

[DOI: 10.20472/AHC.2019.005.002](https://doi.org/10.20472/AHC.2019.005.002)

FRANCISCO CASTILLO

Universidad Distrital FJdC, Colombia

EVOLUTIONISM IN MUSIC HISTORY: TOWARD RECONCILIATION

Abstract:

The first part of this paper identifies some of the reasons why evolutionism has been avoided in historical musicology in the Latin American context, including political ideologies, postcolonial studies, and philosophical positions. Moreover, nature has been used many times as an argument to validate music theory and musical hierarchies, causing the links between biology and musicology to be full of faults made by past thinkers. The second part presents some arguments derived from analysis, critically reviewing the objections to musical evolutionism and showing how these have misunderstood the basic principle of natural selection. The paper also discusses the possible claim of evolutionary biology as a useful tool in order to understand music history, while contributing to current discussions in music historiography.

Keywords:

Music History, Evolutionism, Historical musicology

JEL Classification: Y90

Introduction

In the past few years, famous authors and intellectuals have written books arguing that humanity has benefited from moral progress throughout history. Among them, Pinker (2018), Singer (1981), Shermer (2015) and Harari (2014) have explained that over time, humanity has found more ethical and kind ways of behaving and relating to each other. Not being the purpose of this paper to discuss the details of their arguments or to analyze the objections to progress, some of their examples will be reviewed in order to recognize that at least some changes are visible.

In Chapter V of his *Politics*, Aristotle points out that “silence gives grace to women.” A comment like this usually wakes up several ideas at once. On the one hand, it is a symptom of how women were perceived in those times; on the other, we give Aristotle the benefit of historical relativism: so they thought before, we do not think so anymore, but we can continue learning from Aristotle if we stop judging him for the cultural misogyny that surrounded him. We can also acknowledge that such an expression would sound terrible, and it would condemn its author to a well-deserved social punishment. The moral advances referred to by Pinker or Shermer are not that all *macho* ideas have disappeared, but that they have diminished, and so has the social awareness of the problem. Examples like this abound in Western cultural history around issues such as gender, slavery, social classes, war, childhood, and racism.

We could then argue that Aristotle was mistaken because his cultural context did not teach him the good ideas that we have now. But we could also separate the misogynistic Aristotle from the philosopher, full of interesting questions that can brighten our way of seeing the world and understanding ourselves.

In Latin America, Charles Darwin has not been so fortunate, and the extension of his ideas from biology to the field of humanities has been openly avoided. I do not intend to compare Darwin directly with Aristotle; however, I do want to show that Darwin's mistakes, as well as his followers', have prevented us from seeing the positive implications of some of his ideas outside of biology. To do this, I will concentrate on historical musicology because it is my main discipline, and because it serves as a good example of a broader phenomenon that concerns humanities in Latin America.

This paper has three parts. In the first one, I will try to identify the reasons why evolutionism has been avoided in humanities (namely sociology, anthropology, and history). In the second, I will review how these objections have impacted historical musicology in Latin America. Finally, I will present some of the benefits that the evolutionary model can bring to our vision of music.

Part One: Why has Darwin been excluded from Humanities?

Objections to integrate biology with humanities come from different sources. In what follows, I will concentrate on four of them: political ideas, decolonial studies, some philosophical positions, and the use of "nature" as legitimation.

Political Ideas

Nature shows that many species struggle with each other for survival. Given the conditions known to all, this is usually understood as a constant fight where [only] the strongest [the fit] survive. Humankind did not have to wait too long to see this argument used in favor of an invasion or a colonial mission. Expressions such as *biopolitics* (Foucault, 1999) or *social Darwinism* pick up this vision, as they open the possibility of imagining nations as species whose military or technological superiority gives them the right to dominate others or survive at their expense of them.

Sandin (2000) and Lewontin (1987), among others, have identified that this position fits very well in a world dominated by aggressive politics and competitive trade relations like ours. John D. Rockefeller's standpoint that "The growth of a large business is simply the survival of the fittest," it can be assumed from there that he was using a biological argument to justify a warlike business movement.

Understanding (albeit not accepting) these premises, it would be logical to avoid thinking of the national states under an evolutionary frame. Not only would it be "politically incorrect," but it would also be opposed to other values that are considered key elements of the world that we want to build. One in which, for instance, states do not annihilate each other, and in which diversity and self-determination of the peoples are valued.

Objections from Post-Colonial Studies

Since the end of the 80s, the academic context in Latin America has witnessed the growth of a new field within Cultural Studies. Thinkers such as Aníbal Quijano, Enrique Dussel, Catherine Walsh, Ramón Grosfoguel, and Santiago Castro-Gómez (2007) initiated what is now known as *decolonial studies* (aka, *postcolonial studies*, although this schism is part of another debate). Without seeking to reduce their ideas to a simplistic definition, one can now mention that, supported by postmodern philosophy, these authors formulated profound questions about other dimensions of colonial domination that transcend territorial occupation. According to decolonial studies, it is imperative for the Latin American academy to recognize other ways of power and domination such as the dichotomy between high and low culture, an epistemology monopolized by the written word, the hierarchical division between art and crafts or culture and folklore, or the violent universalization of values that are strictly European. This extension of the colonial project to other cultural dimensions allows them to argue that colonialism has not yet ended, but has been replaced by other layers, such as capitalism.

"From what we call "decolonial approach", the contemporary global capitalism, the exclusions provoked by the epistemic, spiritual, racial/ethnic and gender/sexual hierarchies are deployed by modernity. Thus, the long-lasting structures formed during the 16th and 17th centuries continue to play an important role in the present." (Castro-Gómez and Grosfoguel, 2007, p. 14).

What does this have to do with Darwinian evolutionism? As a matter of fact, quite a lot. According to the decolonial line of thinking, the technological complexity of the Europeans wins over the native Latin culture to the same extent that the complexity of a wolf exceeds that of a worm. By classifying native Latin American peoples as "primitive" they were being placed on a scale lower than Europe's most evolved and superior societies.

Nelson Maldonado-Torres illuminates the link between evolutionism and colonialism thus:

"There is a similarity between 19th century racism and the attitude of colonizers with regard to the idea of humanity degrees. In some ways, it can be said that scientific racism and the very idea of race were the explicit expressions of a more general and widespread attitude on humanity of colonized and enslaved subjects in the Americas and in Africa." (Maldonado, 2007, p. 131).

Objections from Philosophy

To think that a tree, a dinosaur, and myself have a common ancestor is counterintuitive. It contradicts everything that our "common sense" might suggest. Although evolutionism can explain that this is so, the idea is unattractive because it took millions of years to be realized. When biology sees the past, it tries to look farther away than history does. The former in millions of years, and the latter just a few millennia away.

Among the many ways in which philosophy could contribute to this debate, the authors labeled as "postmodern" were the most acute and influential. Perhaps the foundational text of this trend is Lyotard's *The Postmodern Condition* (2006). Covering a wide array of topics, it aroused huge suspicion regarding great historical narratives within the contemporary academic guild. Having said that, in 1979, Lyotard predicted that mega-stories, teleological and canonized, would be replaced by local discourses made up from many voices and with no intention of enforcing generalizations. Along with skepticism over long historical narratives, historians found a fertile territory for research focusing on particular cases. Microhistory, cultural history, and other historiographic ideas were widely disseminated in recent decades. Thus, the discipline has taken distance from long-range evolutionary perspectives in favor of narrower reflections on subjects or on a particular phenomenon.

Nature as an Argument

To some extent, this point summarizes the other three. For many years, nature has been used by force to legitimize or justify social, political, and aesthetic theories.

Different forms of government such as monarchy, imperialism, or even democracy have been defended with arguments that align them to a natural principle. Similarly, it has been said since

the Middle Ages that social classes could be justified as an extension of the natural classes, arranged by God in His creation, and therefore unquestionable. If one accepts a premise according to which nature is perfect, then any theoretical system can be attributed with that same perfection, if it is presented as a natural order. For example, it is easy to identify nature as an argument in debates such as pro-choice versus pro-life regarding abortion; or same sex marriage versus different sex marriage; vegetarian versus omnivores, and so on. It should be noted that the "natural order" is an argument found in both extremes of the debate.

Given that the human sciences presented non-European societies as "natural" in order to classify them as primitive, (i.e., closer to the jungle or to primates), it is understandable that, with the advent of cultural relativism and globalization, these arguments have been gradually abandoned in favor of multiculturalism and horizontal dialogue among nations.

Part Two: Denying Darwin in Latin American Musicology

The uses of the evolutionary perspective in the field of humanities have deeply impacted historical musicology, and thus the vision we have of music in Latin America.

Herbert Spencer was an important figure for Darwinism, both by spreading Darwin's ideas and by his interpretation of them. In fact, it is well known that Spencer—not Darwin—coined the expression "survival of fittest," a key sentence for social Darwinism. In 1911, Oscar Chilesotti (2015) wrote a series of articles under the title *The Evolution of Music* in which he used Spencer's philosophical basis to explain the transformations of musical genres, emphasizing their development from simple to complex. In a similar perspective, Hubert Parry wrote in 1893 that "The basis of all music and the very first steps in the long story of musical development are to be found in the musical utterances of the most undeveloped and unconscious types of humanity, such as unadulterated savages and inhabitants of lonely isolated districts we removed from any of the influences of education and culture" (Parry. 1905, p 47).

Such ideas prosper in the musicological literature of the first half of the 20th century. All agree in presenting European music as the most complex, evolved, and cultured, relegating other musical arts as less evolved, wild, and in an evolutionary race where Europe is already waiting for them at the finish line. With this framework, it is understandable that most of Latin American scholars turned their backs on evolutionism, as they were trying to revise Latin American music without such an unfavorable cultural and political hierarchy. For instance, anyone who approaches *cumbia* or *joropo* with a friendlier attitude would notice that this genre doesn't lack complexity. Rather, this music is regulated by rules that are different from those of French or German music. Thus, the difference between music features led musicology in Latin America to move away from the conceptual and methodological tools offered by the European school.

Another example: in 1853, Arthur de Gobineau published a theory in which he defended the racial superiority of German whites. These ideas were recovered by Richard Wagner, whose operas

recreated the original myths supporting such a theory. Houston S. Chabersky, Wagner's son-in-law was also one of Hitler's philosophical influences. Considering that Hitler is the personification of the worst moral conduct in the second half of the last century, this repudiation would be transferred into the evolutionary musicology that used Wagner as a model of harmonic and melodic perfection.

It must be said that the assumption of cultural superiority did not come with Darwinism. It is easy to find books that would negatively classify music other than European. In 1776, long before Darwin, Charles Burney (1789) explained that music goes through different phases in its passage from childhood to maturity. Certainly, South American music would have been an infantile manifestation of the mature and complex art already present in Austria and England.

Along with many discriminatory or paternalistic mentions from pre-Darwinian thinkers, what most offends musicology in Latin America is omission. It seems that for the European scholars of the 17th and 18th centuries, Latin America is musically worth so little, that it does not even deserve to be mentioned. For example, despite the promise of a broader perspective from its title, Pedro de Ulloa's 1717 treatise *Universal Music, or Universal Music Principles* fails to see beyond the chords, counterpoint, vocal polyphony, and other principles that are not significant outside the European canon. This work, like many others, implies a universalization of Western ideals by virtue of their aesthetic and cultural superiority.

On the other hand, one can just look at operas such as *Motézuma* (Vivaldi, 1733) or *Les Indes galantes* (Rameau, 1735) to notice how Latin America was perceived in the old continent during the 17th century: as savages, quasi-animals, and like children.

Latin American musicology also refuses to use nature as a legitimizing argument. Harmony in European music is based on J. P. Rameau's seminal book *Treatise on Harmony reduced to its natural principles*, which aims to align the behavior of Western music with a natural design. From the 6th century (Boethius, 2009) to 20th century theory (Huron, 2006), classification of consonant or dissonant sounds, song structure, and many other musical features have been justified as manifestations of a natural order, and therefore indisputable. From a Latin American point of view, naturalization of cultural criteria is a violent gesture of colonial homogenization, and thus, avoidable.

Towards Reconciliation

So far, we can draw some conclusions:(1) Neither evolutionism nor science is the cause of Eurocentric arrogance. Political domination and the hierarchy of musical cultures were part of the musicological discourse long before Darwin. (2) If when reading Darwin's letters or revising 19th century biology we should find anything immoral or discriminatory, we could simply point out that it's a mistake, affected by a social context that was blind to the richness of cultural diversity. (3) The pronounced evasion of Darwin by humanities and musicology in Latin America, the absence of expressions such as "evolution" or "nature" in our lexicon, is due to undesirable uses of these words.

Understanding the set of reasons which came to exclude biology from humanities, let us begin to imagine the great possibilities of bringing those two disciplines together.

What is Darwinism, then? And more importantly, how can it contribute to historical musicology? It may be useful to remember that the fundamental thesis of *On the Origin of Species by Means of Natural Selection* does not rely on the survival of the strongest, nor in the political structures of the world, nor in the origin of life. The book offers an elegant explanation of how the species are transformed by the pressure of a mechanism called natural selection. The explanation of the model includes three basic steps: variation, selection, and heredity. If there are differences between organisms of a species, and these differences help them survive, the characteristics that differentiate them will be increasingly frequent in the species.

This explanation of the basic principles of evolution, sometimes called Universal Darwinism, not only can (and should) be detached from political content, but should also be precisely what we convene as a contribution to historical musicology. In recent years, there have appeared books, congresses, ideas, and concepts linking humanities and biology. The expression "cultural evolution," previously avoided for reasons hereinbefore explained, sounds less strange today.

Perhaps the most influential antecedent in the cooperation between biology and humanities is found in *The Selfish Gene*, a famous book by R. Dawkins (2002). At the end of the text, after discussing the origins of altruism and having placed the struggle to survive at the level of genes (not organisms or species), the biologist suggests that culture evolves under the same principles. He coins the term *meme* to point out cultural information units that are replicated, transformed, and inherited. Books like this, together with others from the early 80s, have opened a promising field of study in which history, anthropology, and other social sciences improve their perspective by using evolutionism. Alex Mesoudi (2011) has conducted experiments that explain how certain ideas are reproduced better than others, being replicated more times by more people. Next to him, Daniel Dennett (2017) has considered that memetics theory has the potential to explain in detail deep aspects of culture. Sulkowsky (2012) has even come to suggest that *neo-evolutionism* is a candidate to establish itself as a new paradigm in the social sciences.

This approach redefines the old *nature-nurture* dilemma and can be summarized as follows: all physical characteristics of living beings are there by natural selection. They have been the product of a blind process, without an omnipotent designer in command, and have won over other features, giving them reproductive advantage, in virtue of which they will be replicated more times. The same can be said of objects created by a culture: in the construction of a house, for example, many different ideas converge. Every house built before has imitated a model of a previous house. Within the variations that distinguish a house from its predecessor, those that help the house to fulfil its cultural functions will be more likely to be reproduced in the following houses. In the same way, no one created the elephant from nothing. A house, shoes, cooking recipes, language, and capitalism have evolved along with other aspects of culture.

This powerful model of explanation serves to observe many aspects of music. For instance, every musical instrument, every musical genre, all chords and dances, all gestures made by a conductor, and every song that has been created within a culture, have been imitations of previous *memes*, with no exceptions whatsoever. Every flute that has been built imitated a previous model of flute, and in that process, the ideas compete to survive against other ideas. Sometimes a new species of flutes is created, while others are extinguished in the process, and so on. The same can be said of all other instruments, the opera, or a simple melody.

The contributions of the evolutionary approach to historical musicology have not yet been fully manifested, for it is a very recent field of study. However, we can identify some of these contributions, considering the challenges faced by contemporary musicology, particularly in Latin America.

Global culture, transnational connections, migrations, and globalization are essential aspects within contemporary social sciences. The vision of a more connected world is materializing in front of our eyes, and this phenomenon constantly interrogates the ways in which we study music, history and culture. Under this premise, the delicate balance between local and global features is a crucial challenge for musicology in the 21st century. We are called to recognize intercultural transfers as fundamental ingredients in our history, and we are also called upon to recognize cultural diversity as a treasure. From the many examples available, it is worth mentioning that most of the musical genres in Latin America face this dilemma: on one hand, they are guardians of a cultural tradition that deserves to be protected from Western homogenization; on the other, they are malleable, musical practices that cannot avoid being influenced by globalizing elements such as the recording industry, concert halls, or electric musical instruments.

Revising musical genres such as *rock*, *cumbia* or *Gregorian chant* from a Darwinian perspective can solve the dilemma created by thinking that they must be fossilized in order to protect them from the changes, or liberated so that they may homogenize under the aesthetic principles of the dominant culture. Approaching these musical genres as a set of memes allows us to better understand the transformations that occur to them, because these changes are explained in terms of participation in a wider context, one that favors their reproduction or extinction.

Additionally, articulation between various disciplines has been the hallmark of academy in recent decades. If it is good for a research project to combine musicology with anthropology, philosophy with history, sociology with gender studies and so on, why can't it be the same with humanities and evolutionary biology? The concept of *concilience* developed by Edward O. Wilson (1999) brings forth this possibility in many ways: "The main thrust of the concilience world view instead is that culture and hence the unique qualities of the human species will make complete sense only when linked in causal explanation to the natural sciences. Biology in particular is the most proximate and hence relevant of the scientific disciplines." (Wilson, 1999, p. 292)

Following this idea, it becomes important for musicologists who research on music history to embrace the human condition, its evolutionary characteristics, and the biological models that

explain it in order to formulate historical accounts that recognize the unity of the species, human dignity, and cultural altruism as essential aspects in our discipline. The tools offered by biology to historical musicology not only lead us to scientifically review evidence and conclusions, but also to understand the musical practices of the past and the present as human and cultural expressions exposed to transforming powers and to complex and changing environments, instead of insisting on music as the great works by great composers with almost superhuman qualities.

Finally, if we accept that music is not only a reflection of culture but also a key element of cultural transmission, a vision on music that recognizes human biology will direct all social scientists in the right direction: one that salutes cultural diversity and also includes human universals. These universals are explained by Darwinian evolution and are necessary to identify the common ground that enables intercultural dialogue, respect for difference, and equal rights.

References

- Boecio, A. M. T. S., & Moreno, J. L. (2009). *Sobre el fundamento de la música: cinco libros*. España: Gredos.
- Burney, C. (1789). *A general history of music, from the earliest ages to the present period* (Vol. 1). London: printed for the author. <https://books.google.com> [Accessed 25 Apr. 2019].
- Castro-Gómez, S., & Grosfoguel, R. (2007). *El giro decolonial: reflexiones para una diversidad epistémica más allá del capitalismo global*. Bogotá: Siglo del hombre Editores.
- Chillesoti, O. (2015). La evolución de la música: apuntes sobre la teoría de H. Spencer. In: A. Bombi, Ed. *Pasados presentes: tradiciones historiográficas en la musicología europea (1870-1930)*. Valencia: Universitat de València. pp. 213-226
- Dawkins, R. (2002). *El gen egoísta* [1976]. Barcelona: Salvat.
- Dennett, D. C. (2017). *From bacteria to Bach and back: The evolution of minds*. New York: WW Norton & Company.
- Foucault, M. (1999). *Estética, ética y hermenéutica*, Barcelona: Editorial Paidós.
- Harari, Y. N. (2014). *Sapiens. De animales a dioses: Una breve historia de la humanidad*. Colombia: Debate.
- Huron, D. B. (2006). *Sweet anticipation: Music and the psychology of expectation*. Cambridge: MIT press.
- LEWONTIN, R.C.; Rose, S.; Kamin, L.J. (1987), *No Está en los Genes*. Barcelona: Ed. Crítica.
- Lyotard, J. F. (2006). *La condición postmoderna* 4ª ed. Madrid: Cátedra.

- Maldonado-Torres, M. (2007). Sobre la colonialidad del ser: contribuciones al desarrollo de un concepto. In: S. Castro-Gómez, S., and R. Grosfoguel, eds., *El giro decolonial: reflexiones para una diversidad epistémica más allá del capitalismo global*. Bogotá: Siglo del hombre Editores. pp. 127-168
- Mesoudi, A. (2011). *Cultural Evolution: How Darwinian Theory Can Explain Human Culture and Synthesize the Social Sciences*. Chicago: University of Chicago Press.
- Parry, H. (1905). *The Evolution of the Art o Music*. London: 4th ed. Xegan Paul, Trench, Trubner & Co..
- Pinker, S. (2018). *Enlightenment now*. New York: Penguin Random House.
- Sandín, M. (2000). *Sobre una redundancia: el darwinismo social*. Madrid: *Asclepio*, 52(2), 27-50.
- Shermer, M. (2015). *The moral arc: How science makes us better people*. New York: Henry Holt and Company.
- Singer, P. (1981). *The expanding circle*. Oxford: Clarendon Press.
- Sułkowski, Ł. (2012). Neoevolutionism—the new paradigm of the social sciences?. *Journal of Intercultural Management*, 4(2), 5-18.
- Wilson, E. O. (1999). *Consilience: The unity of knowledge*. New York: Vintage.