15 March 2021). She does that by having in mind the technique such as “augmented sound/audio reality”. Augmented reality (AR) aims at augmenting the sensuous perception of the real world, aided by a computer-generated, virtual stimuli and information. Based on hyperactivity in real-life surroundings and in real time, it is actually another form of virtual reality (VR), which combines both realistic and virtual objects. *Augmented sound/audio reality* is, by analogy, a combination of real-life and virtual auditory objects put in a real life environment. In both cases, the idea is to upgrade reality (a perception of reality), without doing a complete swap. Hannes Gamper, “Enabling Technologies for Audio Reality Systems, Aalto University”, Doctoral dissertation, 2014, 27. <https://core.ac.uk/download/pdf/80711759.pdf> (accessed on 20 August 2021).

⁵⁰ Ana Gnjatović, *A Conversation* (15 March 2021)

⁵¹ Salomé Voegelin, *Ibid.*, 112.

⁵² Ana Gnjatović, *A Review of the Work 1*, a manuscript.

put the piano sound on trial.⁵³ Both the composer and the pianist have managed to make use of their skill-set in this way, since Ana Gnjatović also performs/improvises on stage. So, the creative and performative ‘imprint’ within the music piece itself is the result of a mutual collaboration and dialogue. Simultaneously, the role of the interpreter has been considerably extended, considering the standards – her work is the outcome of the experiments inside the piano, on the keyboard, ‘around’ the keyboard – she talks (that is, she delivers some excerpts from Kafka’s text), so her voice becomes an additional sound layer of the music piece. Performing the work on the piano in a conventional way, which means the performer’s body remains static in relation to the instrument, undergoes a process of ‘metamorphosis’ – the pianist is quite active, her body is actively moving during the major part of the performance (from sitting to standing up and leaning over the inside of the piano).

According to the author, the kinetic and performing aspects are some of the impressive elements of the music piece, *Arachne’s Dream*:

I have decided that the pianist should not start her performance in the way she’s expected to (on the left, or on the right side from the centre of the keyboard), over the surface of the instrument. Instead, she follows the movement line into the inside of the instrument, that is, towards the inside, or the outside (into the piano, and out of it), while her body takes up the space before the fourth octave. Nataša has outlined 8 piano parts on that movement line which produce different sounds (they are: the keys, lid, top of the lid, wooden frame, pegs, capo d’astro). In order to connect all of these points, it’s necessary to stand up and lean over the piano many times. As both tempo and tension grow, the pianist’s gestures also grow simultaneously, becoming bigger and more emphasized. The theatrical aspect of the piece certainly is no coincidence. What’s more, it should come out naturally, as the result of the correct interpretation of the score, and not as an additional element.

We do not refer to the assimilation of any theatrical elements, since they do not come as a result of the influences of the world outside music/sound, in this case. On the contrary, the theatrical and performing parameter as a physical act is immanent in the music text itself, it ‘grows’ out of it, and it is equal to the other structural materials of the piece. Apart from its dramaturgical effect, such potential of a music text has contributed to a specific visualization of the interpreter. Leaning over the keyboard/piano in a continuous, circular motion, gradually speeding up to the culminating point, she depicts/

⁵³ Ana Gnjatović, *A Conversation* (15 March 2021).

simulates weaving movements, while simultaneously falling into her own *web*. Her dematerialized and transformed 'body' of a pianist (along with its voice), becomes 'an extension' of the instrument, just like the electronics (we can also talk about the acoustic extension of the electronic medium). The body, piano, and electronics constitute a section where timeless conventions are questioned and transformed, while the traditional positions of the composer and performer become decentralized. In that context, performance and work, *process and product* (as Nicholas Cook would point out)⁵⁴ represent an amalgam, the elements of which are in complementary relations. Listeners, therefore, have an opportunity to appreciate the piece by simultaneously employing both their senses, and cognition. They can experience the process of creation itself as a performative act, while its performance can be considered a work of art in itself, which is in line with the transformation of the contemporary idea of listening: listening does not only involve following the reproduction of the piece, but it also refers to a more "indirect and temporary touch with the event".⁵⁵

Just like Kafka's protagonist, who becomes a hybrid by combining the characteristics of an insect and a human being, *Arachne's Dream* connects the acoustic sound, tones and noises produced by a man/woman (on/inside the piano) with the electronic sound, created by a machine, operated by a man/woman (based on the actual sound). However, the mutual activity and symbiosis of these two sound lines, their interaction, convergence, supplementation, layering, cancel out the initial limits, thus making it hard to decipher between a sound and a sample which is the result of the actions on, and around the instrument. This kind of auditory 'illusion' can be heard right after the electronic introduction: as I have already explained, at the very

⁵⁴ I refer to Cook's review of a musicological discourse (primarily the one which was produced in the period before the new musicological revisions appeared) which positions a work as a primary category, used to contemplate music. A performance is considered "a reproduction", or an "addition". On the other hand, he claims that music is simultaneously a process (a performance, or practice) and a product (something 'fixed'). What's more, it clearly involves a different view of a score: a score is not a completed text, but a scenario for a performance, prone to interpretation. With that in mind, it is important to emphasise that Ana Gnjatović's collaboration with Nataša Penezić was based on a draft, and not on a completed score, which served as a starting point. See more: <https://www.mtosmt.org/issues/mto.01.7.2/mto.01.7.2.cook.html> (accessed on 1 September 2021).

⁵⁵ Mišel Šion, *Audovizija: Zvuk i slika na filmu*, transl. by Aleksandar Luj Todorović, Beograd, Klio, 2007, 94.

beginning, microelectronic sounds, or *the motif of tiny legs* which quiver inside the web are heard against a long-sounding aliquot row background, symbolising the web. The same motif is produced on the piano, by tapping inside the instrument (around 1.07 min.). The pianist then delivers the first sentence of the chosen text (around 1.13): “He needed arms and hands [to lean on]⁵⁶ to push himself upright. Instead of these, however, he only had a multitude of tiny legs” (“биле су му потребне руке [да се на њих ослони], а имао је само мноштво ножица”). Even though the absolute coherence of the text is not the crucial parameter the author is guided by (perhaps even an unattainable one, due to technical reasons, or the use of a microphone), we can still quite clearly comprehend its meaning. Nevertheless, the text itself is not treated as a musical form of narration, but as an effect which shapes both the atmosphere and the dramaturgy of the piece.

The following part is based on the model of the previous one, by a minor and gradual rise in tension (from around 1.20): while the electronic threads ‘vibrate’ continuously, following the downward model of the aliquot row, ‘the tiny legs’ now begin to appear, firstly scratching and tapping inside the piano (1.40). The ‘echoes’ of these effects can be heard in the electronic part (even though the ‘auditory’ illusion is still in effect, so, at first, it is not evident where the sound comes from). ‘The battle’ inside the web becomes more intense, so the pianist’s movements become more engaged: she delves deeper into the inside of the piano, leans over it by using an even greater capacity of her own body (around 3.00). What’s more, the number of effects, or the ways in which the sound is created with the piano, becomes gradually more complex. What follows is an increase in tension while the pianist is delivering the second segment of the text: “Gregor’s small limbs buzzed now that the time for eating had come” (“ножице су му трепериле док је ишао према храни”) (around 4.08). As the text is repeated against a background of an increasingly louder electronic sound, its meaning takes the background position, while the *sound* of the text itself becomes noticeable and crucial.

Finally, almost half-way through the piece, upon conquering ‘the inside’ of the piano, the pianist conquers the outer body of the instrument, thus (temporarily) taking over the keyboard (around 4.20). Nevertheless, the treatment of the piano remains an unconventional one, reduced to the shades of ambient sounds with a tremolo effect (which follows the pitch of the electronic part), as well as to other treatments, arising from the interaction be-

⁵⁶ The segment has been left out in translation.

tween *the body which speaks* in a circular motion, and the acoustic (amplified) instrument. It seems that the MIDI device simultaneously takes over the competencies of the piano, by introducing a melodic movement as a part of the pre-culmination section, against the background 'accompaniment' (culmination starts around the 7th minute). Both metaphorically and dramaturgically speaking, this would represent the moment of the final attack, while the prey is trying to escape. The sound simulation of the final 'battle' within the web can be explained as a 'simulation' of the standard music image which includes 'a melody and accompaniment'. A circular chromatic motif, made of three sounds in a downward motion (around 4.50), or "a micro phrase"⁵⁷ which repeats, then 'disassembles' just to 'reassemble' once again (and I interpret it as a method of depicting the movement of the prey, its rushing towards the 'bottom'), furthermore followed by a string of dull electronic 'thuds; such as the chords which predict the ruthless attacks on the prey (around 5.10).

Heading towards the culmination of the piece, up to this point, the path becomes even shorter, followed by a more perturbed, faster and louder repetition of the second textual excerpt. The circular motion of the pianist and the dynamics of all sound layers become more intensified. What's more, while the 'thuds' become more intense (since the web is strangling), a new sample appears – a downward chromatic *micro phrase* consisting of four tones in circular strings (around 7.04) (another attempt of the prey to find a way out of an even stickier web). 'A triumph' of the web ensues, signalled by a deep and shaking sound which resonates like a gong (around 8.17). The pianist, whose body remains leaning over the piano, confirms that the 'prey' has finally been defeated. While the sound is echoing, and the *web* vibrating, the situation with the sound changes drastically – suddenly, the electronic material appears subtle, while the third segment of the text, in a significantly clearer form now, becomes yet another layer (around 8.48): "he soon made the discovery that he could no longer move at all. This was no surprise to him, it seemed stranger and more unusual to him that he had ever been able to move on those spindly little legs" ("брзо је схватио да се уопште не може померати. Није га то чудило, било му је чудније и необичније што се тим танким ножицама икада могао кретати"). Although the sounds become quieter and more reduced now, steadily fading away, the pianist still remains in a state of physical tension, leaning over the inside of the instrument. The 'battle' is over...

⁵⁷ The author uses this term when referring to this segment.

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If we consider the electronic part to be a signifier of the web (as the author herself points out), then we could say that the analogue sound, created by the pianist, that is, the sound which is produced on/within/around the piano, represents the idea of a victim lured, into the web. Furthermore, that could mean that the piano, as an old 'medium', yet technologically improved, represents a contemporary human being who stands against a powerful creation of the web/natural world, in this case mediated by technology. The question we need to ask is whether *Arachne's Dream* represents an allegory of the battle of humans versus nature, or humans versus technology (or maybe both)? Or, is it perhaps the battle of humans versus themselves? Could this dream be interpreted as an augmented representation of the reality we live in, created out of an insatiable desire to establish a balance between the three centres, or a reconsideration of the idea that humans are in any way a superior species? Or could it be about a warning, or about a critical review of everything human? Have people eventually become an endangered species? Affirmative answers to these questions, should be of no concern, whatsoever. On the contrary, they are both a reminder and a warning that a *metamorphosis* may always happen.

Translated by Marija Čuposka

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Summary

In this paper, the composition *Arachne's Dream* (2019) for piano and live electronics by Ana Gnjatović is analyzed. The author represents the genesis of the work, from its initial idea – the electronic simulation of a spider's web, to the final realization and interaction with the pianist Nataša Penezić (to whom this work has been dedicated). The work is the result of the author's research of sound and other spheres of ideas, including the ancient Greek myth of the weaver Arachne, the short story "The Metamorphosis" by Franz Kafka and the paper "The Pleasure of the Text" by Roland Barthes. The author uses all these stimuli as threads from which she 'spins' a web of sound/with sound. The author sees Gnjatović's work as the example of a posthuman allegory of the 'battle' of humans versus nature, or versus technology (or maybe both).