

Birdsong

Maria Anna Harley

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The present article is concerned with the use of birdsong in human music; for discussion of birdsong itself see *Animal music*.

The vocalizations of birds have been of interest to musicians since at least the 14th century. They have been described as *musica avicularis* (Schröder, 1639), ‘protomusic’ (Hartshorne, 1973) or ‘micromusic’ (Szöke, Gunn and Philip, 1969). Music notation of birdsong began with Kircher’s *Musurgia universalis* (1650); options include graphic notation (Hold, 1970) and sound spectrograms, available since the 1940s.

Ethnomusicological studies indicate that listening to birdsong has influenced some musical cultures, especially in areas with intense bird vocalizations, such as the rain forest of Papua New Guinea (Feld, 1982). Non-Western people have imitated birdsong in daily life and rituals (Feld) for hunting purposes (Brandily, 1982) and to aid the learning of rhythmic structures in their own music (Shimeda, 1986). While the aural sensitivity of the inhabitants of rain forests is shaped by their continuous immersion in the tapestry of avian sounds, birdsong is more distant from city dwellers, and has been domesticated by the keeping of captive birds in homes and attracting them to gardens. Some caged birds can be taught human melodies; various instruments and tunes have been devised for this purpose (e.g. *The Bird Fancier’s Delight* for flageolet, 1717).

Composers have included birdsong in their music in these ways: (a) by imitation, by voices or instruments (including Bird instruments); (b) by quotation, using recordings; and (c) by using live birds’ voices.

Aristophanes’ comedy *The Birds* (414 BCE) illustrates two forms of birdsong imitation common before the advent of recordings, syllabic onomatopoeia (e.g. ‘io, io, ito, ito’) and with wind instruments (e.g. the flute as nightingale). Here birds serve as an allegory for human relationships, as they do in some musical repertoires, such as the Parisian chanson (van Orden, 1995) or in folksongs from India (Sharma, 1979).

Birdsong portrayal may appear in music for anecdotal, symbolic or ornamental purposes, or simply for its significance as sound (see *Programme music*). Migratory songbirds carry associations with (i) the spring and joy, as in the English 13th-century rota *Sumer is icumen in*, (ii) love and love relationships, as in Szymanowski’s ‘Nightingale’ from *Three Songs of the Fairy Princess* (1915), (iii) the serenity of nature, as in Beethoven’s Pastoral Symphony (1808, where three birds described by Kircher – the nightingale, cuckoo and quail – are imitated) and (iv) spiritual jubilation, as in Messiaen’s *Messe de la Pentecôte* for organ solo (1949–50). The first three meanings are intertwined; less common significations of birdcalls and songs include (v) freedom (Wishart’s *Red Bird* for tape, 1985), (vi) mystery (Mahler’s ‘Der Vogel der Nacht’ in Symphony no.3 (1893–6)), and (vii) madness (Maxwell Davies’s *Eight Songs for a Mad King*, 1969).

In European music, birdsong frequently shares the decorative role of captive birds; repertoires of ‘bird’ music (see Jensen, 1985; Schneider, 1985–6; Roggenkamp, 1987) include 14th-century virelais (Vaillant, Senleches), 16th-century chansons and madrigals (Gombert, Janequin, Morley, Weelkes) and 17th- and 18th-century

harpsichord miniatures (Couperin, Daquin, Frescobaldi, Kerll, Pasquini, Rameau). Composers portray calls and songs of a small group of familiar, local species by means of simple patterns, such as a descending 3rd for the cuckoo (also a 2nd, or a 4th in Janequin's *Le chant des oiseaux*, c1559) and a series of repeated pitches with trills for the nightingale (see exx.1, 2, 3, 4, 5, and 6). Other musical birds include blackbirds (Tiessen, 1953), skylarks, quails, owls, crows, hens and roosters; the last three groups have been assigned comic functions in Italian madrigals and frottolas.

nightingale's syllabic onomatopoeia in Janequin's four-part chanson *Le chant des oiseaux* (c1559), fragments of two voices

no

Two staves of music. The top staff has a treble clef and a key signature of one flat. It contains a series of eighth notes, mostly G4 and F4, with some rests. The bottom staff has a bass clef and a key signature of one flat. It contains a series of eighth notes, mostly E3 and D3, with some rests. The lyrics are: 'dian frian frian frian frian frian frian teo. Tu tu tu tu tu tu tu tu tu tu'.

dian frian frian frian frian frian frian teo. Tu tu tu tu tu tu tu tu tu tu

dian frian frian frian Ti - cun ti - cun ti - cun ti - cun ti - cun ti - cun Qui la - ra

typical woodwind nightingale in Beethoven's 'Scene am Bach, and Sixth Symphony' (1808)

Flute *Nachtigall*

A single staff of music with a treble clef and a key signature of one flat. It contains a series of eighth notes, mostly G4 and F4, with some rests. The lyrics are: 'cresc. Tu tu tu tu tu tu tu tu tu tu'.

cresc. Tu tu tu tu tu tu tu tu tu tu

nightingale's repeated pitches, trills and grace notes in the finale of Mahler's Second Symphony (1893-4)

Flute *Flute*

A single staff of music with a treble clef and a key signature of one flat. It contains a series of eighth notes, mostly G4 and F4, with some rests. The lyrics are: 'PPP (wie eine Vogelstimme)'.

PPP (wie eine Vogelstimme)

static vocalise and rhythmic flexibility in Stravinsky's 'Chanson du Rossignol' from *The Nightingale* (1908-14)

sempre piqué

A single staff of music with a treble clef and a key signature of one flat. It contains a series of eighth notes, mostly G4 and F4, with some rests. The lyrics are: 'p'.

p

nightingale's repertory of motifs in Messiaen's *Quatuor pour la fin du temps* (1941)

modéré (comme un oiseau)

A single staff of music with a treble clef and a key signature of one flat. It contains a series of eighth notes, mostly G4 and F4, with some rests. The lyrics are: '8va'.

8va

1 2 3 4 5

(son flûté vers la pointe)

nightingale's timbre rendered by harmonic means in Messiaen's *Catalogue d'oiseaux*, no.9, 'La boucarle' (1956-8).

modéré (♩ = 66)

A single staff of music with a treble clef and a key signature of one flat. It contains a series of eighth notes, mostly G4 and F4, with some rests. The lyrics are: 'Vif (♩ = 152)'.

Vif (♩ = 152)

PPP PP

f (brusque et brillant)

Ex.1 The nightingale's syllabic onomatopoeia in Janequin's four-part chanson *Le chant des oiseaux* (c1559), fragments of two voices; Ex.2 Stereotypical woodwind nightingale in Beethoven's 'Scene am Bach', Sixth Symphony (1808); Ex.3 The nightingale's repeated pitches, trills and grace notes in the finale of Mahler's Second Symphony (1893–4); Ex.4 Chromatic vocalise and rhythmic flexibility in Stravinsky's 'Chanson du Rossignol' from *The Nightingale* (1908–14); Ex.5 The nightingale's repertory of motifs in Messiaen's *Quatuor pour la fin du temps* (1940–41); Ex.6 The nightingale's timbre rendered by harmonic means in Messiaen's *Catalogue d'oiseaux*, no.9, 'La Bouscarle' (1956–8)

In vocal music, birdsong may be rendered by syllabic onomatopoeia or by extended vocalises. In instrumental music, birdsong is usually simplified and accommodated to musical conventions, appearing at cadence points (Beethoven's *Pastoral Symphony*), in episodes (Vivaldi's *Four Seasons*), cadenzas (Handel's *Organ Concerto* no.13 in F) and more rarely in thematic material (J.S. Bach's *Sonata in D* for keyboard, BWV963). Instrumental virtuosity is a common feature of generic birdsong representation; Liszt used pianistic trills and arabesques to suggest bird timbres and flight patterns in *Légende: St François d'Assise: la prédication aux oiseaux* (1862/3). In orchestral music, the voices of songbirds are represented primarily by woodwind timbres, high registers, brief motifs, staccato articulation, grace notes and trills. Wagner's 'Forest Murmurs' in *Siegfried* (1856–71) evokes birdsong in the natural habitat with a texture of fragmented motifs set against a static chordal background. Stylized birdsong soundscapes appear in works by Rimsky-Korsakov, Mahler, Delius (*In a Summer Garden*, 1908), Strauss (*Eine Alpensinfonie*, 1911–5), Bartók (the 'nature music' idiom), Britten (*Spring Symphony*, 1949) and others. While these textures usually represent bird choruses, an individual may sing a free-flowing melody in a quasi-improvisatory manner, for example the soprano vocalise in Stravinsky's 'Chanson de Rossignol' from *The Nightingale* (1908–14).

Before the 20th century, musical birdsong belonged to the domain of ornamental beauty; birds could be lyrical and, at times, amusing, but seldom dramatic or tragic. Messiaen transformed birdsong from an ornament to an element of musical style, drawing particularly on its complex rhythmic ostinatos and varied melodic contours, and approximating birds' microtonal intervals with the 12 chromatic pitch classes (Messiaen, 1944, 1995). His first attempts at a free 'style oiseau' in organ music from the 1930s (e.g. *La Nativité du Seigneur*, 1935) emphasize the asymmetry and rhythmic irregularity of birdsong (Johnson, 1995). Bird species are first named in 'Liturgie de cristal' from *Quatuor pour la fin du temps* (1940–41), in which the clarinet has the 'principal melody' of the blackbird and the violin plays the 'secondary counterpoint' of the nightingale. *Réveil des oiseaux* (1953) contains only transposed and slowed-down birdsong, of 38 species, faithfully rendered in its daily variations including the dawn chorus and the silences of the sunrise and noon. The monumental piano cycle *Catalogue d'oiseaux* (1956–8) seeks to portray the birds of France within their visual and aural landscapes. After 1950, birdsong appears in virtually all Messiaen's works: he used his own transcriptions and related the choice of birds to the subject matter, for example, Japanese birds in *Sept haïkai* (1962) or birds of the American desert in *Des canyons aux étoiles* (1971–4). From *Oiseaux exotiques* (1955–6) onwards, he included birds from all the continents and represented all available birdsong models, from brief calls to elaborate compositions. The ornithological accuracy is less important than the development of a new musical style with the birds' irregular phrase structures, rich timbres, complex melodic contours and intricate rhythmic patterns in incessant variation (see Hold, 1971; Kurenniemi, 1980; and Mâche, 1987).

In the bird choruses of the opera *Saint François d'Assise* (1983), Messiaen employed controlled aleatory techniques, which had been used by Lutosławski in woodwind textures with traits of birdsong (e.g. Symphony no.2, 1965–7; *Mi-Parti*, 1975–6). The virtuoso tempos and rhythmic spontaneity of birdsong have inspired jazz musicians, particularly in the bebop tradition (e.g. Mingus's *Birdcalls*, 1959). Charlie Parker's creative improvisations, especially in a series of 'bird' pieces (*Ornithology*, 1946; *Bird of Paradise*, 1947) share traits with The Birds' *Free Composition*, especially in his use of quotation from many musical sources (reminiscent of avian mimicry) and the *cento* technique of improvisation, based on a corpus of distinct formulae, arranged in ever new patterns.

While the improvisations of jazz musicians may display some general stylistic traits of birdsong, the notated music of North America contains representations of various local species, especially the hermit thrush (Amy Beach's *Hermit Thrush at Morn*, 1922; Bartók's Piano Concerto no.3, 1945; see Harley, 1994) and R. Murray Schafer's *The Princess of the Stars* (1981, rev. 1984). The two last portray whole choruses of birds: Bartók stylized motifs of the wood thrush and the towhee, while Schafer used vocal and instrumental imitations of the white-throated sparrow, whippoorwill, chickadee and others to incite live birds to sing. His work, designed for performance at dawn at a wooded lake, blends birdsong imitation and presence.

The quotation of recorded birdsong in orchestral music was introduced in Respighi's *Pini di Roma* (1923–4; the nightingale accompanied by the orchestra). In *Gli uccelli* (1928) Respighi reverted to adding conventional woodwind embellishments to tonal music. With the advancement of electroacoustic technology, the musical potential of recorded birdsong has increased. Even a simple transposition downwards may bring interesting effects (James Fasset, *Symphony of the Birds*, 1955). François-Bernard Mâche has explored connections between bird vocalizations and music, for example by borrowing birds' rhythmic patterns in *Rituel d'oubli* (1968), blurring the distinction between recorded birdsong and voice in *Korwar* (1972) and creating a birdsong counterpoint in *Naluan* (1974). In Michaël Lévinas's opera *La conférence des oiseaux* (1985) singer-actors display a grotesque mixture of human and avian characteristics while the tape part includes sonorities derived from birdsong. Many electroacoustic works quote or stylize birdsong (e.g. François Bayle's *Trois rêves d'oiseau*, 1971; Joan la Barbara's *Urban Tropics*, 1988). However, recorded birds reiterate their song with each playback of the tape, thus sharing the main shortcoming of birdsong representation, that is, the loss of variability of real birds' voices. More diversity can be created in live-electronic music with manipulation of recordings (e.g. Cage's *Telephones and Birds*, 1977) and with the use of improvisation, sampling and computer processing of recorded birdsong.

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See also

Messiaen, Olivier, §1: Life

Rameau, Jean-Philippe, §3: Keyboard music

Sound effects, §3: Musical sound effects after 1950

Animal music