Linnaeus, Zoomusicology, Ecomusicology, and the Quest for Meaningful Categories

Linnaeus, zoomuzikologija, ekomuzikologija in iskanje smiselnih kategorij

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ABSTRACT

“Music” is not a scientific term. In the course of time, it has become like a big container, where sonic objects and practices that have nothing in common are put together. It carries so many historical and cultural connotations as to make it unfit for scholarly discourse about the social use of sound.

Linnaeus

Carolus Linnaeus (1707–1778) is the Latin name of the Swedish scientist, widely considered as the father of modern taxonomy. The importance of his work in biology is nicely reflected in the well-known sentence “God created the world and Linnaeus organized it”. His classification system starts with the three “kingdoms”: mineral, vegetal, and animal. The vegetal and animal kingdoms are divided into “classes” and they, in turn, into “orders”, then into “genera” and further into “species”. It was Linnaeus
who invented the diction *homo sapiens*, with *homo* as the “genus” and *sapiens* as the “species”.1 Even today, after the revolutions brought about by genetics and evolutionary biology, his system of classification retains its value. It has been much refined over the years, but the basic principle remains: classification has to be based on definable and comparable categories.2

Why am I bringing up Linnaeus in the context of music studies? Because he dealt with “categories”, and music scholarship by necessity does the same, albeit less successfully. We recurrently use terms, concepts, and categories that, unlike those employed by biologists, often cannot be satisfactorily defined and compared. Let us think, for example, of macro-genres such as classical, folk, jazz, pop, rock, world music.3 We essentially rely on an intuitive perception of what makes such genres different from one another.4

Let us consider more specific labels, like “fugue” and “sonata form”. When Antonin Reicha published his book *Über das neue Fugensystem* (1805), Beethoven reportedly said, those fugues by Reicha were no fugue at all. Were they? It is hard to say: we do not have a comprehensive definition of fugue. In more recent times Charles Rosen, in an attempt to by-pass the problem inherent with the concept of “sonata form”, titled one of his books *Sonata Forms* in the plural (1980). We do not get any further with terms such as “tonic” and “dominant”. Is there a tonic in the yodelling of Muatatal in Switzerland? If so, it certainly is not the “same kind” of “tonic” we find in the blues form and, again, not the same as in Schubert’s compositions. Indeed, there is a problem with terminology; we use categories that do not help us make subtle and meaningful distinctions. We tend to place diverse items together into the same basket, assuming their fundamental similarity. Worse than that, we are often not even in a position to clearly define what such a basket is made up of. The biggest problem of all is, arguably, the word “music” itself.

The Problem with “Music”

“Music” has been defined in a number of ways throughout Western history. Among ethnomusicologists, the best known is perhaps John Blacking’s definition as “humanly organized sound”.5 Composer Edgard Varèse provided us earlier on with a more essential definition: “organized sound”. Varèse’s definition appears much broader, but no evidence suggests that he really implied that music could exist without human agency.

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1 *Homo* is the genus comprising the subspecies *Homo sapiens*, or modern human, plus several extinct species classified as ancestral to or closely related to modern humans. In other words, at least 27 human species have walked the Earth (among others, the *Homo habilis*, the *Homo neanderthalensis*, the *Hobbits* of Flores in Indonesia, and the *Denisovans* in Central Asia), but only our lineage survived.
3 How undefinable they are is highlighted in the famous statement attributed to Louis Armstrong, when he was asked to define “jazz”. His answer was: “If you’ve got to ask, you’ll never know” (Jones at al. 1970: 25).
4 Difficulties in defining “classical music” are discussed in detail in Chapter 11 of *What Makes Music European* (Sorce Keller 2012b).
for instance, among non-human animals.\(^6\) Today, however, the field of zoomusicology is taking exactly that view, although a rather small number of scholars in mainstream music studies truly pay attention to it.

Ethnomusicology is a field where diverse cultural understandings of “music” received necessary attention. As an area of intellectual endeavour with the clear notion of cultural relativism, it is based on the work of scholars such as Franz Boas, Ruth Benedict, Margaret Mead, and Gregory Bateson, who are widely considered the pillars of anthropological theory that marked the first half of the twentieth century. And yet, intriguingly, attitudes and research interests of ethnomusicology still remain, as I will explain, somewhat ethnocentric and – most definitely – anthropocentric. Ethnomusicologists are very much aware of the fact (of which other music scholars do not seem to be equally aware of) that “music” is definitely not a universal concept – and yet we continue speaking about “music”, as if such a thing existed out there in the real world and were not a mental and social construct, only significant to a few; this attitude I call ethnocentric. Mark Slobin once explained it as follows: “Only a few European languages have a term broad enough to cover all the human sounds that we group together this way ... Navajo doesn’t, nor does Arabic or most other languages...In most languages, each kind of performed sound might have a separate word, or a whole set of linked terms, without the umbrella term ‘music’...”\(^7,\(^8\) What we call “singing” is in many cultures regarded as a form of emphatic speech, like among the Suya of Brazil and the Tuareg of the Sahara.\(^9\) The Mi'kmaq people of Newfoundland also have no concept of “music”, but rather an expression, welta'q, that literally means “it sounds good”. It refers to the “quality” and “experience” of sound, rather than to a particular way of producing it.\(^10\) For this reason welta’q is a broad term comprehensive of all that is pleasing to the ear: chants, songs, stories, or even the blowing of the wind. Just as much intriguing is that among many communities living in areas as far apart as New Guinea and the Amazon rainforest, human-made sounds are often conceptualized in the same terms as animal sounds.\(^11\) The Netsilik group of Inuit, for example, also considers songs as simply one type of natural sound, with animals, as well as people, producing them.\(^12\) What I would like to suggest here is that the knowledge we possess could potentially help us develop a less ethnocentric and less anthropocentric view of “meaningful sound”. The question is whether it makes sense to speak of “music” in cultures that do not have that

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8 The book Was ist Musik? by Carl Dalhaus and Hans Heinrich Eggebrecht, published in 1985, contemplates in just a few lines about the possibility of speaking of music in the “plural”. It also recognizes that such a term as “music” is missing in languages of non-European cultures. It however treats this piece of information just as an item of curiosity, not worthy of further discussion. According to the authors, only Europeans have real “music”, and not even all that in the West is labelled as such actually “artistic”, and therefore does not really deserve their attention (jazz, pop, rock).
11 Bernd Brabec de Mori, Die Lieder der Richtigen Menschen Musikalische Kulturanthropologie der indigenen Bevölkerung im Ucayali-Tal, Westamazonien (Heilbing Verlag Innsbruck, 2014).
12 Beverly Cavanagh, Music of the Netsilik Eskimo (Ottawa, National Museum of Canada, 1982), 144.
particular mental category? And yet, the evocative aura radiated by the word “music” is so strong, that those who do not think of it as a universal concept nonetheless call themselves ethno-music-ologists, and so use a label containing the mystical intrafix.

The Problem with “Art”

Part of the problem with “music” is its connection with the Western concept of “art”, which is also not at all universal. When we categorize something as “art”, in other words, it automatically becomes - in our Western mind - something non-natural, in a way artificial. In fact, the word “art” and the word “artificial” go back to the same Latin root (ars, artis; artifiosus; artificium). All that is “artistic” is seen as “artificial” (although not all that is artificial is necessarily artistic), that is, human-made. It is intriguing that what humans do should be classified as artificial, as if we were not an integral part of nature but rather somewhat external to it, capable of either improving or harnessing the natural world, and guilty of disrupting its (supposed) balance. Non-human animals, on the contrary, are perceived as totally and purely “natural”. From here comes a kind of syllogism: music is artificial, animals are natural, animals make no music.

And yet sonic productions are “natural” long before they become “cultural” – even among humans. That is because our response to sound is first of all physical; and in all kinds of sound we perceive the physical effort necessary to produce it: the striking of something, the breathing out activating our vocal chords. That is why the making of meaningful sound, call it “music” if you like, is not comparable with literature, architecture, or the fine arts. Meaningful sound has as much to do with nature as it has with culture. That’s why defining music as the “art” of sound (like many dictionaries still do) offers a narrow, misleading definition, and ultimately a wrong one.

Music as Nature

The idea that music can only be “artificial” in a positive sense, in other words, exclusively human, is however relatively new in Western thinking. In fact, music history

14 Dutton Denis, “But they don’t have our concept of art,” Theories of Art Today, N. Carroll, ed. (Madison: The University of Wisconsin Press, 2000), 217–238.
15 A good example is culturally rich Indonesian island of Bali, where local language does not contain a word for “art” or “music”. What we recognize across the world as “music” is not conceptualized in many cultures as such or as “art”. This is the case, for instance, among the Navajo people, whose songs are expected to express religious power rather than to impress in an aesthetic sense. David McAllester recalled a Navajo musician in Arizona who, when asked whether he liked a song they were listening to on the radio, could not answer without knowing first “what is it good for.” (McAllester 1954).
16 Even in Germanic languages the two words are related, like Kunst and künstlich in German.
17 Somehow, dams made by beavers, although they significantly alter ecosystems, are not perceived as equally “artificial” as those constructed by humans.
18 John Dewey marveled that music could retain “the primitive power of sound” and, at the same time, “transform (its) material into a (sophisticated) art that is most remote” from nature (John Dewey, Art as Experience (New York, Minton, Balch & Co., 1934).
19 It is however worth remembering how György Lukács pointed out in History and Class Consciousness that “nature” is also a value concept (1923: 27).
handbooks always mention how throughout the Middle Ages and the Renaissance three forms of music were believed to exist.

The noblest of the three was musica mundana or “music of the spheres”. Back in those days, it was actually believed that planets and stars in their regularly calculated motions produce harmonious sounds. Musica humana, to which both a physical and spiritual dimension were attributed, was one step lower in the hierarchy. On the one hand there was the external symmetry of the human body, the balance of its parts, the beauty of internal organs, and the harmony established by their finely-tuned functioning; on the other was the harmonious relation between body and soul. Like in the musica mundana, such relationships giving substance to the musica humana were thought to be “musical”, because - and here we see the linkage to the Pythagorean tradition - such relationships were harmonious and expressible through numerical ratios. And finally, on a lower level still, came the musica instrumentalis, consisting of two branches: the “theoretical” or “speculative” and the “practical” or “active”. Of the two, only the latter is what we recognize as “music” today, and this was deemed to be the lowest form of all in the scale of values, one step inferior to the “theoretical” or “speculative”. The idea apparently was that there is more “music” (more harmony) in theoretical thinking than could be expressed by the actual manipulation of sound.

In our time, this ancient idea that music is intrinsic to the nature of the universe itself, survives only in non-Western cultures. Although a word like “music” might not be available in their languages, the idea is often encountered that sound has something to do with the intimate fabric of nature, and that it may reflect itself and resound in different ways from case to case in each individual living creature. Just like when the Sangita Sastra affirms that whoever learns to listen to the divine voice in himself/herself will discover beautiful sound forms; or when the Sanscrit term mantra tends to embrace concepts that go both towards the micro and the macro aspects of reality, indeed reminiscent of the musica humana and the musica mundana.

This all-embracing idea of “music”, which we perceive today in the West as a historical or ethnographic curiosity, reminds us of a time all until the Renaissance, when history and science would blur into myth and legend. Even later, Georg Friedrich Handel in his Cäcilien-Ode and Joseph Strauss in his 1868 waltz titled Sphärenklänge remind us that celestial harmony was a poetic image that people of their times would understand. Today nobody would. Moreover, people like us, socialized in a culture where music is seen as a manufactured product to be projected towards a “public”

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20 The idea of music being intrinsic to the very nature of the universe can be found as late as in the work of Tommaso Campanella (1568-1639), who mentions the harmony of the spheres in his Citté del Sole (1602). Intriguingly, the harmony of the spheres is in a way confirmed by radio astronomy, even though the sound is not produced by the motion of celestial bodies. It comes from radio waves that stars give out, and which astronomers, for their convenience shift to the audio spectrum, getting as a result a sort of at all unpleasant “harmony”.


22 To what extent practical music-making was considered inferior to theoretical “musicking” is well expressed by Guido of Arezzo (ca. 991-1033) who wrote in his Regulae rythmicae: “MUSICORUM ET CANTORUM MAGNA EST DISTAN TIA. ISTITI DICUNT, ILLI SCIUNT QUAES COMPONIT MUSICA. SED QUI FACIT, QUOD NON SAPIT, DIFFINITUR BESTIA” (Great is the distance between theorists and practical musicians. The latter say, the former know, how music works. Doing something without understanding it is what an animal does).

and to be handed over to future generations, find it hard to imagine how tangible and emotionally charged were concepts of “music” held in the Medieval West and in Oriental cultures; that of music that simply “is” and one does not “make”.

Intriguingly, however, this all-embracing idea of “music” reappears in modern garb with John Cage and, in a more intellectually elaborated manner with Raymond Murray Schafer, whose investigation began with acoustic design and developed into a full ecology of sound.24

**Zoomusicology**

This is the point where “zoomusicology” needs to be addressed. In fact, the study of meaningful sound across the animal world has been intensive for more than thirty years now.25 Not many mainstream music scholars have expressed in-depth interest in it so far, probably because of the widely accepted notion of music as of something artificial (therefore “artistic”), not natural, in a way, outside or above nature; something which only humans can make.

And yet, back in the days of comparative musicology (from about 1880 until 1950), several scholars, among them Erich Moritz von Hornbostel and George Herzog, asked the question, whether music could have had its beginnings among non-human animals. Because of their evolutionist view of history, and their quest for the origins of music, it made sense to consider how those beginnings could have taken place in the world of nature, before developing among “primitive” human cultures first and, later, among the “great civilizations” (Hochkulturen).26 But once the interest for the origins of music abated - partly because scholars began to specialize in small areas, and partly because it is arduous to search for the origins of something that cannot be satisfactorily defined in the first place - the study of animal sounds lost much of its appeal.27

But something dramatic happened in the 1970s, when ethologists came up with new groundbreaking information.28 The more thought-provoking challenges came from marine biologists studying the humpback whales.29 They revealed how humpback whale songs are such highly-organized sound patterns that Roger Payne decided to call them “songs”30. Such “songs” may be up to 20 minutes long, and – this is the real

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25 It is generally accepted that the field of zoomusicology starts with the publication of François-Bernard Mâche’s *Musique, mythe, nature ou les dauphins d’Arion* (Mâche 1983).

26 As late as 1941, Glen Haydon in his *Introduction to Musicology* maintained that while “Non-European musical systems and folk music constitute the chief subjects of study” (…), “the songs of birds and phylogenetic-ontogenetic parallels are subordinate topics” (Haydon 1941: 218).

27 A revival of interest in the topic was caused by the new ideas and information from evolutionary biology (Wallin, Merker, and Brown 2000).

28 The 1970s were years of considerable development in the field of ethology. In fact, it was in 1973 that Nikolaas Tinbergen, Konrad Lorenz and Karl von Frisch jointly received the Nobel Prize for the results of their studies in animal behavior. Those were the years when the very word “ethology” began to be known to wider public.

29 The humpback whale (*Megaptera novangliae*) is a species whose adults range in length from 12-16 m and weigh about 36,000 kg. Humpbacks have a distinctive body shape, with long pectoral fins and a knobbly head.

big discovery – they reveal the identity of single populations within the same species. In other words, different populations of humpback whales develop different song-styles. Also, whales learn their songs from one-another and adapt them, improve on them, according to rules that can be at least in part made out analytically. In other words: what marine biologists described is no more and no less than “an oral tradition”. Whale “songs” are “natural” in the sense that they characterize the species; but they are also “cultural”, because separate populations develop their own idiosyncratic styles, whose characteristics are the result of imitation, individual creativity, and acceptance by the group. Since then, comparable forms of sonic behavior have been reported in regard to other animal species. The main point to be stressed here is that, if we define culture, as we usually do, as “learned behavior”, which is not solely the expression of the genetic make up of individuals, then animal groups do learn, transmit what they know to the younger generations and, therefore, do have “culture”. This is something anthropologists, ethnomusicologists, and philosophers now have to reckon with.

The study of animal cultures from the standpoint of the sounds they produce and utilize goes today under the name of “zoomusicology”: I think it could be productively considered as part of ethnomusicology. Elsewhere I tried to make the point that a marriage between the two fields would be one of those really made in heaven. On the one hand, students of animal behavior could considerably benefit from the concepts and methods developed by music scholars. On the other, ethnomusicologists, while performing a type of fieldwork they are well-trained to do, would profit from the information provided by ethologists. Such information would help us better estimate how widely on this planet of ours sound is intelligently used by living creatures – possibly in even more different forms than we ever suspected.

One point needs to be clarified. When animal sounds are discussed, the question is frequently asked, whether they are to be seen as “music” (something that to the Western mind implies aesthetic quality or, at least, the element of “play”, that is, activity having no purpose beyond the enjoyment it produces) or, on the contrary, “communication”. This is probably not a very useful question to ask. It is not one that

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31 The definition of “folk music” given by the International Folk Music Council in 1954 comes to mind here: “Folk music is the product of a musical tradition that has been evolved through the process of oral transmission. The factors that shape the tradition are: (i) continuity which links the present with the past; (ii) variation which springs from the creative impulse of the individual or the group; and (iii) selection by the community, which determines the form or forms in which the music survives (…)” (Karpeles 1955: 23).

32 In 1976 Donald Griffin published The Question of Animal Awareness. He later developed his ideas on the matter in Animal Minds (1992) and Animal Minds: Beyond Cognition to Consciousness (2001). Griffin pointed out that physiologically, the brains of animals and humans share many features, such as neural cells associated with empathy and other emotions. He argued further that the complexity of animals’ communications strongly suggests evidence that they have minds. He also made the point that the extraordinary variety of their responses to their native environment contradicts the traditional view of animals as unthinking and unfeeling. Since then, evidence has accumulated that many animals experience emotions such as compassion and a sense of fairness, that some are aware of themselves and others as separate beings. Most remarkable is that some non-human animals have abilities once thought to be unique to people: the ability to give names to objects, to use tools, to teach their young. At this point, the most controversial question in animal cognition is not whether they have thoughts and feelings, but whether they collectively create something that could reasonably be called a “culture”. At the present time philosophers – I am thinking of Peter Singer and Markus Wild – seem to be more amenable to facing the question of culture in the animal world.

people lacking in their native language a word for “music” would formulate (people who do not necessarily distinguish between speech, communication, and pleasing or in some way functional sonic productions); for instance the Suya Indians of Brazil, the Wanng a aborigines of Arnhem Land or the Mi’kmaq people of Newfoundland. Moreover, a clear-cut distinction between “communication” and “music” is hard to make even among human cultures. In other words: speaking and singing are not always, and necessarily, separate. Let us just think of tone languages (Chinese, Vietnamese, Hausa, etc.), of talking drums in Africa imitating intonation of words, often with musical results, or of the whistling language in the Canary island La Gomera, where some people are more pleasant to hear than others – even though they may in essence be saying the same thing. In many linguistic utterances, the sonic character takes at times a predominant role over semantics.

The fact that sound is such a fundamental aspect of life makes scientists explore the possibility that even plants may use sound to communicate with one another. Whether some plants do it more effectively than others, or more “musically”, is likely to remain unknown, at least for some time.

Ecomusicology

The practice of ethnomusicology has convincingly shown that the study of meaningful sound (“music”) makes little sense if it does not take into account cultural context. That is tantamount to saying that the meaning of intentionally produced sound is situational, that is, only in part germane to the sonic production itself. What may be meaningful at one time in one place, to a specific group of people, may mean little or nothing to other people or even to the same people, experiencing it at other times or in other places. By using the terminology of music historians, one would have to say that much of the meaning of “music” is extra-musical. And yet in our time it becomes clear that studying the “extra-musical”, in other words music in context (“in culture” and “as culture”), may not suffice to stay on top of the highly diversified cluster of social interactions that mingle with organized sound – unless context also includes the environment. After all, cultures develop interaction with environments, with the geography of specific places, with their ecosystem, and specific soundscapes result from such interaction. To make the context of sonic actions inclusive of ecosystems, will undoubtedly be quite a challenge; but surely a most fascinating one. So far the musicologies we know have shown little interest in understanding what role nature,
environments, ecosystems play in the development of sonic activities, and in the interpretation of them once they come into existence.

However, in recent times, “ecocriticism”, a field of literary scholarship focusing on the interaction between literature and environment was a major force in activating the interest of music scholars in this direction. In fact, since 2007 a Study Group for Ecocriticism exists within the American Musicological Society, which is devoted to the study of Western music, with a predominantly historical approach. Apparently, familiarity of historical musicologists with literary studies provided them with the opportunity to start this important new direction. The Society for Ethnomusicology followed a few years later, in 2011, by officially recognizing its Special Interest Group for Ecomusicology. It is an encouraging showcase of a productive encounter of scholars converging from diverse backgrounds. A possible danger, however, would be a further fragmentation in music studies, where so many “musicologies” already exist and their main branches, more often than not, do not much interact with each other.

Precisely because zoomusicology well connects with the expertise ethnomusicologists have in dealing with culture and ecomusicology well connects with the experience they have in doing fieldwork in all kinds of environment, it would be appropriate for ethnomusicology to claim such areas of intellectual endeavour as its own and help bring them all together. Such an attitude would probably avoid the risk that such new fields would develop as independent disciplines which, at the moment, appears to be a possibility.

**Conclusion**

We live in the Age of Musicologies – the plural is in order. When Guido Adler, towards the end of the 19th century, described how music studies could be organized, “ethnomusicology” (at the time, “comparative musicology”) was a part of his articulate mapping of the territory. A century later, many people accepted a somewhat simplistic division of music studies into two main pillars: “historical musicology” and “ethnomusicology”. In this respect things have changed to a considerable extent. Back in 1977, when in the USA scholars with theoretical interests separated from the American Musicological Society, “music theory”, as we know it today, became a discipline in its own right. “Jazz studies” had developed largely as an independent field; although many ethnomusicologists are interested in jazz, jazz scholars at large, such as Joachim Ernst Berendt, James Lincoln Collier, Frank Tirro, or Ted Gioia did not and do not consider themselves ethnomusicologists. The same counts for “popular music studies”.  

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37 No doubt, other strains of research contributed to the development of ecomusicology. One of them is represented by Raymond Murray Schafer, who realised how crucial it is to relate sonic activities to the environment. He explored how the idea of “absolute music” (symphony, quartet, sonata) had its beginnings during the XVIII century, as if it were a response, a sort of antidote or protection, against the progressive invasiveness of the urban, low-fi, soundscape of European cities, at the time when noisy factories were proliferating within the city itself, rather than out in the countryside as it happens today. In order to make it possible to hear the music and screen out the city noise, enclosed spaces were invented – what in the XIX century became the “concert-hall” (Murray Schafer 1977).


39 Since 1981 they have their own society: the International Association for the Study of Popular Music (IASPM).
Although many ethnomusicologists conduct research on popular music, popular music scholars such as Charles Hamm, Richard Middleton, Philip Tagg, or Franco Fabbri did not in the past, nor do they today think of themselves as ethnomusicologists. And now, in addition to music theory, jazz studies, and popular music studies, there are also fast-growing computational musicology, ludomusicology, sound studies, zoomusicology, and ecomusicology, to mention just a few.

Such a wide spectrum of contemporary music scholarship is at the same time exciting and confusing. It is hard to say where this proliferation of “musicologies” will take us. The danger – I wish to emphasize the point already mentioned in the previous paragraph - is that, the more fields became established, the more they tend to ignore each other. Disappointingly, from my personal point of view, ethnomusicology no longer seems to be that great comprehensive field we thought it was back in the 1970s.

At the very outset of this article, I observed how the categories we use in music studies are not satisfactorily defined. It would be easier and more productive to work with definable categories, whenever possible. Sometimes a re-definition of concepts suffices, sometimes not. Back in the 1990s, the definition of what is a planet became fuzzy among astronomers, and it took time before the International Astronomical Association arrived at a new one.40 Biologists who focus on organisms, no longer can use the old definition of what an “organism” is, but so far could not provide a new one.41 They made of it an “ideal type”, and describe systems based on carbon chemistry as more or less “organism-like”, or “organismal”.42 We, music scholars, are in an even worse situation; we all study “music”, and yet have no definition of it that would brings us all together. The same applies to the lack of cogent definitions for other categories whose meaning is essentially ideological: “classical music”, “folk/traditional music”, “popular music”. While new musicologies, open up for us new vistas, all of them utilize old categories that do not help us make meaningful distinctions.

In a personal attempt to get out of the described situation, I decided to follow Christopher Small – at least temporarily. He suggested that the question “what kind of music is this?” is not the right one to ask.43 A better one would be “what is happening here?”44 In order to answer, I find it useful to distinguish among forms of behavior (human and

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40 The newly proposed definition of a planet is: a celestial body with sufficient mass to assume a nearly spherical shape that orbits a star without being another star or a satellite of another planet. By this definition, the list of planets in order from the Sun now reads: Mercury, Venus, Earth, Mars, Ceres, Jupiter, Saturn, Uranus, Neptune, Pluto-Charon (considered a double-planet system), and the newly discovered and officially unnamed 2003 UB313, otherwise known as Xena. The committee also proposed a new category of planets, called plutons, be applied to those bodies that, like Pluto, both take longer than 200 Earth years to revolve around the Sun and have eccentric orbits outside the typical orbital plane.

41 The old definition was “a contiguous living system, capable of some degree of response to stimuli, reproduction, growth, and homeostasis”.

42 A virus is not an organism according to the old definition, because it does not possess the ability to reproduce itself autonomously, without using the organs of a host cell. And neither is the biosphere, if seen from the standpoint of James Lovelock’s “Gaia Hypothesis”. Both are however “organism-like”, to the extent that there is cooperation among their component parts.


44 Each performance represents somebody’s values and way of life. Performances articulate and express values held by specific groups, large or a small, local or cosmopolitan, powerful or powerless, rich or destitute. No piece, no performance, no form of sonic behavior was ever conceived for universal appeal. Quite the other way, its function is to celebrate how local people feel about themselves. That is why, ethnomusicology invented the plural for the word “music”; and “musics” always have a location in time, space, and culture.
non-human) that are sound-centered, sound-complemented, sound-enhanced, or even sound-polluted as may be the case. Sound can be essential, more or less functional or disfunctional, incidental, optional, oppositional, obliterative – in our daily lives as well as in ecosystems in a more general sense. No doubt, these are ideal types, of which in reality we only find approximations – but at least they are not ideologically coloured and, more importantly, they cut across disciplinary borderlines, and so could help us make borderlines among musicologies more permeable.

As far as the non-scientific term “music” is concerned, it does not help us to gain knowledge; it actually often blurs or makes invisible differences that may be of primary relevance. We can certainly keep using it in everyday conversations, but not in a scholarly discourse.

**Bibliography**


M. SORCE KELLER • LINNAEUS, ZOOMUSICOLgy, ECOMUSICOLgy...


**POVZETEK**