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The Anatomy of a Benign Failure: Péter Szőke's Ornithomusicology as Represented in *Barátom, Bonca*, a 1975 Hungarian Children's Film

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Keywords: aesthetics of birdsong, *musica universalis*, concepts of music, ecomusicology, zoomusicology, ethnomusicology in Hungary, children's television

Abstract: The 1975 Hungarian children's television film *Barátom, Bonca* (*Bonca, my Friend*; directed by Ilona Katkics, screenplay by Katalin Varga) contains a remarkable scene in which a ten-year-old boy is initiated into the idea of universal music through a declaration that birdsong has musical quality. In my article I show that the scene was inspired by ornithomusicology, the one-man discipline of Péter Szőke, whose (pseudo) scientific activity in Kádár-era Hungary aimed to prove that birdsong and human music were governed by the same neurological and physical laws. Attending to the history of its genesis, I dissect the scene to demonstrate that everything one hears in it is the result of four consecutive instances of failure: wishful thinking in science, misinterpretation, misrepresentation and misidentification, of which the first can be ascribed to Szőke, the rest to the filmmakers. I show how the filmmakers' factual errors were conditioned by age-old concepts of European culture, and I conclude that these errors nevertheless contributed to the artistic authenticity of the final product. This authenticity is inseparable from a strong sense of environmental ethics, which is partly conveyed by the specific way the word 'music' is used in the film.

Introduction

In the literature on biomusicology and zoomusicology, Péter Szőke ([ˈpeːtɛr ˈsøːkɛ]; 1910–1994) appears in a number of short references that in one way or another present him as the twentieth-century forefather of both fields (the nineteenth-century forefather being Charles Darwin).² Some of these references are affirmative, some are neutral, but all of them were written without access to Szőke's Hungarian-language publications or the archival materials pertaining to his activity. This is the first English-language article to be informed by both kinds of sources, and the first to point out the highly controversial nature of Szőke's work. But the latter is only one of its aims. I embed Szőke's presentation in the discussion of a small episode of his Hungarian reception, which might at a first glance seem to make a narrow subject even narrower. However, it is exactly this embedding that allows me to gradually widen the scope of my study, finally arriving at a subject as broad as the ethical semantics of the term 'music'.

"The chirping of birds is music, too". My article is centred around a single film scene whose key moment is this statement, followed by the playback of a diegetic sound recording of slowed-down birdsong, whose intended function is to prove the truth of the statement.³ The scene is part of the 1975 Hungarian children's television film *Barátom, Bonca* ([ˈbɒrɑːtom ˈbɒntsɒ]; *Bonca, my Friend*), directed by Ilona Katkics ([ˈilonɒ ˈkɒtkiː]; 1925–2022).

What is the basis and what is the purpose of incorporating this episode in the film? I answer the question by investigating the genesis and historical background of the scene, and by contemplating the scene

1 Author's email address: loch.gergely@gmail.com.

2 WALLIN 1991: 453–454; ROTHENBERG 2005: 83–85; MARTINELLI 2009: 5; DOOLITTLE and GINGRAS 2015: R819; TAYLOR 2017: 5, 73, 190; MUNDY 2018: 169, 225.; OLIVEIRA PINTO 2020: 15–16.

3 For audio(visual) illustrations, see <https://drive.google.com/drive/folders/1nA6B2nPfcornNb0oVgeVsclm10MCMS0Q> [23.04.2024].

in the context of the film as a whole. I demonstrate that the genesis consists of a chain of conceptual and factual errors. These are fruitful from a historiographical point of view, as they highlight influential factors in the wider and narrower historical background: the aesthetic appreciation of birdsong, the concept of universal music, and a politically charged debate in Hungarian ethnomusicology in the late 1950s and early 1960s. Finally, I argue that the errors were fruitful from an aesthetic point of view as well: they contributed to the artistic authenticity of the final product, an authenticity which is inseparable from a strong sense of environmental ethics. I believe that this sense is conveyed in part by using the word ‘music’ with a specific meaning, one that I describe by referring to a classic philosophical work of Martin Buber.

Bonca-ness, Friendship, and an Optical Revelation

The film *Bonca, my Friend* starts out with the ten-year-old boy protagonist, Bence ([ˈbɛntsɛ]; ‘Bennie’; Krisztián Kovács) quickly making friends with Andris ([ˈɒndriʃ]; ‘Andie’; Gábor Berkes), a new acquaintance, in the park. Their shared fantasies about African hunting expeditions leave no doubt about that they are kindred spirits. But Bence seems to lose Andris just as quickly as he had befriended him, as Andris does not show up in the park the following days. Bence did not have the chance to get to know his friend’s name, so, inspired by his own given name, he decides his name must be Bonca. As there is no such Hungarian given name, Bence sets off to find his lost friend among people who have Bonca as a surname.



Fig. 1. Bence and Andris. Still from *Barátom, Bonca* (3'17")

The film follows the long journey Bence takes out in the world — that is, in Budapest — before he finally meets his friend again. The key concept of this *Bildungsroman* quest is *boncaság* (*bonca-ness*), a term from Bence’s own vocabulary that refers to the Bonca-like character of someone, that is, the sense of being kindred spirits with someone. He learns soon that someone’s *bonca-ness* does not depend on their family name. For example, Bálint ([ˈbaːlint]; ‘Valentine’; István Bujtor), the artist painting bald trees in the park, is not a Bonca in his name, but is undoubtedly a Bonca in his character, to the extent that he had also fantasised about African hunting expeditions as a child.

It is Bálint who gently guides Bence on his quest, and as a first and most important step of this guidance, the painter initiates the boy into what he calls “the secret of colours”. As he puts it, everything in this world is a “sunlight gobbler”. Firstly, the existence of different colours is due to different materials having a specific kind of “greediness” for sunlight: they “gobble up”, that is, absorb one or another part of it and reflect the rest. Secondly, living organisms “eat sunlight” in a more verbatim way as well: they indirectly gain their energy from it. Bálint offers Bence a sugar cube to eat, referring to it as “a handful of sunlight”: “that’s what makes you move, too, believe me, you sunlight gobbler”.⁴



Fig. 2. Bálint and Bence. Still from *Barátom, Bonca* (10'48")

The ingestion of the sugar cube gives an almost eucharistic character to Bálint’s initiation scene, reifying its central message, according to which all things and beings belong together in the universal community of sunlight. For Bálint, friendship is defined as a conscious experience of this community. He says it is his friendship with the plants serving as his models that give artistic value to his paintings. When he speaks about friendship in these terms and says he and Bence are already friends, he at the same time illuminates the deeper meaning of bonca-ness: it is ultimately rooted in a much more substantial connection than a common enthusiasm for, e.g. African hunting expeditions.

The Acoustic Revelation

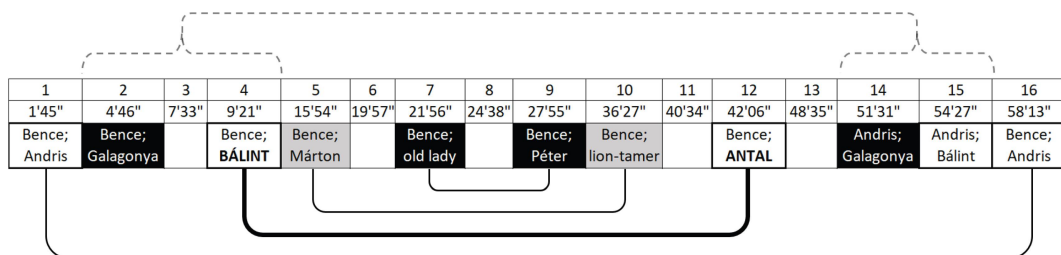
The screenplay was written by Katalin Varga ([ˈkɑtɒlin ˈvɒrgɒ]; 1928–2011), a writer and poet who is today primarily remembered in Hungary as a prolific author of children’s books. She is especially well-known as the author of *Gőgös Gúnár Gedeon* (*Gideon, the Haughty Goose*), a reading book first published in 1962⁵ that has become a classic in first grade education. It is a true literary feat, as most of the texts are written with a reduced alphabet, each using exclusively the letters that children are likely to have learned at a given stage of their studies, the consecutive texts gradually extending the set.

4 All quotes in this paragraph are from scene no. 4, for times see Fig. 3.

5 By Móra Ferenc Könyvkiadó, Budapest.

Varga had previously told the story of *Bonca, my Friend* in a book with the same title, published in 1974.⁶ Whereas in the book the initiation into the idea of a universal community of being happens only through Bálint's optical revelation, Varga decided to add a symmetrical counterpart to it in the screenplay: an acoustic revelation. The optical revelation was associated with a painter, so it was probably an obvious idea that the acoustic revelation should come from a character whose everyday life is bound primarily to hearing, a blind old man called Antal Bonca ([ˈɒntɒl]; 'Anthony'; Antal Páger). This old man is a Bonca in both his family name and his personality, and he is the only adult besides Bálint to whom Bence comes really close – Bálint and Antal are the only grown-ups whom Bence starts to address with the informal personal pronoun *te*, the Hungarian equivalent of being on first-name terms.

The connection between Bálint and Antal and the shared function of their respective revelations are emphasized in other ways as well. In the almost perfectly symmetrical order of the film's sixteen scenes, the episode of Bence meeting Antal corresponds to the episode of Bence meeting Bálint (Fig. 3; scene nos. 4 and 12). The two scenes are accompanied with the same cue of Zdenkó Tamássy's film score. The spiritual community of the two adult men is also expressed in the fact that Bálint eventually, at Bence's suggestion, moves to Antal's house as a tenant.



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1'45" Bence; Andris	4'46" Bence; Galagonya	7'33" [empty]	9'21" Bence; BÁLINT	15'54" Bence; Márton	19'57" [empty]	21'56" Bence; old lady	24'38" [empty]	27'55" Bence; Péter	36'27" Bence; lion-tamer	40'34" [empty]	42'06" Bence; ANTAL	48'35" [empty]	51'31" Andris; Galagonya	54'27" Andris; Bálint	58'13" Bence; Andris

Fig. 3. The symmetrical order of scenes in *Bonca, my Friend*. Cells with thick borders indicate meetings between kindred spirits. Cells with black background stand for meetings dominated by antipathy, while the ones with grey background mean meetings that are characterized by sympathy, but which nevertheless end with some kind of disappointment. The five unfilled cells stand for reflections on the preceding scene (Bence discusses the latest events with his mother in scene no. 3, and with Bálint in scene nos. 6, 8, 11 and 13).

In his garden, Antal shows Bence his chirping cage birds and a braille book of poetry. Antal says he likes poems because of their "music", and Bence's reply to this provides opportunity for the acoustic revelation. It begins at 46' in the film,⁷ and faithfully follows the text of the screenplay that I now quote:⁸

Antal: [...] Szeretem a verseket.
Muzsikájuk van.

Bence: Nem madárcsipogás.

Antal: Ó, a madárcsipogás is muzsika. Ott a luga-
gasban megtalálod a magnómat a kisasztalon.
Meg van?!

Bence: Igen.

Antal: Kapcsold be.

Antal: [...] I love poems.
They have their music.

Bence: It's not like the chirping of birds.

Antal: Well, the chirping of birds is music, too.
You'll find my tape recorder at the trellis, on the
table. Got it?

Bence: Yes.

Antal: Switch it on.

6 VARGA 1974.

7 This excerpt from the film can be viewed at: https://drive.google.com/file/d/178P7_Gquh97IFb5zEcASbkPC0rnSk28n [23.04.2024].

8 MTVA Archives Budapest, 74/2492, VARGA, Barátom Bonca, 33–34 (transl. by Gergely Loch).

Gyönyörű dallam hangzik.

.... A csalogány éneke.

Lassított felvétel.

A muzsika a legszebb dolog a világon.

Akár a csalogány éneke,

akár az ember játsza[!] hegedűn.

A wonderful melody is heard.

.... The song of the nightingale.

Slow-speed recording.

Music is the most beautiful thing in the world.

Whether sung by the nightingale,

or played by a human on a violin.



Fig. 4. Antal and Bence listening to slowed-down birdsong. Still from *Barátom, Bonca* (46'54")

The screenplay contains almost nothing but dialogue. There is only one descriptive sentence in the whole document, and that's the one quoted above: "A wonderful melody is heard". Using Antal as her mouthpiece, Varga claims that if we slow down its recording, the song of the nightingale is revealed to be just as musical as the performance of a violinist. This is to prove that the universal community of sunlight has an acoustic equivalent, the universal community of music. These two equally manifest the unity of all living beings.

Let me now dissect the historical reality of the acoustic revelation, layer by layer, starting with the top layer, that is, the final result of the film's genesis, the content of the audio-visual material.

Misidentification

When I asked the director, Ilona Katkics, about the origin of the birdsong recording heard in the film, she informed me that it had been one of the set decorators who had been sent to the Hungarian Institute of Ornithology, where he had been given this tape.⁹ Nothing is known about what the set decorator and the unknown ornithologist said to each other at their meeting. Only one thing is sure: if we speed up the soundtrack approximately ten times, giving the sound recording back its natural speed, what one hears is clearly not the jug of the common nightingale (*Luscinia megarhynchos*), but the song of the common chaffinch (*Fringilla coelebs*), more specifically, a single motif of the type that

⁹ KATKICS 2013, 2017, 2018.

finch-keeper Danube Swabians in Hungary called *Dulzier*. This is also apparent if one compares the spectrogram of the soundtrack excerpt and a corresponding birdsong recording (Fig. 5).

We are told we hear a nightingale, when we in reality hear a chaffinch: the first error found in the scene is misidentification. Both the nominal and the actual bird have a significance that I am going to discuss in the next sections.

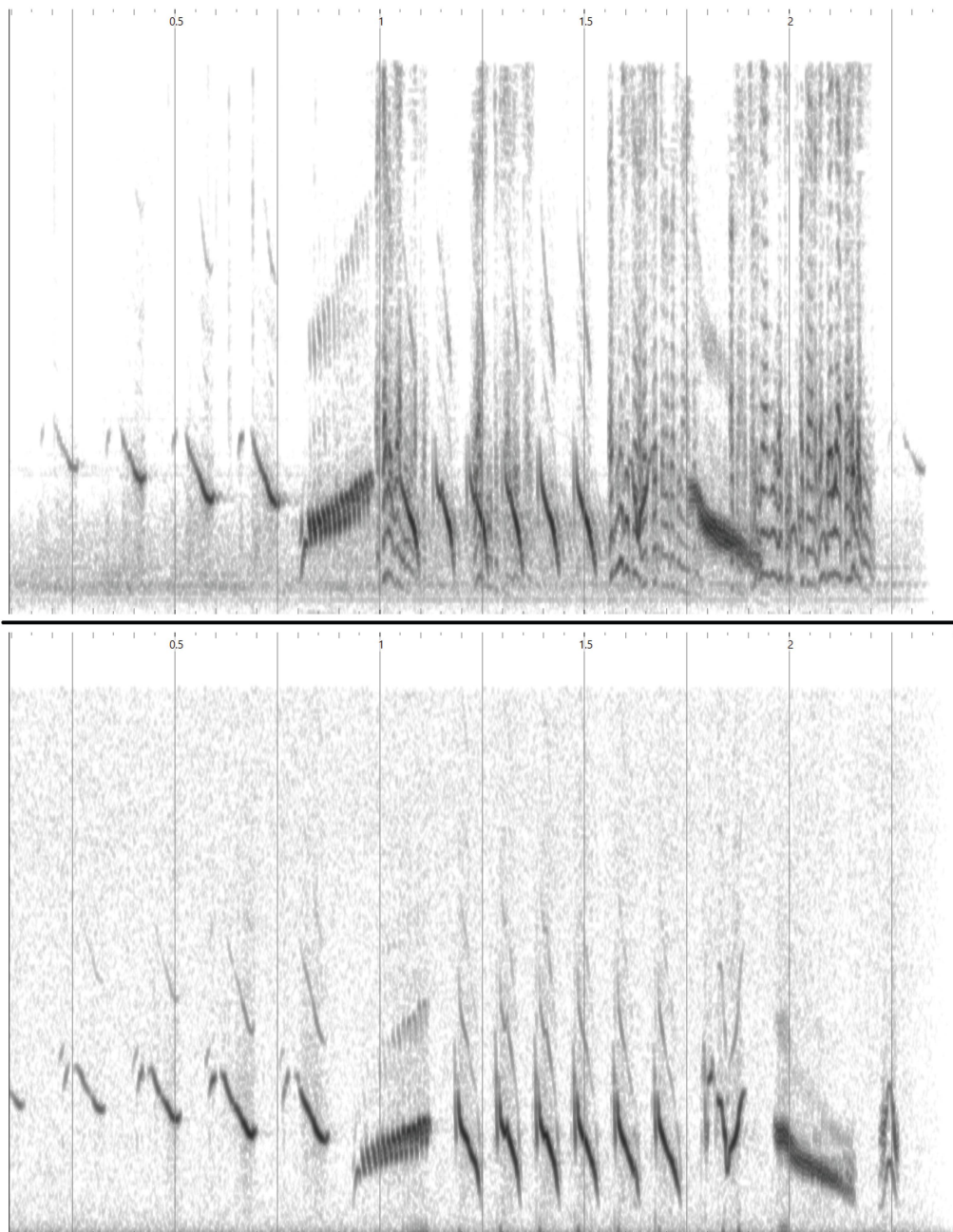


Fig. 5. Top: Spectrogram of the slow-speed birdsong recording from the film soundtrack sped up ten times to reach what sounds like its original speed. The highly fluctuating tones with lots of overtones that appear in the second half are speech sounds of Antal Páger in the role of Antal Bonca, commenting on the song. Bottom: Spectrogram of a recording of the common chaffinch *Dulzier* motif for reference.¹⁰ Both spectrograms are linear, with a frequency range approximately between 80 Hz and 20 kHz.

Time values are in seconds.

¹⁰ Reference recording: Szőke 1960: 25'55". The identification of the motif is based on Szőke 1982: 117.

Misrepresentation

The idea of slow-speed playback revealing musical quality in birdsong reminded me of *ornithomusicology*, a discipline invented and propagated by Péter Szőke in Kádár-era Hungary. It seemed likely that it had been the source of inspiration for the acoustic revelation. To verify my hypothesis, I asked Benedek Varga, the son of writer Katalin Varga, who as a little boy had been the model for the character of Bence,¹¹ and who worked as the director of the Hungarian National Museum at the time of my research. I quote his reply:

When you mentioned Szőke's name I immediately thought of the Bonca book. I clearly remember that my mother was firmly convinced that [Szőke's] theory about slowed down birdsong was true. She kept mentioning it months (or perhaps years) before writing the book, she was so enthusiastic about it. I believe it was important for the symbolism of the novel to incorporate some kind of theory of sounds alongside the theory of colours, and she may have made use of it for that reason. It is strange, because she played the piano and the organ a lot in her childhood (in the School of the Congregation of Jesus, where she was raised, she regularly played the organ for Mass). She was learned enough in music to be able to choose some more conventional theory, yet she wanted this one.¹²

Although Benedek Varga mistakenly connected the acoustic theory with the book, when in reality it appears only in the film version, his memories about Katalin Varga's view on Szőke were firm enough to confirm my hypothesis. How does the screenwriter's representation of Szőke's theory relate to the theory itself?

By his original profession, Szőke was an official of commercial cooperatives, and did not have formal education in either musicology or ornithology.¹³ He appeared on the stage of Hungarian musicology in the late 1950s as an amateur ethnomusicologist, and thanks to the exaggerated egalitarianism of the communist regime and his contacts with top politicians, he made it to professional scientific forums and institutions.¹⁴ He wrote a bulky ethnomusicological treatise in the late 1950s that was published in 1959 by the state-owned music publishing company *Zeneműkiadó*.¹⁵

This intrusion into professional Hungarian ethnomusicology carried a sharp critique against Zoltán Kodály (1882–1967), the doyen of the field. Kodály believed that analogies between certain archaic Hungarian folksongs on one hand and the musical folklore of some Uralic people on the other originated in historical contact between the respective groups.¹⁶ Szőke by contrast argued in his treatise that the analogies are caused by universal laws of neurophysiology and physics.

Kodály discredited Szőke categorically at a public debate in 1960,¹⁷ not only because of the disagreement of their views, but also because Szőke was an outsider, and because his argument was politically charged. Szőke gave his theory a Marxist framework, embracing the prescribed dogma of the communist regime at a time when this regime took measures to deprive Kodály's Group of Ethnomusicology of its autonomy of thought.¹⁸

At the time of Kodály's rebuff however, Szőke thought he had found a decisive argument supporting his own theory. In 1957, he slowed down tape recordings of birdsong for the first time, and in some of them he thought he heard folksong-like patterns in the series of sounds that in their natural form had been too fast and too high pitched to be discernible by human ears.¹⁹ The natural laws governing music

11 SZÉMANN 1976. Bence is a nickname of Benedek.

12 VARGA 2017 (transl. by Gergely Loch).

13 H-Bn, Music Collection, Péter Szőke's Estate (from now on: MCPSE), Szőke, [Autobiographies].

14 For detailed documentary evidence, see LOCH 2021: 36–39.

15 SZŐKE 1959.

16 Historical context and bibliography: SZOMJAS-SCHIFFERT 1976: 16–19.

17 SZŐKE 1962a: 231, fn. 11.

18 PÉTERI 2021: 161–162.

19 This discovery was first presented in the Appendix of SZŐKE 1959. The same text was published in German translation as SZŐKE 1962b.

seemed to be so universal as to have produced human-like musical patterns even in the vocalizations of some avian species.

This assumption led Szőke to develop the one-man discipline he called *ornithomusicology*. From 1957 until his retirement in 1978, he worked as a full-time ‘bird music researcher’, first at the Hungarian Institute of Ornithology, and from 1965 on at different departments of the Hungarian Academy of Sciences.²⁰ In his publications, he used birdsong as an ideological weapon in his unresolved debate with Kodály, even long after the latter’s death.²¹

As to the Marxist framework of Szőke’s theory, his argument was based on a tenet of dialectical materialism that goes back to Friedrich Engels, according to which culture has a biological foundation, and biology has in turn a physical foundation.²² This tenet holds that nothing is specifically cultural if it can be explained by biology, and nothing is specifically biological if it can be explained by physics. Therefore, according to Szőke, music has a primarily non-cultural and non-biological definition, one that lacks any functional, aesthetic, emotional or semantic content, and endows a single structural feature with the status of being essential: music is any sound phenomenon that exhibits frequency ratios approximating those of small integers.²³ He believed these frequency relationships ultimately derive from the vibrational laws of matter.²⁴ The vertical placement of noteheads in Western staff notation corresponds to such relationships, thus, in Szőke’s view, anything can be called music if and only if it can be represented using this notation.



Fig. 6. Péter Szőke in the Hungarian Institute of Ornithology, 1965.²⁵

What Szőke thought to fit his definition of music best in the avian world can be seen in Fig. 6. The notations on the blackboard are his representations of motifs of the woodlark (*Lullula arborea*) and the hermit thrush (*Hylocichla guttata*; name used today: *Catharus guttatus*), the two species among European and North-American birds respectively whose slowed-down song he considered to be the most

20 H-Bn, MCPSE, Szőke, [Autobiographies].

21 Szőke 1982: 191–197; Szőke 1990: 660. The latter article also appeared in German: Szőke 1994.

22 ENGELS 1954: 243–256.

23 Szőke 1982: 189.

24 Szőke 1959: 6–47; Szőke 1982: 17–32.

25 Diapositive from H-Bn, MCPSE. Szőke notated one motif of the woodlark and two motifs of the hermit thrush after recordings slowed down 32 times. For earlier notations of the same woodlark motif and the spectrogram of its recording, see Fig. 7.

“human-like”, and therefore regarded as his most important discoveries.²⁶ He never used the song of the common nightingale as an example of music in birds, clearly because he found its frequencies were by far too unstable to be described in terms of the ratios he considered as the criterion of musicality.

As to the song of the common chaffinch, until the late 1960s Szőke presented it as musical, even if the notation of a sole chaffinch motif he used was not what he believed to be his most important example.²⁷ Later however, the common chaffinch disappeared from his illustrations of bird music. When it reappeared in 1982 it was no longer to illustrate musicality, but the accuracy of vocal learning in finches, with notation that no longer used noteheads but curvy lines.²⁸ With these, Szőke inadvertently admitted that his earlier notation had not been realistic, and the common chaffinch had not fit his own definition of a musical bird, its song consisting exclusively of glides – even if these glides were not as fast as those of the nightingale.

In short, the second error of the film scene is that it misrepresents Szőke’s theory. The screenwriter chose a bird that Szőke would not have considered to be an appropriate example at all, and the soundtrack features a birdsong that Szőke most likely would not have considered to be the best example by 1975.

Misinterpretation

The unfitting choice of example was rooted in the fact that Katalin Varga misinterpreted Szőke’s theory as a whole. The misinterpretation was obviously conditioned by two age-old concepts of European culture, neither of which is commensurable with Szőke’s theory.

When Varga chose the nightingale as an example, describing its slow-speed recording as a “wonderful melody”, she clearly related to the tradition of attributing aesthetic qualities to birdsong, the nightingale being the most emblematic European songbird of this tradition.²⁹ In this context, the term ‘music’ is used in the sense of any kind of sound pattern that is experienced as beautiful, independently of whether its frequency ratios can be expressed with integers or not. This meaning is completely incompatible with Szőke’s structuralist, pronouncedly non-aesthetic definition of music. Yet Varga, together with several others,³⁰ were misled to believe that if people had been calling birdsong musical for centuries and Szőke the scientist called it musical too, modern science corroborated the traditional view.

Varga presented music as a token of universal kinship, which indicates that she was thinking in terms of *musica universalis*, a concept from the Middle Ages that has its roots in Antiquity. This concept is based on a tenet of natural philosophy usually attributed to the ancient Greek Pythagoras, according to which everything in the universe is governed by numbers conceived as metaphysical entities: numbers govern the movement of heavenly bodies, the change of seasons, the growth of trees, the functioning of the human body, and, incidentally, the tuning of musical instruments.³¹

To this concept of universal musicality a tripartite division was added in the Middle Ages: *musica mundana* (the music of the macrocosm: the ordered behaviour of planets, also known as the music of the spheres; the change of seasons etc.), *musica humana* (the music of the human body, i. e. the order of its construction and functioning), and *musica instrumentalis* (the phenomenon we call music today). The first two kinds of music were believed to be imperceptible without special abilities.³²

26 SZŐKE 1962b: 59–60 (“von allen uns bekannten Vogelstimmen der menschenähnlichste”); SZŐKE et al. 1969: 431 (“the highest summit in the evolution of animal music so far known to us”; “strongly ‘human-like’ song forms”).

27 SZŐKE 1962b: 58; SZŐKE 1963: 599; SZŐKE et al. 1969: 427; H-Bn, MCPSE, Szőke, *A madárhang mint biológiai zene*, 181. A recent republication of Szőke’s example in an article about common chaffinch song in culture, see OLIVEIRA PINTO 2020: 16.

28 SZŐKE 1982: 120.

29 ROBERTS 2021.

30 LOCH 2021: 232–45.

31 BARBERA 2001; SIMONYI 2012: 49–54; HUFFMAN 2019.

32 HAAR 2001.

Szóke also considered music to be a universal phenomenon because he defined it through the vibrational laws of matter. For Szóke the empiricist however, numbers were not metaphysical entities, but mere abstractions of measurements made in the experiential world – for him, the only world there was. As the title of his comprehensive monograph *The Origin and Three Realms of Music* expresses, Szóke thought music existed on three levels: physics, biology and human society.³³ However, the three kinds of music he talked about are all perceptible, they have nothing to do with the three kinds of music of the medieval view.

Because of the superficial similarities, several people were misled to believe Szóke's theory was a re-birth or a scientific confirmation of the ancient concept, despite the two being incommensurable. He did not mean to refer to the music of the spheres and a universal kinship of metaphysical origin, yet, several people were reminded of these when hearing or reading him, including Varga.³⁴ As a materialist, he held that humans did not have souls as such, and if this word had any meaning at all, it could only refer to the sum of neurological processes.³⁵ By contrast, Varga and Katkics' film touches upon the subject of extra-sensory perception shortly after the bird music episode.³⁶

Wishful Thinking

Varga referred to a theory that she believed to be scientific. And that is where we come to the fourth and last error: the theory was in fact not scientific. Szóke's various pieces of evidence are products of wishful thinking. Most of them seem to have been made in good faith, some of them border on being forgeries.

Szóke proposed a valuable and pioneering hypothesis concerning the biological foundations of sonic activities, one that could have led to the birth of bio-/zoo-/cognitive/evolutionary musicology in Hungary – had he entered a more receptive milieu in a less offensive way. When looking for evidence however, he exhibited extreme naivety and arbitrariness, tendentiously selecting and interpreting birdsong recordings to match his own cultural and ideological preferences, unwittingly leaving the realm of science, becoming more of a composer working with *objets trouvés*.

Figure 7 shows one of Szóke's crown witnesses, one of the woodlark motifs he used most as evidence for what he called musicality in birdsong.³⁷ If one compares the notations he made by ear and the spectrogram I prepared of the recording, it becomes evident that he projected the pitch relationships of his culturally conditioned hearing into the sounds, and it was these projections that he represented in his notations. By their very nature, the noteheads correspond to pitches whose relationships form the basis of Western musical culture. None of these pitches or relationships have a distinguished role in the continuous, broad glides of the woodlark.

The frequencies are just too unstable to enable one to speak about proportions that approximate those of small integers. The structuralist rigour of Szóke's definition of 'music' here turns out to be the distorting lens of anthropocentric interpretation. The emergence of Szóke's anthropomorphic projections was aided by a phenomenon known in psychology as priming:³⁸ He used pitch pipes when making his notations, providing himself with stable tonal reference points while listening to the bird sounds, establishing a framework for tonal interpretation that was in no way present in the recordings.³⁹

33 SZÓKE 1982.

34 LOCH 2021: 222–231.

35 SZÓKE 1985, relevant excerpts quoted in LOCH 2021: 421, fn. 818.

36 At 47'51" Antal Bonca "feels" that Bence's sister has arrived, without hearing her.

37 A survey of all woodlark examples used by Szóke: LOCH 2021: 123–126.

38 HIGGINS 2000; McDERMOTT 2000.

39 H-Bn, MCPSE, SZÓKE, [Notation of woodlark song, with incipit "1962/63 / Egy Lullula arborea"], p. 2. The marginal note to melody no. 23 indicates use of pitch pipe.

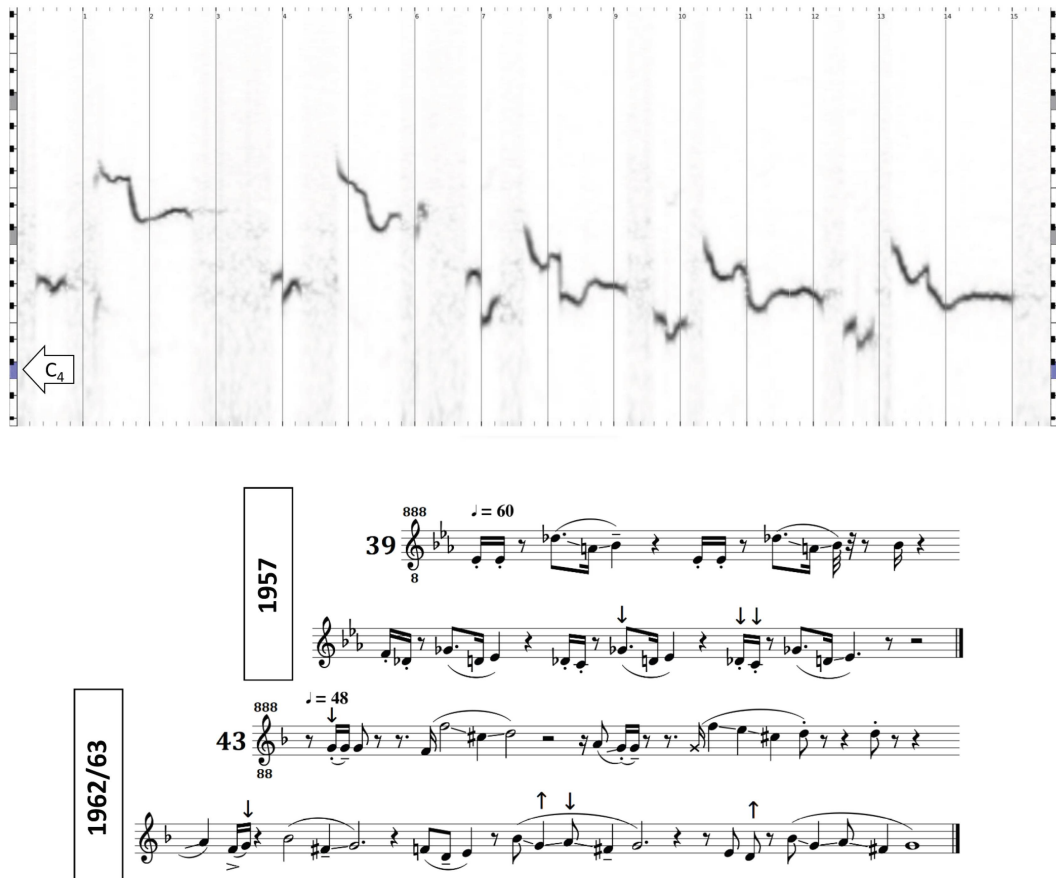


Fig. 7. Top: Melodic range logarithmic spectrogram I made of a single motif from a woodlark's song recorded by Péter Szőke in 1957.⁴⁰ Note the miniature keyboard included on both sides for reference. The pitch and time values reflect a slowing down by a factor of 8, usually used by Szőke when presenting audio examples. Bottom: notations Szőke made by ear of the same motif in 1957 and in 1962/63, after slowing down the recording 16 and 32 times, respectively.⁴¹

The woodlark's motifs are known for having a tendency to gradually descend in pitch in the course of their utterance⁴² – the spectrogram of fig. 7 is a telling example even in this respect. When Szőke encountered utterances that exhibited just a slight descending, he interpreted these as the bird getting out of tune, a minor deterioration in the musical quality of the song, an accidental error that should be corrected in the notation.⁴³ However, in the case of more drastic descensions, when the repeated pattern of a motif seemed to be getting transposed to a lower scale degree, Szőke spoke of an especially advanced stage of musical evolution in woodlarks.⁴⁴ The melody of fig. 7 was one of such examples, and a particularly important one for Szőke, as he saw it analogous to the archaic fifth-shifting descending style of Hungarian folk music,⁴⁵ the question of whose origins played a crucial role in his dispute with Kodály. No wonder he chose this motif for the representative photograph of fig. 6.

40 SZŐKE 1957: 15'00".

41 Manuscript from 1957: H-Bn, MCPSE, SZŐKE, [Notation of woodlark song, with incipit "Erdei pacsirta (*Lullula arborea*) / 1/1/2 sz."], p. 5; manuscript from 1962/63: H-Bn, MCPSE, SZŐKE, [Notation of woodlark song, with incipit "1962/63 / Egy Lullula arborea"], p. 4. In the earlier notation, the melody is transposed approximately a major third downwards, probably due to a technical error in playback. The first two lines on the blackboard of fig. 6 show a simplified and transposed version of the 1962/63 notation.

42 SVENSSON 2009: 250.

43 SZŐKE 1967: 250.

44 SZŐKE 1982: 59.

45 SZŐKE 1967: 153.

In short, he interpreted the same phenomenon as accidental or as regular, as a deterioration or as an advanced feature depending exclusively on which of the two opposing interpretations supported his argument in a given case. He selected his examples with similar arbitrariness: the woodlarks he recorded sung hundreds of different motifs, the overwhelming majority of which did not conform to the patterns he favoured. The occurrences of structural features that seemed to be in line with certain regularities of musical folklore were clearly accidental, yet he presented them as proofs of a universal law.

The manipulations mentioned above were limited to the field of interpretation, but in some cases Szőke went as far as tampering with the physical audio material as well: he cut out segments that disturbed the folksong-like symmetry or the tonal feel of one or another woodlark melody, and it was these tweaked versions that he notated, published and used as audio illustrations.⁴⁶ These manipulations became known only after 2013 as a result of my doctoral research.

The Benignity of the Failure

It is because of the four errors presented above that I call the genesis of the film scene a failure. However, the failure of a genesis does not necessarily mean the result is a failure as well. I use the word 'benign' before the noun, an adjective that can mean harmless, but which can also mean favourable. I believe this particular failure is not only harmless, but also favourable, because it contributed to the artistic value of the film.

Katalin Varga wrote her screenplay in a scientific age, in a country where dialectic materialism was at the time still the only officially accepted ideology. To be able to present her thoughts, she needed an up-to-date scientific warranty, and she believed to have found one in Szőke's theory of bird musicality. The only function Szőke's theory had in the genesis of *Bonca, my Friend* was to enable Varga to say what she wanted to say. It could not possibly have carried any other function because its actual content was completely absent from the film, for the reasons presented above. One could even say that Varga misused the theory, but the film benefited from her doing so, as Szőke's work had an extremely problematic relationship with reality.

I go further: I believe that even if she had found a legitimate scientific theory, it would have been better to break away from it, because modern natural science in general has, in a certain sense, a problematic relationship with reality. It is a relationship that the Austrian philosopher Martin Buber described in his 1923 book *Ich und Du (I and Thou)* as the attitude of the 'I' towards an 'it', that is, something seen as separate from the 'I'.⁴⁷ Katalin Varga offered another way of thinking about the world, one that Buber would describe as the attitude of the 'I' towards a 'thou', that is, something the 'I' is connected to because of their shared place in existence.

Knowledge about this relationship comes from spiritual initiation⁴⁸ – just like the ones that happen in the film. It does not come from demonstrating facts, because such demonstrations are based on analysis, which turns everything into an 'it'. Accordingly, Antal Bonca's statement about the music of the nightingale is not based on a comparative analysis that shows the analogies between man-made and avian sounds. It could not possibly be based on it either, because – regardless of whether slow-speed or regular-speed playback is used – neither the song of the chaffinch nor the song of the nightingale is similar to anything in the musical culture of Antal, Bence, the members of the film crew and the television audience of the film.

Benedek Varga was present as a boy at the filming of this scene and shared his memories with me: "I remember that I was excitedly waiting for this scene at the shooting, curious whether the birdsong would really sound like a violin. And I remember how unusual and surreal the slowed-down birdsong sounded".⁴⁹

46 LOCH 2001: 138–139, 142–143.

47 BUBER 1970.

48 About the role spiritual initiation plays in Buber's thought: JOHNSON 2020: 13–40.

49 VARGA 2017, transl. by Gergely Loch.

The contrast between expectations and experience is evident. Katalin Varga and Ilona Katkics must have seen this contrast, too, however, it was not problematic for them to call what they heard music – if it had been, they would have asked for another tape, or would have discarded the scene altogether. I believe they accepted the strangely unfamiliar recording as ‘music’ because in their film *Antal* is in an ‘I-thou’ relationship with birds and their song, and the word ‘music’ is used in a sense that conveys this relationship.

According to the vocabulary of the ‘I-it’ attitude – a vocabulary used by, among others, Szőke – bird-song can be called ‘music’ only inasmuch as one can project the culturally determined content of one’s mind into it. By calling it ‘music’ in this sense, one performs a mild act of appropriation, and neglects differences by emphasizing alleged analogies. In the ‘I-thou’ vocabulary of *Bonca, my Friend* however, the term ‘music’ seems to carry the following meaning: any sound that originates in the primordial kinship of things, and which, for this sole reason, is respected and valued. No matter how familiar or unfamiliar it sounds, no matter its function and structure, the sound will be accepted as an organic part of this relationship. The more unfamiliar it is, the better this sense can be demonstrated.

This meaning of ‘music’ carries a strong sense of environmental ethics when applied to sounds of the natural environment, one that is in sharp contrast with the anthropocentric, Eurocentric, and egocentric meaning of the same word in the ‘I-it’ vocabulary. Scholarly discourse relies inevitably on the latter vocabulary, and that’s why I join Marcello Sorce Keller in suggesting that the term ‘music’ should not be used as a framework in the scientific investigation of sonic practices or behaviour.⁵⁰ Szőke’s case is an especially telling cautionary tale about the errors predetermined by this kind of usage. Varga took Szőke’s theory as a point of departure and neutralized his errors through her own unwitting errors of interpretation, transplanting the word ‘music’ from a scientific discourse where it had been misused into an artistic discourse where it was used in a valid manner.

Bonca, my Friend is one of several heart-warming Hungarian children’s films directed by Ilona Katkics. I phoned the director three times over the past ten years, asking her about the subject matter of the present writing.⁵¹ She was always very kind, and she had a good laugh when I told her during our last conversation that I had found out their nightingale was actually a chaffinch. She said she had been unaware of this, but she did not think it made any difference. I dedicate this article to her memory.

Gergely Loch studied musicology at the Liszt Academy of Music, Budapest, and at the University of Stockholm. He gained his PhD degree in 2022 at the former institution with his dissertation entitled “Péter Szőke and his Ornithomusicology: Science, Productive Misunderstanding and Reminiscence”. His research concerns liminal situations of acoustic culture, in and beyond the realm of what is usually called ‘music’.

Bibliography

Manuscript Sources and Interviews

“H-Bn, MCPSE” stand for National Széchényi Library (Budapest, Hungary), Music Collection, Péter Szőke’s Estate. The documents of the estate are uncatalogued at the time of publishing this article.

H-Bn, MCPSE, Szőke, Péter: [Autobiographies].

H-Bn, MCPSE, Szőke, Péter: [Notation of woodlark song, with incipit “Erdei pacsirta (Lullula arborea) / 1/1/2 sz.”], 1957.

H-Bn, MCPSE, Szőke, Péter: [Notation of woodlark song, with incipit “1962/63 / Egy Lullula arborea”], 1962/63.

⁵⁰ SORCE KELLER 2010, 2019.

⁵¹ KATKICS 2013, 2017, 2018.

- KATKICS, Ilona (2013, 2017, 2018): Telephone interviews conducted by Gergely Loch, manuscript notes, 04.12.2013, 16.03.2017, 08.03.2018.
- MTVA Archives Budapest, 74/2492: VARGA, Katalin: *Barátom Bonca* [screenplay], 1975.
- SZŐKE, Péter (1957): Sound recording of woodlark song, 02.08.1957, H-Bn, MCPSE, tape no. 74, green side, 13'21"–18'24" (rec. no. 1713).
- SZŐKE, Péter (1960): Sound recording of common chaffinch song, H-Bn, MCPSE, tape no. 6, red side, 25'53"–26'55" (rec. no. 200).
- SZŐKE, Péter (1967): *A madárhang mint biológiai zene* [manuscript of candidates degree dissertation]. H-Bn, MCPSE.
- SZŐKE, Péter (1985): Szőke's manuscript supplements for an interview conducted by Tibor Szántó R. and László Zsolnai. In the property of Tibor Szántó R.
- VARGA, Benedek (2017): Correspondence with Gergely Loch, e-mail, 24.03.2017.

Published Sources

- BARBERA, André (2001): "Pythagoras", in *Grove Music Online. Oxford Music Online, Oxford: Oxford University Press*, <https://doi.org/10.1093/gmo/9781561592630.article.22603> [23.04.2024].
- BUBER, Martin (1970): *I and Thou*, transl. by Walter Kaufmann, New York: Charles Scribner's Sons.
- DOOLITTLE, Emily and GINGRAS, Bruno (2015): "Quick Guide: Zoomusicology", in *Current Biology* 24/19, R819–R820.
- ENGELS, Friedrich (1954): *Dialectics of Nature*, transl. by Clemens Dutt, Moscow: Progress.
- HAAR, James (2001): "Music of the Spheres", in *Grove Music Online. Oxford Music Online, Oxford: Oxford University Press*, <https://doi.org/10.1093/gmo/9781561592630.article.19447> [23.04.2024].
- HIGGINS, E. Tory (2000): "Category Accessibility", in *Encyclopedia of Psychology*, 8 vol, ed. by Alan E. Kazdin, vol. 2, Washington: American Psychological Association; Oxford a. New York: Oxford University Press, 48–49.
- HUFFMAN, Carl (2019): "Pythagoreanism", in *The Stanford Encyclopedia of Philosophy*, ed. by Edward N. Zalta, <https://plato.stanford.edu/archives/fall2019/entries/pythagoreanism/> [23.04.2024].
- JOHNSON, Donovan D. (2020): *Turning to the Other: Martin Buber's Call to Dialogue in I and Thou*, Eugene, OR: Wipf and Stock.
- LOCH, Gergely (2021): *Szőke Péter és az ornitomuzikológia*, Budapest: Liszt Ferenc Zeneművészeti Egyetem. Doctoral dissertation, https://apps.lfze.hu/netfolder/PublicNet/Doktori%20dolgozatok/loch_gergely/ [23.04.2024].
- MARTINELLI, Dario (2009): *Of Birds, Whales and other Musicians. An Introduction to Zoomusicology*, Scranton, UK: University of Scranton Press.
- MUNDY, Rachel (2018): *Animal Musicalities. Birds, Beasts, and Evolutionary Listening*, Middletown, CT: Wesleyan University Press.
- MCDERMOTT, Kathleen B. (2000): "Implicit Memory", in *Encyclopedia of Psychology*, 8 vol, ed. by Alan E. Kazdin, vol. 4, Washington: American Psychological Association; Oxford a. New York: Oxford University Press, 231–234.

- OLIVEIRA PINTO, Tiago de (2020): "Songbird and Birdsong: Listening to the Finches in the Harz Region, Germany", in *Sound Studies* 6/2, 215–238, <https://doi.org/10.1080/20551940.2020.1799543> [22.04.2024].
- PÉTERI, Lóránt (2021): "National Icon and Cultural Ambassador: Zoltán Kodály in the Musical Life of State Socialist Hungary", in *Polski Rocznik Muzykologiczny* 19/1, 147–181, <https://doi.org/10.2478/prm-2021-0011> [22.04.2024].
- ROBERTS, Bethan (2021): *Nightingale*, London: Reaktion Books.
- ROTHENBERG, David (2005): *Why Birds Sing. A Journey into the Mystery of Bird Song*, New York: Basic Books.
- SIMONYI, Károly (2012): *A Cultural History of Physics*, transl. by David Kramer, Boca Raton, FL: CRC Press.
- SORCE KELLER, Marcello (2010): "Was ist Musik? Einige Gründe dafür, warum wir die 'Musik' nicht mehr als 'Musik' bezeichnen sollten", in *Schweizer Jahrbuch für Musikwissenschaft* 30, 11–26.
- SORCE KELLER, Marcello (2019): "Music, Definitions of", in *The SAGE Encyclopedia of Music and Culture*, 5 vol., ed. by Janet Sturman, vol. 3, Los Angeles: SAGE Reference, 1507–1511.
- SVENSSON, Lars (2009): *Fågelguiden. Europas och Medelhavsområdets fåglar i fält*, [Stockholm:] Bonnier Fakta.
- SZÉMANN, Béla (1976): "Barátom Bonca sikerei", in *Népszava*, 11.06.1976, 5.
- SZŐKE, Péter (1959): *A melódia belső fejlődésének dialektikája, a népzene sokféleségének egysége*, 2 vol., vol. 1, Budapest: Zeneműkiadó.
- SZŐKE, Péter (1962a): "Juliánusz barát és összehasonlító népzene kutatásunk", in *Magyar Zene* 3/3, 218–233.
- SZŐKE, Péter (1962b): "Zur Entstehung und Entwicklungsgeschichte der Musik", in *Studia Musicologica Academiae Scientiarum Hungaricae* 2/1–4, 33–85.
- SZŐKE, Péter (1963): "Ornitomuzikológia", in *Magyar Tudomány* 70/9, 592–607.
- SZŐKE, Péter; FILIP, Miroslav and GUNN, William W. H. (1969): "The Musical Microcosm of the Hermit Thrush", in *Studia Musicologica* 11/1, 423–438.
- SZŐKE, Péter (1982): *A zene eredete és három világa*, Budapest: Magvető.
- SZŐKE, Péter (1990): "Megoldhatatlan-e a zene eredetének a művészet látóhatárán túl rejtőző évszázados titka?", in *Magyar Tudomány* 97/6, 659–688.
- SZŐKE, Péter (1994): "Ist das hinter dem Horizont der Tonkunst verborgene säkulare Rätsel des Ursprungs der Musik unlösbar?", in *Systematische Musikwissenschaft* 2/1, 71–108.
- SZOMJAS-SCHIFFERT, György (1976): *A finnugor zene vitája*, 2 vol., vol. 1, Budapest: Akadémiai Kiadó.
- TAYLOR, Hollis (2017): *Is Birdsong Music? Outback Encounters with an Australian Songbird*, Bloomington, IN: Indiana University Press.
- VARGA, Katalin (1974): *Barátom, Bonca*, Budapest: Móra.
- WALLIN, Nils L. (1991): *Biomusicology – Neurophysiological, Neuropsychological and Evolutionary Perspectives on the Origins and Purposes of music*. Stuyvesant, NY: Pendragon Press.

