

## Hear the Machine, Fear the Machine: George Antheil's *Ballet Mécanique* and Listener Ambivalence in the Twentieth Century

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Résumé de l'article

Le *Ballet mécanique* de George Antheil est célèbre pour ses sonorités cacophoniques, ses allusions industrielles et son utilisation d'instruments mécaniques, notamment le Pianola. Bien reçue à Paris en 1926, la pièce fut très mal accueillie aux États-Unis en 1927. En s'appuyant sur des sources de l'époque, cet article reconsidère la réception américaine du ballet à la lumière de la relation entre le public américain du début du XX<sup>e</sup> siècle et le machinisme. Il suggère qu'à travers son utilisation d'instruments mécaniques, en particulier le Pianola, le *Ballet mécanique* a exacerbé l'anxiété et le scepticisme à l'égard des machines en reflétant la peur croissante des conséquences destructrices d'une société mécanisée.

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## HEAR THE MACHINE, FEAR THE MACHINE: GEORGE ANTHEIL'S *BALLET MÉCANIQUE* AND LISTENER AMBIVALENCE IN THE TWENTIETH CENTURY

Carolyn Sumner

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At the turn of the twentieth century, the rise of the machine age and the emergence of new sound-recording technology significantly affected both the domestic and public spheres of American society. Technological advancement and mechanical innovation epitomized American modernity (Oja 2000b, 59; Thompson 2004, 4). The sweeping fascination for the mechanical further bled into the aesthetic and cultural realms of American society through the emergence of mechanical instruments such as the player piano. A staple in American households during the early 1900s, the player piano became a popular means of entertainment throughout the twentieth century. More importantly, however, this mechanical instrument became a new important source of musical and compositional inspiration for avant-garde composers, notably George Antheil, prompting him to compose what he believed was “the first piece of music that has been composed OUT OF and FOR machines, ON EARTH” (80).<sup>1</sup>

Composed in 1924 while Antheil was living in Paris, *Ballet Mécanique* is known for its cacophonous sonority, its motoric quality, and most importantly, its use of several mechanical instruments, including the player piano. While Antheil's *Ballet Mécanique* enjoyed a successful Paris premiere in 1926, its New York premiere later in 1927 failed to replicate its initial success; indeed, the American reception of Antheil's piece was largely hostile, and his ballet was vehemently criticized by critics of the time who deemed the work “boring, artless, and naïve” (Oja 2000a, 195).<sup>2</sup> Although Antheil's highly anticipated work

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<sup>1</sup> In addition to Antheil's *Ballet Mécanique*, several works inspired by the mechanical emerged during the early twentieth century. These include, among others, Igor Stravinsky's *Étude for Piano* (1917), Paul Hindemith's *Triadic Ballet* (1922) and *Suite for Mechanical Organ*, Gerhart Münch's *Polyphonic Études* (1926), Hans Haass's *Capriccio, Fugue and Intermezzo for Mechanical Piano* (1927), and Ernst Toch's *Three Original Pieces for the Electric Welte-Mignon Piano*. For further reading, see Patteson (2016).

<sup>2</sup> Premiered in New York at Carnegie Hall on 10 April 1927; Oja notes that the “scandal” or pomp and circumstance surrounding Antheil's American premiere of *Ballet Mécanique* was very much staged.

was considered a disappointment by American audiences, some consideration of their complex relationship with the mechanical during this period is necessary. Although the emergence of new mechanical technologies at the turn of the century embodied American triumph and mastery over nature, the machine's automated, impersonal, and destructive potential aroused skepticism, at times fear of, and ultimately ambivalence, towards the mechanical. By using Antheil's *Ballet Mécanique* as a case study, this article thus investigates the social, ideological, and environmental circumstances that may have contributed to the growing ambivalence of American audiences towards mechanized music and instruments during the early twentieth century, specifically the player piano. By framing Antheil's work in light of the emerging mechanized musical soundscape of modern America, this article seeks to better understand how and why listeners began re-evaluating, and ultimately renegotiating, their relationship with the mechanical at this time.

### BUILDING THE MUSICAL MACHINE

"Scored for countless numbers of player pianos," claims Antheil in a letter to Stanley Hart in 1925 (Oja 2000b, 80–1). "All percussive. Live machines. All efficiency. NO LOVE. Written without sympathy. Written cold as an army operates. Revolutionary as nothing has been revolutionary" (81). Written for several mechanized instruments and noisemakers, including wooden and metal propellers, whistles, sirens, sewing machine motors, and electric bells, *Ballet Mécanique* is perhaps best described as a living and breathing musical machine (Oja 2000a, 190). In her study of Antheil's work, Carol Oja describes the ballet as a "percussive extravaganza that glorified technology using actual machines, mechanical instruments, and principles of mechanical construction" (Oja 2000b, 78). Antheil's fascination with the mechanical was largely a product of his encounters with significant artistic movements including Dada and Futurism, and his mechanical aesthetic resonated with the works of Dadaist artists such as Morton Schamberg, Francis Picabia, and Marcel Duchamp (191). In particular, Antheil was fascinated by the "style mécanique" aesthetic of the early twentieth century, composing several works that commented on the rise of the industrial age and the machine (Levi 2000, 339). These include his works for piano *Airplane Sonata* (1923), *Mechanisms* (1923), and *Death of Machines* (1923), which feature highly mechanistic and percussive piano parts.

Unlike the latter works, which metaphorically evoked the mechanical through highly mechanistic musical gestures and percussive writing, *Ballet Mécanique* was composed specifically for a machine: the player piano (Oja 2000b, 90). In Antheil's original scoring, *Ballet Mécanique* was orchestrated for sixteen synchronized player pianos and was meant to accompany a Dadaist and mechanically inspired film by Fernand Léger.<sup>3</sup> According to Julia

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<sup>3</sup> Within the scope of this article, the collaboration between Antheil and Léger is not addressed at length. However, it is important to note that this early collaboration provided Antheil with his inspiration for the work, particularly his use of the player piano as the mechanical foundation of *Ballet Mécanique*. According to Susan Delson, Antheil was asked by Léger and fellow producers to create

Schmidt-Pirro, the appearance of these instruments would have emphasized the mechanized aesthetic of both the work and film, visually depicting “a factory floor occupied by rows of machinery” (Schmidt-Pirro 2006, 407). As the result of complications (notably problems of synchronization and length), Antheil’s collaboration with Léger was unsuccessful (Bijsterveld 2008, 148–9; Schmidt-Pirro 2006, 407). Nevertheless, Antheil revised his ballet in 1926, re-orchestrating the work for one player piano, standard pianos, and a variety of noisemakers and percussive instruments (407). Despite his significant revisions, the 1926 version of *Ballet Mécanique* still retained much of its original mechanical quality, which was largely because of the presence of the single player piano (Oja 2000a, 192).

### THE NEW YORK PREMIERE OF *BALLET MÉCANIQUE*

Because it was advertised as a performance “no New Yorker [could] afford to miss,” “an atmosphere of musical skepticism” permeated the night of the New York premiere of Antheil’s highly anticipated work (Thompson 2004, 142–3). Indeed, audiences voiced their discontent by booing, whistling, hissing, and even meowing, many leaving Carnegie Hall utterly disgruntled by the performance (142). Several reviews published in newspapers across America chronicle the events of the premiere and shed light on the reception of Antheil’s work. Headlines ranged from “George Antheil Fails to Please a N.Y. Audience” to “Ballet Mécanique Booed in New York,” in which several articles describe the displeasure of audience members who attended the premier (*Sedalia Democrat* 1927). In particular, journalists and critics note that audiences were displeased by the array of noisemakers and instruments used by Antheil, and that the piece ultimately “seemed to annoy and perplex the audience” (*Daily News*, Lebanon, PA 1927).

Indeed, some articles explain that several audience members expressed their dissatisfaction by walking out of the concert hall during the performance: “Many people walked out of Carnegie Hall in the midst of it and many of those who stayed felt they wanted to screech to relieve their feelings” (Wright 1927). The audience, it seems, was particularly displeased by the persistent and continuous mechanical roar that emanated from the stage: “In the midst of it all, a man down in front hoisted a white handkerchief on a cane. Long before the close, the whole house was ready to surrender, for the monotony of steel and percussion, and the mechanical rhythm of both had got on people’s nerves. It was too realistic, and many began to walk out before the end” (Straus 1927).

While several factors likely contributed to the visceral reaction to Antheil’s *chef d’oeuvre*, Schmidt-Pirro suggests that it was the content of the work that provoked audience discontent, particularly its focus on the mechanical, rather than the human (Schmidt-Pirro 2006, 408–9). Some audience members urged

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a “musical synchronized adaptation” with player pianos for the film. This was to be accomplished in collaboration with French inventor Charles Delacomme (who was working for the Pleyel player piano company), who apparently created a system that would synchronize the film projector with the player-piano roll. See Delson (2006) for more information on the production of the film *Ballet Mécanique*.

Antheil to “find beauty ... in the vitality of our human endeavors,” rather than those of the machine (409). This comment reveals the growing ambivalence of American audiences and listeners towards the mechanical in the concert hall, particularly in works that evoked the mechanical or were written for mechanized instruments such as the player piano. By re-evaluating the complex relationship between American audiences and the technology of the player piano, the following section will thus contemplate how the growing skepticism toward and fear of the mechanical affected how audiences both listened to and experienced Antheil’s premiere of *Ballet Mécanique*.

### **THE MUSICAL MACHINE IN AMERICA: THE PLAYER PIANO AND AMERICAN SOCIETY**

Introduced at the turn of the century, player pianos were widely popular among the American middle class. Captivated by their cultural, artistic, educational, and even “healing” properties, Americans were fascinated by these new musical machines (Dolan 2009, 108). Populating households, cafés, and salons, the player piano pervaded both the domestic and public spheres of American society throughout the early twentieth century and was viewed as an embodiment of American technological triumph, innovation, and progress (xiv, 112). Not only did this musical machine help foster a sense of enculturation in middle-class listeners, it also enabled the democratization and survival of “high art” music, allowing listeners to hear their favourite musical works from the comfort of their homes (Patteson 2016, 31). Recognizing the economic potential of these instruments, reputable companies such as Wellsmore and Walters Player-Piano flooded local newspapers with ads urging Americans to purchase these revolutionary instruments (figures 1.1 and 1.2). For composers, the potential of the mechanical piano was equally enticing, enabling them to expand their artistic and creative horizons, no longer bound by the constraints of the human performer. The player piano offered composers “complete freedom in conjuring up complex contrapuntal, harmonic and rhythmic combinations which no human pianist could possibly perform” (Braun 2002, 11).

Despite its obvious affordances, however, the emergence of the player piano also provoked backlash from performers and consumers alike. Amateur musicians, in particular, became increasingly aware of the encroachment of mechanical instruments onto the New York musical scene. By the 1920s, player pianos were fixtures in vaudeville and silent film theatres—institutions that were important employers of amateur musicians at the time, and amateur musicians feared that they would eventually be replaced by these mechanized instruments (Pinch and Bijsterveld 2003, 540). As evidenced in several newspaper ads published by the American Federation of Musicians, American consumers were urged to reconsider their relationship to mechanized instruments. Headlines of these ads varied from “Are YOU Getting YOUR MONEY’S WORTH In Entertainment?” to “Is the Robot Fooling YOU?,” many of which denounced the presence of mechanical music in theatres and concert halls



**BLOOMINGDALES**  
57TH TO 60TH STREET      LEXINGTON TO 3D AVENUE

**Sale of Players**  
*Store Closed All Day Saturday*

If you have no Player in your home **GET ONE NOW.** No better offer could be presented to you at any time to procure a standard Player of recognized merit than the one we offer in this sale. But as the supply of these beautiful instruments is limited we advise you to act quickly.

TRI-SOLO MELODIST

**WALTERS  
PLAYER-PIANO**

**\$475**

Terms **\$3 a Week**

Don't put off the purchase of this Player until you can pay all cash for it. We invite you to take advantage of our **EASY PAYMENT PLAN**, which will give you the opportunity of enjoying the pleasure of a Player-Piano in your home during the time you are paying for it.

**Included Without Extra Charge**  
A Beautiful Music Cabinet—Handsome Bench to Match  
12 Rolls of Music of Your Own Choice and Free Delivery

Among the many important inventions of recent years, the Player-Piano stands out as a shining light to the inventive genius of an American. This wonderful instrument has brought music and entertainment to millions of homes throughout the civilized world. Anyone can play any musical selection, from the classical compositions of the great masters to the popular rag-time of today, without any previous musical education, on the Player-Piano. The mechanical improvements made on the Player-Piano from year to year have made this wonderful instrument so nearly perfect that it is almost impossible to distinguish a selection played on the Player-Piano from hand playing. The new Walters Player embodies all the latest Player devices and stands in a class by itself among Player-Pianos manufactured today. You have the opportunity to possess one of these beautiful instruments providing you take advantage of this offer at once.

If You Cannot Call Tomorrow—Mail Coupon  
Gentlemen—Kindly send me illustrated catalogue and particulars regarding your  
**Player-Piano Sale**  
NAME .....  
ADDRESS ..... W-5

Figure 1.1 “Sale of Players,” *Evening World* (New York, NY), 5 August 1920, 14.



**CHRISTMAS JOY ALL THE YEAR**

**WHEN** winter winds whirl snow against the windows, when homes are bright with love and laughter and dear ones have come from afar, then a player-piano adds a pleasurable thrill to the happy occasion—and makes it perfect.

**The Wellsmore Player Piano**

brings delightful entertainment and education to every home fortunate enough to possess it. The extremely low price of this instrument and the liberal terms of payment, makes it possible for every family to enjoy the manifold pleasures and delights of music.

We will be glad to explain our generous plan whereby you come into possession of the Player Piano immediately on a small down payment.

**Chas. Willard Music House**  
No. 229 North Union St.

Figure 1.2 “Christmas Joy All the Year,” *Times Herald* (Olean, NY), 2 December 1921, 11.

alike, and ultimately argued for the importance of “the human touch” (see figures 2.1 and 2.2).

**Are YOU Getting  
YOUR MONEY'S WORTH  
In Entertainment?**

The American people pay more generously for entertainment than any nation on earth. Their generosity has enriched the motion picture industry.

Spoken dialog has come to replace the subtitle of the silent picture. Tagging along with the talkie comes Mechanical Music—an economy.

Real Music is being ordered out of many theatres in favor of this new comer, who never dared a theatrical appearance until he gained the protection of the Talking Picture's novelty and the magic word "Synchronized." Now synchronization with a picture does not give Mechanical Music the quality of Real Music.

Banishment of Living Music represents a loss for the theatre patron. Is this loss balanced by the substitution of Mechanical Music?

A very great many theatre-goers will answer:

**“NO!”**

Then why should the aforementioned American people, who pay so generously for entertainment, be required to take less for their money than they were wont to get?

**THE AMERICAN FEDERATION OF MUSICIANS**  
(Comprising 140,000 professional musicians in the United States and Canada)  
JOSEPH N. WEBER, President, 1440 Broadway, New York, N. Y.

Figure 2.1 American Federation of Musicians, “Are You Getting Your Money’s Worth in Entertainment?,” *Ithaca Journal*, 9 December 1929, 9.



**Is the Robot Fooling YOU?**

The Paris correspondent of “VARIETY” reports:  
“The music-wise Continentals object violently to mechanical music (in the theatre).”

WHAT, then, if Europeans thus prove their “music-wisdom,” are we North Americans supposed to be, that we are wot to accept mechanical music—and mechanical music only—in the theatre? **MUSICIANS, perhaps?**

What, at least 2,000,000 theatre patrons have rejected that characterization by joining the Music Defense League. They mean that they want Real Music, not Canned Music exclusively, in the theatre.

If you value the Art of Music, you, too, should be numbered among the “music-wisdom.” Just sign and mail the coupon at the left!

.....  
Name .....  
Address .....  
City ..... State .....

**THE AMERICAN FEDERATION OF MUSICIANS**  
OF THE UNITED STATES AND CANADA  
JOSEPH N. WEBER, President, 1440 Broadway, New York, N. Y.

Figure 2.2 American Federation of Musicians, “Is the Robot Fooling You?,” *Times Herald* (Olean, NY), 12 May 1930, 3.

While these ads speak to the growing ambivalence towards the mechanical during the 1920s, they also shed light on the societal tension concerning mechanized labour versus human labour at this time and further reveal a fear of the replacement of the human by the mechanical, particularly in the concert hall. Although composers such as Antheil were fascinated with composing works specifically for mechanical instruments such as the player piano, audiences began to question the unmistakable absence of the human body, as evidenced in a 1926 performance of Paul Hindemith’s work for mechanical organ, *Triadic Ballet*.<sup>4</sup> Citing an account of this performance, Patteson writes, “The piano finished the composition and there was an uneasy pause. Should one applaud? There’s no one sitting there. It’s only a machine” (Patteson 2016, 18).

Although audiences were intrigued by the virtuosic potential of mechanized instruments, they were also hesitant about how they should react to bodiless performances and were troubled by the lack of human presence, expression, and emotion on the concert hall stage. While many were entertained by these

<sup>4</sup> Composed in 1916, *Triadic Ballet* was later featured as the accompaniment for a ballet choreography by Oskar Schlemmer in 1926. According to Andreas Broeckmann (2016, 189), Schlemmer conceived this ballet as a visual representation of the confrontation between the human and the machine, and through his innovative staging, costume design, and puppet-like choreography, his ballet emphasizes the overall mechanization of the human body.

instruments at home, they were not yet accustomed to hearing these instruments in the concert hall, let alone works composed specifically for these machines (Bijsterveld 2008, 139). “The machine,” writes Oja, “brought fear of dehumanization, of loss of connection with the land, of separation from primal essences. It became a symbol of how quickly the new was obliterating the old” (Oja 2000b, 64). Indeed, to counter consumer fear of the de-humanization of music and musical performance, player-piano roll companies began to rebrand their instruments in order to “humanize” and “naturalize” them through innovations such as the “singing tone,” which ostensibly purged the player piano of its mechanical quality (see figure 3). Thus, while these new technologies were viewed as a societal good and emblematic of progress, it is evident that Americans were becoming increasingly aware of the dehumanizing quality of mechanical innovation and the destructive consequences of an industrial and modernized society (Thompson 2004, 120).

### MECHANO-MORPHIZATION AND BALLET MÉCANIQUE

Artistic works that glorified the machine, such as Antheil’s *Ballet Mécanique*, likely exacerbated these concerns, creating unease in audience members and music critics of the time. Although Antheil’s 1927 performance featured ten human pianists, not only were they outnumbered by mechanical instruments and noisemakers, they were ultimately pitted against the ballet’s unerring and precise mechanical core: the player piano (Oja 2000a, 190).<sup>5</sup> It is possible, therefore, that audiences



Figure 3 “The Singing-Tone,” *Evening World* (New York, NY), 17 June 1920, 10.

<sup>5</sup> According to Oja, the piano parts performed during the Carnegie Hall premiere were played by prominent composers and musicians, including Aaron Copland, Colin McPhee, George Herzog, and Carol Robinson.



were put off by both the aural and visual opposition between human performer and player piano in Antheil's ballet, the struggle between human and machine. Similarly, it is also possible to view *Ballet Mécanique* as both an aural and visual representation of human assimilation by the mechanical; by featuring ten human pianists performing highly mechanized parts, the performer not only mimics and enhances the piece's mechanical quality—the performer ultimately becomes part of the machine.

Although the synchronization between Léger's film and Antheil's original score was unsuccessful, it is important to briefly consider how Léger cinematographically reinforced the theme of the mechano-morphization of the human body, as evoked musically and visually in Antheil's score. Using a variety of cinematographic effects and techniques, including montage and mirror reflection, Léger juxtaposes images of the atomized human body (including distorted faces, eyes, lips, and dismembered legs) with highly mechanical and industrial imagery (Broeckmann 2016, 72; Turvey 2011, 59). Through his strategic use of rhythmic editing and repetition, Léger's kaleidoscope-like cinematography blurs the human with the mechanical, making it difficult for the viewer to differentiate between the anthropomorphic and the mecano-morphic. As further explained by Malcolm Turvey, Léger "periodically animates the subjects of the shots with a mechanical beat, regardless of whether they are machines or not" (59). In doing so, Léger's film ultimately depicts the mechanization of the human body, and Antheil's highly mechanical, repetitive, and rhythmic score would have further complemented this process.<sup>6</sup>

The mechano-morphization of the human body evoked in Léger's film not only mirrors the explicit mechano-morphization of the human pianist in Antheil's score, but it can also be understood as an artistic representation or metaphor for the mechanization of human labour during the twentieth century (Broeckmann 2016, 72). Through its emphasis on repetition and rhythmic drive, Antheil's 1926 scoring of *Ballet Mécanique* further complements the connection between human labour, industry, and the mechanical evoked in Léger's film. Commenting on his mechanical work, Antheil writes, "It is the rhythm of machinery, presented as beautifully as an artist knows how... [T]he rhythms are steely and hard. It is the life, the manufacturing, the industry of today" (Oja 2000b, 64). Thus, whether evoked through the replacement of the human performer by the mechanical piano in Antheil's score, or through the visual representation of the mechanization of the human in Léger's film, both artistic works reinforce and perhaps critique the relationship between the human and machine in industrial America during the early twentieth century. Specifically, they portray the growing presence of the machine in industry and artistry, and how human labourers not only rely on the machine, but have become part of the repetitive, monotonous, and automated hum of industry.

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<sup>6</sup> While initial attempts to synchronize Antheil's original score with Léger's film were unsuccessful, both Antheil's 1926 version of the score and Léger's film were later performed together on 18 October 1935 at the Museum of Modern Art in New York (Rose 2003, 62). Recent synchronized versions of *Ballet Mécanique* include the reconstructed version by Ortiz Morales (2016).

## THE MUSICAL MACHINE IN THE CITY: *BALLET MÉCANIQUE* AND THE MODERN AMERICAN URBAN SOUNDSCAPE

Perhaps, however, we can further understand the opposition of the human and the mechanized performer in Antheil's ballet as a metaphor for the opposition between natural and artificial, organic and inorganic, rural and urban. Antheil explains that "the ballet represents to me New York or America. It is a dream of Negroes, skyscrapers and glittering, polished surfaces rising up for thousands of feet. It must contain machinery and our view of life in general" (Sisk 1927). As he confirms, *Ballet Mécanique* was partly inspired by the urban and industrial roar of modern America, and he believed his work embodied the soundscape of New York.

Scholars such as Emily Thompson (2004) have explored how the rise of the machine age transformed and altered the modern American soundscape during the early twentieth century, when industrialization prompted the emergence of new industrial sounds and mechanical noises that permeated the modern American soundscape, especially in New York City. For many city dwellers, mechanical noises were distressing, even potentially destructive to one's health, prompting the rise of noise-abatement programs throughout the 1920s (116–18).

While noise reformers viewed mechanical noise as menacing and perilous to American society, many artists, intellectuals, and avant-garde composers were inspired by these new sounds, and noise became a source of artistic and expressive meaning. By repurposing mechanical noise and transporting it into the realm of the concert hall, Italian Futurist composers such as Luigi Russolo, for instance, advocated for the use of mechanical noise as a source of musical inspiration and ultimately challenged listeners of the early twentieth century (Thompson 2004, 136). Likely *Ballet Mécanique* similarly challenged American audiences, notably the city dwellers of New York, through Antheil's use of several urban-like noisemakers and mechanical sounds.

Reviews of the premiere reveal that the piece evoked strong allusions to New York's urbanized soundscape, which displeased critics of the time. In the *Brooklyn Daily Eagle*, critics confirm the piece's sonic evocation of the noises of industrial America, noting that "it is interesting to see, if not hear, a composer try to put them on record" (*Brooklyn Daily Eagle* 1927). While perhaps interesting to some, other critics such as Burton Rascoe were unimpressed by the work's unmistakable sonic allusions to the New York city soundscape:

All I got of the *Ballet Mécanique* was a headache from the noise, it wasn't music to me. It was just like the noise I get from the street below my office, only louder. In the street below they are building a subway. Pneumatic drills are going all day long. Then there is blasting. Street cars clang and jangle over the steel frogs. Automobiles swear at each other with klaxons and sirens. The police whistle recurs every few minutes regulating traffic. It is really awful. And even if Antheil has caught all this and reproduced it in a musical composition, I don't want to hear it again. (Rascoe 1927)

The audible portrayal of the New York soundscape was further emphasized through the set design featured during the premiere of Antheil's piece. The performance was accompanied by an enormous backdrop, which Donald Fried describes as a "futuristic city of skyscrapers [with] a series of enormous noise-making machines" (Oja 2000b, 73). Thus, while the première of Antheil's work evoked a provocative counterpoint between the visual depiction of New York's urbanized landscape and Antheil's own vision of a highly mechanized American soundscape, it is evident that his vision was also highly unwelcomed by audiences and critics of the time.

By introducing urban and mechanical noises into the concert hall (whether through the use of noisemakers, or highly mechanized instruments such as the player piano), composers including Antheil likely prompted audiences to renegotiate their relationship with the mechanical. By doing so, in Thompson's words, "they tested long-standing definitions of musical sound, and they challenged listeners to reevaluate their own distinction between music and noise. Some of these listeners met the challenge and embraced new music, while others refused to listen" (Thompson 2004, 119).

In his ballet, Antheil transports the urban and mechanical roar of industry into an acoustic space once designated for works conceived in the long-standing and age-old traditions of Western art music performance practice. In doing so, his work ultimately invades a space that was likely considered a retreat for many, a temporal and acoustic space in which they could momentarily escape the chaotic noises of New York City. Thus, during the 1927 première of *Ballet Mécanique*, listeners were not only bombarded by sounds they sought to escape, but, through the visual and aural depiction of New York's urban soundscape, *Ballet Mécanique* embodied and portrayed the encroachment, even invasion, of the mechanical into all spheres of American life. Although it was widely accepted that industrial and mechanical noise represented progress, innovation, and ultimately modern America, audiences were not only unprepared, but apparently unwilling, to hear these noises within the sacred confines of the concert hall (Thompson 2004, 120).

While several other factors likely affected audience perception of the mechanical that have not been addressed in this article, including questions of social status, race, and even gender, it has hopefully broadened the perspective through which we can better understand the reception of Antheil's revolutionary work. Possible lines of inquiry for future research and discussion about this topic include consideration of the societal dimension of mechanical noise and the mechanical aesthetic, notably the possible perception of mechanical sound by the middle class as being associated with the working class, as well as consideration of the racial dimension of mechanical sound and industry, particularly among Jewish textile workers in sweatshops during the early twentieth century (i.e., sound of the sewing machine). The role of the player piano in America during the twentieth century also bears gendered nuances, notably in regard to questions of gender norms, femininity, domesticity, and the female pianist.

Accordingly, by repositioning *Ballet Mécanique* within the emerging industrial and mechanized soundscape of modern America, and by tracing the rise of the player piano during the early twentieth century, this article reveals the growing societal ambivalence towards the mechanical at this time. In doing so, it demonstrates how American audiences began to question their relationship with the mechanical, at home and in the concert hall, and how this ultimately affected their ability and desire to listen to mechanical works such as *Ballet Mécanique*. Although his New York première was considered a failure by critics and audiences alike, perhaps it was ultimately Antheil's intention for American audiences to re-evaluate their relationship with and their reliance upon the mechanical.

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## ABSTRACT

George Antheil's *Ballet Mécanique* is notorious for its cacophonous sonorities, its industrial allusions, and its use of mechanical instruments, notably the player piano. Despite a successful première in Paris in 1926, the 1927 American reception of the piece was viscerally critical. Drawing upon contemporary documents, this article reconsiders the American reception of the ballet in light of the relationship between early twentieth-century American audiences and the mechanical. It suggests that through its use of mechanized instruments, specifically the player piano, *Ballet Mécanique* exacerbated anxiety and skepticism about the mechanical and mirrored a growing fear about the destructive consequences of a mechanized society.

**Keywords:** Mechanical Instruments; George Antheil; Urban Soundscapes; Twentieth Century America

## RÉSUMÉ

Le *Ballet mécanique* de George Antheil est célèbre pour ses sonorités cacophoniques, ses allusions industrielles et son utilisation d'instruments mécaniques, notamment le Pianola. Bien reçue à Paris en 1926, la pièce fut très mal accueillie aux États-Unis en 1927. En s'appuyant sur des sources de l'époque, cet article reconsidère la réception américaine du ballet à la lumière de la relation entre le public américain du début du XX<sup>e</sup> siècle et le machinisme. Il suggère qu'à travers son utilisation d'instruments mécaniques, en particulier le Pianola, le *Ballet mécanique* a exacerbé l'anxiété et le scepticisme à l'égard des machines en reflétant la peur croissante des conséquences destructrices d'une société mécanisée.

**Mots-clés :** Instruments mécaniques; George Antheil; Paysages sonores urbains; Amérique du XX<sup>e</sup> siècle

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