

New aspects regarding the instrumentalists' performance

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Abstract. This article proposes to identify the aesthetic currents and key events that influenced music instrumentalists over the last century, as well as to characterize new outcomes in music performance. The aesthetical, technical, and compositional evolution of music impacted and changed the traditional conception of the performance – that of a musician taking to the stage using only his instrument in order to deliver a rendition of a music score – to a multidisciplinary concept. This new concept brought new demands to the instrumentalists, who had to adapt and improve without guidance or tuition. But it also introduced a source of creativity, fostering new techniques both in music interpretation and in writing. This analysis will focus on traditional musical instruments players and excludes instrumental music of oral tradition and/or improvisation, as well as vocal interpreters.

Keywords. Instrumentalist, multidisciplinary, music, performance.

1 Introduction

This article synthetically presents and discusses the significance of events that influenced the evolution of instrumentalists' performances of written music in the Western tradition, developing on previously presented concepts ^[1]. The analysis of these key events will contribute to an awareness regarding the broader scope of the inherent functions to this kind of performing art, and assert its contribution not only concerning performative matters, but also as a support for studies in music and instrumentalist education. In this way, the article is developed over the following sections: musical performance; procedural rupture; *musique concrète* and acousmatic; *musique concrète instrumentale*; different aesthetic concepts; socio-economic development; instrumentalist evolution; notational evolution; technological addition; and conclusion.



2 Musical performance

The word performance was first used in relation to theater and only later, already with a different dimension, to categorize a new, more encompassing artistic field: the performing arts. The word derives from the Italian *per formare*, which means to give shape through a concept ^[2]. According to McCarthy, Brooks, Lowell and Zakaras (2001: 7) ^[3] nowadays, the arts market is divided into four categories: performative, media, visual and literary. With regard to the performing arts, these include music, theatre, dance and opera. Within musical performance, and regarding written music of Western tradition, there has always been a pre-defined structure that involves a score and its interpretation for an audience ^[4]. The score – or musical notation – was the creation of an Italian monk, Guido d'Arezzo, around the year 1030, and its first objective was to preserve musical and cultural memory. However, in more recent times, it also came to allow the commercialization and dissemination of musical works. Musical notation also gained an important role as a communication channel between composers and interpreters, allowing composers to convey their thoughts about the work to the interpreters, as well as receiving feedback, leading to an improvement of the work and its performance through this interdisciplinary model. Thus the musical score became the preferred communication platform in knowledge sharing between composer and interpreter. Concomitantly, the role of these actors – composer and interpreter – were well defined during the XIX century, as interdisciplinary collaboration led to many composers not needing the capacity to perform their own works ^[5]. The evolution of musical notation allowed to improve the tools available for the composers to convey their ideas to the interpreters, who, in turn, have more and more detailed information at their disposal regarding the works. Through this interdisciplinary collaboration and evolution, interpretation became increasingly more precise and thorough ^[6]. All of this is aligned with the idea that written music is based on the reproduction of a text, and the most important premise for the interpretation to be accepted as a performance, was that it was performed live ^[7], which, in turn, implied the existence of three actors during the process: the composer, the interpreter – which could be the same person – and the listener ^[8]. However, other authors proposed replacing the third actor – the listener – with the ambience/ecosystem ^[9] or acoustic ecology ^[10]. Acoustic ecology/ambience, beyond its scope of the acoustic influence during the performance – modifying the sound and conditioning the sound production in this way – also designates the social contextualization, with all the actors that are involved, in particular: the interpreter, the composer, the notational communication channel between them, and the audience. In short, acoustic ecology/ambience is the framework over which the entire creative process evolves, exerting its influence on both the concept and the practice, covering all the aspects involved in the performative process. Caroline Palmer ^[11] defines musical interpretation as having three primordial aspects, and all of them linked to the sound outcome: sound intent – the choice of musical intention through the emphasis given to each musical structure, melody, phrases and dynamics; the rhythmic organization – organization of accents and emphases related to the duration of sounds; and the use of articulation – the way the sound is shaped in terms of attack, duration and ending. As addition to the above-

mentioned performative aspects, Nijs, Lesaffre and Leman ^[12], separate the creative processes in two categories: actions – all the interpretative physical movements which were planned and performed in a conscient way; and operations – all the interpretative physical movements which arose from an unconscious routine of practice. In summary, musical performance until the beginning of the XX century, is generally defined by auditory and mechanical parameters, and is always linked to instrumental performance.

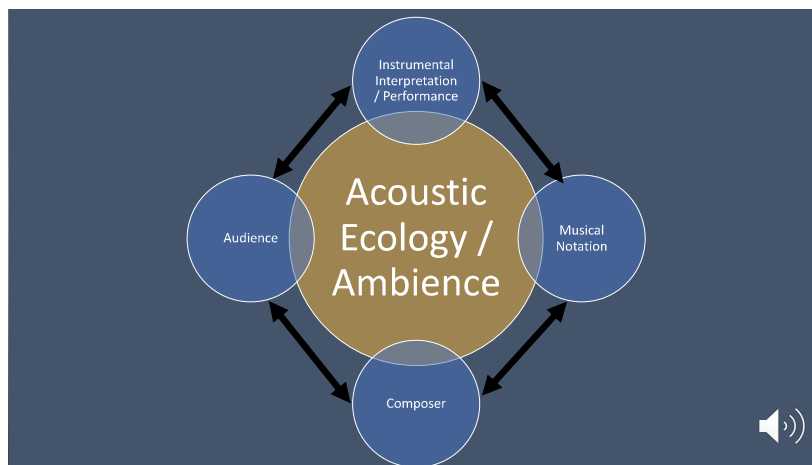


Fig. 1. Traditional Performance. Source: author ^[1].

As we can observe in Figure 1, musical performance is surrounded, being influenced, and influencing all the other components, over the acoustic ecology/ambience framework. Musical notation assumes the role of a communication channel between composer and interpreter, which, through feedback regarding the score, could in turn influence the composer. The audience members, through their role as consumers, influence both the composer and the interpreter, and therefore impact the acoustic ecology/ambience. Still in this context, it is possible to observe the separate roles of composer and interpreter, which, before the XIX century, were mostly assumed by the same individual. We can, thus, observe an evolution regarding the role of the instrumentalist/interpreter who no longer assumes the role of the composer, in order to focus and specialize on musical and mechanical interpretation of one or more instruments. Lastly, regarding the acoustic ecology/ambience, it is up to the interpreter to adapt his performance in real time to the acoustic and social conditions of the surrounding space, so that the characteristics of the work remain as identical as possible to the composer's original intent, avoiding interferences that might be originated at the performance site.

3 Procedural rupture

In the late 1930s and throughout the 1940s John Cage created works that symbolically broke the link between composer and interpreter, replacing the score with a procedural form. This implied a rupture, not only in the musical work itself, through the switching of the melody and harmony for an open work. In contrast with the fully notated work, open work is characterized by a deliberately open notation^[5], where musical writing is replaced by processes to create situations that will produce music^[4]. But it also introduces a significant change in aesthetics, from the interpreter/instrumentalist's point of view, as this type of work requires new performative skills that go beyond mere instrumental execution, in a broad sense. Thus Cage presents an alternative to the considerations of Russolo in 1913 – the traditional orchestra is no longer capable of capturing the imagination of a society involved in noise – and of Edgard Varèse in the 1930s – the difference between music and noise is only the organization of sound^[13]. 4'33" works as a meeting with appointed time, to perform and appreciate the sound process, in which, for the first time in music history, the musical interpreter takes the stage without having to play a single note^[14]. Thus, there is also a rupture with the preconceived idea that the audience goes to a concert hall to listen to an exclusively instrumental performance^[4]. Consequently, the audience members who were once routinely attending a concert hall to listen to melodies and harmonies produced by one or more instruments, became themselves part of the performative process through their sonic reactions – or lack of –, all of this in parallel with their normal roles, as audience members. Another aspect that caused changes in the audience's habits, was the addition of scenic components to the performance – everything that involves purposeful bodily processes that are not intrinsic to instrumental performance – that inherently drive the audience to a greater focus on the visual component.

Summarizing, as we can observe in Figure 2, the rupture caused by Cage gave rise to an evolution regarding musical notation, so that the score acquires the form of a procedural description, the work becomes autonomous, and frees itself from the need to interconnect with musical interpretation to achieve the performance. Musical interpretation has also been separated from performance, because this ceases to happen exclusively through an instrumental performance and focuses only on its sound production – sound direction, rhythmic organization, and articulation – to be complemented by the visual component^[15]. Likewise, the audience no longer has an exclusively passive role, as their interactions become an integral part of the performance.

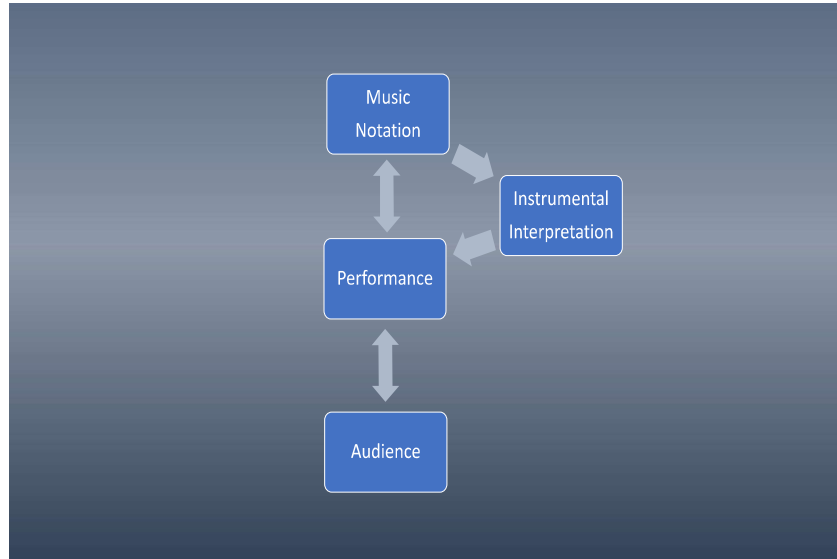


Fig. 2. New connection between performance and notation. Source: author [1].

4 *Musique concrète* and acousmatic

Before Cage's more mature developments, Pierre Schaeffer proposed another concept in the late 1940s, in France [4]. He called it *musique concrète*, and it was based on the assumption that sound is an object and, as an object, it can thus be transformed, in terms of mass, timbre, dynamics, strength, and duration, among other features. *Musique concrète* is produced through technological manipulation and appears in opposition to the abstract sounds performed by music instruments, one of its goals being the dissociation between sound and its source, leading to the appreciation of sound only for what it is. To this concept, the appearance of the magnetic tape as a substitute for the phonograph, was a breakthrough, because it opened door to a new set of possibilities, such as reproduction in different channels, the reverse play function, different playback speeds, direct cut and edition, track recording, sound overlap, use of the stereo effect combined with the spatialization and placement of several speakers, only to name a few [16]. It is precisely in this context that acousmatic music emerges, which consists of the playback of concrete music exclusively through speakers, exploring their physical positions, and whose designation evokes Pythagoras' methodology, of teaching behind a curtain in order to stimulate hearing over vision [17]. In short, acousmatic music has the purpose of separating the sound from its source, so that the audience can appreciate sound exclusively for what it is, without any connotation with the way it is produced [18]. Consequently, concrete music and acousmatic music distanced instrumentalists from performance, giving autonomy to composers who thus embraced a multidisciplinary related to acoustics and sound engineering, and assumed all performance responsibilities. One of the characteristic aspects of traditional

instruments is their unstable and not linear behavior in acoustic terms, which obliges the instrumentalist to have constant daily practice throughout his entire life as a performer/interpreter. This commitment is not consistent with an already demanding activity such as composition, thus, electronics provided an opportunity to overcome this obstacle ^[19]. Despite the distance of instrumentalists from the performative process – stress on “performative” since with electronically processed sounds for concrete music and acousmatic music, these sounds can also be sourced from traditional instruments – both concepts ended up having repercussions on the development of instrumentalists’ performance, influencing the appearance of concrete instrumental music.

5 *Musique concrète instrumentale*

In the wake of *musique concrète*, composer Helmut Lachenmann conceived *musique concrète instrumentale*, and produced in 1968 his first work of the new genre named *TemaA*. In Lachenmann’s perspective, *musique concrète instrumentale* is a sound transmission from the mechanical parts of traditional instruments, as well as an energetic experience, where instruments are used as objects and utensils. Regarding its composition and interpretation, this implies a defamiliarization of instrumental technique, connected to a constant discovery of new sounds together with new technical learning for the instrumentalists. Despite the mechanical features, the human factor is present in the performances, and the sounds that compose it are physically produced live, thus being able to convey to the audience a sense of traceability, as opposed to the artificial quality of the sound produced through the membranes of a speaker ^[20]. It is possible to observe similarities between Lachenmann’s concept and Cage’s, in that both converge the human factor as a sound generator for the performance, unlike Schaeffer who uses electronics to work and reproduce sound during the performance. In summary, *musique concrète instrumentale* focuses on the search of new physical sounds through traditional instruments, replacing the development of melody and harmony at the centre of musical development ^[21].

6 Different aesthetic concepts

Although the concepts of Cage and Schaeffer converge – in the sense that both sought to develop sound as the main raw material, freed from harmony and melodic conceptions, using it as an independent material for their works, as well as the development of a relationship between the work, the physical location of its presentation, and the conditions generated by these two factors – the overall concept was quite different ^[4]. While Schaeffer captured the sounds to electronically process them, Cage provided situations for the sound to occur and be artistically apprehended in its pure state. There is also an important differentiation in the sensory field, while the aesthetic current derived from Schaeffer sought to make sound worth only by itself and its spectrum, disconnecting it from its producing source and seeking to originate a purely

auditory experience, Cage added a visual component to sound. For the latter, the artwork triggered events in order to provide the public with a perception of the sound of real life. In short, while aiming at the emancipation of sound, the results were opposite, since Schaeffer presented an electronically manipulated sound, whereas Cage presented it in a raw state, while also manipulating it but only in the process of its production. In acousmatic music, in addition to sound manipulation, there is also an acoustic manipulation at the time of performance through the planning and relationship of sound sources, by carefully positioning the loudspeakers. Lachenmann, on the other hand, physically manipulated traditional instruments, developing new interpretive techniques and new concepts of musical notation, coinciding in the objective of emancipating sound with those of Cage and Schaeffer. However, this concept chose to maintain the traditional relationship of Western music, as the musicians performed a score for an audience, in a unilateral relationship. Analyzing these three concepts under the instrumentalist's so-called traditional instruments point of view, three different ramifications emerged regarding interpretation: with Cage's conceptual approach, the instrumentalist embraces a multidisciplinary with other areas, being himself part of a process in which sound production is not just his responsibility; acousmatic music sets aside the instrumentalist as a performer, reserving for him an experimental role in the process of capturing sounds; Lachenmann's aesthetic leads the instrumentalist in a quest for new sound production techniques. In summary, we can conclude that these three aesthetic currents also brought new paths to the instrumentalists' performance; in Schaeffer's concept, the instrumentalist was excluded from the performance, being used only to capture sounds, which were later electronically manipulated.

7 Socioeconomic development

There is an entire economic system around music that is undergoing constant mutations due to socioeconomic development. As far as the artistic part is concerned, the technology, through the capacity of recording and audio reproduction, not only allowed but fostered the massification of musical culture, driving music into becoming a product of consumerism ^[22]. This massification marks the end of an era, in which the most common way for the public to relate to their musical idols was through their presence at concerts. For the past decades corporations have extended a greater influence over relationship through the fabrication of artistic images for musicians, and using them for global dissemination. The concept of the artist's public image and its exploitation, fostered not just an increase in music consumption – along with the generalized and increasing demand of new consumerist experiences – but also in a plethora of related merchandise ^[23]. Music consumption is no longer done exclusively live, to become a more individualistic consumption – in the sense that everyone is now able to reproduce just for oneself the recording of a concert, instead of going to a live concert, as part of the audience – through the reproduction of recordings distributed by a market that transforms everything into a product, even the avant-garde aesthetic movements, in a massive attempt at economic profitability. The instrumentalists also

became products of this consumerism and targets of this experimentation. Note the case of Benny Goodman, for example, who in the late 1930s sold millions of copies of his albums and, a few years later, in 1956, a cinematographic biography was made to capitalize on his image^[24], thus giving a feeling of closeness to the fans and, at the same time, generating a widespread growth of empathy across the creation of a commercial image. Therefore, the consumer culture influenced the instrumentalist, bringing him a new concept of marketing and public image, and transforming their art from an ephemeral and unique product – such as a live event – into a (potentially) perpetual and mass replicated one. Performance became thus capable of reproduction, overcoming the restrictions of space, time, and singularity.

8 Instrumentalist evolution

In terms of musical performance, Cage opened the door to an artistic scope that went clearly beyond music. Similar to what electronics brought to music, equating it to the visual arts - the composer, being able to use recordings and reproductions of any type of sound, had a palette of sounds, just as the painter has a palette of pigments^[25] – Cage takes musical performance to another level of multidisciplinary, which makes it evolve from a concept based only on instrumental interpretation, to another in which all the sounds in the space where the performance takes place have the same degree of importance, and where the visual component becomes as important as the sound. One of the firsts works written with an equaled concern between the visual component and instrumental interpretation, was *Water Music* – a work for piano by Cage written in 1952 – which already presented an important dimension of non-musical expression. Stockhausen, inspired by Cage's work, extended this idea and demanded that the musician embraced theatrical performance skills, namely in the work *Harlekin* for solo clarinet, written in 1975^[26]. In this work, the clarinetist has to play atonal music from memory, in parallel with theatrical and dance performances, for approximately 45 minutes. The composer himself describes the work as being for a *dancing clarinetist*. In this way, we reach a performative level in which the musician interpreter merges his musical knowledge with other skills, thus creating a multidisciplinary performance. Even before Stockhausen, Luciano Berio in 1966 had also explored a multidisciplinary approach with the work *Sequenza V* for solo trombone. In this work, dedicated to the clown Grock, the score has references to the clothes to be worn, stage lighting, vocal sections, and theatrical performance^[27]. Another pioneer regarding the exploration of the experimental theatrical music, and also inspired by Cage, was Mauricio Kagel in the late 1950s. Experimental theatrical music was a strand that emphasized four aspects^[28]: (1) predefined scenic movements to perform with the instrument; (2) stage design for musicians and elements related to choreography; (3) use of speeches for instrumentalists; and (4) elaboration of the musicians' movements taking into account the general performance. Thus, stage design could be developed not just based on the physical position of musicians for scenic or performance reasons, but also in relation to acoustic motives. A comparison regarding this aspect is made here, to acousmatic music – when the musician's position on stage

happens only due to acoustic and/or timbral reasons, the purpose being similar to what acousmatic music uses in the physical distribution of the loudspeakers in the concert hall. An example of this similarity is what happens on *Domaines*, by Pierre Boulez, in which several musicians are distributed in different areas of the stage, with the clarinetist being a hybrid element, who can be positioned in different areas throughout the work. On another level, related to concrete instrumental music, the instrumentalist sees a large part of his instrumental technique becoming obsolete on behalf of the research for new techniques and sounds. In this way, the instrumentalist also becomes a scientist in a quest for new sounds and timbres, and developing with the composer a fairly different system of musical notation, characteristic of an interdisciplinary cooperation. In short, the instrumentalists renew their instrumental technique at the same time as they acquire form of expression, both at an interpretative level and in terms of musical notation.

9 Notational evolution

Several composers have developed their own languages, leading interpreters to learn different types of notations ^[29], depending on the composer and the work they perform, and, within these new languages, we can identify verbal additions and additions of new sound designations. Verbal additions emerged in the Baroque period as a descriptive component related to indications of time, character, expression, and concrete instructions, however, over time, this verbalization was developed and some works became exclusively verbal, such as for example *de 4'33* by Cage or the *Aus Den Sieben Tagen* by Stockhausen – the first as procedural form and the second in which the score takes the form of a poem. Summarizing, musical notation was expanded in its functions and encompassed not only the musical field – sound duration, dynamics, pitch, articulation – but the procedural as well – indication of physical movements, concepts, and all kinds of instructions that the composers considered useful and pertinent. In sound additions, musical notation has been developed through the inclusion of new techniques – harmonics, *flautterzongue*, growling, among others – as they emerged ^[29]. Erik Satie, in 1893 in his work *Vexations* wrote the following instruction: “In order to play this motif 840 times in succession, it would be advisable to prepare oneself beforehand, in the deepest silence, through serious immobility” ^[30]. According to Satie’s instructions, a small score became a 28 hour piano performance, testing the physical and psychological limits of the interpreter and, even inducing trance states during the performance ^[30].

10 Added technology

Although the instruments are themselves technological objects, this section focuses on the technological integration provided by sound recording and reproduction through a computer and/or digital technologies. In this field there are augmented instruments which incorporate electronic amplifications of their normal capabilities, such as the

Feedback Cello project ^[31], which can be played in the traditional way with the addition of pedals that manipulate the sound, played and manipulated externally through lines of code in real time, as well as played through predefined processes by digital signal processing. In this case the whole project was designed and developed by the instrumentalist, in a multidisciplinary and interdisciplinary process. Centered on this subject, the *Augmented Instruments Laboratory* has significantly explored these instrumental aspects ¹.

But the added technology also impacted the non-traditional music-making forms, such as electroacoustic, in which the interpreter shares the performance with electronics. Although Luigi Russolo between 1913-14, Varèse between 1929-31, and Ottorino Respighi in 1924, have all used phonographic reproductions for their works, one of the first works considered as mixed electroacoustic is *Musica su Due Dimensioni* by Bruno Maderna, composed in 1952 for flute and magnetic tape ^[18]. There are also mixed electroacoustic works that explore the visual component in different ways, such as in *Parcours de L'Entilé* by Flo Menezes, composed in 1994 – where illusory movements occur with the objective of confusing the audience about whether it is the instrumentalist who produces the sound, or if it is coming from the loudspeakers – and in *Altra Voce* by Berio, composed in 1999 – the alto flute plays the same sound as the speaker but slightly out of phase, with score indications for the instrumentalist to examine the instrument, conveying the idea it was actually being cleaned during the performance ^[32]. The challenge that the interpreter faces in this kind of performance, if it includes a reproduction of a previous recording, is a very reduced flexibility in the interpretation, in order to be able to accompany the previously recorded audio. However, there are already other resources that increase this flexibility, namely the *Score Follower*², that can be added to the electronics. Nevertheless, this requires greater perfection in the interpreter's sound articulation so that the software delivers a good result. This technology may also introduce problems in sound capture, as it will be more demanding. In case the electroacoustics are controlled in real time by another musician, this problem disappears – however, the role of the electronic device is then changed from that of consistent playback to that of a digital instrument ^[33].

11 Conclusion

Multidisciplinary in musical performance is first materialized through the interpretation of symbols – musical notation – allied to the instrumentalist's sensibility in treating the sound, thus producing an interpretation through a musical instrument ^[8]. Opera singers are already faced with this type of multidisciplinary, since opera contains an implicit theatrical component, external to music. From the perspective of the musical interpreter, Cage has had a decisive role, as he helped pave the way for multidisciplinary musical performances, beyond the traditional performance, greatly expanding the creative possibilities. We can conclude that the centrality of the instrument in musical

¹ <http://instrumentslab.org/>

² <https://www.scorefollower.org/>

performance has undergone mutations due to the addition of new possibilities that complement the performance such as, dance, narration, scenic actions, among others, thus balancing its auditory and visual aspects.

These additions also gave rise to the interpreter being compelled, by certain works, to acquire extra-musical skills in order to be able to abide by the multidisciplinary requirements of composers. Like Cage, composers such as Stockhausen, Berio, and Lachenmann, among others, brought a need for instrumentalists to develop and adapt to a new performative reality. They had to reinvent themselves by dressing the role of scientists for their instruments and creating interdisciplinary connections to acquire more and more skills. Here, there is also the possibility of symbiosis, as the composer can benefit from the instrumentalist's knowledge, and thus, in an interdisciplinary work, develop performance based on mutually acquired knowledge.

Other aspect that is in constant evolution is marketing, as a result of the massification of music distribution. The prejudice several classical musicians may suffer against promoting their own work, assuming that self-promotion will break their artistic integrity, contributes to a knowledge divide, where self-marketing is seen as being out of reach for them, a gray area mostly addressed through self-learning – as opposed to formal [34]. As mentioned, performance is influenced by the acoustic ecology/ambience. Therefore, the marketing created around the interpreter, the work, the space, among other aspects, can shape this framework. Commercial marketing can be a complementary area to performance [35], the creation of immersive experiences [36] [37], technological innovation or other points so characteristic of current commercial artistic experiences [38].

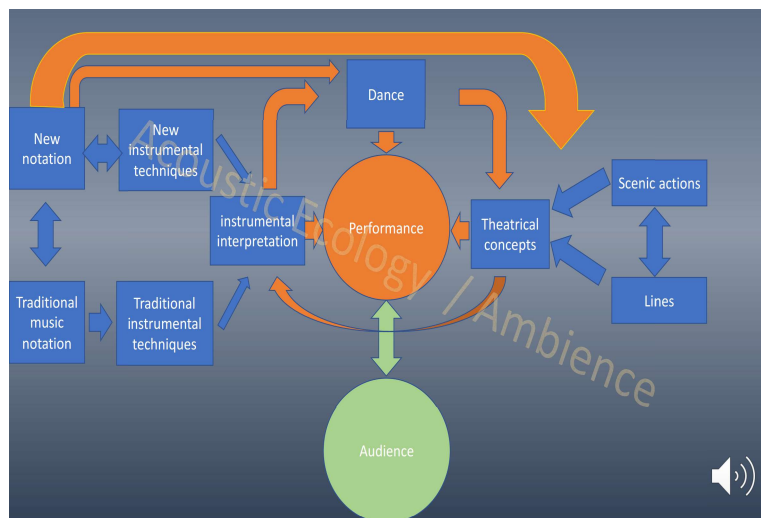


Fig. 3. Current performance. Source: author¹¹.

With regard to the personal experience of the author of the present article, who is also an instrumentalist, he is faced with different demands in terms of performance. Where

multidisciplinarity is concerned there is also an interesting correlation, as the requirement for more skills in order to perform the work are usually accompanied by larger creative freedom, which drives the interpreter into having to deal with experimentation in the absence of *knowing* [39], creating a need to build new knowledge.

Lastly, and to summarize, we can observe the diagram presented in Figure 3, which shows the instrumental performative possibilities, influenced by the aesthetic concepts presented throughout this article. When compared to Figure 1 and Figure 2, it is possible to verify the evolutionary path of performance. Figure 3 depicts as a background the acoustic ecology/ambience that works as a framework, supporting the performance. This network can be called the social footprint, or ecosystem, and links the composer, the work, the interpreter, the act of performance and the audience. Then there is the performance as a central point, which exists in function of an audience, which in turn, depending on the artistic work, may or may not influence or interact with the performance itself. Around the performance and beyond musical interpretation, theatrical concepts and dance emerged. However, this circle is not closed and may involve other multidisciplinary aspects. The instrumental interpretation itself has undergone changes with the introduction of new forms of notation, which, as we see in Figure 2, can jump directly to performance or to another disciplinary valence, as in the case of 4'33, in which musical interpretation does not occur. This new notation, when connected to musical interpretation, is intrinsically linked to new instrumental techniques and vice versa, since the creation of new techniques requires new notation. Finally, with regard to musical notation, it has adapted to incorporate other scenic and performative elements, such as physical movements, lines, clothing, among others.

Still concerning Figure 3, it was mentioned that the circle around the performance is an open circle, and it may be incomplete, as its expansion only depends on the creativity and new demands of creators and performers, making it impossible to carry out a survey of all musical performative works that use skills in a multidisciplinary way. However, the same figure highlights the evolution of musical performance, from the beginning of the XX century.

Through the point of view of a traditional instrument performer, all the aesthetic evolution brought an expansion to performance and especially to its multidisciplinarity. This multidisciplinarity, converges with the experimentalism expected by the audience, being therefore an evolving subject, which integrates other areas, both inside and outside the domain of arts [5]. It is admissible, given the evidence on traditional performance, with no known contradictory, that until the first half of the XX century, the personal involvement of an instrumentalist in performance was exclusively in the context of instrumental interpretation and a multidisciplinary approach restricted to the assimilation of reading the score with musical interpretation. Thus, by observing all the evolution registered after the aesthetic evolutions started in the 1050s, as well as in the derived works, it can be concluded that the role of the instrumentalist has suffered – and continues to suffer – a mutation with regard to its interpretative characteristics, which consist in the expansion and extrapolation of the technical execution of a musical instrument, to a multi and interdisciplinary field, crossing other artistic areas and involving other technologies. This is a type of evolution linked to *knowing* and not to *knowledge*, as the acquisition of knowledge is triggered by the need that

comes from creativity and carried out by the performative practice of the performer, and not by theoretical knowledge ^[39]. An individual may have full theoretical *knowledge* about a piano, but if he has not acquired the *knowing* from practice, he will certainly not be able to play it. This is how we can characterize the evolution of instrumental performance referred to throughout this article, in which various aesthetic currents brought new elements to the performer – scenic components, new instrumental techniques, physical movements, among others – and which have been shaping the performative path. These emergent/innovative techniques appeared as new in the field of musical interpretation, so it was not possible to have any academic support that could lead to their implementation or development. In this way, Cage, Beria, Stockhausen, among others, are responsible for directing and creating new demands on the performer, who had to adapt to an increasingly interdisciplinary performative reality, generating their own *knowledge* through practice and collaboration with their peers. Thus, we can identify the following aspects that have expanded the required domain of interpreters over the past century ^[1]:

- Exploration of the interpreter's physical capacity.
- Exploration of the interpreter's psychic ability.
- Different types of sound and verbal notation.
- New instrumental techniques.
- Multidisciplinarity with other artistic areas.
- Multidisciplinarity with other areas of knowledge.
- Different flexibility of interpretation and articulation in the case of mixed electroacoustics.
- New communication and marketing concepts.

With all these aspects emerging in the last century, with the highest incidence occurring in the last 50 years, it is concluded that instrumental performance has been undergoing significant changes, adapting and combining the development of new forms of artistic expression in the music. As most of these aspects are relatively recent and few are implemented in the instrumental repertoire, we can intrinsically conclude that the current educational offer to instrumentalists is one step behind, with regard to new techniques, leading the instrumentalists to self-develop and self-acquire skills, along their artistic path. This article can, therefore, serve as a basis for future research related to the academic training of instrumentalists, and/or be used as a starting point for a greater deepening, revealing more evolutionary aspects and exploring the instrumentalists' performance in more detail.

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