Tempo 64 (251) 8–16 © 2010 Cambridge University Press
doi:10.1017/S0040298210000021 Printed in the United Kingdom

Photo: Luigi Russolo

RETHINKING RUSSOLO

Edward Venn

One of the more telling indicators of Luigi Russolo's (1885–1947) Anglo-American reception is his description in *Grove* as an 'Italian inventor, painter and composer'.[1] Within this lurks the devaluation of his composing efforts in comparison to his work as the maker of *intonarumori* (noise instruments), his authoring of new aesthetic ideas, and his activities as a painter.[2] There is little, perhaps, to argue with in this assessment, for (somewhat ironically) Russolo's music of the future has been consigned irrevocably to the music of the past; Raymond Fearn has suggested that 'the musical remnants from this period have remained to a large extent in the realm of musical archaeology'.[3] The only material traces available for musical archaeologists are the opening seven bars of the score of *Il risveglio di una città* (*The Awakening of the City*; 1913–14):[4] the machines that were to play it were destroyed during the Second World War. The loss of Russolo's compositions has inevitably distorted our understanding of his work and has served to throw attention onto those progressive, and sometimes speculative, theoretical and mechanical aspects of it that have survived in written accounts, at the expense of those elements that are of a more traditional or pragmatic nature. Study of the remaining fragments of *Il risveglio di una città*, leavened with necessary doses of circumspection and speculation, forms a vital and hitherto under-utilized component to any assessment of Russolo's career. Together, the writings and music provide complementary examples of the characteristic tension between the pull of tradition and the exhilarating opportunities of Futurism in his work.

~

Such tensions are present in Russolo's writings, which, due to the loss of virtually all of his music, form the foundation on which his reception has been built. For the most part, this reception has followed Russolo's lead in stressing the progressive (often Futurist) elements that in practice involve the construction and use of the noise instruments. Nevertheless, the writings do not quite succeed in concealing the debts Russolo owes to certain traditional musical values, and the intermingling of these with his energetic prose reveals more of his compositional approach than he perhaps intended.

[1] Flora Dennis, 'Luigi Russolo', *The New Grove Dictionary of Music and Musicians II* ed. Stanley Sadie (London: Macmillan, 2001), p. 34. Anthony Burton, in *The Oxford Companion to Music* ed. Alison Latham, arranged the three professions thus: 'composer, inventor and painter' (Oxford and New York: Oxford University Press, 2002), p. 1093.

[2] Russolo was a signatory of both the 'Manifesto of the Futurist Painters' and 'The Technical Manifesto of Futurist Painters' (February and April 1910 respectively) and his work was included in a 1912 exhibition of Futurist paintings in Paris.

[3] Raymond Fearn, Review of *Il suono veloce: futurismo e futurismi in musica* by Daniele Lombardi, *Music and Letters* Vol. 78 No. 4 (November 1997), p. 621.

[4] The extract was reproduced in 1914 in the magazine *Lacerba* to illustrate Russolo's ideas for enharmonic notation, and has subsequently been reprinted on numerous occasions, including in *The Art of Noises* trans. Barclay Brown, pp. 72–3. Flora Dennis lists a further three works by Russolo plus incidental music: none of this is thought to have survived; 'Luigi Russolo', p. 35.

The emphasis on the visionary aspects of Russolo's work which informs Barclay Brown's introduction to his translation of Russolo's writings are typical of the Anglo-American reception.[5] Whilst noting that at the time of writing comparatively few people have actually read Russolo's essays, Brown nevertheless draws attention to the significant place they occupy in 20th-century music.[6] The writings include the 'first expression' of '[t]he doctrines of *musique concrète*' and one can find aesthetic links with 'such contemporary figures as Pierre Schaeffer and John Cage'; in modified forms Russolo's ideas informed the work of 'a number of movements and individuals'.[7] His reputation as an inventor of noise machines 'lingered on in Paris long after his departure' from that city, where he had accompanied avant-garde films using his *rumorarmonio* (noise harmonium).[8]

The writings themselves, and in particular 'The Art of Noises: Futurist Manifesto' (1913) share numerous correspondences with Filippo Tommaso Marinetti's 'The Founding and Manifesto of Futurism', published in *Le Figaro* (20 February 1909). These correspondences throw into sharp relief the blend of progressive and traditional thought in Russolo's work, and provide a counterbalance to the image of Russolo depicted in Brown's work. Comparing these two manifestos, we can observe that each invoke a like-minded group of artists, though in both only the author of the manifesto is a signatory. Secondly, there is a strong whiff of the skin being sold before the bear is caught: both speak primarily of art that is to come, rather than describing art that is in existence. Thirdly, and despite claims of self-renewing originality based on scientific discovery, the manifestos betray Futurism's links to the past whilst simultaneously trying to kick over its traces.

For all of Marinetti's self-aggrandizing and violent rhetoric of renewal, the Founding Manifesto is rooted in 'a tangled web of turn-of-the-century political, cultural and philosophical currents'.[9] The influence of writers such as Proudhon, Bakunin, Sorel and above all Nietzsche inform – often in an idiosyncratic and distorted fashion – both its prose style and content.[10] Italian intellectuals such as Giovanni Papini, Giuseppe Prezzolini and Argendo Soffici criticised the Futurists for their 'lack of originality' – though one wonders if this criticism was to some extent directed at Marinetti's lack either of acknowledgement of his sources or of his recognition of the similar themes articulated by his peers.[11]

On the surface, and in contradistinction to Marinetti's grounding in the intellectual and artistic climate from which his own manifesto sprung, Luigi Russolo's manifesto 'The Art of Noises' (1913), seemed to owe little to his background as a painter.[12] It is likely that Marinetti's linking of technology, machinery and music in an insert into Balilla Pratella's 'Technical Manifesto of Futurist Music' (1911), along with Marinetti's example in general, stimulated Russolo's musical ideas.[13] The themes of Futurist art that can be detected in Marinetti's manifesto

[5] Barclay Brown, 'Introduction', *The Art of Noises* trans. Barclay Brown (New York: Pendragon Press, 1986), pp. 1–21.
[6] Brown, 'Introduction', p. 1.
[7] Ibid.
[8] Ibid, p. 16.
[9] Caroline Tisdall and Angelo Bozzolla, *Futurism* (London: Thames and Hudson, 1977), p. 17.
[10] Ibid., pp. 18–9.
[11] Jane Rye, *Futurism* (London: Studio Vista, 1972), p. 11.
[12] Although not trained as a musician, Russolo grew up in a musical family; see Rodney J. Payton, 'The Music of Futurism: Concerts and Polemics', *The Musical Quarterly* Vol. 62, No. 1 (January 1976), pp. 35–6. Russolo claims that the music that was considered most successful was that that is most unconventional; one wonders if his claims of 'knowing nothing' were somewhat disingenuous, given his family background, cited in Brown, 'Introduction', p. 8.
[13] See Brown, 'Introduction', pp. 2–3 and Payton pp. 31–2.

recur in Russolo's. Above all, one must place one's faith in the future, rather than the past. Instead of the safety of tradition, the Futurist is to plunge joyfully into the unknown, embracing the machine age, raising the machine to the level of an artistic object, glorifying speed and dynamism, exalting violence and conflict, and exploring the relationship of all this to urban life. The goal is a mode of expression 'flexible enough to express the range of experience open to man in the dawning century of speed, mobility and unprecedented scientific advance'.[14]

The realization of this new form of expression is a central theme of Russolo's writings. His anticipation of noise machines (the first of which was ready a month after the publication of the manifesto) genuinely looks towards a musical future that only became commonplace from the 1940s with the advent of *musique concrète*. As with all Futurist manifestos, the past is recognized for its glories, but for Russolo the concert hall is no longer to be a museum, nor the performer a curator:

> We futurists have all deeply loved and enjoyed the harmonies of the great masters. Beethoven and Wagner have stirred our nerves and hearts for many years. Now we have had enough of them, *and we delight much more in combining in our thoughts the noise of trams, of automobile engines, of carriages and brawling crowds, than in hearing again the "Eroica" or the "Pastorale"*.[15]

The expansion of timbral resources – surely the most innovative aspect of Russolo's work – is to be accompanied by an expansion of pitch and rhythmic material: the octave is to be divided into quartertones (rather than semitones), this division enabling 'dynamic continuity';[16] rhythmic counterpoint is to take advantage of the infinite 'rhythmic motions of a noise'.[17] Russolo's vision of music thus encompasses the scientific exploration of sound, the depiction of urban life, the possibilities of the machine age and the focus on dynamism that characterizes Futurist art in general. In this respect, his work is overtly progressive.

More traditional concerns inform the practicalities of composing such music, which for Russolo was essentially abstract rather than imitative.[18] Although many Futurists prized extreme subjectivity, such abstraction was by no means uncommon in their art. In paintings such as his 'Iridescent Interpretations', for example, the artist Giacomo Balla drew on scientific analysis of light;[19] we might assume from this that Russolo was interested in a similar artistic response to the scientific properties of sound. He certainly provides sufficient observations about the nature of overtones in noise to suggest this is the case.[20] On the other hand, Russolo also discussed certain organizational principles – indeed, he was at pains to stress the 'logic' of his music – that were of a more traditional nature, and which also might deserve the epithet abstract.[21]

When searching for further evidence that might help pin down what Russolo meant by 'abstraction', a useful point of departure might be the observation that Marinetti's liberation of sounds from syntax and grammar was an inspiration for Russolo. A similar divorce of sound from

[14] Tisdall and Bozzolla, p. 7.
[15] Luigi Russolo, 'The Art of Noises: Futurist Manifesto', in *The Art of Noise*, p. 25 (original emphasis).
[16] Luigi Russolo, 'Enharmonic Notation', in *The Art of Noise*, p. 68
[17] Russolo, 'The Art of Noises', p. 28.
[18] See Brown, 'Introduction', pp. 2 and 13.
[19] It should be noted that this attracted criticism from other Futurists such as Umberto Boccioni, who complained as early as 1907 that Balla's 'universe does not throb'. (Cited in Tisdall and Bozzolla, p. 62.)
[20] See for instance, 'Physical Principles and Practical Possibilities', *The Art of Noises,* pp. 37–40. If my inference is true, then we find Russolo once again through his scientific study of sound anticipating subsequent 20th-century developments.
[21] Russolo, 'Polemics, Battles, and the First Performances of the Noise Instruments', *The Art of Noises*, p. 31.

imitative associations in Russolo's music may well stem from Marinetti's example, but this neither implies nor denies the existence of a (musical) grammar as an organizational principle.[22] Russolo did not in fact discuss musical syntax and grammar as such, save to suggest that noise might be regulated by harmonic and rhythmic means, giving us justifiable grounds for supposing that these elements were decisive in the shaping of his music, and in particular the principle of 'dynamic continuity'.[23] That pitch is of vital importance to his art is again apparent from a passage in 'The Orchestra of Noise Instruments', in which he discusses accuracy of intonation in the same context as 'musicality',[24] a somewhat traditional concept and a possible signal that Russolo regards his work on some level as being evolutionary rather than revolutionary. In this light, we might view Russolo's 'emancipation of timbre' in the same way as Schoenberg's 'emancipation of dissonance', in that it renews, rather than replaces, the musical resources available to the composer.

Given the available evidence, the preceding comments and conclusions might need to be taken with a pinch of salt. However, it is clear that Russolo's desire for practicality in both the notation and performance of his works meant that he blended old and new musical symbols in his scores (such as the use of the 5-line stave and traditional time-signatures with certain graphical representations)[25] along with traditional terminology.[26] A similar pragmatism informs the practice of Futurist composers of using the *intonarumori* alongside standard orchestral instruments. Russolo notes that he added timpani, a sistrum and a xylophone to his orchestra of noise instruments; Pratella combined conventional and unconventional instruments in his opera *Eroe*.[27] Nevertheless, here at least Russolo is clear that his preference is for his new instruments on their own.[28]

It is impossible to be sure from the writings if such compromises were made in the spirit of introducing gradually the novel aspects of Futurist music, as Russolo would have us believe, or if they were indicative of a compositional aesthetic less radical than one might otherwise have thought.[29] Nevertheless, the fact that such compromises exist at all should alert us to the possibility that Russolo's compositions may also have displayed an underlying pragmatism, if not conservatism, that served to organize (or even constrain) the musical material.

~

Although it is dangerous to assume that there is necessarily a unity between a composer's aesthetic writings and compositional output, there is evidence in the first seven bars of *Il risveglio* that Russolo

[22] In a similar manner, the absence of traditional instruments removes particular expressive and associative connotations. Alexander Goehr noted how for the Futurists 'flutes or kettle drums themselves symbolise a culture', and 'traditional instruments were remnants of an ancient civilisation which had to be destroyed'. In this respect, the Futurists provided an example for Stravinsky and Varèse. See 'The Survival of the Symphony. 4. Licence for Licence', *The Listener* (10 December 1987): p. 18. With little supporting evidence from Russolo's writings, Brown suggests in his 'Introduction' (p. 19) with reference to a review of *Il risveglio* in the *Pall Mall Gazette*, that there may well be some formal principles underpinning the music.

[23] In 'The Art of Noises: Futurist Manifesto', p. 27.

[24] *The Art of Noises*, p. 81.

[25] See 'Enharmonic Notation', p. 67–8.

[26] The use of the word 'theme' in the article 'The Orchestra of Noise Instruments' may have been metaphorical, but it may also have signalled that traditional musical methods of construction inform Russolo's practice, p. 82.

[27] Russolo, 'The Orchestra of Noise Instruments', p. 82.

[28] Ibid.

[29] One might note a similar compromise in the first wave of Futurist painting, which relied on recent trends (Divisionism and Cubism) for its technical basis.

practised what he preached. That is to say, these bars provide further confirmation that Russolo is less of a revolutionary than might be imagined, and this consistency enables the music to be admitted as evidence when considering Russolo's output as a whole.

Before turning to what we know of Russolo's music, what of the music that has not survived? Brown omits from his account the direct contact Russolo's contemporaries had with both the noise instruments and the music written for them.[30] Stravinsky had met Russolo and heard his music on a trip to Milan in 1915; also present on this occasion were Diaghilev and Prokofiev.[31] Six years later, three Futurist concerts in Paris were to have 'a considerable impact […] on Casella, Falla, Honegger, Milhaud, Ravel and Stravinsky',[32] and a 1929 demonstration of the *rumorarmonio* was introduced by Varèse. Accounts of the 1915 event suggest that, at best, the potential of the instruments was recognized, but their current state of development, and the music that was written for them, was considered less impressive.[33]

Example One presents the surviving bars, transcribed into standard notation. (At the start of each system are the ranges of each instrument as given by Russolo, who claims that these were the ranges employed in performances of *Il risvelgio*.)[34] Barclay Brown has described these bars as follows:

> These two pages display the constant use of drones and glissandos. Although the individual entrances of the instruments and the presence of contrary motion in the parts give the impression of polyphony, the music has a clearly harmonic intent. The first of the two pages seems to be loosely based on a chord intervallically constructed like a dominant seventh with the root of G.[35]

All but the last of these features can be discerned in Ex. 1. The pedal points provided by the *ronzatori* (low hummer) suggest i–V–VI in E minor, though in practice the language is more ambiguous than that. The opening leans first towards an enharmonically-spelt dominant seventh on C-natural and then to a half-diminished chord on C-sharp. Bars three and four combine a sustained perfect fifth on B with moving material that affirms E as a tonic. The extract ends with a sustained augmented chord on C, first anticipated in passing in bar 1. The use of quarter-tones at the very end, in a sort of written out glissando, falls far short of the brave new world of pitch resources described by the composer.[36] Rhythmically, the passage is far more straightforward. The pedal points establish a regular harmonic rhythm; motion above this conforms to a regular simple triple metre. This is true also for the glissandi that are initiated in the second bar and which become increasingly important as the extract progresses: the crotchet pulse regulates the beginnings, endings, peaks and troughs of all of the glissandi.

[30] Such omissions are characteristic of Brown's Introduction: see John C. G. Waterhouse, [Review of *The Art of Noises*], *Music & Letters* Vol. 69, No. 3 (Jul., 1988): 414.

[31] Payton, 28.

[32] Dennis, 34.

[33] Waterhouse, 416

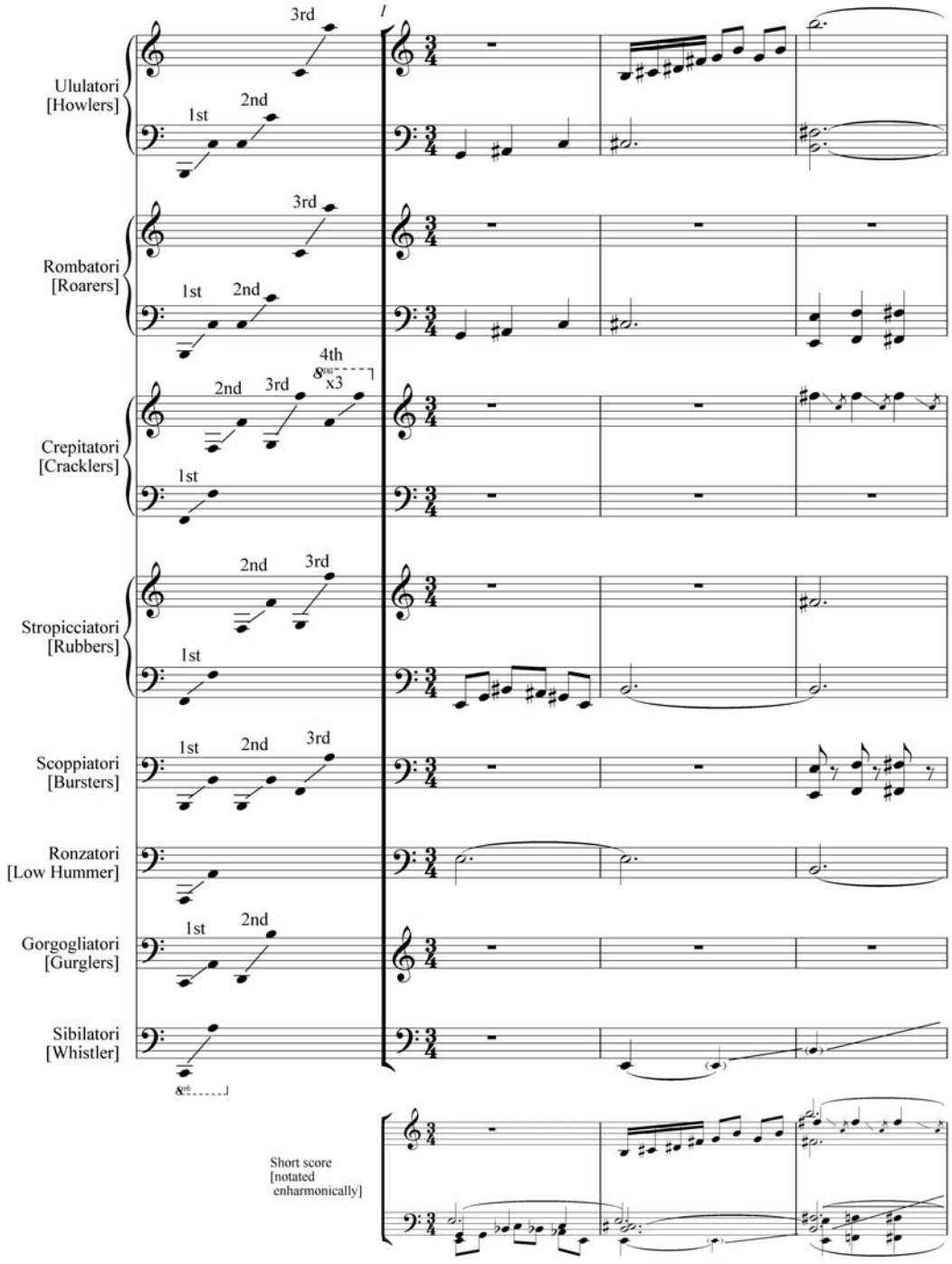
[34] Russolo, 'The Noise Instruments', in *The Art of Noise*, 77. However, as can be seen in Ex. 1, there are numerous instances of the work going beyond the notional limits of the instruments. This fragment was recorded in 1977 using reconstructions of Russolo's instruments. The recording itself is but 30 seconds long; there are also demonstrations of each of the instruments. Some issues of the recording distinguish between the work and the samples of the intonarumori (for instance, *Musica Futurista: The Art of Noises*); others, such as *Futurism and Dada Reviewed* (LTMCD 01) run all the tracks together, creating a misleading impression of the work and its content.

[35] Barclay Brown, 'The Noise Instruments of Luigi Russolo', *Perspectives of New Music* Vol. 20, No. 1/2 (Autumn, 1981 – Summer, 1982), 36.

[36] 'The Conquest of Enharmonicism', *The Art of Noises*, pp. 61–66.

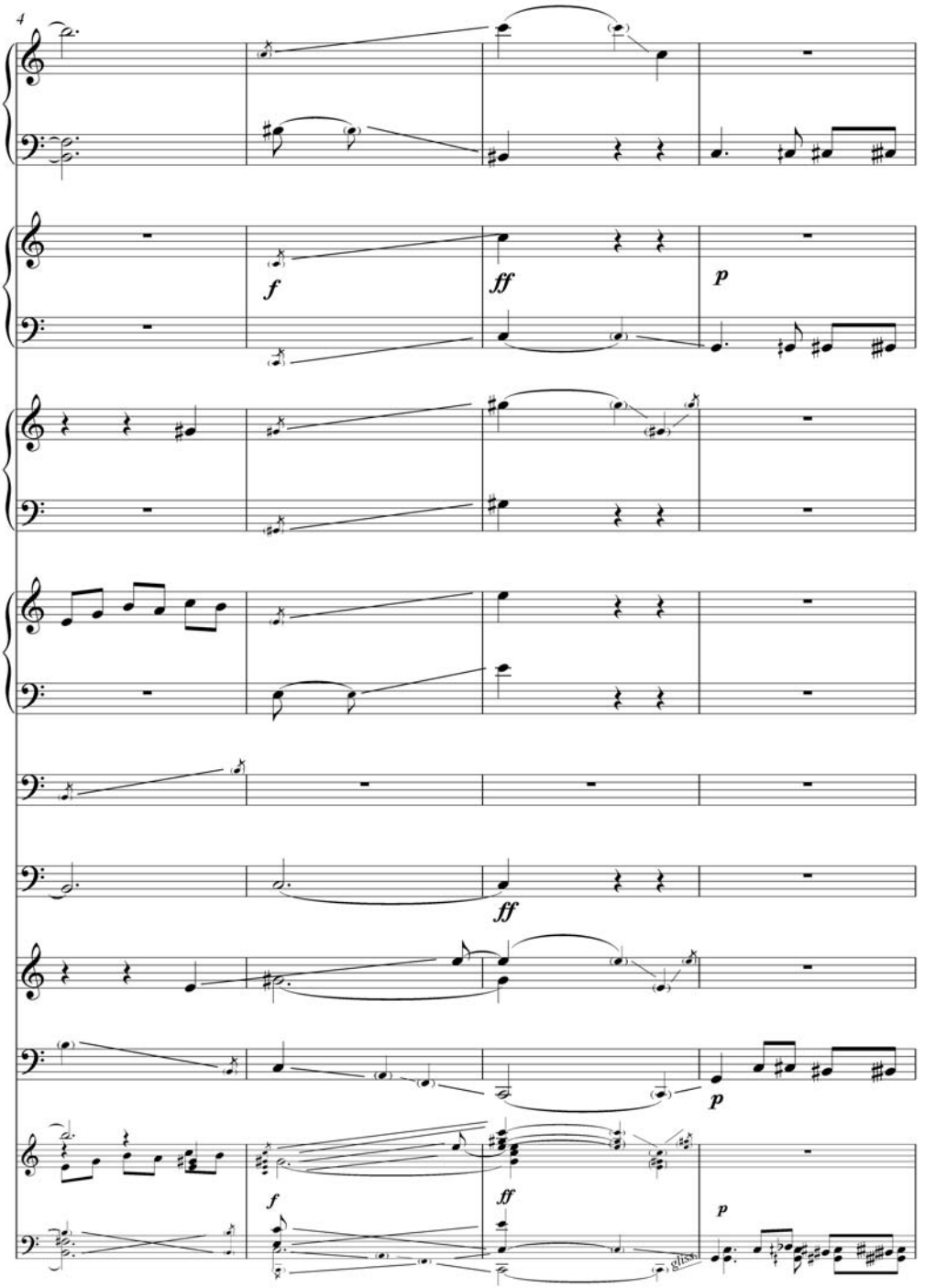
If pitch and rhythm provide the logic underpinning Russolo's music, what organizational principles might we infer from this passage? The harmonic language as notated, considered independently from timbre, shows an awareness of contemporary developments in the field, balancing impressionistic sonorities with weakly-directed tonal motion. This tonal motion, coupled with the regularity of harmonic rhythm and

Example 1



measured crotchet pulse, provides a solid, if routine framework. Giving Russolo the benefit of the doubt, one might assume that this framework was yet another pragmatic device, one that gave musicians unused to the *intonarumori* something familiar to work with. It is likely, however, despite Russolo's claim that the noise instruments have amongst the

Example 1 continued



numerous overtones a clearly defined primary pitch,[37] that the resulting harmonies would have been inaudible, and any notional pragmatic function that they may have had would have been lost. Certainly, none of the accounts of Russolo's concerts discuss the harmonic language, and nor can it be heard in reconstructions of these bars.[38]

As with Russolo's relatively simplistic approach to harmony, his use of the *intonarumori* lacks a deft touch. The impression is that the composer is over-eager to show off his creations. Within the first six bars, he deploys all of his available resources: all but one of the instruments contributes to the tutti in bar 5, and only the *ronzatori* do not make use of their ability to glissando. Clearly, the city is waking quickly! Unfortunately, it is likely that the rush to incorporate everything would render indistinct the timbral variety at his disposal.

A similar argument regarding the inaudibility of rhythms can be made, for the noise machines set up their own internal rhythms.[39] In this respect, the timbre of the noise instruments serves to mask the musically unadventurous material in much the same way the Futurists such as Marinetti and Russolo cover their own aesthetic debts to the past in their otherwise progressive writings.

The degree to which these debts are covered can be discerned in Mark Radice's analysis of these bars. Although he doesn't use the term 'dynamic continuity' in this context, Radice's sympathetic reading of the work suggests how Russolo's expressive goal might have been realized:

> In traditional Western art music, vertical sonorities are arranged as a progression of chords consisting of identifiable intervals invariably based upon the presumption that the half step in some way represents the smallest, indivisible sub-atomic particle. Russolo's conception of Futurist music eliminates such "progressions" and substitutes instead a continuous "transformation" of vertical sonorities.
> [...]
> Russolo's new notation does indeed facilitate correspondingly new musical ideas, particularly insofar as transformations of vertical sonorities are shown in what we might call analogue fashion. Since Russolo's time, important compositions employing transformations rather than progressions have appeared – Bartók's *Music for String Instruments, Percussion and Celesta* (1936) and Penderecki's *Threnody for the Victims of Hiroshima* (1960) are two well-known examples. [...] Unfortunately, music theory has not kept pace with musical practice, and, as yet, there is no system for discussing vertical sonorities incorporating microtones.[40]

As I have shown, the musical language is not as unorthodox as Radice would have us believe; the glissandi and microtones are essentially surface decorations and the transformations of vertical sonorities owe as much to late-Romantic parsimonious voice-leading as it does to proto-Bartókian principles (note, for example, the chromatic shifts in bars 1 and 2; the augmented chord on C is formed by raising the third and fifth of the 'tonic' E minor chord). At this early stage of its development, dynamic continuity seems to have fallen far short of the Futurist aims of 'speed, mobility and unprecedented scientific advance'. The reasons for this, I contend, are twofold. Firstly, Russolo's reliance on traditional structuring principles, whether for pragmatic purposes or not, serves to inhibit the musical flow; nor do these principles provide an alternative means of realizing a new form of musical expression. Secondly, Russolo's use of traditional devices leaves him open to traditional criticism, and these bars would suggest that he is not a particularly inspired composer (hardly a surprising conclusion, given his background).

[37] 'The Art of Noises: Futurist Manifesto', p. 27.
[38] See n. 34.
[39] 'The Art of Noises: Futurist Manifesto', p. 28.
[40] Mark A. Radice, '"Futurismo": Its Origins, Context, Repertory, and Influence', *The Musical Quarterly* Vol. 73, No. 1 (1989), pp. 7 and 16.

One should perhaps not read too much into these opening bars, for they represent Russolo's earliest attempts at deploying the new resources at his disposal. Furthermore, by basing both his notation and his organizational principles on traditional models, he makes the learning process easier for performers schooled in such models. However, the traditional basis of these bars should also serve to limit readings of his work that overemphasize the progressive aspects. Indeed, throughout his surviving literary output, and exemplified by *Il risveglio*, we find Russolo building on the past, rather than sweeping it aside with the new as the Founding Manifesto of Futurism confidently proclaims should be the model.

Nevertheless, if one is to attempt an evaluation of Russolo's musical career, then these few bars, rescued and reconstituted by musico-archaeology, become significant. Russolo's reception has seldom been based on a close reading of his music, and doing so provides interesting parallels with his theoretical and mechanical work, whilst highlighting certain musical weaknesses which compromise his endeavours. In this light, Flora Dennis's suggestion that Russolo was an inventor first and composer third has more than a ring of truth about it; Russolo's relegation to an interesting footnote in music history is perhaps deserved.

BIBLIOGRAPHY

Balla, Giacomo; Carrà, Carlo; Marinetti, Filippo Tommaso, Russolo, Luigi; Severini, Gino, *The Technical Manifesto of Futurist Painting*, 1910.

Brown, Barclay, 'The Noise Instruments of Luigi Russolo', *Perspectives of New Music* Vol. 20, No. 1/2 (Autumn, 1981 – Summer, 1982), pp. 31–48.

Burton, Anthony, 'Luigi Russolo' in *The Oxford Companion to Music* ed. Alison Latham (Oxford and New York: Oxford University Press, 2002), pp. 1093–4.

Dennis, Flora, 'Luigi Russolo' in *The New Grove Dictionary of Music and Musicians* 2nd edition., Vol. 22 ed. Stanley Sadie (London: Macmillan, 2001), pp. 34–5.

Fearn, Raymond, [Review of *Il suono veloce: futurismo e futurismi in musica* by Daniele Lombardi], *Music and Letters* Vol 78 No. 4 (November 1997), pp. 621–622.

Goehr, Alexander, 'The Survival of the Symphony. 4. Licence for Licence', *Listener* (10 December) pp. 17–20.

Marinetti, Filippo Tommaso, *The Founding and Manifesto of Futurism*, 1909.

Payton, Rodney J., 'The Music of Futurism: Concerts and Polemics', *The Musical Quarterly* Vol. 62, No. 1 (Jan. 1976), pp. 25–45.

Radice, Mark A., '"Futurismo": Its Origins, Context, Repertory, and Influence', *The Musical Quarterly* Vol. 73, No. 1 (1989), pp. 1–17.

Russolo, Luigi, *The Art of Noises* trans. Barclay Brown (New York: Pendragon Press, 1986).

Rye, Jane, *Futurism* (London: Studio Vista, 1972).

Tisdall, Caroline and Bozzolla, Angelo, *Futurism* (London: Thames and Hudson, 1977).

Waterhouse, John C. G., [Review of *The Art of Noises*], *Music & Letters* Vol. 69, No. 3 (July, 1988), pp. 413–416.