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Pratella and the foundation of musical Futurism

More than a century after its appearance on the European artistic scene, Futurism has become firmly established in the chronicles of twentieth-century avant-garde movements, the first of many *-isms* that followed (Dadaism, Surrealism, Constructivism, etc.). However, the term 'Futurism' is often used inappropriately to refer to *all* Modernist trends, however strange and exotic they might be. A historical account of Futurism needs to recognize that Marinetti was the first to use the genre of the manifesto as a form of artistic communication in order to outline his aesthetic programme. In *The Foundation and Manifesto of Futurism* (1909), he proposed an outline for the future development in the arts, thereby providing a mission statement that all adherents of the movement could subscribe to.

The Futurist adventure in the field of music began a year later with a meeting between Marinetti and the young composer Francesco Balilla Pratella (1880–1955). In 1903, Pratella had taken part in a competition organized by the publisher Sonzogno and was one of twenty winners (out of 237 participants) with his opera *Lilia*, which was subsequently performed in Lugo. His fame increased with the dialect opera, *La Sina d'Vargön: Scene della Romagna bassa per la musica* (Rosellina dei Vergoni: Scenes from the Romagnolo Countryside Put to Music), a rare example of the use of popular traditions in music at the time. It was during a performance of this opera at the municipal theatre of Imola on 20 August 1910 that Pratella met Marinetti and immediately joined his Futurist movement.

As the official musician of the group, Pratella made several theoretical contributions that adopted Marinetti's radical viewpoints and applied them to music. Between 1910 and 1912, he wrote three manifestos that outlined a theoretical framework for a new conception of music. The first was Manifesto dei musicisti futuristi (Manifesto of Futurist Musicians, 1910), which reaffirmed Marinetti's position through a series of judgments and claims intended to give a moral dimension to the musical life of the age and to explore new ways of overcoming the limitations of Italian musical sensibilities at the time, especially the reactionary cultural context in the Italian provinces, from which others, such as Alfredo Casella (1883-1947) and Alberto Savinio (1891–1952), had fled abroad. The second manifesto, La musica futurista: Manifesto tecnico (Futurist Music: Technical Manifesto, 1911), speculated on the possible developments of musical composition within the context of European musical life, while the third, La distruzione della quadratura (The Destruction of Quadrature, 1912), investigated theoretical aspects through a study of rhythm. All three manifestos demonstrated that musical theory and experimentation were further advanced in the rest of Europe than in Italy. Paris and Vienna, in particular, were attracting all kinds

of revolutionary practitioners who developed concepts of polytonality, atonality and twelve-tone serialism, as, for example, Arnold Schönberg in Pierrot Lunaire (Moonstruck Pierrot, 1912) and *Die glückliche Hand* (The Hand of Fate, 1910–1913), Ferruccio Busoni in Sonatina seconda (1912), Alban Berg in Altenberg Lieder (1913), Igor Stravinsky in Le Sacre du printemps (The Rite of Spring, 1913), Debussy in his second book of *Préludes* (1913) and Anton Webern in *Fünf Orchesterstück* (Five Orchestral Pieces, 1913) and Bagatelles for string quartet (1913). It was within this context that Pratella presented Inno alla vita: Sinfonia futurista op. 30 (Hymn to Life: A Futurist Symphony, 1912) in Rome. It contained compositional features that were to become a constant in Pratella's work: a Futur-Expressionism marked by a torpid sensuality alternating with popularist roots and 'Futurist' motifs, at times carefully dissonant, with a reiterated use of the hexatonic scale reminiscent of Claude Debussy (1862–1918).

The Futurists' attack on a country that was profoundly linked to a traditionalist culture sparked a fierce reaction from the musical world. In 1911, Ildebrando Pizzetti (1880–1968) condemned Pratella's theories and the Manifesto of Futurist Musicians, while Giannotto Bastianelli (1883-1927), who himself drew up a manifesto in 1914, and other critics were more positive (see Lombardi: Il suono veloce, 32–33). One of the most critical articles was written in 1914 by Gennaro Napoli:

This is music that is really ingenious, free and modern, that sounds as if "the soul is embracing the future"; music that reflects "all those new impulses of nature, tamed by man by virtue of his ceaseless 'scientific' discoveries", that renders "the soul of the masses, of the great industrial complexes, of trains, ocean liners, battleships, automobiles and aeroplanes..." It makes me feel nostalgic for a "nauseating" Neapolitan lovesong. (Napoli: "Futurismo musicale", 5)

The debate on the Futurist aesthetic agenda, and the compositions that resulted from it, continued in many newspapers over the next few years. Alfredo Casella, one of the few who attempted to stay in touch with what was happening in the rest of Europe, never wanted to be considered a 'Futurist', as he wrote in a lively article from 1919 (Casella: "Diffida"), although in this period his harsh and highly experimental style had much in common with Marinetti's artistic vision. Even the boldest Italian composers – Alfredo Casella, Gian Francesco Malipiero (1882–1973), Ildebrando Pizzetti, Franco Alfano (1876–1954) and Ottorino Respighi (1879–1936) – who had emerged as the protagonists of Italian musical life, kept their distance as they did not dream of forsaking the heritage of the past or of indulging in subversive experimentation that would lead to a crisis of musical form and genre (see Lombardi: "La sfida alle stelle!"). In this way a querelle between Futurists and conservatives began, which was often portrayed as a dispute between dilettantes and academics.

Pratella's compositions remained anchored to those forms that he saw as the fullest expression of Futurist music: the orchestral and choral symphonic poem and the musical drama. Urged on by the tireless Marinetti, Pratella began work on an opera that, for the first time, tackled the heroism of aviation. Initially, it was to be called L'eroe (The Hero), but the title was eventually changed to L'aviatore Dro (The Aviator Dro). It had three acts and was first performed at the Teatro Rossini in Lugo on 4 October 1920, and after decades of oblivion it was restaged in 1996. In this work, Pratella attempted to achieve a synthesis of sound and colour. The scene of the dreams (sogni) involved a rare instance of Wagnerian influence and contained analogies with Luigi Dallapiccola's one-act opera, Volo di notte (Night Flight, 1940). Pratella's opera predated other musical works inspired by the theme of aviation, such as Kurt Weill's Der Lindberghflug (Lindbergh's Flight, 1929), Casella's Il deserto tentato (The Attempt on the Desert, 1936–37), and Dallapiccola's Il prigioniero (The Prisoner, 1949). Pratella was a firm believer in the relationship between intervals as a means of expressivity, a relationship that he never ceased to exploit. "For man, absolute truth consists in what he feels as a human being", he wrote (Pratella: "Futurist Music: Technical Manifesto", 82). Therefore, his poetics of modality, which he called "generative emotional motif" (motivo passionale generatore; Pratella: "Futurist Music: Technical Manifesto", 82), bordered on Expressionism.

Russolo and the 'Art of Noise'

Marinetti, who placed his trust in Pratella as a musician, urged him to go a step further and take a more active part in European musical life. Meanwhile, the leader of Futurism was contacted by the artist Luigi Russolo (1885-1947), who came from a family of well-established musicians. His brother had a brilliant career as a pianist, organist and conductor, collaborating with Toscanini's orchestra. Luigi Russolo had studied at the Brera Academy of Fine Arts and had worked as a graphic designer before joining the Futurist circle in Milan (Tagliapietra: Luigi Russolo: Vita e opere di un futurista, Collovini: Luigi Russolo incisore, Cavadini: Luigi Russolo: Grafiche, disegni, dipinti, and Folini, Gasparotto, and Tagliapietra: Luigi Russolo: Al di là della materia). He participated as a painter in their first group exhibitions, but around 1913 focussed his attention more and more on music, which at the outset was for him primarily a matter of theory. However, he became responsible for what today is considered to be the most important development in the history of Futurist music. In 1913, he published the manifesto, L'arte dei rumori (The Art of Noises), addressed to Pratella, in which he theorized on the possibility of making music with audio sources that imitate the noises of life. He described an imaginary world of sounds that represented the sounds of everyday reality, the world of work, factories and life in a metropolis (Chessa: Luigi Russolo, Futurist, Brown: "The Noise Instruments of Luigi Russolo", Hegarty: Noise-Music: A History, Morgan: "'A New Musical Reality'", and Poggi: "The Futurist Noise Machine").

There had been some precursors, for example *Symphonie des forces mécaniques* by Carol-Bérard (pseud. of Bernard Ollivier), said to have been written in 1908 or 1910 (Prieberg: *Musica ex machina*, 72, and Dumesnil: *La Musique contemporaine en*

France, 215–216). Ferruccio Busoni (1866–1924), in his Entwurf einer neuen Ästhetik der Tonkunst (Sketch of a New Aesthetic of Music, 1907), had already outlined a similar theory and was one of the first to come to grips with a conception of microtonal music, referring to the first electric generator produced in Washington by Taddeus Cahill, later known as the *Telharmonium* (Prieberg: *Musica ex machina*, 25). After a life spent listening to the clarinet, the traditional orchestra, the piano and the harpsichord, Busoni believed that music had to move beyond traditional sounds and that the moment had come to construct new instruments for this purpose.

Russolo's ideas flew in the face of traditional academic thinking. To conceive of noise as the arrival point of an aesthetic process meant consigning harmony and melody to the rubbish heap and transforming sounds into events. With the help of the technician Ugo Piatti (1888–1953), he constructed new instruments that were able to produce these sounds: he called them *intonarumori*, instruments for 'tuning' sounds at various pitches. It was an ingenious revival of an instrument from previous centuries, the Ghironda (wheel fiddle). The intonarumori were actually boxes that housed a wooden disc. A handle on the outside of the box was connected to a rotor inside; when the handle was turned, the rotor rubbed against a string, the vibration of which was amplified through a membrane. An external megaphone gave the sound a further boost. Moving the handle up and down, the operator tightened or loosened the string, thereby raising or lowering the pitch and making a glissando, which could be held at any position. This was a totally new concept, even though in 1903 the eccentric Dutch scientist Henri Adrien Naber (1867–1944) had invented an orchestra of sirens (Koning: "Dr. H.A. Naber").

The characteristic timbre of the *intonarumori* was provided by the wooden disc: smooth for the *Ululatore* (Howler), indented for the *Crepitatore* (Crackler), with a metal spring for the Gorgogliatore (Gurgler) and so on. The first prototypes were produced between 1913 and 1914, the first of which, a Scoppiatore (Rubber), was presented at the Storchi Theatre in Modena on 2 June 1913 (Berghaus: Italian Futurist Theatre, 118–122). Subsequently, Russolo worked on further Noise-Intoners, ending up with 29 in the three concerts held at the Théâtre des Champs Elysées in Paris (17, 27 and 28 June 1921). He subsequently combined his family of apparatuses in a single instrument, which he baptized Rumorarmonio or Russolofono.

With his noise instruments, Russolo had overturned the traditional musical parameters of pitch, intensity, timbre and rhythm and pushed sound into a totally new dimension, opening up new grammatical and syntactical possibilities. The bundle structure created by continuous sounds gave the impression of a linear flow, or what Russolo called "acoustic voluptuousness" (Russolo: L'arte dei rumori, 92). It was based on the analysis of the real sounds heard in everyday life, in which all acoustic phenomena were catalogued. Russolo then attempted to reproduce each of these phenomena with an instrument. To oppose the abstraction of grammatical formalism in tempered music with the material nature of the sound source, which could be realized in unexpected fusions, was nothing short of revolutionary. In this process, sound was indeed abstracted but only to be rendered material once again, and Russolo was fully aware that this would be far more Futurist than any novelty emerging from music written according to traditional parameters. His 1913 manifesto, *The Art of Noises*, and the book with the same title that followed three years later, constitute the first fundamental technical treatise on *suono-rumore* (noise-sound; see "The Art of Noises: A Futurist Manifesto", 134); a century later, Russolo's conceptions and practical experiments can be considered the most significant legacy of Futurism to music. However, using the instruments made by his brother Antonio Russolo did not do him great service when the latter played *Corale* and *Serenata*, two rather uninteresting pieces composed by his brother, in a concert given at the Théâtre des Champs-Élysées (17, 27 and 28 June 1924; see also p. 459 in the entry on France), in which he used the *intonarumori* in conjunction with a small orchestra (the two compositions were also released as a 78 rpm record in 1924).

Marinetti was an intellectual and occasional music critic (see Lista: *La Scène futuriste*, 26–30) who understood the importance of the international context of Futurist music and did everything he could to promote a Futurist music of noises. The sceptical reactions of some, and the platonic enthusiasm of others (including well-known composers such as Maurice Ravel and Edgar Varèse, who heard the *intonarumori* at Marinetti's home in Milan in 1914), identified Russolo as being more of an artist than a musician. The experience of the *arte dei rumori* has not found a place in the history of music as almost no original recordings, scores and musical instruments remains.

Russolo shares a fate similar to that of the architect Antonio Sant'Elia, whose extraordinarily designs were never realized. Their intuitions occupied an important place in twentieth-century history, alongside contemporary masterpieces, but their value was only understood after the Second World War, when the Utopias they envisaged were taken up in musical and architectural thought. The 1950s saw the advent of Musique concrète, invented by Pierre Schaeffer (1910–1995). The use of ready-made noises recorded and assembled in a musical collage mark the first clear derivation from the Spirale di rumori (spiral of noises; see Chessa: Luigi Russolo, 151-168). A few years previously, John Cage (1912-1992) had invented his 'prepared piano', a percussion instrument that modified sound by adding objects such as screws, insulation material, rubber, pieces of wood, etc. between the strings, the distances between them calculated to produce an interplay of harmonic resonances. In the electronic music of the 1950s, the concept of horizontal structure can be found, too. Here, bundles of sound were meant to encourage the listener to contemplate, analyse and appreciate the secondary timbres and the complex spectral features of the rhythms. They were technically more advanced than Russolo's, due to the use of magnetic wire systems and tape recording.

Russolo also invented the *arco enarmonico* for the violin, with the intention of creating new sonorities (see Russolo: "L'arco enarmonico"). It was a kind of long screw that vibrated the string when pulled across it. The vibration was produced at the point where the bow was drawn, dividing the string into two parts, and two sounds that

corresponded to the proportions of these two parts. The bow could be drawn over the string at any point to produce any fraction of a tone. Thanks to Russolo, all tonal systems, including polytonality, atonality and twelve-tone serialism, were given up in favour of what both Pratella and Russolo called 'enarmonia' (enharmonic modulation; see Pratella "Futurist Music: Technical Manifesto", 81; Russolo: "Conquista totale dell'enarmonismo"), which for them meant the possibility of moving from a high frequency sound to a low one without passing through intermediate stages, but by using glissando. This changed everything because at this point music was no longer to be codified in a system of 88 levels, but could have an infinite number.

Today, only Russolo's theoretical works survive. There are no prototypes of instruments, and not any musical manuscript except for a fragment of Risveglio di una città (Awakening of a City, 1913), reproduced in the review Lacerba. His Futurist manifesto, The Art of Noises, began with the reflection that in ancient times the world was immersed in silence. He then focussed attention on the metropolis, the machine and everything that burst onto the scene in the new century, bringing with it new sounds. He believed in a Utopia in which everyday noise would substitute a musical tradition that was linked to the past and had to give way to modernity. His Ululatori, Gorgogliatori, Scoppiatori, Sibilatori, Ronzatori, Stropicciatori and all the rest of them can be considered today in much the same way as Marcel Duchamp's Fontaine (Fountain, 1917), an invention that was meant to initiate a new way of conceiving 'art'.

Futurist music after the First World War

It was obvious that the myth of speed and everything that had been discussed in Futurist manifestos before the First World War had irreversibly transformed the concept of form in relation to the passing of time. The linear, narrative nature of sound had been destroyed or irreversibly fragmented in a collage. Increasingly removed from narration or representation, art had given rise to deformations of classical notions of form.

One interesting aspect that stemmed from the early Futurist serate (see pp. 247– 248 in the entry on Italian theatre in the present volume) was the practice of improvisation. In 1921, two Roman musicians, Mario Bartoccini (1898–1964) and Aldo Mantia (1903–1982), published the manifesto, L'improvvisazione musicale (Improvisation in Music), which, for the first time, theorized on free improvisation both by soloists and by entire orchestras. Several Futurist theatre productions in the post-war period required the cooperation of musicians. Fortunato Depero's Balli plastici (Plastic Ballets) was presented on 14 April 1918 by the puppet company of Gorno dell' Acqua at the Teatro dei Piccoli in Rome. The four plays included music by Alfredo Casella, Gerald Hugh Tyrwhitt-Wilson (Lord Berners; 1883–1950), Gian Francesco Malipiero and Béla Bartók (1881–1945). The musical director was Alfredo Casella (see Berghaus: *Italian Futurist Theatre*, 309–315). Mention should also be made of the *Teatro del colore*, which had been invented by Achille Ricciardi (1884–1923) in an attempt to dramatize moods and emotions through colour, in an abstract approach to theatre, which made use of forms moving on stage and the projection of coloured light (Berghaus: *Italian Futurist Theatre*, 347–357). In 1919, Ricciardi published *Il teatro del colore: Estetica del dopo-guerra* (Theatre of Colours: A Post-war Aesthetics) and, together with Enrico Prampolini (1894–1956), put on four programmes with three to four plays each at the Teatro Argentina in Roma (21–31 March 1920). Prampolini's production had the collaboration of a number of musicians who played music by Frédéric Chopin, Pratella, Isaac Albéniz, Adelmo Damerini, Gian Francesco Malipiero and Vittorio Gui. Prampolini sought to transform set design into an art that interpreted the drama in a non-mimetic manner and whose dimensions consisted of time and movements through space, rather than static space.

Any attempt to shed light on music from this second period of Futurism, under Fascism, faces the difficulty that musicians working during the time tended to remove this tragic period from their memory. However, two musicians are worthy of attention: Franco Casavola (1891–1955) and Silvio Mix (Silvius Aloysius Micks, pseud. of Silvio De Re, 1900–1927). Franco Casavola was a pupil of Ottorino Respighi. In 1924, he published several theoretical manifestos on music and its relationship with the stage and the visual arts: La musica dell'avvenire (Music of the Future, 1924) and La musica futurista (Futurist Music, 1924), which included Le sintesi visive (Visual Syntheses, 1924, written with Sebastiano Arturo Luciani [1884–1950] and Anton Giulio Bragaglia [1890–1960]), Le atmosfere cromatiche della musica (The Chromatic Atmosphere of Music, 1924) and Le versioni scenico plastiche della musica (Scenic-volumetric Versions of Music, 1924). He courageously adopted an outspoken and risky standpoint with regard to the cultural despotism that the Fascist régime was imposing, most notably in his bold defence of jazz, not only in his theoretical writings, but also in the language of his compositions, in which he made use of rhythms and stylistic elements connected to jazz.

Casavola collaborated with Vinicio Paladini (1902–1971) and Ivo Pannaggi (1901–1981) on the *Ballo meccanico futurista* (Futurist Mechanical Ballet), performed at the Casa d'Arte Bragaglia, on 2 June 1922. From a musical point of view, the significance of the event consisted in the polyphony created by the noises made by motorcycles. By varying the intensity of the noises and accelerating or slowing down the timing, it was possible to produce prolonged insistent fugues, syncopated outbursts, glissandos and backfiring, stops and starts ending in angry crescendos (Berghaus: *Italian Futurist Theatre*, 422–426).

Two years later, with Silvio Mix, Casavola provided music for the *Nuovo teatro futurista* tour through various Italian towns and also contributed music for Prampolini's *Théâtre de la Pantomine* at the Théâtre de la Madeleine in Paris (12 May–June 1927). Only recently have the scores that Casavola wrote in the 1920s come to

light. They include Fantasia meccanica (Mechanical Fantasy), the ballets Anihccam del 3000 (The Machine of the Year 3000), Hop Frog (The Jester) and Operazioni aritmetiche (Arithmetic Operations) as well as the pieces Il castello nel bosco (The Castle in the Woods), L'alba di Don Giovanni (Don Juan's Dawn) and Il mercante di cuori (The Merchant of Hearts). It has finally become possible to assess Casavola's considerable skill as an orchestrator and as a composer of film music.

Casavola's interest in synaesthesia, which he expressed in his manifestos, referred to the possibility of listening to paintings and seeing music. The prime mover behind all of this was Marinetti, who, with his *Tayole parolibere* (Free-Word Tables), had created an important precedent for symbolic notations of poetic actions that used visual codes or ideograms to guide performers. Casavola also wrote lyrics for Futurist songs such as La canzone di Uriele (Uriel's Song), the text of which is entirely made up of meaningless phonemes. Others were musical transcriptions of a tavola parolibera used for advertising purposes, *Campari*, one of the first ever jingles, or to cabaret-style songs such as Fox Trot zoologico, Tankas and Quatrain. All written in the 1920s, they displayed considerable refinement in their use of timbre and a French allure. In 1927, having decided that Futurism no longer corresponded to the way his music was developing, Casavola left the movement. Two years later, his short opera Il gobbo del califfo (The Caliph's Hunchback) had a successful première at the Teatro dell'Opera in Rome (4 May 1929) and won the "Governatorato di Roma" prize.

The other musician who stands out in the panorama of those years is Silvio Mix, a brilliant and precocious self-taught composer who was already conducting his own work at the Pergola Theatre in Florence at the age of 19 and used to improvise with Felice Boghen (1869–1945), a well-known concert pianist and composer. Born in Trieste, Mix's family moved to Florence just before the outbreak of the First World War. In Florence, he began to take part in Futurist soirées held at the Materazzi rooms in via Martelli, at the Galleria d'Arte Cavalensi & Botti and in the gallery that had been opened by the publisher Ferrante Gonnelli. Many of the pieces that were named in the records of the Futurist soirées for which he played the piano actually referred to improvisations. However, when Mix died, he left behind a number of compositions, some of which have never been performed, such as the string quartet in three movements, Preludio, Notturno and Scherzo. More like written-out improvisations are the pages for piano, Due preludi (from Stati d'animo), Profilo sintetico musicale di F. T. Marinetti (Condensed Musical Profile of F. T. Marinetti) and Omaggio a Stravinsky.

Mix wrote and conducted the symphonic introduction to the opera *Sardanapalo*, which was performed in April 1919 at the Teatro della Pergola, and in December of the same year he was again at the Pergola with his Intermezzo sinfonico del metàdramma "Astrale" (Symphonic Intermissions for the Meta-Drama "The Stars"). A few years later, he gave a presentation at the Futurist Congress, held at the Birreria Spatenbrau in Milan (23–24 November 1924), and wrote a series of articles for the newspaper L'impero (Bianchi: *La musica futurista*, 103–123).

In 1921, together with Franco Casavola, he wrote some music for performances of the *Teatro della sorpresa* (The Theatre of Surprise), organized by Francesco Cangiullo (1884–1977) with the De Angelis Company, as well as for its second tour in 1924, now baptized 'Nuovo teatro futurista' (New Futurist Theatre). Mix contributed the ballet *Psicologia delle macchine* and the symphony *Bianco e rosso* (White and Red), originally written for Marinetti's play of the same name, produced at the Teatro degli Indipendenti in Rome in 1923. This was followed in 1926 by music for *L'angoscia delle macchine* (Anguish of the Machines) by Ruggero Vasari (1898–1968), which should have been performed in Berlin with designs by Vera Idelson, and for Marinetti's *Cocktail*, performed as part of the *Théâtre de la Pantomime Futuriste* (Futurist Pantomime Theatre) at the Théâtre de la Madeleine in Paris (May–June 1927).

Within the context of second-phase Futurism, mention could be made of additional musicians, although their involvement with the movement was short lived. These include Aldo Giuntini (1896–1969), Virgilio Mortari (1902–1993) and Carmine Guarino (1893-1965). Giuntini adopted the idea of sintesi (essential brevity) from the early years of Futurism and after 1928 wrote many piano pieces bearing the title Sintesi musicali futuriste. The most interesting of these are Allegria (Gaiety), Il mare (The Sea), Infinito (Infinity), Linee aerodinamiche a 3000 metri (Aero-dynamic Lines at 3,000 Metres Altitude), Festa dei motori (Feast of Engines) and Le macchine (Machines), published in the magazine Stile futurista (Turin, 1934–1935), together with the Manifesto dell'aeromusica sintetica geometrica e curativa (Manifesto of Aero-Music: Dense, Geometric and Curative, 1934). A few of these and others (Le macchine, L'infinito, Il mare, La festa dei motori, Amanti in volo and Battaglia simultanea di terra, mare e cielo) can be heard in a rare 78 rpm recording made by Giuntini in 1931. Marinetti, who organized Futurist evenings of poetry and music with Giuntini, cited other compositions in Futurismo – Aerovita (1934), but these have not survived (Marinetti: "L' aeromusica futurista").

Giuntini contributed to the *Canzoniere futurista amoroso guerriero* (Futurist Songbook for Love and War, 1943) with compositions for voice and piano. The score of *Fuor dai dotti orizzonti* (Leave the Learned Horizons Behind) was designed by Giovanni Acquaviva (1900–1971), with notes represented as triangular little flags. In the mid-1930s, he also attempted to construct an instrument that could produce microtonal music. This *iperfonio* (Hyperphone) was a kind of piano, with two keyboards tuned at an interval of a quartertone and amplified; its volume could be controlled with a pedal (Compagno: *Aldo Giuntini futurista*, and Puglisi: "Le immagini sonore di Aldo Giuntini").

Virgilio Mortari was a pupil of Ildebrando Pizzetti, with whom he shared a similar Neo-classical vision (Ragni: "L'avventura futurista ed altro"). His encounter with Marinetti towards the end of the 1910s led to a momentary interest in Futurism. During this period, he composed *Fox-Trot futurista per il Teatro della sorpresa* (Fox-Trot for the Futurist Theatre of Surprise, 1921), which was published with humorous cartoons and

staves undulating freely across the page, drawn by an unknown artist. He also wrote compositions for voice and piano, such as *La mia anima è puerile* (My Childish Soul), using lines taken from Marinetti's Destruction: Poèmes lyriques / Distruzione: Poema futurista (Destruction, 1904/1911). A rare musical-theatrical synthesis was Dramma-Sinfonia, in which a pianist played a piece for a few seconds while a man dressed in a tailcoat ran across the stage before the curtain closed.

Carmine Guarino was also connected with Futurism. A violinist and composer, he was the first to compose the music for a 'symphonic radio opera' entitled Tum Tum ninna nanna (Il cuore di Wanda) (Tum Tum: A Lullaby, Or Wanda's Heart, 1931), written by Pino Masnata (1901–1968; see p. 232 in the entry on Radio in this volume). He composed many other works, including music for Marinetti's Simultanina: Divertimento futurista in 16 sintesi (Simultanina: A Futurist Diversion in 16 Short Acts, 1931), of which survives a *Canzone* for voice and piano to words by Escodamé (pseud. of Michele Leskovich, 1909–1979). Furthermore, in the 1930s he wrote a Concerto for Pianoforte and Orchestra and other works for piano, such as Canzone Barbara, Capriccio and two curious waltzes entitled La Rinascente, evidently to publicize the department store of the same name. In 1937, Guarino composed a series of piano pieces with the title Musica per bimbi (Music for Children), issued with a Futurist cover design by Giovanni Acquaviva. Late in life, in the 1960s, he revived his interests in Futurism and wrote a *Partita su temi futuristi* (Musical Suite on Futurist Themes).

Another short-lived Futurist was Giacinto Scelsi (1905-1988) who, as a young man, had been very interested in Russolo's ideas (Freeman: "Tanmatras: The Life and Work of Giacinto Scelsi"). In 1929, he composed a work entitled Rotativa (Rotary Press), with the subtitle "Coitus mechanicus", a rare example of music inspired by the myth of machines, similar to Le macchine by Aldo Giuntini (Verzina: "Alcune categorie del futurismo in 'Rotativa'"), cited above. A theme favoured by late-Futurist musicians, and which went hand in hand with their taste for rhythmical and mechanical movement, was that of aviation. Ermete Buldorini (1914–1988) and Mario Monachesi (aka Chesimò, 1908–1992) were both composers of aeromusica. The former wrote Respirare il mare volando: Sintesi per pianoforte e voce parlata-urlata (Inhaling the Sea While Flying: Synthesis for Piano and Spoken/Shouted Voice, 1938), performed at the Gran Ballo dell'Ala held at Falconara Marittima airport at the opening of the touring exhibition of *Aeropittura futurista* (7 August 1938). In the same year, Monachesi composed *Contraerei* (Anti-aircraft), *Ala spaziale* (Wing in Space) as well as a piece for four hands, Eliche (Propellers: Aeromusic for two pianos). Luigi Grandi (1902–1973) was also fascinated by machinery, as is evident from the titles of his compositions *Aeroduello: Dinamosintesi* (Duel in the Air: Dynamic Synthesis) and Cavalli + Acciaio: Meccanocavalcata (Horses + Steel: A Mechanical Ride). Of other composers we have only the names: Renzo Massarani, Armando Muti, Franco Sartori. All of these examples cited show that, by the end of the 1930s, Futurist music had become a popular art form that interpreted an anti-formalist spirit within Fascist culture.

Futurist music in Russia

Futurism was not just an Italian movement, and the theories of *The Foundation and* Manifesto of Futurism (1909) had an international appeal. When Marinetti went to Russia to present Futurism (26 January – 17 February 1914), he confronted strong resistance from Russian artists and writers who claimed that they were the originators of this avant-garde movement and that it was part of their own artistic tradition. Among them was the musician Naum Izrailevich Lur'e (1891–1966), who later called himself Artur Sergeevich or Artur Vintsent Lure and is best known as Arthur Vincent Lourié (see Gojowy: "Sinestesia futuristica e melodismo magico in Arthur Lourié", Gojowy: Arthur Lourié und der russische Futurismus, and Levidou: "Arthur Lourié and His Conception of Revolution"). He was one of the most interesting composers of the period, whose compositions for piano illustrate his interests in dodecaphony and innovative forms of notation. Lourié steered a highly personal course between Primitivism and Futurism, the essential nature of which eventually came to be identified as 'fragmentation', with its isolated patterns juxtaposed between silences intended as sound vacuums, taking to extreme limits the dilation of resonance that can be found in the last works of Franz Liszt (1811–1886).

After beginning with an expressive, late-Romantic style in his Cinq Préludes, op. 1 (Five Preludes, 1908–1910), the fruit of a restless and brilliant adolescence, he soon succumbed with his opus 2, two Estampes (Prints, 1910), to the appeal of the hexatonic world of Claude Débussy. However, this turned out to be a brief transition as he began to explore the harmonic possibilities of superimposed fourths reminiscent of the contemporary works of Alexander Scriabin (1872–1915). The Quatre Poèmes op. 10 (Four Poems, 1912), together with *Deux Poèmes op.* 8 (Two Poems, 1912), paved the way to the most significant moment in Lourié's pianistic output, which comprised Masques (Tentations) op. 13 (Masks: Temptations, 1913) and Synthèses (Délires) op. 16 (Syntheses: Hallucinations, 1914). In these latter two works, the emancipation of dissonance is achieved through a progressive process of deformation: octaves become chords in which the fundamental is no longer doubled, but united to the seventh and minor ninth, intervals of a fifth become augmented fourths, in such a way that the chord structure creates a highly complex sound spectrum. From a tonal point of view, the sound fabric is expanded - with continual contrasts between low and high pitches and with oblique excursions into fields that anticipate certain passages in Pierre Boulez's First Piano Sonata (1946) - while the contrast in rapid dynamics is heavily accented. Masques especially features the dilution of a syntactic development into isolated fragments, while Synthèses, completely divorced from any kind of tonality, harnesses proto-dodecaphonic material.

In *Formes en l'air* – à *Pablo Picasso* (Forms in the Air, Dedicated to Pablo Picasso, 1915), the process of sublimation is complete, made possible by an increasing fragmentation of isolated episodes immersed in an empty silence. Written with an innovative notation system, on numerous separate staves, its performance requires

improvised choices to be made about the length of the silences between fragments. This work can be considered an example of Cubist composition predating Karlheinz Stockhausen's first Klavierstücke (Piano Pieces, 1952). Lourié's extraordinary research into the language of music came to a close with the October Revolution in 1917. Lourié abandoned Modernism for a mysticism that led him back to more traditional forms of expression. His *Troisième Sonatine* (Third Sonatine, 1917), even though it is asymmetrical and maintains a sense of deformation with powerful dissonances in a style that recalls Robert Schumann (1810–1856), reclaims a tonal dimension that concludes resolutely in the key of d-minor.

Today, Lourié's work is not very well known; many compositions got lost when he fled Russia at the beginning of the 1920s during an official visit to Paris on behalf of the Soviet authorities. As a result, his pre-1917 work has largely vanished from memory. Lourié was in contact with Igor Stravinsky, Ferruccio Busoni and others, and when the Nazi troops arrived in Paris (14 June 1940), he emigrated to the United States, where he spent the rest of his life more or less in obscurity, writing film music and occasionally giving performances of his earlier works.

Certain aspects of Futurism found favour in the Soviet Union, such as the Modernist approach to urban design and the rhythms of modern life, but not the formal experimentation that jarred with the aesthetics of Social Realism. This can be seen in the works of another suppressed composer, Alexander Mosolov (1900–1973), who until a few years ago was known chiefly for Zavod (Iron Foundry, 1927), a rare example of a Futurist work for orchestra (Savenko: "Muzyka mashin i ee avtory", Sprengel: "The Futurist Movement in Russia", and Vorob'ev: Russkii avangard i tvorchestvo Aleksandra Mosolova 1920–1930-kh godov). In a letter dated 21 September 1928, Prokofiev wrote to Diaghilev: "I already told you about Shostakovich, Mosolov and Gavriil Popov, whose talents clearly stand out above the crowd" (Prokofiev: Selected Letters, 68). The critic Viktor Belyaev wrote: "His music is characterized greatly by a psychological dimension, by which I mean a penetration of the psyche, often into its most painful moods [...] and the ability to enter into a nocturnal dimension, into the music of the night. It is the 'nocturne' of the city and its modern life tragedy, the tragedy of solitude in people and the tragedy of fantasy and reality" (Beliaev: "A. V. Mosolov", 84). A few years after the Revolution, the Soviet Union was a country animated by strong collective tension, and Mosolov's 'tragedy of solitude' signified an incapacity to face up to the new political reality and to fulfil his rôle in the Socialist collective. His lack of confidence, contempt for Marxist values and streaks of pessimism were considered harmful to the 'proletarian culture' of the Soviet Union. In 1932, as a result of the harsh criticism he received and the climate of hostility that surrounded him, Mosolov sent a letter to Stalin, in which he asked to be given further work opportunities. The real troubles began in 1936, when he was expelled from the Composers' Union under the pretext of causing public scandal in a state of drunkenness. After a visit to Ashgabad in Turkmenistan to investigate the nature of its popular music – causing him to write Turkmen Song to Stalin, which has since disappeared – he was arrested in 1937 and sentenced to eight years in a labour camp, later reduced to five years' banishment from the cities of Moscow, Leningrad and Kiev.

While *Zavod* achieved international notoriety (it was performed in Rome under Bernardino Molinari in 1932 and a few years later by the Orchestra Sinfonica dell' EIAR under Victor De Sabata), Mosolov's sonatas for piano (the third of which was destroyed as a punishment by the Soviet authorities) are much less known. They constitute a fundamental link between the piano music of Scriabin and Prokofiev and, together with the *Second Sonata op. 5* by Sergei Protopopov (1893–1954), are among the most important Russian compositions for the piano of the interwar period. Also worth remembering are his *Gazetnye obiavleniia* (Newspaper Advertisements, 1926), four short compositions for soprano and piano taken from advertisements in *Isvestiia*, and his two concertos for piano and orchestra (Lombardi: "La musica pianistica di Aleksandr Mossolov").

Futurist music in the USA

The impact of Futurism in the United States was minimal (see the entry on the USA in this volume), and there were no contacts between Italian Futurist composers and musicians on the other side of the Atlantic. However, some American artists who had lived in Europe were influenced by it. One of them was George Antheil (1900-1959), an eccentric musician, inventor and endocrinologist, who was born in Trenton/NJ to Polish parents and died in Los Angeles (Whitesitt: The Life and Music of George Antheil 1900–1959). He gave numerous concerts in Europe and had the label 'Futurist-pianist' printed on posters that advertised them. Strongly attracted by the myth of the machine, he wrote *Ballet mécanique* (The Mechanical Ballet, 1923–1924) for the film of the same name by Fernand Léger (Albright: "Antheil's 'Ballet Mécanique'", Freedman: "George Antheil: Ballet Mécanique", and Oja: "'Ballet Mécanique' and International Modernist Networks"). The score provides indications for a rhythm that makes sound and image coincide. The composition grew out of a desire to put together mechanical instruments in a synchronized performance, something that for many years remained a utopian idea. Antheil's score was written for a bizarre group of instruments that could be adapted in accordance with their availability: sixteen pianolas, eight xylophones, four bass drums, an aeroplane engine, electric doorbells and so on. It immediately proved problematic to tune the pianolas to the other instruments. After being premièred in Paris in 1926 and the following year in New York (Aaron Copland was one of the pianists), the first version for sixteen pianolas turned out to be unfeasible, and Antheil drastically diminished their number, producing a revised version for eight pianos to be played live. This was later reduced to four, and today the ballet is performed with groups that vary in their faithfulness to the original specifications, but which in any case sound equally effective.

At the beginning of the 1920s, Antheil composed numerous 'Futurist' piano pieces that were reminiscent of Stravinsky, but with an 'esprit nouveau' intended to scandalize bourgeois concert-goers (Lombardi: "George Antheil: Pianista-futurista tra primitivismo e mito della macchina"). The most important from this period were *Mécanismes* (Mechanisms, c.1923), and *Sonata sauvage* (Wild Sonata, 1922–23). His autobiography, *The Bad Boy of Music* (1945), is an interesting and amusing description of the climate in Paris during those years. Charles Amirkhanian, the cataloguer of Antheil's compositions, has recounted the curious and multi-faceted aspects of the creativity of this eccentric artist (Amirkhanian: "An Introduction to George Antheil"). In 1942, he became friends with the actress Hedy Lamarr (1914–2000), and together the two of them patented an ingenious information coding system, similar to the perforated paper rolls used in pianolas. The idea was presented to the National Inventors Council in Washington and patented on 11 August 1942 as a 'System for Secret Communication no. 2 292 387'.

Perhaps the composer most closely identified with the art of noise was Henry Cowell (1897–1965). Cowell conceived of a piano that could be used as a whole, not just played by using a keyboard and three pedals. He wanted the whole body to resonate by plucking the strings directly. For this kind of interaction, he coined the term 'string piano'. It is unknown whether he was ever in contact with Russolo or Marinetti, but his music operated with a new language of noise effects called 'black and white noise' (Sachs: *Henry Cowell: A Man Made of Music*).

Cowell was a protagonist – along with Charles Ives (1874–1954), Charles Sprague "Carl" Ruggles (1876–1971), Leo Ornstein (Lev Ornshteyn, 1893–2002), George Antheil and three or four others – of the American musical renaissance, which took place in the first quarter of the twentieth century. His works were revolutionary in character when compared to previous compositions for the piano. Cowell already made systematic use of sound clusters in his very first composition, *The Tides of Manaunaun* (1912), one of three *Irish Legends* written at the age of fifteen. Although they may seem the spontaneous and ingenuous fruit of an adolescent creativity, they already pointed the way to how sonorities would be organized according to precise criteria of dimensionality. This is also true for *Dynamic Motion* and *Antinomy*, parts of his *Five Encores to Dynamic Motion* (1917). In *Tiger* (1928), Cowell achieved a synthesis in which lines of repeated chords change and are developed, accumulating or diminishing, moving closer to or further away from the cluster, which remains implicitly suspended in a relation of movement and stasis.

Cowell's chaotic sound cluster can be grouped into three categories, which sound quite different and are recognizable: white key clusters, black key clusters and chromatic clusters using all the keys. In all three types, the pitch is perceptible in the highest or lowest note of the range. In this way, melodies similar to those in Schönberg's *Klang-farbenmelodie* (sound-colour-melody) are created. In this way, too, the piano is exalted for its percussive qualities, but is also defined exactly by its 88 notes. From this point of view, Cowell needs to be remembered as a major influence on his contemporaries.

Russolo was not interested in researching the sound possibilities of the piano, but his concerts held at the London Coliseum (15–21 June 1914) aroused the interest of the twenty-year-old Leo Ornstein. This successful pianist was so intrigued by the event that he wrote compositions inspired by Futurism and defined his recitals as "Concert[s] of Futurist Music" on the posters that advertised them. He wrote piano pieces such as *Suicide in an Airplane* (1913) and *Anger* from *Three Moods* (1914), but especially *Danse sauvage* (Wild Dance, 1915), the noise of which borders on violence and overcomes the distinctions between order and chaos. Tonal and rhythmic clusters are mixed with extremely complex chords and then superimposed on a polyrhythmic progression that accentuates the pieces' percussive density.

Considered at the beginning of the twentieth century to be an 'enfant terrible of the piano', Ornstein was born in Kremenchug in Southwest Russia and died in Green Bay Wisconsin. He made his début at the Steinway Hall in London in 1914, and the Daily Mail of 27 March wrote:

WILD OUTBREAK AT STEINWAY HALL

A pale Russian youth dressed in velvet, crouched over the instrument in an attitude all his own, and for all the apparent frailty of his form, dealt it the most ferocious punishment. Nothing as horrible as Mr. Ornstein's music has been heard so far – save Stravinsky's 'Sacrifice to Spring'. Sufferers from complete deafness should attend the next recital.

Ornstein's reputation as a 'Futurist' accompanied his career as a performer and composer for many years. As a rule, he improvised almost everything, making use of other musicians to write 'under dictation', a practice he had in common with Giacinto Scelsi. This explained the unreasonable scepticism of many critics. In reality, his compositions were extremely original in style and reveal a highly creative personality.

Innovative aspects of musical Futurism

The historical avant-garde at the start of the twentieth century directly affected national and nationalistic cultures and initiated a process of creative and intercultural osmosis. Various strands can be distinguished in so-called 'Futurist music', and they are often found together. Pratella's 'Futurist Expressionism' evokes his notion of "generative emotional and inspirational motifs" (Pratella: "Futurist Music: Technical Manifesto", 83), referring to a succession of sound emotions that are so strong that they create a kind of patchwork, a plot in the form of a collage. This anticipated what years later was to become a Surrealist procedure. In the case of Pratella, however, it was dictated not so much by irrational or unconscious factors, but by a need for form that controlled the internal relations of the sound narration.

'Noise', as conceived by Russolo, has influenced several generations of musicians, who attach more importance to the event than to its form, and to the dynamism

of Becoming within sound structures. Perceived as a material entity, music has always been considered as an art form existing in time rather than in space. The Futurist myths of speed and simultaneity have been represented very differently in music and fine arts, since the flow of time requires the synthesis of different moments to be approached in different manners. The issue is that the visual arts and music have often switched codes (i.e. music has taken recourse to visuality and the visual arts to musicality), in ways that can be defined as a clash, encounter or contamination, depending on the experiences made by different composers and visual artists in the creation of their works.

In the early twentieth century, the idea that time represents a fourth dimension in space had become particularly attractive. This idea made it possible for musicians to conceive of visible sounds, and for visual artists to listen to the sounds evoked by images. This exchange led composers to the world of theatre. Likewise, musical scores transformed into something that could be seen on stage, images could be listened to and texts that were not intended for performance (e.g. Words-in-Freedom) still offered visual traces of events. In short, these comprised a utopia of pre-audio-visual communication, which has characterized our age since the middle of the last century.

The idea of mixing genres, media and languages was a significant aspect of Futurism in its musical manifestation. Marinetti reflected on the suspension of value judgements and the fusion of different musical genres in the manifestos Teatro di varietà (Variety Theatre, 1913), Il teatro della sorpresa (Theatre of Surprise, 1921) and La radia: Manifesto futurista (Manifesto of Radia, 1933). He offered a practical application in Cinque sintesi per il teatro radiofonico (Five Short Scenes for Radiophonic Theatre, written 1933, published 1938), in which he linked diverse sound sources in a collage (see p. 238 in the chapter on Radio in this volume). These Futurist acoustical landscapes made use of all possible sound sources to construct a 'patchwork': not a synthesis intended for light entertainment, but a sophisticated choice linking heterogeneous elements, both banal and sublime. In this sense, Marinetti's Cinque sintesi were ahead of their time and can be related to performances by John Cage and Fluxus artists, in whose works verbal descriptions of actions replace traditional scores (Auslander: "Fluxus Art-Amusement: The Music of the Future?").

The Futurists identified in the machine the most important instrument of modernity, and their idolizing attitude towards possible futures created a sort of 'romantic cult of the machine', an idealistic way of thinking that could be expressed through the mimesis of isochrony (rhythmic division of time into equal portions by a language). However, it also went in the direction of a utopian scenario, or a 'science fiction', in art. Marinetti appealed to a new sensitivity, a new possibility of perception, which was also aspired to by the other avant-garde movements that constituted the premise for a new way of relating to audiovisual messages, a to-ing and fro-ing between the visual and the auditory, which today has become the norm. In the 1950s and 1960s, when informal music made use of representational systems in which images, texts and moveable structures all had a part to play, the actual physical presence of a performer was no longer a necessity, and non-specialist members of the audience could be called upon to provide their own solution to the composer's utopia.

One of the most interesting results of synaesthesia was achieved by Pratella in *Giallo pallido* (Pale Yellow, 1926), which developed a fabric of tonal and dynamic microvariations and evoked a relationship between sound and colour that had also interested other Futurist artists and musicians, as the programmatic text, *L'arte dell' avvenire* (Art of the Future, 1911), by the brothers Ginanni Corradini (better known as Arnaldo Ginna [1890–1982] and Bruno Corra [1892–1976]), showed. Futurism, Cubism and other -isms, including musical ones, pitched Modernism against tradition in a manner that irreversibly transformed the notion of what constituted a work of art. The tonal system had become over-complex and was bordering on entropy. Informal music was born at the moment when sound (to which any noise belonged) became a matter of being closely investigated, returning to Luigi Russolo's notion of the *tabula rasa* with the aim of conquering the infinite variety of noise-sounds. Thus his new aesthetics connected to features of everyday life, even though Edgar Varèse erroneously believed that it was just a slavish imitation and not an innovative form of sound.

Today, we should reconsider the theoretical implications of Russolo's work, especially in the light of what has happened since the days of the historical avantgarde. Futurist writings contain premonitions of *musique concrète*, electronic music, industrial noise music, environmental music etc. and had repercussions in musical domains that were far afield, both temporally and geographically. It is therefore important to give new life to their compositions through performance so that they can be reassessed for their sound impact. In this sense, Futurist composers can be rediscovered and given the place in history they surely deserve.

Futurist music may not have given the world a composer of the stature of Schönberg or Stravinsky, but in the context of the historical avant-garde movements of the early twentieth century, the ferment created by musicians who joined Marinetti's movement should certainly be studied and re-evaluated. This was made clear from the moment when the Futurist poet and musician, Francesco Cangiullo, claimed that the most important Futurist composer was Stravinsky, who had called Pratella and Russolo "a pack of very nice, noisy Vespas" (Craft: *Conversations with Igor Stravinsky*, 105).

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