

Composers' appropriation of pied butcherbird song: Henry Tate's 'undersong of Australia' comes of age

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Introduction

The study of birdsong, like that of the origins of music, resides outside the hands of musicologists, composers, and performers. The fields of behavioral neurobiology, bioacoustics, biolinguistics, biomusicology, cognitive neuroscience, ethological zoosemiotics, evolutionary aesthetics, and biological anthropology are just some of the hybrid domains in which the biological basis of music in humans and/or birds is investigated. Clearly, not all agree that birdsong can be cast as music, 'music', or even proto-music, let alone that that is where the origins of music might lie. Nevertheless, birds have been muses to composers through the ages.

Registers of birdsong-inspired compositions already abound (see [Doolittle 2006: 4–5](#) and [2008](#); [Rothenberg 2005: 188–208](#); [Baptista & Keister 2005](#); [Urquhart 2004: 101–129](#); [Rothenberg & Ulvaeus 2001](#); [Austern 1998](#); [Head 1997](#); [West & King 1990](#); [Jensen 1985](#); [Mâche 1983/1992](#); [Schafer 1977](#); [Hold 1970: 155](#)), making it unnecessary to repeat them here. However, one cannot fail to notice that certain composers keep coming up: Janequin and Handel, Vivaldi and Messiaen, and also 'Anonymous' — who penned many folk tunes based on birdsong, some still notable, many others probably lost. Works come up: the *Pastoral Symphony* (Symphony No. 6 in F major, Op. 68, by Beethoven, completed in 1808), *Oiseaux Exotiques* (1956) and *Catalogue d'Oiseaux* (1956–58) by Messiaen (two of the better-known from among his numerous works inspired by birdsong), and *Cantus Arcticus* (*Opus 61*, 1972), Rautavaara's symphony for orchestra and taped birdsong from inside the Arctic Circle. Recurring birds include the nightingale, canary, cuckoo, starling, mockingbird, skylark, and lyrebird. Native peoples are also regularly mentioned: the Koyukon of Alaska ([Nelson 1983](#)); the Kaluli of Papua New Guinea ([Feld 1990](#)); and the Suya Indians of central Brazil ([Seeger 1979](#)).

Birdsong can provide more than composerly inspiration. French composer François-Bernard Mâche ([1992/1983: 95–165](#)) coined the word zoömusicology (or *zoomusicologie*). He argues persuasively for musicologists to participate in the interrogation of birdsong, suggesting it has currency not just in composition but also in key arenas of analytical practice:



The questions arising from the analysis of birdsong are precisely those which musicology has not yet been able to clarify, including, firstly, the very purpose of analytical practice. The musicologist is far from claiming for his sole task the understanding of the composer's thoughts. On many occasions he is tempted to show himself more perspicacious than the author he is studying. It is probably unfair to conclude, as some do, that the analyst is a frustrated creator; on the contrary, every analysis is some form of creation, which creates the very phenomenon it is engaged in describing. If I acknowledge that the analysis of birdsong is a help in my reflection as a composer, I will soon be suspected of being more imaginative than a scientist should be. Where I think I encounter refrains, anticipations, reminiscences etc., the biologist is satisfied with classifying equivalent signals. At the most, he will sometimes condescend to interpret the riot of individual sonic inventions, by looking for some utilitarian aspects for the benefit of the species, as if the gratuity of musical play was a human privilege, and no similar freedom could be imagined for the animal. ... Meanwhile, musicians' attempts to analyze animal signals will reveal a matter for amazement and reflection, and it will be a long time before this is exhausted. That is why, instead of being criticized as an anthropocentric biologist, I hope to be accepted as a zoocentric musicologist ([Mâche 1997: 77–8](#)).

Traditionally, musical analysis strives to access, comprehend, and illuminate the creative process in question. The critical position assumed by humans who study birdsong is that of an outsider — a non-participant in the world of avian vocalisations. George List questions whether even *intra*-species understanding is possible:

To my mind the most universal characteristic of music is its non-universality as a means of communication. Whatever it communicates is communicated to the members of the in-group only, whoever they may be ([List 1971: 399](#)).

Can humans gain admittance to birdsong's in-group? When sonographic analysis of birdsong recordings became possible, biologists apprehended the subject, although not with a trained ear so much as a trained eye.¹ Much of what biologists have learned concerns the process of song acquisition and song function. A bird's song can serve as an auditory 'keep out' sign to his competitor or as a 'come hither' to his female counterpart, but these two functions are not the entire story. 'Why do birds sing?' involves a complex web of many correct answers ([Fitch 2006: 174](#)) and as many unanswered questions ([Rothenberg 2005](#)). While birdsong is not directed at the human species, we (from philosophers to just plain folk) have a long history of being charmed by it. Why do musicians engage with birdsong?

Historical Birdsong Appropriation Strategies

Bohlman ([1999: 23](#)) casts the concept that music could exist in nature at the extreme end of a continuum, placing at the other end the idea that music strives towards nature. The difference seems a moot point to both composers and listeners. Indeed, whether music sounds like nature or nature sounds like music (or whether both are extreme positions and that the only sensible conclusion lies somewhere in the middle, as far from nature as possible) is a theoretical circle game played by those who perhaps have not experienced a riveting dawn chorus.

Those who dismiss a bird's song on the grounds that it is merely functional are neglecting the fine print. Such reductionist views concerning birdsong's *two* functions derive not from science so much as from popular receptions of science. The literature contains numerous asides by biologists on the apparent aesthetic use of sound by birds: we are left 'to puzzle over the resulting richness and variety' ([Catchpole & Slater 1995: 191](#)); 'Sometimes it is clear that birds indulge in a process of improvisation, first memorizing and replicating a theme, and then subjecting it to a series of systematic transformations, as though assuaging an appetite for novelty' ([Marler 1981: 92](#)); and '[T]he far more complex songs of versatile songsters, the songs of songsters which possess large individual repertoires, sometimes appear to be so variable as to dramatically violate the requirement of song invariance for species distinctiveness' ([Boughey & Thompson 1976: 5](#)).

While the functions of territorial defence and mate attraction do a lot of the heavy lifting, other motivations also seem likely candidates. It could serve as a group password, a tool for social bonding and group consolidation, a participatory experience, a signature on both an individual and a species level, a self-rewarding activity ([Morris 1962: 145](#)), a heightened experience for both producer and listener, a challenge that provides a sense of accomplishment, an indicator of fitness and strength, and/or a vehicle for various sorts of domestic communication.



If we insist on distinguishing ‘use’ from ‘function’, as Merriam does ([1964: 219–27](#)), our list of functions remains considerable: emotional expression, aesthetic enjoyment, entertainment, communication, physical response, and contribution to the integration of society. Function and aesthetics are not mutually exclusive and humans affirm their territory, their personal taste, and their group through music ([Taylor & Lestel 2010](#)). Music is loaded with cultural meaning and embedded in other activities, so both biology and culture shape our music-making and our response to music.

Ultimately, the question ‘Is birdsong music?’ has little relationship to the activity on the ground, where musicians seek and find inspiration from all corners, including the vocalisations of birds. Composers employ a range of strategies in the appropriation of birdsong, and some works incorporate more than one. Imitation is common, whether as direct quotation (with or without added accompaniment) or by way of poetic inspiration, as is imitation recast as ‘improvement’ on the birdsong. Humour — ‘sonic cartoons’ ([Feld 2000: 272](#)) — or vulgarity can be introduced via animal imitations. Some birdsongs are incorporated into cadenza-like sections ([Hold 1970: 155](#)). For many years, the Italian national radio station RAI broadcast a birdsong collage by Pierre Schaeffer and Pierre Henri as its off-air call signal ([Giddings, accessed 12 January 2008](#)). Some cultures call upon birdsong to bridge the gap between *Homo sapiens* and other species, and in those with a strong affinity for the natural world, music can be used to communicate with non-human animals, whether ‘for practical, spiritual, playful or other purposes’ ([Doolittle 2008a: 1](#)).

A number of works present an affinity for or excursion into nature, and birds provide an obvious point of reference for these simulated voyages. Audio recordings of birds, when featured in compositions, also betray a programmatic purpose. The first was probably Respighi’s (1879–1936) *Pines of Rome*. Composed in 1924, the score calls for a gramophone recording of a nightingale’s song (*Il Canto dell’usignolo*) ([Respighi 1925: 55](#)). Muted strings and celeste accompany the recording, which spans 11 bars. Also in 1924, cellist Beatrice Harrison encouraged nightingales by performing in a Surrey wood in the first live outdoor radio broadcast, which came to be known as the Cello and Nightingale Sessions.² Sound is no respecter of space: unlike eyelids, we have no ‘earlids’ ([Bull 2000: 118](#)). Interspecific collaborations, whether wittingly or not for either birds or humans, have a long tradition and an apparent future.

Composers have sought to absorb avian idioms in a wider sense than melody, particularly in the twentieth and twenty-first centuries. In the birdsong-derived music of Messiaen and his student Mâche, among others, deeper structures are incorporated. Increasingly, birdsongs are thought of as compelling models on a number of fronts and are called upon by some to evoke mystery and spirituality as well as to provoke ecological insights and a dialogue between nature and culture.

Occasionally birds turn the table on things, appropriating human music and other sounds into their vocabulary. Hartshorne ([1973: 8](#)) predicted, ‘Bird judgment of human music must indeed be hopelessly “subjective” or, to invent a word, *ornithomorphic*’. However they might judge it, birds do seem able to replicate human music. The earliest published manual for training songbirds dates from c. 1700 ([Stainer 1899: 671](#)); one is still in print, *The Bird Fancier’s Delight* ([Godman 1955/1717](#)), used to train canaries, nightingales, starlings, and other birds given to our sense of musicality.

In his article ‘Experiments and observations on the singing of birds’, the ornithologist Daines Barrington ([1773–4: 271](#)) includes *Composition for Two Piping Bullfinches* by ‘Mr. Zeidler, who plays the violincello at Covent Garden theatre’. Barrington finds this ‘ingenious’ composition well suited to birds:

I have before observed, that by attending to a nightingale, as well as a robin which was educated under him, I always found that the notes reducible to our intervals of the octave were precisely the same; which is another proof that birds sing always in the same key. ... As birds however adhere so stedfastly [sic] to the same precise notes in the same passages, though they never trouble themselves about what is called time in music, it follows that a composition may be formed for two piping bulfinches [sic], in two parts, so as to constitute true harmony, though either of the birds may happen to begin, or stop, when they please ([Barrington 1773–4: 270–1](#)).

His experiments include hanging caged birds of various species together in order to determine how they might influence one another, all ‘intended to determine, whether birds had any innate ideas of the notes, or song, which is supposed to be peculiar to each species’



([Barrington 1773–4: 259](#)). In a wide-ranging article, Barrington takes to task composers who ‘introduce the cuckow [sic] notes in a sharp third’ rather than a flat third ([Barrington 1773–4: 269](#)); describes the difficulties of birdsong notation as arising from three causes: the rapidity of the singing, the height of the pitch, and their use of intervals smaller than a semitone ([Barrington 1773–4: 266](#)); and announces that human musical intervals are ‘originally borrowed from the song of birds’ ([Barrington 1773–4: 269](#)). His table of British singing birds of merit rates mellowness of tone, sprightly notes, plaintive notes, compass (or range), and execution ([Barrington 1773–4: 282](#)). He concludes that

[t]he notes of many birds are certainly very pleasing, but can by no means stand in competition either with the human voice or our worst musical instruments; not only from want of the striking effects of harmony in many excellent compositions; but because, even when compared to our simple melody, expression is wanting*, without which music is so languid and inanimate. [* The nightingale, indeed, is perhaps an exception to this general observation. (Barrington’s footnote)] ([Barrington 1773–4: 288](#)).

One is left to wonder what Barrington would have made of the powers of the Australian lyrebird. Both species of lyrebird appropriate human sounds, but the ‘superb flute-playing lyrebirds’ are of particular relevance ([Curtis & Taylor 2008](#)). In the 1920s, a juvenile superb lyrebird (*Menura novaehollandiae*) in captivity, unable to hear adult lyrebirds, modeled his singing on the practice routine of a flautist. When released back into the wild, he apparently continued his flute songs (displaying variable pitch), while also picking up territorial songs (often consisting of nearly level pitch or of noisy signals such as clicks) and mimicry used by the local population. The human songs, scales, and flute-like timbre the bird had learned in captivity were culturally transmitted, spreading through the local lyrebird population and replacing the original territorial song.

Henry Tate’s Vision

Appropriation of birdsong by Australian composers in the Western classical tradition did not coincide with white settlement. Melburnian Henry Tate (1873–1926), composer, poet, and music critic for *The Age*, was one of the first to encourage birdsong as an overlooked and nationalistic resource:

The Australian composer, searching for native peculiarities to build a national music upon, must soon give attention to the very essential matter of striking and characteristic rhythms. ... [Our bird calls] are with us always, and they supply us with an unfailing reservoir of varied and charming rhythms. The paltry imitation of the calls in any exact way is too cheap a device to be worth consideration. Indeed, the actual notes of some of the carols go outside the resources of any conceivable musical system. The rhythms of many of the bird calls, however, are so definite and clear that they may be easily used for the basis of fantastic dances, and so added to the Australian composer’s store of ideas for transformation and elaboration. The butcher bird, among his numerous chants, gives us a grave and gentle measure, not very marked, it is true, by novelty, but readily combinable with other calls in an artistic ensemble. ... While we are lamenting the absence of dance forms as a source of national musical inspiration, the birds in their green palaces are tapping out dainty measures without stint, which, when we have ears to hear them, we shall reproduce with effect in the internal pulsations of our Australian music ([Tate 1924: 20](#)).

Tate regularly singles out the pied butcherbird (*Cracticus nigrogularis*). In addition to identifying their rhythmic, gestural, melodic, and poetic inspiration as having the potential to underpin a recognisable national music, he also suggests that composers might copy this endemic bird’s use of repetition:

At least two of our birds will suggest worked-out melodies, as contrasted with the broken morsels of melody known as ‘figures’. The slow and dreamy prelude of the butcher bird naturally expands into musical sentences of the meditative type. ... These and many other calls are eminently suitable for imitation, not by any means ‘the simple expedient of imitating the bird calls’, but imitation ‘in the technical sense of the repetition of a motif or phrase’, one of the most effective devices known to musicians ([Tate 1924: 22–3](#)).



Tate's vision of birdsong imitation at the level of repetition, cells, and sequences, rather than imitation as sonic caricature, foreshadows Mâche:

[T]here is not a single musical procedure which does not have its equivalent or its prototype in one or other of the innumerable signals of animals. The simplest, in animals as in man, is naturally repetition ([Mâche 1992/1983: 115](#)).

Tate ([1924: 27](#)) makes the observation that 'our bird calls are not estranged from the psychology of the modern Australian' — these sounds are registered in the national psyche. Neither is he immune to the pied butcherbird as a scalar source:

Modern music has cheapened the diatonic discords, and without some brightening factor they tend to become as wearisome as the threadbare progressions they displaced. The butcher bird, to pick out one of the many possibilities, with his lift of a semi-tone from the initial note, the fall to a semi-tone below the first sound, and the return to the starting-point, indicates the 'augmented sixth' interval, and a scale with a flattened second. If the sixth degree be flattened in sympathy, a delightful scale with a major third results, abounding in symmetrical harmony and entrancing possibilities of lucid modulatory and chromatic progressions. ... There are many suggestions of 'something different' in harmony in the fragments of natural scales and arpeggi of our Australian birds ([Tate 1924](#)).

In his booklet *Australian Musical Resources*, Tate had already fleshed out specific ideas in text and music notation, including motifs and melodies fashioned from Australian birdsong and 'cadences and chord progressions built upon the "special chromatics" of the "deflected scale"' ([Tate 1917: unpaginated](#)). He examined the contrapuntal features inherent in the dawn chorus and the developmental possibilities of 'a central idea from which a number of themes are evolved' ([Tate 1917: unpaginated](#)) in cycle form.


Pied Butcherbird Appropriation

A survey of all composers known to have appropriated the song of the pied butcherbird in their work follows. A pied butcherbird is shown in Figure 1 and a field recording of its song may be heard by clicking the sound icon next to the caption. The range of musical genres and affinities influenced by the species is wide, and due to the number (20), space does not allow an in-depth analysis of each work and composer. Rather, the intent is to interrogate which pied butcherbird songs have inspired composers and to speculate on why, as well as to identify the strategy or strategies of appropriation utilised by each composer. Nuance, variety, and transformation are uncovered at both the level of avian singer and human composer. The analytical process will not only trace the way in which the present writer's personal research into the species might illuminate the compositions, but also present original observations from many of the composers.

No such survey would be complete without mention of South Australian Hooper Brewster-Jones (1887–1949). An Adelaide-based composer, pianist, music critic, and teacher, Brewster-Jones wrote a series of seventy-three piano miniatures entitled *Bird Call Impressions* (published [2006](#)), as well as twenty-three *Horse Rhythms* (published [2007](#)), also for piano. Composed between 1923 and 1926, his birdsong works pre-date by some thirty years Messaien's early birdsong-inspired piano pieces such as *Reveil des oiseaux* (1953), *Oiseaux exotiques* (1956), and *Catalogues d'oiseaux* (1956–8) ([Crispin in the introduction to Book 1, Brewster-Jones 2006: iii](#)). While Tate's musical language was conservative, Brewster-Jones shows himself in these piano pieces to be an early modernist. Twenty-six species are represented, but no pied butcherbird model is present. Brewster-Jones is known to have transcribed birdsong while at the Adelaide Hills retreat of the landscape artist Hans Heysen ([Crispin in the introduction to Book 1, Brewster-Jones 2006: iv](#)). Pied butcherbirds would be unlikely to be found in Adelaide, while in the surrounding area their presence is known but uncommon ([Barrett et al. 2003: 605](#)).

Most of the literature concerns itself with the pied butcherbird voice, which is variously described as clear, mellow, magnificent, glorious, and superb ([Higgins et al. 2006: 522](#)). The metaphor of a piping flute, a cornet, or an organ is often noted, and the list of superlatives recommending the voice is considerable. In his survey of musicality in Australian songbirds (using the human standard as his measuring stick), Hartshorne ([1953: 118](#)) describes the pied butcherbird as 'the true "magic flute", the perfection of musical tonality coming from a bird'. He continues, 'I doubt any European will have heard anything so richly musical from birds' ([Hartshorne 1953: 118](#)). Sound sample 1, of a pied butcherbird, was recorded in Alice Springs, Central Australia.



Figure 1: The pied butcherbird and a field recording (**Sound Sample 1**) of its song. 
(Photograph by Robert Ingliss. Used with permission.)



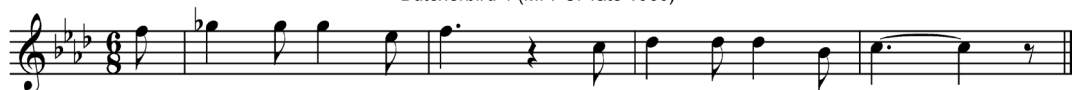
Henry Tate

Many of Tate's compositions are lost or remain solely in fragments. Eight transcriptions of pied butcherbird song survive; they appear to be limited to the suburbs of Melbourne. Example 1 details Tate's transcription of pied butcherbird vocalisations as edited and annotated from his notebooks by Christine Mercer.³

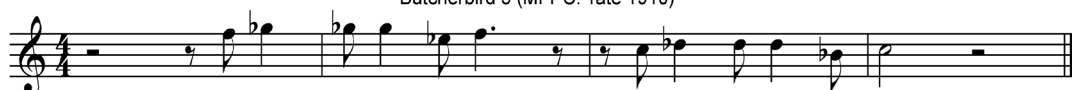
With the exception of motif '6b', all the motifs appear to be a reworking of a single theme (whether by Tate or the bird is not clear). Example 2 is an excerpt from his composition *Morning in the Gully* (Tate 1924: 66). The left-hand part is a transposed variant of the transcriptions in Example 1 (excepting '6b'). Tate appears equally at home with (or puzzled by) the barline in a number of positions.

Example 1: Transcribed pied butcherbird song from the notebooks of Henry Tate, as edited and annotated by Mercer.


Butcherbird 4 (MFPC: Tate 1909)



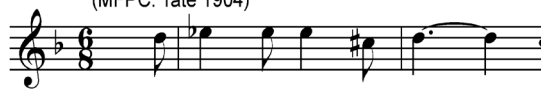
Butcherbird 5 (MFPC: Tate 1910)




Butcherbird 6: Notated at Ferntree Gully, Victoria for 'Morning in the Gully', *Suite Joyous*



Butcherbird 7: Motif used in *Bush Miniatures* (1902-24) (MFPC: Tate 1904)



Butcherbird 8: Motif used in *Dawn: A Symphonic Rhapsody* (1922) (MFPC: Tate 1910s)





Example 2: An excerpt from Tate's *Morning in the Gully* (1924), in which the bottom line corresponds to songs of pied butcherbirds in Example 1 (excepting 6b).

Excerpt from Tate's 'Morning in the Gully' (bars 25-29)

In addition to *Suite Joyous*, Example 1 contains transcriptions Tate applied to *Bush Miniatures* and *Symphonic Rhapsody*, indicating that he took his own advice to seek musical material from native Australian birdsong ([Tate 1924](#)).

A note about the terms 'call' and 'song': while non-experts often use them interchangeably, there are differences. Compared to songs, calls tend to be shorter, simpler, and innate. My research into pied butcherbird vocalisations indicates that there are no species-wide *song* phrases held in common by the entire population, variations appearing to be geographical, seasonal, and individual ([Taylor 2008d](#)). Their protean vocalisations make the positive identification of pied butcherbird song models in scores and a subsequent assessment of how closely they conform to the actual avian source unlikely unless field recordings are available from the composer in question. However, there is a species *call* (Example 3) stereotyped across the continent in both pitch and contour ([Taylor 2005](#)).

Example 3: Transcription of four similar and typical pied butcherbird species calls.

This call is often reworked in song by the bird. In these cases, a transposition is likely. Since Tate's motif is similar across several (albeit nearby) sites and follows its pitch contour, it is in all likelihood the species call, or at minimum a song motif that the bird has crafted from it. Another common use of this call is in antiphonal song, where one bird will deliver a song phrase, which another answers with the species call. In any case, Tate's simple reworking of the motif matches that of his avian counterpart: the call becomes a cell and is subjected to repetition. All told, Tate's prescience in the possibilities inherent in Australian birdsong appropriation is a more significant and enduring legacy than his musical corpus.

Hugh Dixon

Composer Hugh Dixon (b.1927, Sydney) has resided in New Zealand since 1940. He set 'The Blue Wrens and the Butcher-bird' (2004) for soprano voice and piano to a poem by Judith Wright. The pied butcherbird notes (Example 4) in the piano accompaniment appear to be a variant of the species call, as contour, pitch, and rhythm are close matches. The two-bar phrase is repeated immediately in the piano for a total of six iterations. However, the soprano part contains no material reminiscent of the call; the vocal material seems more in service to the lyrics than any interrogation of pied butcherbird song idioms. The species call appears to be strongly emblematic of the pied butcherbird's voice and stands as a musical identity marker in the minds of those who have heard the bird.



Example 4: In matters of contour, pitch, and rhythm, this Dixon excerpt closely matches the pied butcherbird calls in Example 3.

Excerpt from Dixon's 'The Blue Wrens and the Butcher-bird' (bars 39-40)

Poco meno mosso

$\text{♩} = 60$

Piano

mp

David Lumsdaine

The music of David Lumsdaine (b.1931, Sydney) embodies his considerable experience of the Australian landscape. In addition to his musical scores, he has recorded environmental sound as the basis for compositional material, such as 'Pied Butcherbirds of Spirey Creek', the first track on his CD ([Lumsdaine 1996b](#)) of composed Australian field recordings. The track excerpt in Sound Sample 2 begins with the sounds of insects, frogs, and a rushing creek. The pied butcherbird enters at 0:45.

Sound Sample 2: A track from the CD 'Pied Butcherbirds of Spirey Creek' by David Lumsdaine. 

Lumsdaine appraises the song as follows:

The Pied Butcherbird is a virtuoso of composition and improvisation: the long solo develops like a mosaic, through the varied repetition of its phrases. In the course of the song, some elements remain constant, some elements transform through addition and elimination. The bird is a virtuoso of decoration: there is an extraordinary delicacy in the way it articulates the harmonic course of its song with microtonal inflections, or places its cadences with a bird's equivalent of tremolandi and flutter-tonguing.

I've made a number of recordings of Pied Butcherbirds, and many of them are technically better than this set; but, beautiful as they may be, none of them matches the performance by these particular birds. Serendipity plays a large part in determining the musical quality of a soundscape — there are no retakes in the wild ([Lumsdaine 1996b, notes](#)).

Much ink has been spilt over the use of a birdsong recording as a 'composition'.⁴ It calls to mind the blurred lines of DJ sampling, 'Plunderphonics', and the studio as a compositional tool. This is how Lumsdaine negotiates the terrain:

Composing, for me, is usually the notating of a listening which goes on 'inside' my head. By contrast, these soundscapes are recordings of a very active listening which we may say has gone on 'outside' my head. By making and editing these recordings I'm organizing my listening, that's to say, I'm composing it. By playing them I'm inviting others to share, and by sharing, extend that experience. To hear these soundscapes as music, you must join with me in being both audience and composer ([Lumsdaine quoted in Hall 2003: 74](#)).

Lumsdaine's recording was the basis for a London dance concert, *Bird Song* ([2004](#)), by the Siobhan Davies Dance Company. The tape was played without alterations or additions. *Mandala 4* for String Quartet ([1996a](#)) is Lumsdaine's recasting of the recording as an instrumental work and is dedicated 'to the Buddha of Spirey Creek' ([Hall 2003: 78](#)). Lumsdaine makes use of the species call, as seen in Example 5.

The call is faithfully imitated three times in succession (bars 261–6), but aside from the viola solo (beginning in bar 65), the song phrases are approached more obliquely. 'Their gestures, contours and harmony are the heart and the taking off point for all the music', the composer notes in the score ([Lumsdaine 1996a](#)). Although the result differs, his approach of sourcing all musical ideas from the



Example 5: This Lumsdaine excerpt imitates a transposed pied butcherbird species call.



birdsong model is similar to that of Messiaen. Mapping the acoustic constructs of one idiom onto another is a cross-species practice; consider the similar case of mimicry in songbirds, of which the pied butcherbird is a keen practitioner.⁵

Don Harper

Melbourne-born Don Harper (1921–99) was a jazz violinist and conductor of big bands, as well as a composer of music for film and television. His *Images of Australia* (1991) for string quintet (including double bass) consists of 16 movements, the second of which is based on the song of the pied butcherbird. Entitled 'Butcher birds', the subtitle penned on the score reads 'at Spirey Creek', indicating the thematic provenance to be Lumsdaine's 'Buddha' again. However, the 18sec. field recording that begins the work as heard on the CD ([Harper 1997](#)) is *not* from Spirey Creek, but from a different Lumsdaine recording, one from Lamington Plateau. (Coincidentally, it serves as the basis for one of this writer's compositions, *Lamington Plateau* for flute ([Taylor 2008b](#)).⁶) The recording is merely a springboard: no obvious statement or development of the bird's thematic material (in terms of rhythm, interval, contour, or timbre, for instance) is apparent in Harper's score. That both of these birdsongs precipitate several outcomes speaks not only to the rarity of pied butcherbird recordings, but also to the way some birds strike us as more musical than others.

Olivier Messiaen

Pied butcherbird vocalisations impressed Olivier Messiaen (1908–92), who incorporated their song into his last work, *Éclairs sur l'au-delà* (1988–92, published posthumously in 1998):

I listened at length to the Australian birdsongs, and I even tried to notate them. They are all most interesting, especially the pied butcherbird and grey butcherbird, which are marvellous. [Author's translation]

*J'ai écouté très longuement ces chant d'oiseaux Australiens, et j'ai même essayé de les noter. Ils sont tous d'un grand intérêt, spécialement Pied Butcherbird et Grey Butcherbird, qui sont merveilleux.*⁷

Thus, the timbre of the pied butcherbird voice can serve as inspiration, even if its phrases are then turned over to an instrument that is by and large incapable of reproducing it.

Messiaen's familiarity with pied butcherbird vocalisations began at least a decade before he wrote *Éclairs sur l'au-delà*: amongst his archival transcriptions held at the Fonds Messiaen in the Bibliothèque Nationale de France are five pages of pied butcherbird notations.⁸ In addition to these pages, in his *Traité de rythme, de couleur, et d'ornithologie*, Messiaen (1949–92: 612) details his June 1988 excursion with Australian ornithologist Sydney Curtis to Tamborine Mountain, but no pied butcherbird transcription finds its way into the *Traité*. After their fieldtrip, Curtis sent Messiaen a cassette of selected Australian birdsong (including that of pied butcherbirds) entitled *Pour Messiaen* ([Curtis & Taylor 2008](#)).

'Les étoiles et la gloire', movement VIII of *Éclairs sur l'au-delà*, is the longest of the work and marks the first entrance of the entire orchestra (and of the double basses). The pied butcherbird entrance (page 19) is annotated on the score in typical Messiaen fashion and appears

Example 6: A comparison of a pied butcherbird call in Messiaen's score and in his field transcription reveals an exact match for rhythm and pitch in the top line of the flutes.

Excerpt from Messiaen's 'Les étoiles et la gloire' (page 41, bars 2-3)

Modéré, un peu vif $\text{♩} = 184$

Flutes

ff fff f

Pied butcherbird

f

Messiaen field transcription
from notebook #23159, page 65,
line 11, dated 13 June 1988.

to be an instance of the transposed (by the bird) species call incorporated into song. A number of these motifs are found on page 65, lines 10–11, of the archival transcription. The top line of the flutes in the score matches Messiaen's field transcription in rhythm and pitch. Example 6 presents a comparison of the score and the field transcription.

The motif D#7 E7 E7 in the score matches the field transcription, but also notice the slur in the flutes in bar 1 leading up to the first note of bar 2. This replicates the frequent pied butcherbird strategy of a 'zip' up to the first note of the species call (as presented in Example 3). Messiaen would likely have heard this in the field, and he heard it in the Curtis cassette *Pour Messiaen* as well, as evidenced by the numerous transcriptions of it on page 12 of notebook #23159. The pied butcherbird re-enters on page 156 of the score, this time with notes from song (rather than their species call) — repeated notes reminiscent of a dry rattle and mid-sized intervals (thirds, fourths, and fifths) abound. While this entrance is not an exact match with any of the transcriptions, the motifs all show Messiaen to have been a quick study in capturing the essence of a bird's song. In a conundrum that musicians understand, although he did not always 'get it right' when transcribing, he always 'got it' — the essential bird comes through ([Curtis & Taylor 2008](#)).

Ivan Kinny and Keith Aubrey

In 1988, organist and ornithologist Ivan Kinny sent his transcriptions of Australian birdsong to Messiaen, singling out the virtues of the grey and pied butcherbirds:

The bird is carnivorous and gets its name because of its practice of making a larder, impaling its prey on a thorn or wedging it in the fork of a tree to eat later. There is a grey variety (*cracticus torquatus*) and a black-and-white species (*cracticus nigrolatus*) [sic], which are among the finest bird singers. Their calls are very tuneful and diatonic and the sound is bright and pure, like a flute ([Kinny quoted in Hill & Simeone 2005: 365–6](#)).

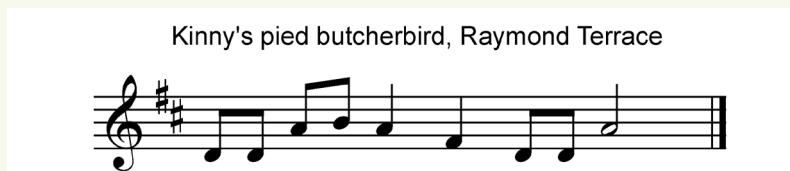
I wrote to Kinny, telling him I had read about him in Messiaen's biography and requesting copies of his birdsong transcriptions. He responded, 'I was amazed to discover that my submission to Messiaen had even been received by him, knowing that he died not long after I'd given it to Neil McEwan to pass on to him' ([Kinny, pers. com. 2010](#)).

Kinny also sent birdsong to his longtime friend from their student days at Sydney University, the composer Keith Aubrey (b.1918 Sydney-2004). 'I had sent him my record of the Raymond Terrace butcherbird', recalls Kinny, 'which went thus' ([Kinny, pers. com. 2010](#)) (Example 7). Aubrey responded with a work for his friend, *L'Oiseau-Bucher* (1987), the first eight bars of which constitute Example 8.

True to his words, Aubrey has fashioned a work more indebted to Couperin than a pied butcherbird aesthetic. Kinny plays it on the organ at St Alban's Anglican Church in Muswellbrook, New South Wales ([Kinny, pers. com. 2010](#)). The pied butcherbird normally sings for about one second, followed by several seconds of silence. The challenge for a composer wishing to appropriate this avian material is what, if anything, to do with the silence. In this case, Aubrey has responded with a descending scale in measures 3–4 and 7–8, which is not



Example 7: Kinny's transcription of a pied butcherbird from Raymond Terrace, sent to Aubrey and Messiaen.



Example 9: The opening bars of F. Hill's *The Pied Butcher-bird* for solo clarinet and audio tape.

Opening excerpt from Hill's *The Pied Butcher-bird*

Clarinet in B \flat

tape pre-recorded

f

p

Unlike some, this composer deliberately avoids direct timbral imitation. Example 9 details the opening loop and subsequent four bars. The first three notes of each bar of the loop are reminiscent of the species call.

The semitone, particularly ascending, dominates the score, including the tape loop. Once again, with no extant field recording, one is hard-pressed to determine after the fact whether composer or bird or both are involved in the reworking of the species call in the loop.

Charles Bodman Rae

British-born Charles Bodman Rae (b.1955, Catterick Camp, Yorkshire) resides in Australia. The songs of several species of birds appear in his String Quartet No. 2 (2003), including a pied butcherbird theme he hears from his garden in the Adelaide foothills.⁹

The first movement features various Australian birds, including a transformed version of a pied butcherbird song. This song appears in some of the later movements as well (there are five movements). The original melody was always in C minor: B, D, D / Eb, C / G, D, D / Eb, C. Clearly, this bird had perfect pitch! You will find various transformations and transpositions of this bird theme, particularly in the first and fourth movements where it appears *flautando* ([Bodman Rae, pers. com. 2008](#)).

Bodman Rae focuses on pied butcherbird timbre, interval, and gesture in this work. The use of the expression mark *flautando* evokes the flute-like timbre of the pied butcherbird. In the first movement, antiphonal birdsongs (including the Eastern whipbird, the Australian magpie, and the pied butcherbird) are split between the violins, and the descending minor third is prevalent in all voices. Indeed, all movements are dominated by the interval of a minor third, both ascending and descending, but only in the fourth movement (at letter 'G') is the pied butcherbird theme stated in its entirety. The Example 10 excerpt begins at bar 85, where minor thirds dominate until the middle of bar 88; then, the violins state the theme two octaves apart (transposed to what Bodman Rae would identify as the key of F minor).

The matching sound sample continues through bar 105, illustrating what occurs throughout this string quartet: the composer relies on ascending and descending minor thirds and perfect fourths. The repetition and variation of these simple but effective two- and three-note cells, sometimes expanded to other intervals, unites and energises the work.

Elaine Barkin

American composer Elaine Barkin (b.1932, New York) composed two pieces inspired by pied butcherbird song after her first trip to Australia in March 1986. *Out Back* (1986) is a tape collage created for choreographer Peggy Cikerska, 'who wanted a non-narrative music that suggested earth-sound, out-of-doors, the back yard, a place where creatures play' ([Barkin 2005: 6](#)). At 1:55 into the seven-minute work, we hear a few phrases of taped pied butcherbird song, 'whose chromaticism had an immediate appeal to me' ([Barkin 2005: 6](#)). While some of the sound sources are electronically modified, the birdsong appears to be unaltered. The composer's goal of 'a free-flow sense of abundance and harmoniousness' ([Barkin 2005: 6](#)) is accomplished in large part by the use of the field recordings of both pied butcherbirds and bellbirds.

'Rhapsody in Black and White' for C and alto flutes (1986) is the second of *Three Rhapsodies*. The work is 'recomposed and transcribed from pied butcherbird recordings, a bit of dawn chorus mumblings and real tunes' ([Barkin, pers. com. 2009](#)). The recording is from Paul White's undated and out-of-print cassette, *Rhapsody in Black and White*, which features 16 Australian songbirds, all of which are black or white or both. Central to Barkin in this work are her efforts to avoid perfect unisons and 2:1 octaves:

Example 10 (Sound Sample 3): An excerpt from movement IV of Bodman Rae's String Quartet No. 2, beginning at bar 85. Midway through bar 88, the violins state the pied butcherbird theme as transcribed by the composer. 🎧

Excerpt from movement IV of Bodman Rae's String Quartet No. 2

Violin I
Violin II
Viola
Cello

flautando sul tasto
pp
flautando sul tasto
pp
pizz.
pizz.
arco
IV
arco

♩ = 120
G
8va

Unison and octave are the terms we use for hypothetical constructs of acoustical phenomena, those very concepts of sameness that I sought to contravene. Along the way I explored fuzzy tunings with mixed or matched registers. Above all ... are the re-created quotations of and allusions to garbled, mumbly Black-backed Magpie and high-pitched, semitonal Pied Butcher Bird, both of which made their way into 'Rhapsody in Black and White': their sounds were in my head and out they came! ... despite mutated and re-created bird song and evocations of anomalies, the Rhapsodies are not Programmatic, rather they are Imaginary — a word, a concept, I prefer to Absolute or Abstract. The pieces are not 'about' birds or any particular place, though they might be 'inspired by' ([Barkin 2005: 6](#)).

Although the pied butcherbird voice is often compared to a flute, any sense of sentimental bird imitation that might be evoked by this instrumentation is mitigated by the serial nature of the work. A number of motifs from the White recording are utilised, and the frequent stops and starts reminiscent of discontinuous birdsong are highly effective — an innovative solution to the 'problem' of a bird's discontinuous song.

A more recent work was prompted by the pied butcherbird transcription Barkin discovered in this writer's book ([Taylor 2007](#)). This resulted in *Faygele & Friends* (2010), a spare and spacious MIDI composition. 'Faygele' is the Yiddish word for 'little bird' ([Barkin, pers. com. 2010](#)). Some motifs and figures are faithful to the transcription, while others, much as Bodman Rae does, are re-worked in the composer's own language.



John Rodgers


Birdsong is a recurring theme in the music of multi-instrumentalist, improviser, and composer John Rodgers (b.1962, Millmerran, Queensland). 'The Butcher-Bird' (2006) is part of a set he wrote for Australian recorder-virtuoso Genevieve Lacey. Asked whether the birds are pied or grey butcherbirds, he answers:


I don't know. They were in my back yard where I used to live in [the Brisbane suburb of] Hill End. Maybe they weren't butcherbirds at all, but everyone thought they were. It was very pleasant actually. They'd go all morning, and I'd just write them down as I heard them. I got some sense of what they repeat, return to, etc. I'd bet that at least some stuff I got was not a butcherbird at all. It didn't matter to me; I was trying to make music — not an ornithological document. I found magpies and butcherbirds the most inspiring. On the other hand, I didn't try too hard to 'make music' because they sounded pretty musical anyway. I liked that you could get audiences responding positively to quite strange stuff because they identified it as birdsong. Whether it's a voice, a recorder, or a viola, there's no way you can actually make the sounds birds do. I realised that mimicry is somehow convincing the listener that you are when you aren't, and I think that means using one's intuition ([Rodgers, pers. com. 2009](#)).

The tension between complexity, accuracy, and musicality in birdsong appropriation by composers resurfaces. What makes for good music does not necessarily make for good ornithology — bird identification is not a priority for Rodgers. His confidence resides in the source material, which is evident in the utter simplicity of the piece. All art grapples with the balance between repetition and novelty. Music tolerates and embraces repetition particularly well. We want to predict, *but* we want to be surprised. Rodgers' phrase length is conspicuously similar to that of the bird model. Alternation of pauses and hesitations, *same* and *different*, and contrasting timbres is evident. Pied butcherbirds and other avian songsters have proposed solutions to musical problems, and Rodgers has found their inventions to coincide with his own sensibility.

Mark de Brito

Mark de Brito (b. 1963, London) comes from a family from Trinidad, West Indies. His main career has been as a poet, translator, and critic. He wrote *Saraband for a Butcherbird* for flute and piano (2008) just after returning from a trip to Australia, which de Brito divided between the Gold Coast and Sydney ([de Brito, pers. com. 2009a](#)). The flute part transcribes five minutes of a commercially available recording of a pied butcherbird ([Skeoch 1998](#))¹⁰, while the piano part is formed from other material. This writer had previously transcribed the same recording, and de Brito's transcription closely matches it. The song is a slow one, delivered pre-dawn during a full moon. The phrases echo along the walls of ancient Ormiston Gorge. The original bird can be heard in Sound Sample 4 and De Brito's working in Sound Sample 5.

Sound Sample 4: 'Ormiston Gorge, Full Moon, 3 am' from a CD by Andrew Skeoch. Recorded at Ormiston Gorge, west of Alice Springs, Central Australia. 

Sound Sample 5: *Saraband for a Butcherbird* by Mark De Brito. 

While his rendition is reminiscent of Erik Satie's miniatures for piano, de Brito points to the birdsong as his model:

Since I'm not an accomplished composer, I don't have a style as such, so I didn't put the bird melodies into an existing mould but created an ad hoc stylistic frame for my subjective impressions. The moods and energies of the music are what I heard in the birdsong itself ([de Brito, pers. com. 2009c](#)).

A second piece, *Bird Music for Two Pianos*, also incorporates pied butcherbird motifs. However, it is the violin that intrigues de Brito:

I think the violin is the ideal instrument to represent and translate birdsong. I don't say that just because of the imitative value of varied intonation and bowings, but because monophony is more persuasive outside of equal temperament ([de Brito, pers. com. 2009b](#)).

Tuning and microtonality are a recurring concern.




Ron Nagorcka

Composer, performer, and naturalist Ron Nagorcka (b. 1948, Hamilton, Victoria) spent his childhood exploring music and the natural world on a sheep farm in western Victoria. *Artamidae* (2004a) is his five-movement suite that celebrates a family of Australian songbirds: the grey butcherbird, Australian magpie, black currawong, pied butcherbird, and grey currawong. He writes:

You will hear in the *Artamidae* piece that I've used a just intonation scale, and the electric guitar in particular (a fretless instrument) imitates the bird with some pretty subtle tonal shifts. This brings me to my theory that birds sing in JI (they certainly don't stick to 12 tone ET), and a further question then arises. When they don't seem to be spot on are they singing 'out of tune', or is such a concept ridiculously anthropomorphic? Still, may not 'in-tuneness' be something a female listens for in order to choose a prospective male for breeding? (I am assuming here that just intervals are the benchmark of in-tuneness.) (Nagorcka, pers. com. 2005)

Sound Sample 6 is an excerpt from the opening of the 5:01 movement.

Sound Sample 6: 'Pied Butcherbird', movement four of *Artamidae* by Ron Nagorcka. 

In my research, frequency measurements were taken on a number of songs in order to see whether pied butcherbirds sing in simple integer ratios, something approaching just intonation (Taylor 2008d). While some pied butcherbird song seems to consist largely of discrete pitches, closer examination reveals that this is seldom the case (Taylor 2008d). Portamento is omnipresent, a clear impediment to conventional musicology that relies heavily on establishing a pitch.

Those cultures whose music relies upon pitch bends, portamentos, microtones, blue notes, and arabesques of ornament and decoration may find the fixed pitches of Western art music's equal-tempered system limiting. While pitch glides and microtonal strategies could 'work' for an audience member from any culture, those involved in birdsong notation could be forgiven their longing for discrete pitches. Burton (1909: 22) encountered such difficulties in notating Native American songs with portamento, bemoaning the 'vagueness'. Bartók, too, found notation challenging:

The recording of songs on the phonograph is extremely helpful as a method for the gathering of songs, because sometimes — in our attempt to accurately transcribe a folk song — we lack the appropriate musical signs corresponding to those whimsical gliding effects from one series of sounds to the next, which are known in music as glissando, and can be properly interpreted only through phonographic reproductions (Bartók 1997: 1).

With few fixed reference points and more often a pitch continuum, the relational aspects of pitch that normally ensue after identifying individual notes, from the simplest inter-tone relationships to the hierarchical relationship among the tones such as intervals, scales, melodic contour, tonality, structure — these key components of typological research fade or vanish. Composers are likely to be drawn to those species and those individual birds that sing discrete pitches rather than to those that deliver noisy, *Klangfarbenmelodie*-type songs, with which the notation system struggles. It cannot be ignored that some pied butcherbirds' virtuosic song phrases are of this latter type, displaying clear, bold quality differentiation. Strong contrast could be found in note durations, dynamics, and texture — alternating pure notes and noisy ones, smoothness and roughness (Malloch 2004: 54–6). Intensification via powerful attacks and steep but rapid ascending and descending portamento can be in evidence, and quasi-electronic signals often come to mind. In the analysis of these cases, McClary's insight (2000: x) to resist the easy solutions of tonal-theory training is not merely pertinent but obligatory.

Perhaps Nagorcka's bird did sing in just intonation. Clearly, some pied butcherbird vocalisations will not fit a 12tet template, while others seem to do so comfortably. What is evident is that Nagorcka's inspiration comes in part from the microtonal leanings he hears in his specific pied butcherbird model. But whether his bird model sings strictly in just intonation, or whether his expertise in and fascination with just intonation influences him to place the birdsong into this template, is uncertain.



Emily Doolittle

Like Barkin, de Brito, and Nagorcka, Canadian composer Emily Doolittle (b.1972, Halifax) has an ear for the microtonal possibilities of pied butcherbird song:

Music for Magpies (2003) is a collection of transcriptions of real and imaginary birdsongs. Pied butcherbird song was what inspired me to write this piece. I heard that recording, and it was so musical/composer-like that I wanted to transcribe the song to get closer to it. The transcriptions of the real bird songs are based on recordings from Jean C. Roché's *Les grands virtuoses: Les plus beaux chants d'oiseaux*. I ended up quite interested in the musical result, so then I transcribed the hoopoe lark song. (The pied butcherbird transcription is quite exact — the hoopoe lark transcription is farther away from the actual birdsong. The others I wrote with what I perceive to be a bird-like grammar and language, but are not based on the song of any particular bird.) The piece was originally intended for performance on viola da gamba with quarter-tone frets, but can also be performed on cello or viola ([Doolittle, pers. com. 2008b](#)).

Doolittle's 'Pied butcherbird' is the first movement of a five-movement work. We know from Messiaen's example that the use of words such as 'quite exact' to describe one's birdsong transcription can be problematic ([Curtis & Taylor 2008](#); [Fallon 2007](#); [Hill & Simeone 2005: 208, 244](#); [Nichols 1972](#); [Demuth 1960](#)). Depending on the composer and the moment, transcription varies from slavish to haphazard to simply serving as inspirational seed material. In my research, upon hitting the roadblock of making 'scientific' measurements on the one hand or capturing the essence of the music on the other, I sought advice from Mâche, who responded:

You are right to trust first your ear, then measurements. For complex sounds, like most of those of birds, our ear generally defines a subjective pitch that sonograms do not reveal, particularly when there are portamentos. An exact transcription is of no use to a musician, and a subjective transcription of no use to a biologist. This is one of the ambiguities of our work. I believe that it is best to first define the aim of the analysis, which will then determine the type and degree of simplification of the acoustic terrain. What is relevant for the musician will not always be so for the acoustician, and what the ear picks up on is not always present in a sonogram. I used to make my transcriptions too precise, rendering them virtually illegible to others. These days, I simplify. [Author's translation]

Vous avez raison de vous fier d'abord à l'oreille, puis aux mesures. Pour les sons complexes comme la plupart de ceux des oiseaux, notre oreille définit en général une hauteur subjective, que les sonogrammes ne font pas apparaître, et en particulier lorsqu'il s'agit de sons glissés. La transcription exacte est inutilisable pour un musicien, et la transcription subjective est inutilisable pour le biologiste. C'est là une des ambiguïtés de notre travail. Je crois qu'il faut bien définir d'abord le but de l'analyse, en fonction duquel cette analyse choisira le type et le degré de simplification des réalités acoustiques. Ce qui est pertinent pour le musicien ne le sera pas toujours pour l'acousticien, et ce qui est pertinent pour l'oreille n'apparaît pas toujours dans l'imagerie. Autrefois je faisais des transcriptions trop précises, peu lisibles par les interprètes. Aujourd'hui je simplifie ([Mâche, pers. com. 2006](#)).

Science excels in the telling; music suggests. Haraway relates the dangers of the neutral zone between them collapsing into two ways of knowing that are deaf to one another:

Nor must we lightly accept the damaging distinction between pure and applied science, between use and abuse of science, and even between nature and culture. All are versions of the philosophy of science that exploits the rupture between subject and object to justify the double ideology of firm scientific objectivity and mere personal subjectivity ([Haraway 1991: 2](#)).

As Haraway suggests, facts can be deficient. Science's instruments, software, and experiments enumerate and explicate, but machine knowledge is partial. We know from physics that many aspects can be neither definitively tested nor accounted for; that does not mean they do not exist. I became determined to confront musical issues and not technological ones ([Taylor 2008a](#)). I had survived the 'lure of numeracy' ([Gourlay 1978: 26](#)).

Perhaps 'exact' is a word best avoided in birdsong transcription ('fidelity' is less contentious). In a comparison of Doolittle's transcription-cum-composition with the recording, 'exact' would be difficult to justify when applied to pitch (when measured in the sonogram window



and heard by this writer with absolute pitch), although it could apply to contour. She shows herself to be adept at translating the gestural sense of the rhythm. Scant attempt is made to deal with the numerous portamentos, but dynamics and timbres are meticulously indicated. Example 11 presents the opening phrase from the work.

Example 11: The opening phrase of Doolittle's 'Pied Butcherbird' from *Music for Magpies*.

pied butcherbird
violin version

Accidentals apply to the adjacent note(s), and to groups of notes beamed together. Accidentals do not carry over the octave.

$\text{♩} = 200$
flowing and lively
notes slightly detached from each other

delicate *fast tremolo*

(very slight accent) *p* *mp* *p* tapping on wood of violin

Doolittle has captured many qualities but left others behind, as is her composerly right.

Improvisation from Yves Cerf, Frédéric Folmer, and Raúl Esmerode

Saxophonist Yves Cerf, bassist Frédéric Folmer, and percussionist Raúl Esmerode collaborated on a 1999 jazz CD, *Ornithologies: 10 pièces improvisées pour chants d'oiseaux*. Each track essays a different birdsong and consists of a field recording, some composed elements, and improvisation. Cerf (b.1955, Berne, Switzerland) penned track nine, 'Corbeau flûteur-pie' ('pied butcherbird' in French), which is 5:35 in duration. The track begins with the Roché recording on which Doolittle based her work. After a few birdsong phrases, the trio enter with punchy unison riffs emulating the contour and rhythm of several of the bird's phrases. This is followed by an up-tempo jazz improvisation while the field recording continues at a reduced level. After several minutes, the field recording interrupts the improvisation; a slow improvisation section with the field recording ensues, and then a final section returns to the unison riffs of the opening. These short motifs emulate a common avian strategy: sound then silence. Like much of human music, some birds are continuous singers, while many others are discontinuous.

Petri Kuljuntausta and Dario Martinelli

The Roché recording that Doolittle and Cerf appreciate also finds its way into 'A Zoomusicological Essay', track two of Petri Kuljuntausta (b.1961, Tampere, Finland) and Dario Martinelli's (b.1974, Andria, Italy) CD (2005). In this blend of Kuljuntausta's often-dense electronic textures with field recordings assembled by Martinelli, Roché's pied butcherbird enters at 5:30 for an essentially solo presentation until 8:00, at which point the recording is sampled and developed by way of electronic manipulation. Once sampled, the material quickly moves to the point where it can no longer be traced.

Several seconds from the Roché recording also appear as thematic material for the pied butcherbird stuffed toy, which plays when the toy is squeezed.¹¹ Again, the vocalisations of certain birds so capture the human imagination that the song sees multiple outcomes. Others find the pied butcherbird voice emblematic of something beyond music.

Mark Hansen

Mark Hansen's (b.1960, Cremorne, Sydney) CD *Australian Birdsong Improvisations* (1997) features eight 'new age' piano musings, two of which are based on pied butcherbird song. A single phrase is extracted from a birdsong recording and pasted several times in close succession in a rhythmic framework. Such a pattern of singing — in which a bird repeats a phrase multiple times before switching to another, termed 'eventual variety' — is not typical of the singing of the pied butcherbird, known to be a singer of immediate variety, in which successive phrases are different; moreover, there would typically be much longer silences between phrases (Taylor 2008d). As the piano enters, the bird fades.



The Pied Butcherbird recording that I have has two calls of contrasting moods, which I took and created a sad and reflective piece, and also an uplifting, bright, and cheery song ([Hansen, pers. com. 2008](#)).

The pieces are consistent with those works suitable for yoga classes or meditation. This type of outcome, suggesting a harmonious oneness with nature, is a recurrent theme in birdsong appropriation ([Navickaite 2008](#)). The field recordings are credited to Andrew Skeoch, but no date or place is indicated, nor do they figure in the collection Skeoch has shared with this writer.

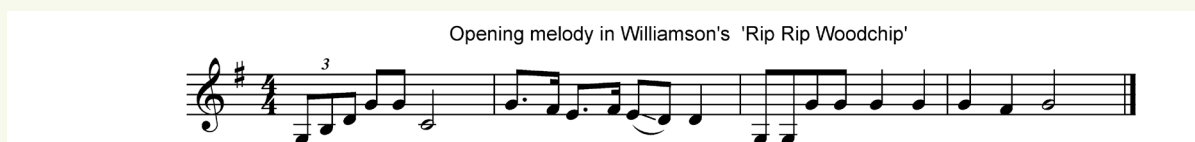
John Williamson

Australian country music singer/songwriter John Williamson (b. 1945, Quambatook, Victoria) is known for tunes that celebrate the continent's indigenous flora and fauna, as well as those who would protect them. 'Galleries of Pink Galahs', 'Cootamundra Wattle', and 'Wildlife Warriors: It's Time' (a tribute to the late 'crocodile hunter' Steve Irwin) are typical titles from Williamson's songbook. In 1989 he penned 'Rip Rip Woodchip', a song critical of the forest industry and reputedly based on the song of a butcherbird. His daughter Ami clarifies which species of butcherbird it is based on (there are four all told):

It's a pied butcher bird ... but Dad reckons they change their tunes — perhaps seasonally, but he's not sure ... he thinks that they may all have different tunes to communicate with specific partners. But the direct tune is the line 'Over the hill they go' ([Williamson, pers. com. 2010](#)).

The motif corresponding to these lyrics (and others as well) consists of a rising G major arpeggio, which then descends to a C (Example 12).

Example 12: The opening vocal part to Williamson's 'Rip Rip Woodchip'. Bar one is appropriated from the pied butcherbird.



While the motif in bar one is consistent with country music's aesthetic, there is nothing in the pitch, contour, or rhythm that would rule this out as a complete or partial appropriation from pied butcherbird song. Even bar two seems idiomatic of the species, although the two would be delivered as distinct phrases separated by several seconds of silence. Bars three and four reflect a human solution, one chiefly concerned with supporting lyrics and resolving the phrase.

Brett Dean

Australian Brett Dean's (b.1961, Brisbane) *Pastoral Symphony* ([2000/rev. 2001](#)) for chamber orchestra incorporates a recording. The pied butcherbird is featured for several bars intermittently. Dean shares Williamson's concern for environmental protection. He comments:

Sure, we all 'love' nature, but what we love more are all the trappings of modern living ... certainly more than the desire to stop and bask in the glory of a single butcherbird, perhaps the most magical sound found on the whole Australian continent. This piece, then, is about glorious birdsong, the threat that it faces, the loss, and the soulless noise that we're left with when they're all gone ([Dean 2000](#)).

Dean's ecological preoccupation suggests that music is capable of establishing a dialogue between nature and culture. The use of a tape marks a departure from the more standard reworking or elaboration of a birdsong transcription. When the bird is allowed to 'speak' for himself, timbre, central for many avian songsters and particularly this species, can come to the forefront. As Bartók suggested, 'The only really true notations are the sound-tracks on the record itself' ([Bartók & Lord 1951: 3](#)). However, a recording is not a tangible fact, nor a first-hand field experience. Messiaen grasped the subjectivity of the microphone as well as the variability of birdsong within members of the same species. As he explained to Claude Samuel:



To know the song of the meadowlark, one has to have heard thousands of meadowlarks for hours, days, months, and years; so, you see, a phonograph record is an incomplete tool inasmuch as it only gives us a portion of a song, just as a photograph conveys the snapshot of a single individual. ... Only a composer could manage to understand it and capture it on paper; in fact, most ornithologists refrain from describing it and merely say, 'Extraordinary song, impossible to describe' ([Samuel 1994: 89](#)).

Whether birdsong is heard via the concentrated listening of a concert hall or a shotgun microphone in the field, contextualisation will affect the outcome. Dean's tape is a sketch of one individual's singing style, and even then, everyone hears a different bird.

Michael Hannan

Michael Hannan (b.1949, Newcastle, New South Wales) is a composer, performer, and music researcher based in Nimbin. The sounds of nature, particularly birdsong, are the main inspiration for his work, and his catalogue contains dozens of pieces that employ transcriptions of Australian songbirds. He utilises both his own recordings and those of others. 'I often transcribe birdsong directly as I am composing and sometimes transcribe the songs without recording them', he recounts ([Hannan, pers. com. 2009](#)).

Resonances I–IV for piano (1987–97) incorporate transcribed pied butcherbird songs; another distinctive feature is that the sustain pedal is constantly depressed. Not unlike when a bird shares its acoustic space with numerous other species: '[A]ny new material has to blend harmonically with what has gone before' ([Hannan 1995](#)). For Hannan the sound itself is key, and complex sustained chords explore the harmonic possibilities. Although he makes no explicit reference in his writing to the timbral elements of pied butcherbird song as an inspiration, one can imagine that in this bird he identifies a kindred spirit.

In the second movement of *Resonances I*, 'Earth Song', all the melodic material is constructed from fragments of pied butcherbird calls:

I was surprised in analysing the melodic line retrospectively that all the tones were part of the octatonic scale, a scale of alternating minor seconds and major seconds (called the diminished blues scale in jazz theory, and the second mode of limited transposition by Messiaen). I was also delighted to discover later that Henry Tate's *Australian Musical Possibilities* ... had suggested the butcherbird as a source of musical ideas. Tate even suggested a scale derived from the calls that involved the minor second and major third. However, Tate suggested altering the tones of the bird he heard to include a minor sixth in order to ally the scale with Bartók's musical practice ([Hannan 1995](#)).

While individual pied butcherbirds may visit discrete pitches, my research failed to confirm any suggestion of a universal pied butcherbird scale. In addition, due to prevalent portamento, assigning a scale to most pied butcherbird vocalisations would appear to be an oversimplification or a forced codification.

'Sky Song' (from *Resonances IV*) is based on a field recording in which the bird exhibited compound metre tendencies, and Hannan ([1995](#)) wrote the piece preserving this quality. A more recent work, *13 Ways of Looking at a Butcherbird* for piano ([Hannan 2008](#)), relies on simple harmonic frameworks for each movement. The composer has shared his source recordings and subsequent transcriptions with this researcher. The spare, minimalist pieces match up easily from recording to transcription to completed work, striking a balance between accuracy and simplicity. One suspects that the bird is an accomplice, for just as food plants and folk tunes have been winnowed down and refined by a myriad of trials, so too has the robust, flexible, and mercurial song of the pied butcherbird. Theirs is often a simple but compelling elegant musical statement, and, as with many of the above composers, Hannan trusts the material (Examples 13a and 13b).

When avian material is interrogated and worked by a composer, new insights stand to be revealed. Thus, composition based on birdsong becomes part of the analysis process and not merely what precedes or follows it.



Example 13a: Hannan's pied butcherbird transcription from Coffs Harbour.

Pied butcherbirds at Coffs Harbour as transcribed by Hannan



Example 13b (Sound Sample 7): Hannan's composition based on the transcription in Example 13a: Movement 4 from

13 Ways of Looking at a Butcherbird.

Movement 4 from Hannan's *13 Ways of Looking at a Butcherbird*

$\text{♩} = 104$
8 *Grazioso*

mf *mp*

sempre pedale

4 8 *p*

8 8 *mf*

Hollis Taylor

As it is with Hannan, pied butcherbird material is the main source for my (b.1951, Portland, Oregon) own compositions, which do not set out to improve on their song. Accordingly, developmental method inherent in sonata form and other Western classical-music procedures have little pertinence. Rather, their vocalisations are celebrated more in keeping with their own stylistic conventions (admittedly wide, but they do exist).

A constraint was imposed on one group of pieces that the works would be for a solo instrument, so that the instrumentalist would have to 'go out' in the same way as a bird goes out into the dawn chorus, as one voice. Of course, birds seldom sing in a sound vacuum — here is the entire biophony unfolding — the bush orchestration, if you will. So, on occasion another instrument, bird, frog, or insect is allowed to participate. *Nightbirds: Alice Springs* (Taylor 2008c) and *Riffingbirds 1–4* (Taylor 2009b), both for violin and tape, concern themselves with the work's acoustic image, celebrating the physicality of antiphonal song when two or more birds sing from different song-posts or when a bird changes song-posts (speakers are placed at strategic locations and the soloist 'sings' from various points in the hall).



Space is an essential aspect in music, as it is in the dawn chorus. Counterpoint is ideally suited to presenting several, even equal, voices in space. Therefore, the notion of counterpoint as a natural state maintains a critical role in the work, as it does in the avian biosphere, and as it did in the mind *and* body (consider the pedals, stops, and multiple keyboards of an organ) of J. S. Bach, for instance.

Questions of range and timbre also arise: will a pied butcherbird phrase sound as compelling two, three, or four octaves below its normal delivery range? Do we appreciate their vocalisations for their unique timbre, or could a bassoon bring it off with equal panache? By addressing these questions in composition, it became a partner in the process of birdsong analysis.

Pied butcherbird vocalisations often boast a compelling rhythm and raw energy reminiscent of certain jazz styles. Lively syncopations and phrase endings on weak beats are common in their sound repertoire. With an abiding interest in issues of rhythm and bowing in my compositions for strings, I wanted a major work to build on pied butcherbird themes particularly suitable for rhythmic exploration. Such material was uncovered in the pied butcherbirds from Esk, Queensland. The resultant string quartet (see Example 15 for an extract) is entitled *Bird-Esk* ([Taylor 2009a](#)).

In the autumn of 2008, dawn chorus and later diurnal participation by the Esk birds (perhaps eight or ten in number) consisted of overlapping duos, trios, or larger groups, with participation (to these ears) sometimes loosely timed. Their vocalisations were transcribed (see Example 14) and a rule applied: the recomposition would draw on every notated phrase in the order it had been delivered. Original pitches were adhered to, making adjustment for octaves as the various string instruments required. There is nothing particularly ‘scientific’ about the order, and it is not for that reason that this constraint was applied. The next morning, phrases and their order could well have varied. (While diurnal phrases might have sequential rules, this remains an intriguing area for future study.) The various constraints were imposed to maintain as close identification with the morning’s vocalists as possible.

The *raison d’être* of birdsong transcription is to illuminate it, not to duplicate it. All descriptions are partial. My composition portfolio does not strive to recapture or emulate nature, nor is there an attempt to create a pastoral character. The goal is simply to uncover and underline aspects of pied butcherbird song in all their complexity and diversity.

Conclusions


Due to his limited geographical experience with this bird’s vocalisations, Tate could not have known even a fraction of what pied butcherbirds are capable of. Like the composers detailed above, each bird has a unique approach and ‘bag of tricks’, and their songs often display novel recombinations of sonic material. The movement by many composers from mere melodic imitation and elaboration to a fuller exploration of avian idioms speaks to the awe of those who discover that birdsong is more than a primitive commodity awaiting full realisation by the composer. There is much to choose from, and all the surveyed composers have been on highly personal voyages with their avian counterparts. What the composers borrow reflects back on their individual aesthetic as much as it points to the bird model.

The species has been successful in creating and re-creating a culture with clear and unequivocal links to the experience of human music, and this correspondence between the pied butcherbird’s musical proclivities and those of humans is regularly encountered. This catalogue of how composers draw on birdsong produced each of Tate’s recommendations and then some. In compositional design, pied butcherbird vocalisations have been the source in the parameters of melody, harmony, rhythm, gesture, contour, dynamic envelope, formal structure, phrase length (and the balance of sound and silence), scales, repetition, acoustic image, programmatic intent, and poetic or psychic inspiration. Their flute-like phrases have been assigned to piano and bass, clarinet and bassoon, xylophone and violin. They have been embedded in a stuffed toy. The pied butcherbird canon has commenced, and Tate’s vision of composers tapping into Australia’s birdsong resources is materialising.

Example 14: Taylor's pied butcherbird (plus one Eastern whipbird) transcription of antiphons from Esk.

Pied butcherbirds at Esk as transcribed by Taylor

The musical score is titled "Pied butcherbirds at Esk as transcribed by Taylor". It is in 4/4 time with a tempo of 120. The score is divided into two systems. The first system consists of two staves. The top staff has a treble clef and contains notes labeled A, B1, B2, and an "Eastern whipbird" section marked *ppp*. The bottom staff has a bass clef and contains notes labeled A, B1, B2, and an "Eastern whipbird" section marked *ppp*. The second system also consists of two staves. The top staff has a treble clef and contains notes labeled C1, D1, and an "Eastern whipbird" section marked *ppp*. The bottom staff has a bass clef and contains notes labeled C2, D2, and an "Eastern whipbird" section marked *ppp*. The score includes various musical notations such as notes, rests, and dynamic markings.

Example 15 (Sound Sample 8): The opening of Taylor's *Bird-Esk*, annotated for comparison with the transcription in Example 14. 

Bird-Esk *
for String Quartet



Violin I

Violin II

Viola

Cello

Begin: whoosh bows in
air simulating wings

B2 (Eastern whipbird)

B2 (Eastern whipbird)

A

B2 all staves
(whipcrack of
whipbird)

B1

B2

B2

B2

B2

mf

ff

drumstick

C1

C1+2

C1+2

C1+2

D1

D1

slap

D1

D2

D2

arco

* Annotations in this analysis are boxed and do not feature in the musicians' prescriptive score. Letters link to the field transcription of pied butcherbirds in Esk, Queensland on 5 June 2008. Boxes are placed *above* the event they describe.



ENDNOTES

1. This difference in approach between biologists and musicologists is reminiscent of the tug of war in ethnomusicology between anthropologists and musicologists (See Merriam (1969)).
2. <http://musicandnature.publicradio.org/features/#nightingales> (accessed 9 August 2008).
3. Christine Mercer, a PhD. candidate at the University of Melbourne on the topic of Tate's music, is married to Tate's nephew. Annotation numbers and numerals are Mercer's. 'MFPC' refers to where the collection is held. Tate uses grace notes to indicate portamentos ([Mercer, pers. com. 2008](#)).
4. In *Audio Culture: Readings in Modern Music* ([Cox & Warner 2007](#)), see the chapter 'Music in the Age of Electronic (Re)production', particularly the contributions of Eno, Oswald, and Cutler. Also see 'DJ Culture' in the same volume.
5. Cross-species mimicry in birds is well documented, including many Australian species ([Chisholm 1932](#); [Robinson 1975](#); [West et al 1983](#); [Robinson & Curtis 1996](#); [Kaplan 1999](#); [Keeley et al 2008](#); [Zann & Dunstan 2008](#).) While the function of mimicry remains puzzling, at least 123 avian species are known to employ vocal mimicry ([Baylis 1982: 60](#)). For pied butcherbirds, the literature catalogues at least 43 mimicked species, as well as a truck reverse alarm, a phone ringtone, and a car burglar alarm ([Taylor 2008d: 117](#); [Taylor & Lestel 2010](#)).
6. Lumsdaine has supported this research by sending his complete catalogue of pied butcherbird recordings, which span three CDs.
7. [Messiaen pers. com. 1989](#).
8. Notebook #23159: pages 6, 10, and 12 are designated at the top of each page 'The Inland (Australie)', likely the name of a recording from which he was transcribing; page 25 is marked 'Australie, Sydney Curtis' and hails from the recording *Pour Messiaen*, as indicated by the identical order of the cassette and transcriptions and by a direct comparison of the recording with the transcriptions; and page 65 is identified with 'Tamborine Mountain' and is the result of Messiaen's fieldtrip with Curtis ([Curtis & Taylor 2008](#)).
9. These motifs are consistent with the wide range of pied butcherbird conventions. While the pied butcherbird is a rarity in and around Adelaide, the composer lives in the Adelaide foothills, where the bird is more likely to be encountered. Thus, it is entirely credible that Bodman Rae's transcriptions are indeed from the species in question.
10. Skeoch is a widely respected Australian wildlife recordist and amateur musician. I wondered how he would compare his soundscapes to Lumsdaine's, principally whether he considered them to be 'compositions'. Skeoch replied, 'I am not a composer; I try to reveal the composition that is already there. I make choices of how to place the microphone and how to present the audio — you can call me an interpreter, or just a plain recordist. People overlook how composed and musical birdsong is. Anything that can draw attention to it and blur the boundary I think is really good' ([Skeoch, pers. com. 2010](#)).
11. The toy's label reads, in part: 'Wild Republic Birds with real bird calls! ... Authentic bird calls provided by CEBA, Centre Bioacoustique Alpin, recorded in September 1974, near Lamington National Park, Australia. Typical male song'.

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SOUND SAMPLE CREDITS

Sound Sample 1: Pied butcherbird field recording. Recorded on Ilparpa Road, Alice Springs, Central Australia, 6 am, 5 September 2010, by Hollis Taylor. Reproduced with permission of Hollis Taylor.

Sound Sample 2: 'Pied Butcherbirds of Spirey Creek' (Track 1) by David Lumsdaine, 4:43–5:20. Recorded by David Lumsdaine. CD: *Mutawintji*, Tall Poppies TP091. Reproduced with permission of Tall Poppies.

Sound Sample 3 (Example 10): String Quartet No. 2 by Charles Bodman Rae, bars 85–105. Artists: Australian String Quartet—Natsuko Yoshimoto and James Cuddeford (violins), Jeremy Williams (viola), Niall Brown (cello). CD: personal recording of the composer. Reproduced with permission of Charles Bodman Rae.

Sound Sample 4: 'Ormiston Gorge, Full Moon, 3 am' (Track 1) by Andrew Skeoch: 0:39–1:41. Recorded at Ormiston Gorge, west of Alice Springs, Central Australia, 2:30 am, October 1998, by Andrew Skeoch. CD: Listening Earth LECD 9902. Reproduced with permission of Andrew Skeoch, Listening Earth.

Sound Sample 5: *Saraband for a Butcherbird* by Mark de Brito, bars 1–24. Artist: Mark De Brito (keyboard sampler). Personal MIDI audio file of the composer. Reproduced with permission of Mark de Brito.

Sound Sample 6: 'Pied Butcherbird', movement four of *Artamidae* by Ron Nagorcka, 0:00–0:44. Artists: Joe Cook (trombone); Larry Polansky (fretless electric guitar and mandolin); Karlin Love (clarinet and bass clarinet); Jennie MacDonald (flute and piccolo); Ron Nagorcka (keyboard sampler and didjeridu). CD: personal recording of the composer. Reproduced with permission of Ron Nagorcka.

Sound Sample 7 (Example 13b): Movement IV from *13 Ways of Looking at a Pied Butcherbird* by Michael Hannan. Artist: Michael Hannan (piano). CD: personal recording of the composer. Reproduced with permission of Michael Hannan.

Sound Sample 8 (Example 15): *Bird-Esk* for string quartet by Hollis Taylor, bars 1–30. Artists: James Cuddeford and Hollis Taylor (violins), Errki Veltheim (viola), Daniel Yeadon (cello). CD: personal recording of the composer. Reproduced with permission of Hollis Taylor.

ABSTRACT

This article surveys the range of strategies employed by composers who make overt reference to birdsong as a model, with a focus on the pied butcherbird. The species plays a conspicuous role in the appropriation of Australian birdsong by composers, as first proposed by Henry Tate in the early twentieth century. In human compositional design, pied butcherbird's protean vocalisations are well represented as the source in 20 diverse outcomes, from classical music to country, from new age to jazz, and from electronic sampling to the sound embedded in a stuffed toy. Analysis of these birdsong-inspired works is amplified by personal observations and correspondence from a number of the composers. The interrogation of birdsong has currency in analytical practice as well, provoking issues such as musical universals, the origins of music, and the role of transcription and analysis in composition. Tate's vision of composers tapping into Australia's birdsong resources is materialising, with nuance, variety, and transformation shown to be preoccupations of both this avian songster and its human counterparts.

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