Noora Tienaho

Adorno and Electronic Music

PhD Student, University of Tampere
noora.tienaho@uta.fi

Introduction

My research is about the aesthetics and philosophy of Theodor W. Adorno (1903–1969). I intend to apply Adorno’s thoughts to the field of electronic music: I am using Adorno’s concepts to understand and analyse electronic music and its historical background, and on the other hand, I am challenging Adorno’s thoughts with the questions and peculiarities rising from the field of electronic music.

In my presentation, I will start with the rationalization of art and two kinds of rationalities. After that, few words about the role of technique in art and the mimetic behaviour of artworks. I finish with the concept of progress: I go quickly through the progress from the twelve-tone technique via serialism to electronic music and describe problems that rationality and control can cause. But first, I say something about Adorno.

Adorno is a German philosopher, sociologist and musicologist. He can be contextualised in Frankfurt School and Critical Theory that are directed to social change. I became interested in Adorno because for me, he seems to be one of the only philosophers who really know something about music. For Adorno, musical modernism, especially the dodecaphonic works of Schoenberg represents the most significant type of music and he is rather suspicious towards later musical styles.

Yet, there are some remarks on electronic music in his writings and his attitude towards it became more and more approving. Adorno seems to acknowledge the expressive possibilities of the new technology but he rejects the growing focus on timbre instead of form. To him, that represents regression to something pre-musical1.

However, Adorno is not trying to protect music from technology. He thinks that truly modern artworks absorb influences from technology that is developing outside art2. The best composers do not only obey the technological tendencies of society but also accelerate them3.

Anyhow, Adorno seems to fall behind the progress in electronic music; he does not understand or approve the changes in musical material, form, and techniques. In spite of that,

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I am highly convinced that Adorno offers useful conceptual tools for the philosophically oriented electronic music research.

**Rationality**

It is commonly believed that one of the main tendencies in modern society is the increasing rationalization in all institutional areas. The rationalization takes place not only in science, industry and business, but also in politics, religion and arts. The process is characterized by the growing domination of nature, exact calculations leading to efficiency, and the appropriateness of means to chosen ends, that is, instrumental rationality. For Adorno, rationalization is highly connected with enlightenment and it does not mean only positive developments in science and technology or continuously increasing freedom. Rather, rationalization and enlightenment demonstrate a form of tyranny: they are characterized by a great will to power. Domination of nature (both external nature and internal human nature) is the key factor; and with science and technology, humankind has produced more and more effective means for this domination.

Adorno thinks that rationalization fails to achieve its positive aims because of the type of rationality it leans on, namely, instrumental rationality. To overcome problems caused by domination we can try to broaden the concept of rationality with aesthetic rationality.

Adorno describes that “[r]ationality in the artwork is the unity-founding, organizing element not unrelated to the rationality that governs externally, but it does not reflect its categorizing order”. In Adorno’s aesthetics, art and society are highly intertwined. Artworks both reflect and oppose society within their rational form. They criticize the instrumental rationality of society without being able to overcome it because they are rooted in society.

Adorno thinks that artworks are rational because of the systematic control over their material: the conscious technical domination of composers defines artworks as something purposeful and rational in themselves. Yet, artworks are irrational from the perspective of instrumental rationality because the end that the highly rationalized artistic means pursue has no direct or practical purpose. The main difference between aesthetic and instrumental rationality occurs right in the relation of ends to means.

Technique used in music is dependent on the development of extra-aesthetic techniques, which have been used for dominating nature. This forms a threat to art: artworks are supposed to be purposeless but their technique has a certain former function. For example, electronics was not invented for composing music.

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8 Max Paddison, *op. cit.*, p. 140.


But then again, in artworks, extra-aesthetic technique transforms into something else; it adjusts itself to aesthetic rationality. Adorno thinks that in art, technique does not reflect instrumental rationality nor serve to dominate nature. By virtue of the total domination of its material through sophisticated technique, art resembles something that is free of domination

How about rationalization in music? Broadly, rational control over musical material has led from polyphony to equal temperament; from the twelve-tone technique to electronic music and composing with the aid of a computer. In the process of rationalization, musical parameters are taken under control and reduced to calculable rules. The process aims for the purest possible sound and the most exact expression. Developing new instruments and technologies is also part of the rationalization in music.

As Adorno notes “[t]he perfection of the machine and the replacement of human forces of labor through mechanical forces has become a matter of reality in music as well”

The subjectivity and individuality of composers make way to the objectivity and rationality of machines. We can see this shift especially in post-serial electronic music. The quest for the total control of all musical parameters is getting closer and closer to the instrumental rationality.

Mimesis

Adorno thinks that one of the tasks of art is to reflect the dreadfulness and horror of the outside world and thus the mimesis of techno-scientific procedures is part of aesthetic rationality. In the field of art, mimesis refers usually to the imitation of nature, but for Adorno it is more than that. For him, mimesis means making oneself similar to the hostile environment in order to protect oneself from that environment.

What exactly is being mimicked by artworks in the process of mimesis? It is not some particular hostile thing but the whole threatening process: especially the process of rationalization and the growing dominance of instrumental rationality in society. Like said, art is unable to step away from society, and for Adorno the only way for art to protect itself and range against instrumental rationality is to take it inside itself. Art mimics the outside world and its rationality in order to reflect it, criticize it, and to free itself from it.

Electronic music is a good example of art that absorbs and mimics techno-scientific procedures. Adorno says that especially the works of Edgard Varèse (1883-1965) demonstrate that it is possible to musically master the experience of a techno-scientific world. According to Adorno, Varèse did not use technological elements to achieve some kind of “childish science” but for the “effects of panic”. He mimicked the hostile environment in order to gain control over it.

14 Max Paddison, op. cit., p. 141.
15 Ibid.
Progress

The concept of progress is essential in Adorno’s aesthetics: art should always progress. From the writings of Adorno, one can distinguish two notions of progress. Firstly, there is progress in domination of nature. That means increasing control over material with techno-scientific developments, progress in skills and knowledge. The process of rationalization and instrumental rationality are connected to here, too. Secondly, we cannot think of progress without the idea of humanity. Progress occurs only if humankind as a whole progresses, not just some particular spheres of it like science and technology\(^\text{17}\).

Within art, this means that there is progress both in the domination of material (in artistic technique), and in art itself: The latter means progress in the quality and truth content of art and it is connected to progress in humanity\(^\text{18}\). The progress in artistic technique does not automatically lead to progress in the quality of art but the development in the quality happens only through the progress in technique\(^\text{19}\).

As I understand it, for Adorno music is reflecting society at the level of its form, and in so doing, it is also criticizing society. Music must keep itself at the level of the current technique, technology and other expressive means because otherwise its ability to criticize fades. Music must progress in the level of domination of nature so that it could progress in the level of quality and truth content. If music does not progress, it starts to affirm (always-antagonistic) society.

As far as progress happens at the level of technical domination of artistic material, composers need to know how to utilize new technical (and technological) means and ideas. Adorno sees a problem there. He thinks that the development of technology is well ahead of the abilities and musicality of composers. Thus, composers are unable to respond to the demands of techno-scientific progress. This imbalance between technical progress and human responses resembles the situation in society in general: people are incapable of using and controlling the new products of the technical progress\(^\text{20}\). And instead of using technology, technology uses them.

Progress in Music

In the final part of my presentation, I am to draw a line from musical modernism to electronic music. I will clarify the steps from the twelve-tone technique via serialism to electronic music. Arnold Schoenberg (1874-1951) created the twelve-tone technique in the 1920s. When using the twelve-tone technique, a composer organizes all twelve notes of the chromatic scale in a certain row. Notes must follow each other in that determined order and they cannot be repeated before all of them are heard. This guarantees that the idea of the tonal centre is completely negated.


Worth mentioning, for Schoenberg the technique worked mainly as an organizational instrument that prepares and purifies musical material before the actual composing begins. He didn’t believe that the technique itself would create the musical content or meaning.

The twelve-tone technique controls only a pitch; it does not organize other musical parameters. After World War II, composers started also to predetermine parameters like dynamics, duration, articulation, register, and timbre. This is called serialism.

Serialism can be heavily theoretical and (back then) it was getting inspiration from mathematics, statistics, information theory and set theory. For deeper analysis and more exact generation of sounds composers gradually turned into technology. They found new electronic media and started to produce music electronically.21

Therefore, serialism was a crucial factor for the birth of electronic music (or at least certain kind of it). In addition, in the historical context of serialism, electronic music was considered music rather than just an example of physical acoustics or some other scientific experiment.22

The ideology of serialism was followed most clearly in Cologne, in the Studio for Electronic Music of the West German Radio that was founded in the 50s. Composers working there were aiming especially to the total control of timbre (which has proved to be quite difficult to control). Composers thought that with the combination of the perfect sound material offered by electronics (pure sine waves) and the perfect theory (total serialism) they could reach the ultimate control.23

From this kind of storyline, one can draw a conclusion that the development of technology offered composers tools so that they could put into practice or finalize the conceptual revolution that had started already with the twelve-tone technique. It can be said that composers turned into electronic equipment because they wanted to develop serialism further, transcend the problems of it with greater control.24

Already in the strict rules of the twelve-tone technique Adorno saw a tendency to regression. The only justification for any composing method is that it organizes “complex musical contents”. Composing method is a medium for the preparation of musical material before actual composition and if it is used as a static, mathematical system, it degenerates into fetishism.25 It becomes just a number game.

For Adorno, any composing method (be it twelve-tone technique or something else) should be the means not the end.26 “Vain is the hope that through mathematical manipulations some pure musical thing-in-itself might come into being”, he says.27

Adorno considered serialism as the total outcome of the progressive rationalization in music and at the same time, it was a blind alley. For Adorno, the perfect technical control represented an end of modern music. Compositional freedom and all subjective impulses are gone when composers replace the act of composing with an “objective-calculatory ordering”

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26 Max Paddison, *op. cit.*, pp. 84-85.

of all musical parameters. That is when all the parameters of music are subordinated to a predetermined row. For Adorno, this was an over-rationalization of music and a sign of the victory of instrumental rationality.\(^{28}\)

Adorno thought that if the whole act of composing is just to write down what series automatically produce, “one could compose better with an electronic computer than by troubling a composer”. However, results will be something null and void.\(^{29}\) Adorno did not believe that serialism could develop further and eventually solve problems caused by progressive control and rationality (maybe with the higher level of rationality). However, this “objective-calculatory ordering” went even further with electronic music.

References


