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Whose Bird Is It? Messiaen's Transcriptions of Australian Songbirds

HOLLIS TAYLOR

Abstract

This article examines the meeting point of Olivier Messiaen, Australia and birdsong, particularly as it relates to the transcription of pied butcherbird (*Cracticus nigrogularis*) vocalizations. It draws upon correspondence from Messiaen to the Australian ornithologist Sydney Curtis, printed here for the first time, as well as two recordings not previously available to musicologists, from which Messiaen transcribed. Both the recorded birdsong models and Messiaen's transcription of them in his *cahiers* are subjected to sonographic and waveform analysis. In analytical scrutiny of eight of these transcriptions, I demonstrate that Messiaen's pied butcherbird transcriptions conform to their models in a partial and highly personal way. I propose a provisional template for Messiaen's approach to birdsong transcription, in order to answer Alexander Goehr's question: 'Why do birds sound like birds, but Messiaen's birds sound like Messiaen?'

'I don't suppose you'd be interested in my correspondence with Olivier Messiaen, would you?' asked Australian ornithologist Sydney Curtis.¹ In a relationship that up to then had gone unreported, Curtis recounted to me how he had written to the composer in 1981 about lyrebird mimicry. Aware that Messiaen employed birdsong in his compositions, Curtis wanted to enlighten him about an avian corollary: lyrebirds who incorporated *human* music in their vocalizations.² He sent a cassette (which he titled *Lyrebirds for Olivier Messiaen*) containing his original recordings of the two species of lyrebirds, the superb (*Menura novae-hollandiae*) and the Albert's (*Menura alberti*), and a letter of explanation on how the mapping of one musical language onto another was a cross-species practice.³ Curtis was rewarded with an enthusiastic and gracious thank-you letter (Figure 1). Then, in 1988

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This study is deeply indebted to correspondence and several meetings with pianist and Messiaen student/scholar Peter Hill, and to correspondence and meetings with the ornithologist Sydney Curtis and his archives that he generously shared with me. I am also grateful for the valuable suggestions offered by the journal's two anonymous readers. Research for this study was made possible by funding from the Wissenschaftskolleg zu Berlin (where I was a Fellow in 2011–12), and from the University of Technology, Sydney.

Every effort has been made to secure necessary permissions to reproduce copyright material in this work, though in some cases it has proved impossible to trace copyright holders. If any omissions are brought to our notice, we will be happy to include appropriate acknowledgements.

- 1 This conversation took place in 2005 as I began my zoömusicological research into the vocalizations of the Australian pied butcherbird. Curtis was one of several ornithologists who shared their birdsong recordings with me, which is how we met. The article is indebted to his personal archives, including four letters from Messiaen to Curtis, two of which are printed here for the first time.
- 2 H. Sydney Curtis and Hollis Taylor, 'Olivier Messiaen and the Albert's Lyrebird: From Tamborine Mountain to *Éclairs sur l'Au-Delà*', in *Olivier Messiaen: The Centenary Papers*, ed. Judith Crispin (Newcastle upon Tyne: Cambridge Scholars, 2010), 52–79.
- 3 *Lyrebirds for Messiaen*. Field recordings of Australian lyrebirds. Recorded: H. Sydney Curtis. Personal recording sent to Messiaen in cassette format; now in CD format, private archive of author, 1981.

OLIVIER MESSIAEN

230, RUE MARCADET

75018 PARIS

TÉL. 627-99-34

France

à Monsieur H.S. CURTIS

Director Management et Opérations Branch

National Parks, Wildlife service- PO BOX 190

BRISBANE- QUEENSLAND NORTH QUAY 4000 Australie

Paris, le 22 novembre 1981

cher Monsieur le Directeur,

La maison d'éditions Alphonse Leduc vient de me transmettre votre cassette sur les deux OISEAUX-LYRES d'Australie. Je vous suis très reconnaissant de m'avoir envoyé cet enregistrement qui est tout à fait extraordinaire! Je connaissais déjà un peu l'Oiseau-Lyre Superbe et aussi l'Oiseau-Lyre d'Albert, ainsi que les Oiseaux imités dans la section 5 de la face A. Mais cet enregistrement extraordinaire surpasse tous les enregistrements que je connais, non seulement pour la ^{seule} prise de son, mais pour l'étrangeté et l'originalité des cris et des chants des Oiseaux-Lyres. Ce qui est remarquable, c'est que l'imitation des autres Oiseaux, comme l'imitation de la flûte, l'imitation des battements d'ailes, peut-être aussi l'imitation des gouttes d'eau et des grenouilles, tout cela n'est pas servilement imité, mais en réalité recréé. Le même phénomène se passe d'ailleurs aux Etats Unis avec le Moqueur Polyglotte, et en Europe avec les Hypolaïs.

En tout cas, ce que vous m'envoyez est d'une nouveauté rythmique et timbrique absolument stupéfiante. Vous m'avez fait un immense plaisir et je vous en remercie de tout mon coeur.

Croyez je vous prie, cher Monsieur le Directeur, à mes sentiments profondément reconnaissants.

Olivier Messiaen

Figure 1 Letter from Messiaen to Curtis dated 22 November 1981. Used with permission.

Curtis was one of three ornithologists to take Messiaen birding during his six-week tour of Australia. The following year, Curtis compiled and sent to Messiaen a second personalized cassette, entitled *Pour Messiaen*, which featured assorted Australian birdsong.⁴

This recording provides my starting point for analytical scrutiny of eight Messiaen birdsong transcriptions appearing in his *Cahiers de notation des chants d'oiseaux*. I begin by examining transcriptions that Messiaen made of Curtis' recordings of the pied butcherbird, comparing them to the original tape and to my own transcriptions. The study expands to include pied butcherbird transcriptions made by Messiaen from a 1977 cassette recording of Australian birdsong of limited release (*Bird Calls of the Inland*) which, like the Curtis recording, appears to be unknown to musicologists, and further transcriptions from a 1987 Jean C. Roché commercial release.⁵ I also examine sketch pages attributed to Messiaen's fieldwork with Curtis. The goal is to establish with new clarity the habits and idiosyncracies of Messiaen's birdsong transcription.

Much ink has been spilled concerning Messiaen's use of birdsong in his compositions. At times he would transfer every nuance of his transcription into a piece, such as the nightingale he notated at St-Germain-en-Laye, which figures in the final phrases of the opening piano cadenza of *Réveil des oiseaux* (1953).⁶ At other times, the composer intervened to a greater or lesser extent, especially in the later works, where dramatic flair, artistic licence and transformation surface regularly. *Oiseaux exotiques* (1955–56) is the first composition containing birdsong sourced (in part) from recordings.⁷ Detailed accounts of the extent to which Messiaen's birdsong *compositions* (as opposed to transcriptions) match their models fill the literature, and they will not be added to here. Rather, I will move through ground that has been unsatisfactorily traversed, interrogating the kinds of transcriptions that Messiaen crafted.

Music transcription entails the subjective and the reductive. Béla Bartók held that '[t]he only really true notations are the sound-tracks on the record itself'.⁸ Of course, this ignores technology's varying ability to capture and reproduce sonic properties (magnified by shellac's deficiencies of scratch and click, tape's propensity for wow and flutter, etc.). Listening cannot be classified as an objective act. Furthermore, neither a recording nor a sonogram can be deemed an unassailable fact, and both can be problematized.⁹ In a brief chronological

4 *Pour Messiaen*, Field recordings of 19 Australian birds. Recorded: H. Sydney Curtis. Personal recording sent to Messiaen in cassette format; currently in CD format, private archive of author, 1989.

5 *Bird Calls of the Inland*. Recorded: Harold and Audrey Crouch. Cassette, South Australian Ornithological Association, 1977; *Les plus beaux chants d'oiseaux*. Recorded: Jean C. Roché. CD, Auvidis Tempo A6117, 1987.

6 Peter Hill and Nigel Simeone, *Olivier Messiaen: Oiseaux Exotiques* (Farnham: Ashgate, 2007), 28.

7 Hill and Simeone, *Olivier Messiaen: Oiseaux Exotiques*, 32.

8 Béla Bartók and Albert B. Lord, *Serbo-Croatian Folk Songs* (New York: Columbia University Press, 1951), 3.

9 D. C. Williams concludes: 'Auditory space has no point of favoured focus. It is a sphere without fixed boundaries with ourselves in the centre' ('Acoustic Space', *Explorations* (February 1955), 17). See also, for example, Eric F. Clarke, 'The Impact of Recording on Listening' (*Twentieth-Century Music* 4/1 (2007), 47–70); Diana Deutsch, 'An Auditory Illusion' (*Nature* 251 (1974), 307–09); Nicola Dibben, 'What Do We Hear, When We Hear Music?: Music Perception and Musical Material' (*Musicae Scientiae* V/2 (2001), 161–94); and Diana Raffman, *Language, Music, and Mind* (Cambridge, MA: MIT Press, 1993). On the sonogram see Neil J. Boucher, Michihiro Jinnai, and Hollis Taylor, 'A New and Improved Spectrogram' (paper presented at the conference *Australian Institute of Physics*, Melbourne, December 2010).

survey, I find that Messiaen's comments concerning accuracy and authenticity ping-pong, sometimes complicated by a lack of clarity on whether the subject is transcription or composition:

1944: '[A]s it is ridiculous servilely to copy nature, we are going to give some examples of melodies of the "bird" genre which will be transcription, transformation, and interpretation of the volleys and trills of our little servant of immaterial joy'.¹⁰

1953: In his preface to *Réveil des oiseaux*, Messiaen describes his birds as 'parfaitement authentiques'.¹¹

1961: 'I write down rapidly what I hear; the melody and rhythm. I do not note the timbre. As timbre arises from a more or less large number of harmonics it is necessary for me to seek combinations of unexpected sounds, to re-invent at each moment and for each bird. [Birds] are the real authors of some of my pieces'.¹²

1962: '[M]y birdsongs are entirely free'.¹³

1967: 'I've used bird songs in two different ways: either by trying to outline the most exact musical portrait possible, or by treating the bird song as malleable material. [...] Personally, I'm very proud of the exactitude of my work [...] I assure you that everything is real; but, obviously, I'm the one who hears, and involuntarily I inject my reproductions of the songs with something of my manner and method of listening'.¹⁴

1968: 'And now I'd like to talk about the musical forms in which I use birdsongs. There are two different forms, one deceitful and one truthful. The deceitful one – I insist on the word "deceit" – employs the bird-calls as raw material after the manner of composers of electronic music, who use bird-sounds as a source which they constantly electronically alter so much that they almost forget the starting point of the process – so much for the first method. [...] I'll now speak about the second method, which seems to me to be better, I think, also more original. [...] [It] consists quite simply of conforming to reality, not only to the bird-calls, but also to everything surrounding them: landscapes, fragrances, colours and, above all, the passing of the hours during the day and night'.¹⁵

10 Olivier Messiaen, *The Technique of My Musical Language*, vol. 1, trans. John Satterfield (Paris: Leduc, 1944/1956), 34.

11 Robert Fallon, 'The Record of Realism in Messiaen's Bird Style', in *Olivier Messiaen: Music, Art and Literature*, ed. Christopher Dingle and Nigel Simeone (Aldershot: Ashgate, 2007), 115.

12 Olivier Messiaen and Bernard Gavoty, 'Who Are You, Olivier Messiaen?', *Tempo* 58 (Summer 1961), 36.

13 Peter Hill and Nigel Simeone, *Messiaen* (New Haven: Yale University Press, 2005), 244, recounting a pre-concert lecture.

14 Olivier Messiaen and Claude Samuel, *Music and Color: Conversations with Claude Samuel*, trans. E. Thomas Glasow (Portland: Amadeus Press, 1994), 94.

15 Almut Rössler, *Contributions to the Spiritual World of Olivier Messiaen*, trans. Barbara Dagg and Nancy Poland (Duisberg: Gilles & Francke, 1986), 33–34.

Notwithstanding Messiaen's assertion, in interview with Claude Samuel, that 'I'm the first to have made truly scientific and, I hope, accurate notations of bird songs',¹⁶ the majority of scholars have been wary of claims of authenticity *chez* Messiaen, insisting that our attention should be on whether the music works in and of its own accord, a view I share. This article assumes that the human musical outcome will always be different from the avian one. Trevor Hold was an early advocate of this position, writing in 1971: 'The music says what it has to say in its own terms. In a way these trappings are more important to the composer than they are to us, in the same way that serial permutations and manipulations are to other composers'.¹⁷ David Kraft concludes that 'however complex the birdsong, Messiaen's intention was to respond creatively rather than to imitate'.¹⁸ Robert Fallon, who has conducted pioneering work on Messiaen's transcriptions, agrees that they 'attest to his artistry rather than his mimicry',¹⁹ while Rob Schultz directs our attention to 'Messiaen's self-admitted tendency to unintentionally insert his own compositional voice and artistic sensibilities into his birdsong transcriptions'.²⁰ He concludes that we have 'considerable evidence that Messiaen's birdsong is still unabashedly Messiaen's music, and may in fact be understood as such, in strictly musical terms'.²¹ Messiaen student Alexander Goehr recalls that 'Messiaen liked to pretend that he was merely transcribing what he heard when he went to the forests In reality it hardly mattered musically which particular bird he thought he was transcribing; his inventiveness and supreme musical personality revealed itself in the way he set down his transcriptions'.²²

It is the 'setting down' with which this article concerns itself. Hold bemoaned in 1971 that 'without having records of the exact birds that Messiaen used', he 'obviously cannot give exact examples' of Messiaen's transcription methods.²³ More recently, Fallon discovered that Messiaen used sound recordings to notate North American birds in *Oiseaux exotiques*.²⁴ He placed five birdsong models in sonograms in order to compare them to their compositional counterparts, concluding that Messiaen's 'music conforms to his models about two-thirds of the time'.²⁵ The present study also benefits from access to the exact recordings used by Messiaen. It employs sonographic and waveform analysis of both the recorded birdsong models and Messiaen's transcriptions of them from his *cahiers*. On the

16 Messiaen and Samuel, *Music and Color*, 97.

17 Trevor Hold, 'Messiaen's Birds', *Music & Letters* 52/2 (1971), 114.

18 David Kraft, 'Birdsong in the Music of Olivier Messiaen', DPhil diss., Middlesex University, 2000, 352.

19 Fallon, 'The Record of Realism', 123.

20 Rob Schultz, 'Melodic Contour and Nonretrogradable Structure in the Birdsong of Olivier Messiaen', *Music Theory Spectrum* 30/1 (2008), 89.

21 Schultz, 'Melodic Contour', 134.

22 Alexander Goehr and Derrick Puffett, *Finding the Key: Selected Writings of Alexander Goehr* (London: Faber & Faber, 1998), 50–51. Similar sentiments are expressed by Pierre Boulez in Matthew Gurewitsch, 'An Audubon in Sound', *The Atlantic Monthly* 279/3 (1997), 94; and in Seung-Ah Oh, 'Olivier Messiaen's Composition Techniques in *Réveil Des Oiseaux*', DPhil diss., Brandeis University, 2005, 52.

23 Hold, 'Messiaen's Birds', 118.

24 Robert Fallon, 'Messiaen's Mimesis: The Language and Culture of the Bird Styles', DPhil diss., University of California, Berkeley, 2005, viii.

25 Fallon, 'Messiaen's Mimesis', 216–220, and 'The Record of Realism', 120.

basis of this analysis, I will argue that Messiaen does not wait until compositional work on a particular piece to transform the birdsong he notates, but instead actively and with 'characteristic thoroughness'²⁶ adapts birdsong into his personal and distinct musical language at the moment of transcription. I will propose a provisional template for how he filters avian vocalizations – one that confirms and codifies what many have suspected for decades. The template is based on Messiaen's transcriptions of the Australian pied butcherbird (*Cracticus nigrogularis*) and supported by analysis of the superb and Albert's lyrebirds transcriptions and initial analyses of the other species contained in the 64 pages of Australian birdsong transcription in my possession.²⁷

Approach and Methods

If we were to browse any number of books and articles containing birdsong notation from the nineteenth and early twentieth centuries, 'quaint' might be the first word that springs to mind. The notations typically consist of a simple phrase formed almost entirely with crotchets and quavers, set in 3/4 or 4/4 time, floating on a page filled with, depending on the author, learned observations, sentimental text, or a mix of the two.²⁸ Others were motivated to write books suggesting new birdsong notational systems exploring the potential of mnemonic catchwords and graphic notation (like the use of a musical shorthand with lines and squiggles to indicate pitch height, rhythm, and gesture, or of colours to differentiate timbre).²⁹ We cannot dismiss how the visual appearance of Messiaen's extremely detailed avian transcriptions, arriving on the heels of this, influences our estimation of them: they impress. They look, in a word, accurate.

Are considerations of transcription accuracy germane? Fallon believes that they are, not for proving or disproving issues of authenticity, but for understanding the composer's 'aesthetic of representation'.³⁰ Humans are complex and even contradictory creatures; Messiaen was no exception. Christopher Dingle and Nigel Simeone have suggested how,

26 Hill and Simeone, *Olivier Messiaen: Oiseaux Exotiques*, 21.

27 Curtis and Taylor, 'Olivier Messiaen'.

28 See, for example, William Gardiner, *The Music of Nature* (London: Longman, Orme, Brown, Green, and Longmans, 1840); James Edmund Harting, *The Birds of Middlesex* (London: John Van Voorst, 1866); Simeone Pease Cheney, *Wood Notes Wild: Notations of Bird Music* (Boston: Lee and Shepard, 1892); Charles A. Witchell, *The Evolution of Bird-Song with Observations on the Influence of Heredity and Imitation* (London: Adam and Charles Black, 1896); F. Schulyer Mathews, *Field Book of Wild Birds & Their Music* (New York: Dover Publications, 1921/1967); W. B. Olds, 'Bird-music', *The Musical Quarterly* 8/2 (1922), 242–255; A. B. Smith, 'The blackbird's song', *The Musical Times* 63/953 (1922), 480–481; and E. R. G. Andrews, 'Bird songs', *The Musical Times* 71/1047 (1930), 446.

29 See, for example, A. Stadler and C. Schmitt, 'The Study of Bird-notes', *British Birds* 8/1 (1914), 2–8; Walter Garstang, *Songs of the Birds* (London: John Lane the Bodley Head, 1923); Stanley Morris, *Bird Song: a Manual for Field Naturalists* (London: Witherby, 1925); D. S. Falconer, 'Observations on the Singing of the Chaffinch', *British Birds* 35/5 (1941), 98–104; M. E. W. North, 'Transcribing bird-song', *Ibis* 92 (1950), 99–114; and Aretas A. Saunders, *A Guide to Bird Songs: Descriptions and Diagrams of the Songs and Singing Habits of Land Birds and Selected Species of Shore Birds* (Garden City: Doubleday & Company, 1951).

30 Fallon, 'The Record of Realism', 115.

in making our way through the sheer quantity of documentation Messiaen left 'to help to elucidate his music and its inspiration', we risk losing some perspective: 'Scholars of other composers might look with envy upon this abundance of riches, and we are indeed fortunate. However, with a little distance, it is possible to see the limitations of what Messiaen told us'.³¹ In this spirit, when we abandon Messiaen's conflicting statements about notation accuracy and cleave to another set of texts – the avian transcriptions themselves – I believe we can best follow this hunch: that birdsong transcriptions can be read as reflecting the priorities, interests and enculturation of the individual composer. A composer's avian transcription is less an ornithological artefact than a text that mediates between birdsong and the musical score, and as such it will always be conflicted between its descriptive and prescriptive tasks. While we should not expect scientific precision in his transcriptions, or equate 'success' to a close match with a bird model, accuracy nonetheless remains a touchstone as we examine Messiaen's notation choices and contemplate what is chosen and what is ignored, and what is lost and what is gained, through the filtering of birdsong by the richness of the personal musical language and imagination that he brings to the task.

I limit the present discussion to the Australian pied butcherbird in the belief that our investigation could profit from a zoömusicologist who regularly transcribes a species also transcribed by Messiaen.³² This mid-sized black and white songbird delivers mostly pure, flute-like whistles at a lower tessitura and slower pace than many birds.³³ Thus, their song fits reasonably into standard music notation,³⁴ allowing the transcriber to avoid most of the notational challenges encountered in microtonal, high speed, and/or high pitched birdsong. This songbird delivers four types of vocalizations.³⁵ *Calls* tend to be shorter and simpler than songs and are assumed to be innate.³⁶ *Solo songs* are usually sung nocturnally and always discontinuously (phrases are a second or two in duration, followed by inter-phrase intervals of silence generally at least twice as long as phrases).³⁷ Solo songs may last up to six hours.³⁸ *Group songs* range from hocket-like duets, where singers take turns so rapidly that a single melodic line is formed, to large ensembles of eight or even more birds whose vocalizations betray a looser construction.³⁹ Finally, pied butcherbirds are *mimics* with the capacity to eclectically copy techniques and sonic constructs of alien species, as well as

31 Christopher Dingle and Nigel Simeone, 'Introduction', in *Olivier Messiaen: Music, Art and Literature*, ed. Christopher Dingle and Nigel Simeone (Aldershot: Ashgate, 2007), xxii.

32 Since 2005 I have spent up to four months per year observing and recording this species in the field, followed by transcription and analysis of their vocalizations.

33 Hollis Taylor, 'Decoding the Song of the Pied Butcherbird: An Initial Survey', *Transcultural Music Review* 12/12 (2008), 5.

34 There are exceptions, including mimicry of other species. See Hollis Taylor, 'Blowin' in Birdland: Improvisation and the Australian Pied Butcherbird', *Leonardo Music Journal* 20 (2010), 79–83.

35 Hollis Taylor, 'Towards a Species Songbook: Illuminating the Vocalisations of the Australian Pied Butcherbird (*Cracticus nigrogularis*)', DPhil diss., University of Western Sydney, 2008.

36 Taylor, 'Towards a Species Songbook', 12.

37 Taylor, 'Towards a Species Songbook', 129.

38 Hollis Taylor and Dominique Lestel, 'The Australian pied butcherbird and the natureculture continuum', *Journal of Interdisciplinary Music Studies* 5/1 (2011), 73.

39 Taylor, 'Towards a Species Songbook', 114–116.

environmental sounds like cell-phone ringtones, car alarms, and reversing truck signals, in a non-stop montage that they mix with motifs from their own song phrases.⁴⁰

How close can human transcription come to capturing a bird's song? My transcriptions of the same recordings will allow our analysis to follow what Messiaen might have reasonably achieved in terms of accuracy, and thus serve to highlight when and how he departs from the bird model in his unspoken adaptations.⁴¹ My transcription follows in the spirit of Bartók, who in 1929 wrote vis-à-vis folk music collection: 'the musician should not rely on his ear alone, but should use either a phonograph or a gramophone, even in cases of the seemingly simplest melodies'.⁴² Nevertheless, in matters of uncertainty, whether in pitch or rhythm, I defer to the human ear.

Music notation software can only partially capture the visual sense of Messiaen's hand in the *cahiers*; for example, transcriptions were typically written at speed, as evidenced by occasional headless notes employed for repetitions of the same pitch.⁴³ Sometimes, even an experienced eye finds some markings to be ambiguous, and none of the conclusions drawn from this study are based on such uncertain details. When conducting a direct comparison of Messiaen's and my transcriptions, the two are aligned note-by-note whenever possible, with the author's above (or facing) the composer's. In order to facilitate this, despite space and silence appearing relevant in pied butcherbird musical discourse, inter-phrase time intervals are not notated.⁴⁴ In my transcriptions thin double bar lines mark out phrases and indicate a momentary pause in singing.

Messiaen's *cahiers*

Messiaen's *Cahiers de notation des chants d'oiseaux* are housed in the Fonds Messiaen of the Département de la musique at the Bibliothèque nationale de France. Some 200 *cahiers* survive, totalling approximately 10,000 pages.⁴⁵ The marginalia of these transcriptions are frequently annotated with details of location, date, time, habitat, avian behaviour, and plumage. Messiaen credits his attention to ornithological detail and orderliness in part to

40 Taylor, 'Blowin' in Birdland', 81.

41 In addition to my sense of absolute pitch, which I share with Messiaen, I measure frequency in the sonogram window (for which I use the application Amadeus II). However, intervallic distance rather than absolute pitch will be relied upon in comparing matters of pitch. In making my own transcriptions, only rarely do I listen at half-speed, and seldom do I discover anything of merit not already heard at original speed. In the case of a trill, *rattle* (a rapid succession of short and noisy sounding notes), or other quickly iterated decoration, I measure the number of units in the sonogram window and not by ear. Notation is accomplished with the music notation application Finale; its playback feature, delivered by a MIDI flute sound, confirms the notation in matters of pitch, rhythm, and metronomic marking. Finale also accommodates the export of an audio file.

42 Benjamin Suchoff, *Béla Bartók Essays* (Lincoln: University of Nebraska Press, 1976), 4.

43 Fallon observes that, based on starting and stopping times written into a 2 June 1952 transcription, 'his rate of transcription at two minutes per staff reveals that he took little time to ponder his notations' ('Messiaen's Mimesis', 201–202).

44 The measurement of inter-phrase intervals is part of my 'scientific' work, but since Messiaen made no comparable measurements, mine are omitted for the purposes of this article.

45 Interview with Peter Hill, 22 July 2010.

his tutorials from brandy producer Jacques Delamain, the first of which was in April 1952. A friendship developed with Delamain, who was also an author of popular bird books, and Messiaen would later make him one of three dedicatees of his *Réveil des oiseaux*.⁴⁶ Messiaen had been transcribing birdsong since his time at the Conservatoire, but a month after his meeting with Delamain, he began notating in his more systematic *cahiers*. The first *cahier* entry is the result of four days (14, 15, 18, and 20 May 1952) in the forest of St-Germain-en-Laye, soon followed by a return visit to Gardépée on 12 June 1952 for three more days of tutorial with Delamain.⁴⁷

The *cahiers*' marginalia also incorporate comments on timbre, musical mood, tempo, and proposed orchestration, as well as Messiaen's personal reaction to the natural world. Some of the *cahiers* are the product of deskwork, as Messiaen was known to work occasionally from recordings, although he seldom referred to this.⁴⁸ A portion of Messiaen's birdsong transcriptions from his *cahiers* (along with his analyses and examples from his compositions) are featured in volumes 5/1 and 5/2 of the *Traité de rythme, de couleur, et d'ornithologie* (1949–1992).⁴⁹ The first is dedicated to the birdsong of Europe (France in particular), while the second attends to birdsong of the world. In its 1300+ pages, there is no mention that any of the notations are transcribed from a recording.⁵⁰ Fallon estimates that Messiaen began recording birdsongs in the late 1950s.⁵¹ However, Hill reports that no

46 Describing how they met in the preface to one edition of Delamain's *Pourquoi les oiseaux chantent*, Messiaen writes: 'My publisher, Alphonse Leduc, who owned a property in Charente not far from Delamain, talked to him about my endeavours. Some time later, Jacques Delamain wrote to me: "Come, I'm expecting you." His home, at Branderaie de Gardépée, was [...] a large two-storeyed house. I had a bedroom on the first floor with a vast balcony on which I could settle down with my music paper from four in the morning, and take down birdsong at the break of day without disturbing anyone. [...] Jacques Delamain had used his spare time to study birds, and had become over the years an amateur who was recognised and respected by experts. *And if his books are not strictly speaking scientific, they are none the less completely accurate, ornithologically speaking.* It is he who taught me to recognise a bird from its song without having to see its plumage or the shape of its beak, or its flight, so that I no longer mistook a blackcap for a chaffinch or a garden warbler!' (Hill and Simeone, *Messiaen*, 200–201, author emphasis). The italicized passage is another example of Messiaen's propensity to make seemingly contradictory statements, although in this case the reference is not to his own work.

47 Hill and Simeone, *Messiaen*, 205.

48 The composer did not hide the fact that he *listened* to ornithological recordings, for instance in his interview with Samuel (*Music and Color*, 93), but that he transcribed from them was a matter he was less than open about.

49 Olivier Messiaen, *Traité de rythme, de couleur, et d'ornithologie*, 7 vols (Paris: Leduc, 1994–2002. Vol. 1 (1994); vol. 2 (1995); vols 3 and 4 (1996); vol. 5/1 (1999); vol. 5/2 (2000); vol. 6 (2001); vol. 7 (2002)).

50 However, with the sole exception of a Virginia cardinal in a Paris aviary, Hill believes that all of the American birds in *Oiseaux exotiques* were transcribed from *American Bird Songs*, a 1942 six-disc set of 78s released by Cornell University's Laboratory of Ornithology (interview with Peter Hill, 4 February 2013). Hill is here building on research undertaken by Fallon ('The Record of Realism'). Hill and Simeone set the likely time of Messiaen's first notations from this set as early 1954 (*Olivier Messiaen: Oiseaux Exotiques*, 33). Thirteen American birds are paired in the *Traité* with musical examples from *Oiseaux exotiques*. Although only four *cahiers* transcriptions are included (of the catbird, bobolink, whip-poor-will and song sparrow), a search of the original *cahiers* could potentially locate all the examples, allowing a similar study to the present one to be undertaken on these early transcriptions, since the Cornell recording is readily available.

51 'Messiaen's Mimesis', 28.

Table 1 Australian pied butcherbird transcriptions by Messiaen.

Recording ID, Track, Timing/Duration	Recordist(s)	Recording Location & Date	Archives ID & Messiaen Description	Birdsong type
<i>Pour Messiaen</i> 1989 cassette, Side 1/Track 3, 02:34–04:03	Sydney Curtis	Lamington NP, Queensland. 01/10/88	Staves 4–8.5 from “23159 p. 25 Australie (Sydney Curtis)”	Not pied but in fact grey butcherbird duet
<i>Pour Messiaen</i> 1989 cassette, Side 1/Track 4, 04:04–04:48	Sydney Curtis	Lamington NP, Queensland. 01/10/88	Staves 8.5–11 from “23159 p. 25 Australie (Sydney Curtis)”	Pied butcherbird duet
<i>Bird Calls of the Inland</i> 1977 cassette, Side 2/Track 43, 13:32–15:29	Harold & Audrey Crouch	Alice Springs, Northern Territory ??/07/77	Staves 5–9 from “23159 p. 6 the inland Australie (suite)”	Pied butcherbird solo song
<i>Bird Calls of the Inland</i> 1977 cassette, Side 2/Track 43, 13:32–15:29	Harold & Audrey Crouch	Alice Springs, Northern Territory ??/07/77	Staves 7–9 from “23159 p. 10”	Pied butcherbird solo song
<i>Bird Calls of the Inland</i> 1977 cassette, Side 2/Track 43, 13:32–15:29	Harold & Audrey Crouch	Alice Springs, Northern Territory ??/07/77	Staves 1–11 from “23159 p. 12 page bien”	Pied butcherbird solo song
<i>Les plus beaux chants d'oiseaux</i> 1987 CD (Auvidis Tempo A6117) track 13, 02:29 duration	Jean C. Roché	Lamington NP, Queensland. ??/09/74	Staves 1–11 from “23159 p. 57 Australie J. C. Roché”	Pied butcherbird solo song
N/A	N/A	N/A	Staves 10–12 from “23159 Tamborine Mountain p. 65”	Almost certainly a pied butcherbird duet
N/A	N/A	Tamborine Mountain, Queensland 13/06/88	Staves 6–9 from “23161 Australie Tamborine Mountain 13 juin 1988 [p.] 41”	Almost certainly a pied butcherbird duet

recordings from Messiaen's personal collection, either commercial ornithological recordings or Messiaen's own field recordings, are housed in the Archives, or if they are, they have yet to be catalogued and made available to scholars.⁵²

To date, I have examined 64 pages from Messiaen's *cahiers* #23158, #23159, #23160 and #23161 that contain Australian birdsong transcriptions and text related to their cataloguing. When referring to these, I place a period after the *cahier* followed by the page number(s), and if there is a further need to identify staves, I employ a second period (for example, #23159.65.8–10 indicates *cahier* #23159, page 65, staves 8–10). When working in the field,

52 Interview with Peter Hill, 4 February 2013. Fallon speculates that Messiaen may have changed the names of some of the North American birds in *Oiseaux exotiques* that he transcribed from a recording ‘in order to obscure the work's debt to the record’ (‘Messiaen's Mimesis’, 211), and one wonders if perhaps recordings were not sent to the Archives for a related reason. In a similar vein, Matthew Schellhorn teases out the composer's lack of ‘openness in acknowledging the influence of other composers’ (‘*Les Noces* and *Trois petites Liturgies*: an assessment of Stravinsky's influence on Messiaen’, in *Olivier Messiaen: Music, Art and Literature*, ed. Christopher Dingle and Nigel Simeone, 60.)

Messiaen dated each notation; with recordings, this is not the case, nor are the *cahiers*, pages catalogued chronologically.⁵³ Table 1 details all eight pied butcherbird examples appearing in the *cahiers*.

Transcription of the Curtis recording *Pour Messiaen*

Pour Messiaen features 19 Australian bird species in all. Messiaen transcribed five pages from it (*cahier* #23159.25–29). All but three of the 19 birdsongs were transcribed; they were notated in order, and most include the entire excerpt. Eight staves (4–11) from *cahier* #23159.25 are credited to the pied butcherbird.

Curtis initially identified Track 3 (transcribed by Messiaen on staves 4–9.5) as pied butcherbirds duetting, but later revised this to grey butcherbirds. I can verify that Track 3 (as well as Tracks 5 and 6) indeed features a grey butcherbird pair; all three tracks were recorded at the same site and contain similar phrases. Messiaen understandably misidentifies his transcription of Track 3 as ‘Pied Butcherbird’. But although the grey butcherbird is not our target species, it presents an illuminating entry point to Messiaen’s transcription practice. A notable feature of the grey butcherbird duet is some remarkable glissando rattles. One of the pair delivers a rattle twenty times in this excerpt, both ascending and descending, and the rattle spans from three to six semitones in 11–24 units (top line of the double staves of Example 1; note that my transcription places the duo on separate staves, while Messiaen combines them). Messiaen notates all the whistled rattles with a mere five demi-semiquavers on a static *c#*³ marked *sifflé* (‘whistle’; arrows mark the contrast in Example 1), scarcely addressing the rattles’ direction, pitch, duration, and even number of approximate iterations. We cannot assume the composer intends only to notate what humans could perform. Several instrumental techniques, like a keyboard glissando or a *portamento* on the violin with a ricochet bow, would have been at his disposal.

The other bird of the pair is notated in the author’s transcription with various syncopations and rests. Messiaen relies exclusively on an unbroken chain of semiquavers and demi-semiquavers to tell the sonic story. This scarcely seems to be the same person who told Gavoty: ‘Rhythm is a matter of intelligence; the more perfect the human brain becomes, the more one will be able to use complex rhythms’,⁵⁴ nor he who in his book *The Technique of My Musical Language* goes ‘to great inconvenience in order that his rhythmic innovations should be thoroughly treated before he turns to questions of harmony or melody’,⁵⁵ and who devotes much of the first three volumes of his *Traité* to rhythm. Since the transcription is not the product of fieldwork, it was not necessary to notate in haste. Instead, the composer is notating only those song elements that interest him and/or that he will require later in the compositional process, and he is notating very much in keeping with the ‘look’ as well as the eventual sound of his scores. In summary, the rhythm and pitch of Messiaen’s

⁵³ Interview with Peter Hill, 22 July 2010.

⁵⁴ Messiaen and Gavoty, ‘Who Are You’, 35.

⁵⁵ David Drew, ‘Messiaen – A Provisional Study’, *The Score* (December 1954), 34.

The image displays a musical score with three staves. The top and bottom staves represent the author's transcription, while the middle staff shows Messiaen's original notation. Arrows connect specific passages in the author's transcription to corresponding passages in Messiaen's notation, highlighting matching rattles. The middle staff includes markings for 'modéré (flûte)', 'f', 'ff', and 'sifflé'.

Example 1 *Pour Messiaen*, Track 3 at the beginning. The author's transcription is on the top and bottom pair of staves, and Messiaen's (*cahier* #23159.25.9) is on the middle staff. Arrows match the rattles in each. Extracts from Messiaen's *cahiers* here and throughout this article are reproduced by kind permission.

transcription of this duet only partially match the model, and in terms of capturing the essence – the *jizz*⁵⁶ – which, to this auditor, would be the vivid ascending and descending glissando rattles, they are not described at all in Messiaen's notation. The *flûte* contribution from the other bird matches the recorded model more closely, at least by eye – an aural assessment of the transcription when played back matches less well.

Midway through staff nine of the same *cahiers* page (#23159.25), Messiaen writes '2 autres Pied Butcherbird, presque trompette', and this is where the actual pied butcherbird vocalization begins. Comparison of this transcription with my own will further expand our understanding of Messiaen's method (Example 2). To notate this hocket-like duet, I have assigned downward stems to one bird and upward stems to the other on the same staff.

Track 4, phrase 1 as viewed in sonographic analysis (Figure 2) details how Messiaen expands the pitch range in both directions (five semitones beyond my transcription). Messiaen's discussion with Samuel is perhaps relevant here:

Birds are able to sing in extremely high registers that cannot be reproduced on our instruments; so I write one, two, or three octaves lower. And that's not the only adjustment: for the same reasons, I'm obliged to eliminate any tiny intervals that our instruments cannot execute. I replace those intervals, which are of the order of one or two microtones, by semitones, but *I respect the proportions of the*

⁵⁶ Hold, 'Messiaen's Birds', 121.



Example 2 *Pour Messiaen*, Track 4 from beginning to end, with the author's transcription above and Messiaen's (*cahier* #23159.25.9) below.

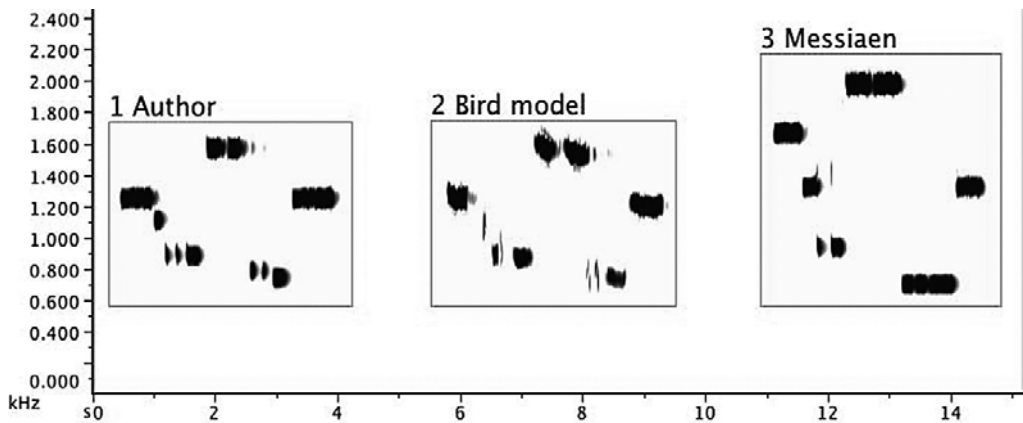


Figure 2 *Pour Messiaen*, Track 4 at the beginning: sonographic analysis of phrase 1 of the author's transcription, the bird model, and Messiaen's transcription (*cahier* #23159.25.9).

different intervals, which is to say that if a few microtones correspond to a semitone, a whole tone or a third will correspond to a real semitone; all are enlarged, but the proportions remain identical. As a result, what I restore is nevertheless exact. It's a transposition of what I heard, but on a more human scale'.⁵⁷

⁵⁷ Messiaen and Samuel, *Music and Color*, 95; emphasis added.

However, since Messiaen leaves no record of by how many semitones he stretches the proportions for this or any other birdsong – indeed, he leaves no documentation at all of when he does this and when not – it becomes impossible to salvage the original material from his notation.

A further peculiarity concerns Messiaen's choice of durational values. It is difficult to reconcile Messiaen's omission of noteheads from repeated notes, which indicate haste, with the laboriousness involved in notating a slow song (marked *lent*) in semiquavers and demisemiquavers. While the choice of note values seems counter-intuitive, these rhythms are pertinent because they will be the ones called upon by the composer in his score. The visual appearance of the composer's scores undoubtedly here affects his approach to transcription. As Erhard Karkoschka notes, '[t]he technical possibilities of a notation system also influence the act of composing – the entire musical way of thinking of all musicians – so that the aural image of a musical work in every epoch is characteristically related to its visual configuration'.⁵⁸

Transcription of the Crouch recording *Bird Calls of the Inland*

In 1977 the ornithologists Harold and Audrey Crouch produced a cassette recording entitled *Bird Calls of the Inland* (see Figure 3). Obscure in its day, it is even more so thirty-six years on. Nevertheless, Messiaen had a copy from which he transcribed thirty-three birdsongs. (By the early 1960s, Messiaen was collecting discs of birdsong from all over the world, and students often gave him birdsong recordings as gifts.⁵⁹) *Cahiers* #23159.3–12 contain notations of all but ten birdsongs from this cassette, and several birds are reworked on a later page. Such is the case with Track 43, the pied butcherbird recording that ends the cassette and which sees three manifestations in this *cahier*, on pages six, ten, and twelve.⁶⁰

Page twelve (*cahier* #23159.12) contains Messiaen's sole transcription of the entire track. In fact, there are six more phrases in the transcription than in the recording; these precede the complete transcription and may represent 'false starts' on the part of the composer (the phrases are close matches to material that appears later). In Example 3a and 3b, Messiaen's transcription from page twelve is paired with the author's, and if we begin in the middle of the third stave of Messiaen's transcription, the matchup works to the end. In the author's transcription, note that 'R' indicates a rattle on that pitch for the duration of the assigned rhythm, and that 'Tok' indicates a timbral effect resembling this mnemonic catchword. It is interesting to observe that here Messiaen elects to write out the rattle iterations in a more thorough manner than in his grey butcherbird transcription (see Example 1).

There is much that could be commented upon in the extended transcription, and my discussion is necessarily selective. Sonogram analysis helps to highlight Messiaen's treatment of

58 These complex subdivisions are reminiscent of Stravinsky's *Ebony Concerto* (1945) for clarinet and jazz band, which had to be recopied when members of the Woody Herman Orchestra encountered the composer's semiquavers and demisemiquavers, rather than jazz's norm, quavers.

59 Interview with Peter Hill, 5 July 2010.

60 Audrey Crouch introduces this track by saying: 'And now, perhaps the most beautiful of all, the pied butcherbird.'

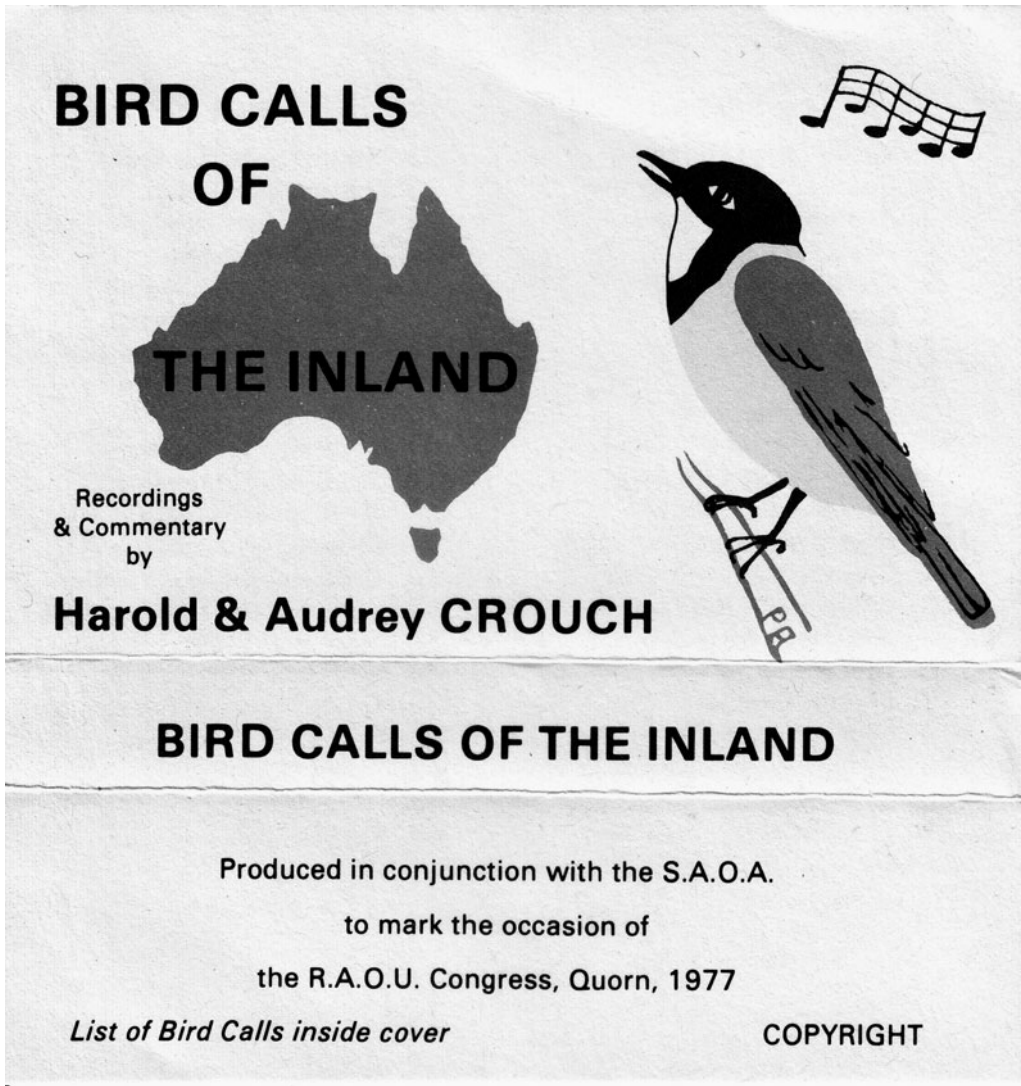


Figure 3 Cassette insert for *Bird Calls of the Inland*, from which Messiaen transcribed. Reproduced with permission.

pitch range. Figure 4 represents phrases 1–7. Again, we see an expanded pitch range (up from my five semitone range to thirteen semitones for Messiaen). A close-up of the first phrase (Figure 5 in a sonogram and Example 4 in notation) makes this even more evident.

A waveform analysis of the start of the original recording of this track (Figure 6) displays a virtually flat envelope. This does not provide a basis for the dynamic fluctuation notated by Messiaen. The first note is indeed softer than the others, but Messiaen waits until note three to insert *forte*. The other dynamics are Messiaen's contribution, rather than determined by the birdsong itself. It seems fair to assume that Messiaen is already in composition

♩ = 120

1 8 Tok

5 8 R

9 8 R

13 8 R

17 8 Tok

21 8 R

25 8 R

Example 3a *Bird Calls of the Inland*, Track 43 from beginning to end, as transcribed by the author.

mode and not seeking complete faithfulness to what the bird-musician is vocalizing. Phrase 4 presents an even more extreme disparity between waveform analysis of the original song and Messiaen's chosen dynamics (*mf-pp[cresc]-fff*) (Figure 7).

In further scrutiny of the first phrase of the track, the author's transcription of it is placed in the top stave of Example 5. This phrase is sung four times in the recording (in one delivery, the final note is closer to a g^2 than an $f\sharp^2$). The subsequent bars are Messiaen's various versions to what the author's ear and sonographic analysis indicate are nearly identical repetitions of the phrase. During his crafting of *Réveil des oiseaux*, Messiaen was thought to have had 'an almost superstitious belief that his first impressions were the truest', although this attachment, at least during the compositional process, diminished in the course of writing *Oiseaux exotiques*.⁶¹ Whilst we cannot know which of these phrases he finds the

61 Hill and Simeone, *Olivier Messiaen: Oiseaux Exotiques*, 31. Performing musicians might liken this to being in the recording studio, where often the first take has the best energy.

Example 3b *Bird Calls of the Inland*, Track 43 from beginning to end, as transcribed by Messiaen (*cahier* #23159.12). Square-bracketed numbers have been added to aid comparison with the phrases in the author's transcription.

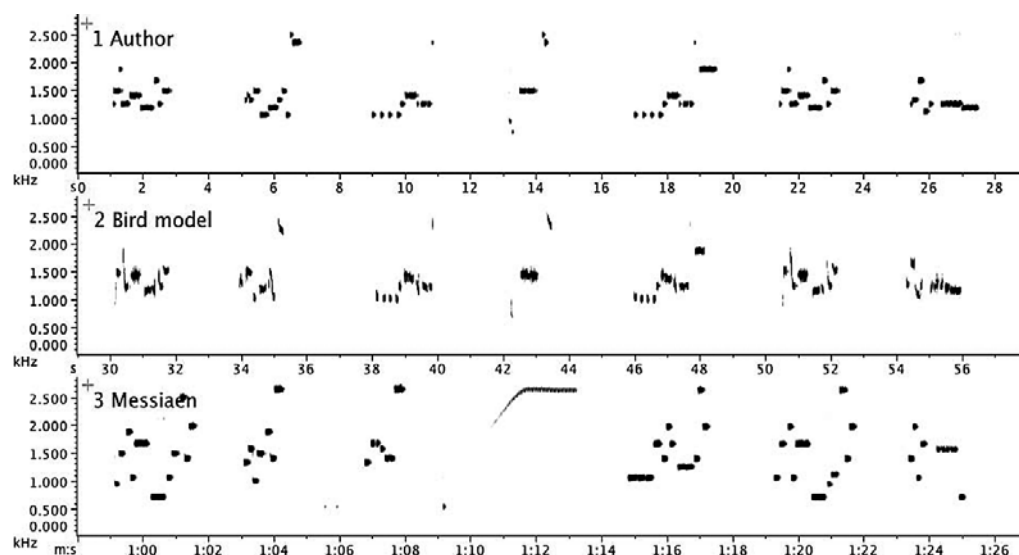


Figure 4 *Bird Calls of the Inland*, Track 43: sonographic analysis (14:08–14:37) of the author's transcription of phrases 1–7, the bird model, and Messiaen's transcription of the same phrases (*cahier* #23159.12.3–4).

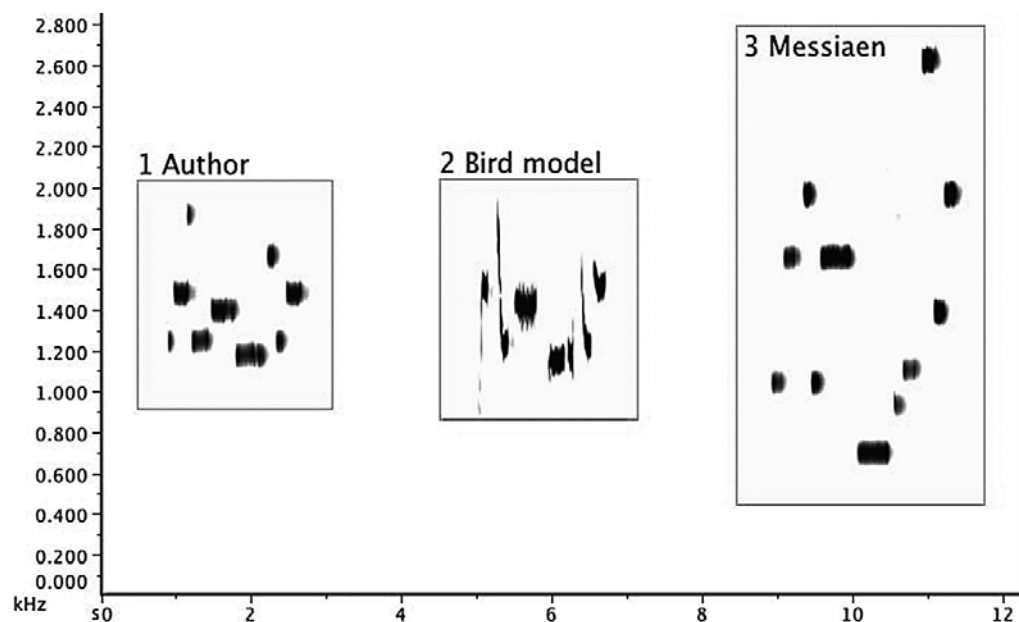
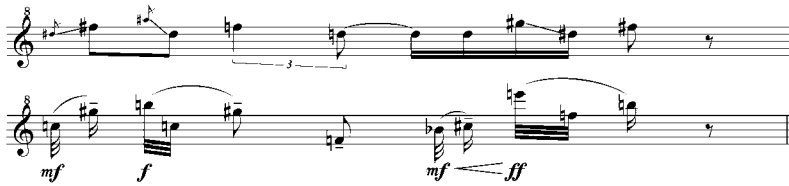


Figure 5 *Bird Calls of the Inland*, Track 43 at phrase 1 (14:08): sonographic analysis of phrase 1 of the author's transcription, the bird model, and Messiaen's transcription (*cahier* #23159.12.3).



Example 4 *Bird Calls of the Inland*, Track 43 at phrase 1 (14:08) with the author's transcription on the top staff and Messiaen's (*cahier* #23159.12.3) on the bottom.

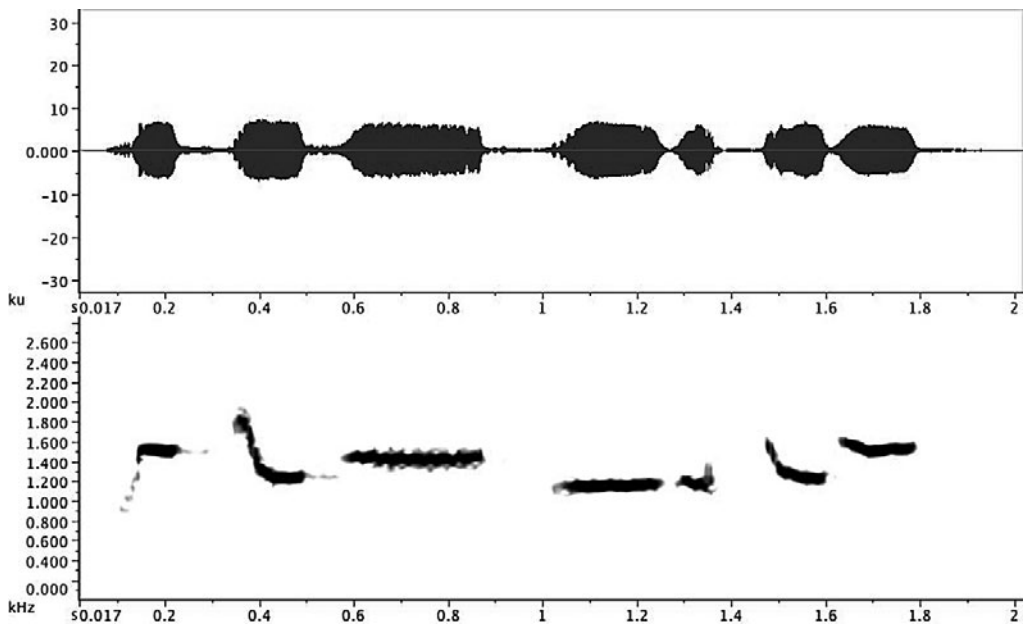


Figure 6 *Bird Calls of the Inland*, Track 43 at phrase 7 (14:08): waveform analysis of the original recording paired with its sonogram below.

truest, or if fidelity is even his goal, it is clear that he arrives at something different each time. Hill and Simeone describe a similar moment in *Oiseaux exotiques*:

A moment that encapsulates Messiaen's new and more imaginative way came with the music of the wood thrush. Messiaen's first notation and the two subsequent elaborations could be described, if not as accurate, at least as accurate equivalents. But the final step goes much further: an inspired simplification, with its spacious tempo and timing, and harmonies drenched in pedal. This is certainly not a transcription, or even a creative reconstruction, but the song of the wood thrush as Messiaen wished to imagine it.⁶²

⁶² Hill and Simeone, *Olivier Messiaen: Oiseaux Exotiques*, 106.

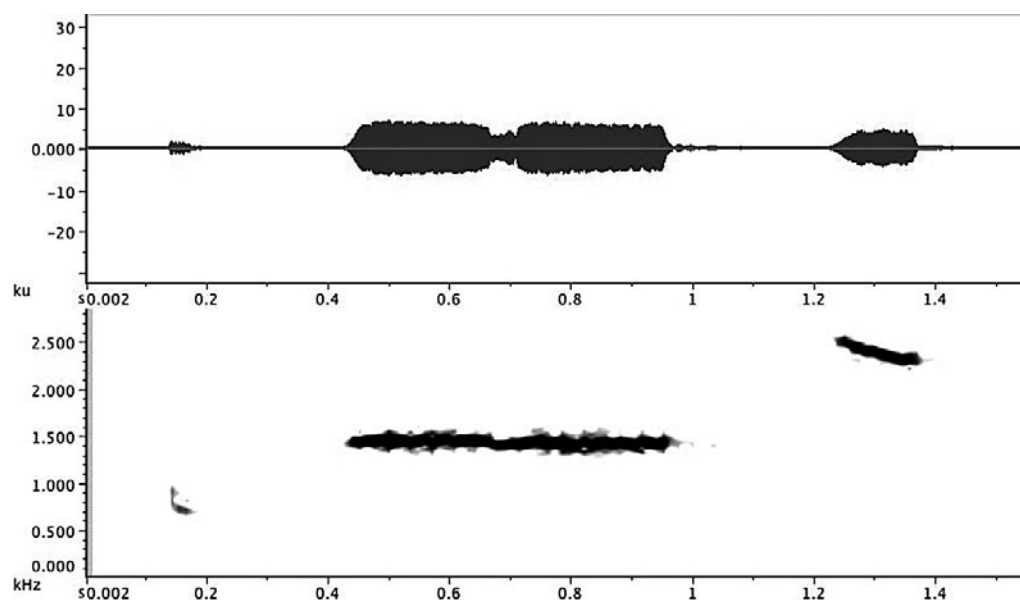


Figure 7 *Bird Calls of the Inland*, Track 43 at phrase 4 (13:54): waveform analysis of the original recording paired with its sonogram below.



Example 5 *Bird Calls of the Inland*, Track 43 with the author's transcription of phrase 1 on the top and Messiaen's five differing transcriptions (*cahier* #23159.12) of it below.

Although Messiaen does not move in this transcription towards simplification, it appears that he is merging the sounds of the pied butcherbird and those of his imagination. Whilst some notes are consistent in all parameters, the pitch, the number of notes, and even the direction of some notes vary considerably. A comparison with the notations of the author, along with sonographic analysis, points to similar discrepancies in other phrases of Messiaen's transcription: extra notes are included, the rhythm matches the model reasonably, the pitch range is stretched (with no sense that intervallic relationships are preserved or are musically salient), and the dynamics match the model only partially.

Transcription of the Roché recording *Les plus beaux chants d'oiseaux*

Our final pied butcherbird recording is Track 13 from Jean C. Roché's *Les plus beaux chants d'oiseaux*. This recording had a further public release in the form of a pied butcherbird stuffed toy from Wild Republic Birds, which credits Roché as the recordist and places the recording at Lamington National Park, in Queensland, in September 1974 (Roché's CD was released in 1987, with presumably an earlier release in cassette format that Messiaen must have had).⁶³ A comparison of the author's transcription (Example 6) with Messiaen's (Example 7) reveals considerable differences.

We will focus on two phrases. Example 8 and Figure 8 detail the phrase at 2:22 (his b. 26 and the author's b. 25), where Messiaen has added two extra notes, his notes six and seven. Otherwise, the rhythm and the pitches are a reasonable match. The extra notes radically stretch the pitch range, and the full transcription sees the author's range of nineteen semitones versus Messiaen's twenty-eight. Messiaen has essentially replaced the bird's pitch relationships with his own.

In Figure 9, a waveform of the phrase at 0:33 suggests that this example would be ripe for dynamic markings, and Messiaen has contributed some. However, they correspond to the waveform analysis only to a limited degree. Example 9 offers the author's translation of the waveform analysis into dynamic markings, using Messiaen's pitch and rhythmic transcription, with Messiaen's version below. At best, his dynamic markings match the model only half of the time.

The other phrase from Track 13 under inspection is at 0:48 (Messiaen's b. 11 and the author's b. 10, singled out in Figure 10), which is displayed in two sonogram views (Figure 10a and 10b), and in transcriptions from the author and Messiaen (Example 10). This phrase was chosen because the two transcriptions are the best match from the whole song. Messiaen does not stretch the pitch range, and the only major difference is the extra note he adds at the end. However, listening back to this phrase, and indeed all of this track as well as the Curtis and Crouch recordings, I am struck by how seldom the Messiaen transcriptions when played back correspond to the rhythm of the bird model. The syncopated flavour of

63 There is no evidence that the cassette was in Messiaen's possession. However, every adult pied butcherbird sings differently, and even today there are only a handful of commercial recordings in existence. Messiaen's transcription is without question of Roché's bird, the disparities with the author's transcription notwithstanding.

Example 6 *Les plus beaux chants d'oiseaux*, Track 13 from beginning to end, as transcribed by the author.

modéré
un peu vif

Example 7 *Les plus beaux chants d'oiseaux*, Track 13 from beginning to end, as transcribed by Messiaen (*cahier* #23159.57.1–11).

this birdsong phrase is captured by Messiaen *for* Messiaen via note groupings and slur markings, which in part compensate for the lack of further rhythmic detail. As in other examples, the almost exclusive use of chains of semiquavers and demisemiquavers represents a stylized – and, one must assume, deliberate – simplification. These aspects of Messiaen’s transcription style do not allow for a retrieval of the source material after the fact, either by Messiaen or anyone else.

Transcriptions from Tamborine Mountain

We return to Curtis, this time to examine the results of his fieldwork trips with Messiaen. The composer wrote of this morning:



Example 8 *Les plus beaux chants d'oiseaux*, Track 13 at 2:22, with the phrase as transcribed by the author on the top staff and Messiaen (*cahier* #23159.3) on the bottom.

Tamborine Mountain, the 13th of June 1988. It was necessary to depart the hotel at 3 a.m. for the one-hour drive in order to install ourselves in the forest at dead of night so as to not disturb the birds. This is a tropical forest. This spot was particularly rich in songs: it is here that I heard, in addition to the Superb Lyrebird, the Albert's Lyrebird. It is less brilliant than the Superb, a little slower, but the song is very beautiful and the timbre remarkable. In three hours, in addition to these two birds I also had the Australian Magpie, the Pied Butcherbird, the Grey Butcherbird, the Black Butcherbird, the Golden Whistler, the Little Shrike-Thrush, the Grey Shrike Thrush, several Whipbirds, the Lewin's Honeyeater, the Rainbow Lorikeet, and the irresistible laugh of the Kookaburra. I saw "Curtis Falls": the waterfall named after the grandfather of my ornithologist. A stream of clear green water flows down the tropical landscape among giant ferns, eucalypts, and a giant fig tree with a trunk measuring ten metres in diameter at the base ... branches, enormous root – it's marvelous!!!⁶⁴

Curtis recalls: 'I was able to get us into position before the [Albert's] lyrebird started calling from his roost – they start before there's much light at ground level. His wife was operating a little recorder, and I held the torch while Messiaen notated'.⁶⁵ Six pages in the *cahiers* are devoted to this outing. The first three were done in the field: *cahiers* #23159.64–66. The second three, *cahiers* #23161.40–42, are marked 'second notation' and are apparently the result of transcription from the recording. Concerning second notations, Messiaen writes:

I make one notation on the spot with all the variations, and my wife makes a tape recording which is less varied than mine, but which captures everything exactly. Then I make a second notation from the tape recorder which is more exact but less artistic. [...] So I always have my two notations, one exact and one more artistic, and I mix the two.⁶⁶

64 Messiaen, *Traité*, vol. 5/2, 393; author translation. Curtis has identified five errata: that the hotel departure time was 5 am, not 3 am; that it was the *Albert's* lyrebird, not the superb, on offer at Tamborine Mountain; that the black butcherbird's territory does not extend this far south, so that species would not have been heard there; that eucalypts are more characteristic of Sherbrooke Forest than the rainforest habitat of Tamborine Mountain; and that the trees fall far short of ten metres in diameter (Curtis and Taylor: 61). Of these, only the latter is in Messiaen's own hand on *cahier* #23159.66. This leads us to believe that the other errata are the product of an editor, not Messiaen.

65 Interview with Sydney Curtis, 4 March 2013.

66 Hill and Simeone, *Messiaen*, 208.

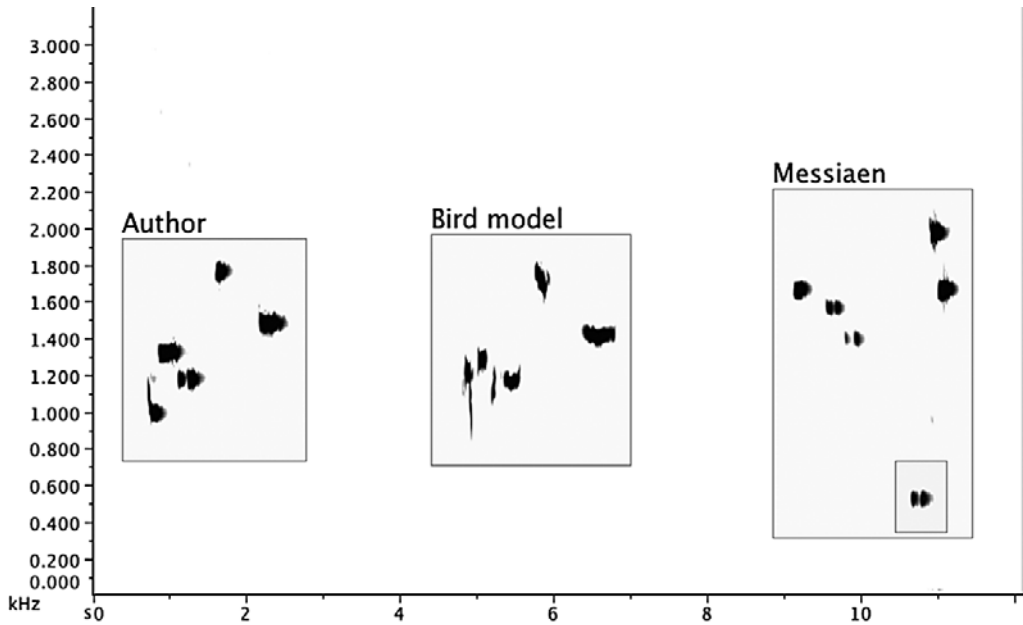


Figure 8 *Les plus beaux chants d'oiseaux*, Track 13 at 2:22, with sonographic analysis of the final phrase of the author's transcription, the bird model, and Messiaen's transcription (*cahier* #23159.57.3). Messiaen's extra two notes are internally boxed.

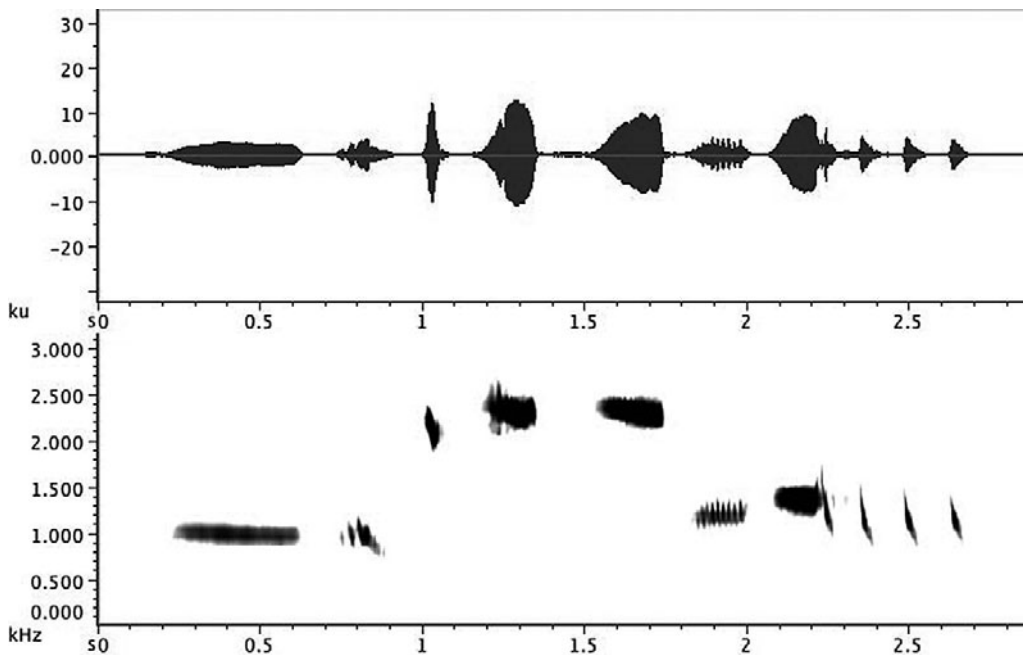


Figure 9 *Les plus beaux chants d'oiseaux*, Track 13 at 0:33, with waveform analysis of phrase 1 of the recording, paired with its sonogram below.



Example 9 *Les plus beaux chants d'oiseaux*, Track 13 at 0:33. Both are the same Messiaen transcription (*cahier* #23159.57.3), but with the author's suggested dynamics based on waveform analysis on the top staff and Messiaen's on the bottom.

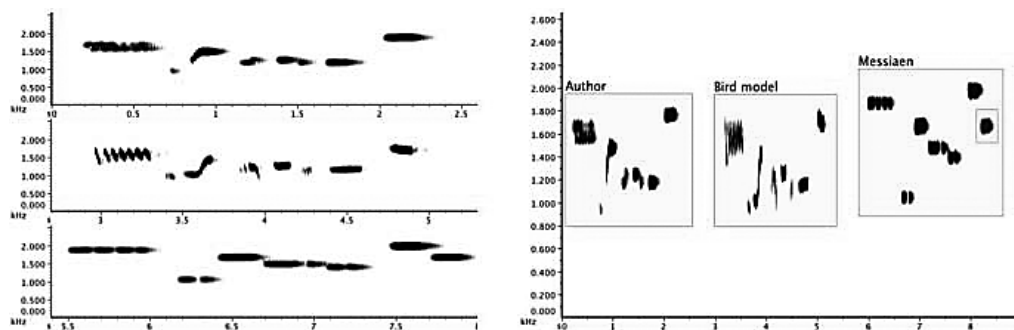


Figure 10a and 10b *Les plus beaux chants d'oiseaux*, Track 13 at 0:48, with the author's transcription, the bird model, and Messiaen's transcription (*cahier* #23159.57.4) from top to bottom (10a) and from left to right (10b). Messiaen's final 'extra' note is internally boxed.

Fallon observes that '[b]ecause Messiaen's handwriting for his outdoor transcriptions appears to be no more hurried than for the recording, there is no reason to suppose that his transcriptions from the records are any more or less accurate than his live transcriptions', and this holds true for all paired examples of fieldwork and deskwork that I have inspected.⁶⁷ The Tamborine Mountain re-notation bears the original date and time and sees a repeat transcription of all birds except the brown pigeon, the rainbow lorikeet and the white-throated treecreeper. The birds arrive in approximately the same order, with the most attention being given to the Albert's lyrebird, followed by the pied currawong, pied butcherbird and Australian magpie. A pied butcherbird is notated on #23159.65.11–12 and #23161.41.6–9. Since we have no access to Loriod's recording, I shall limit the analysis to a brief comparison of the two Messiaen transcriptions.

Example 11 reveals, first, a pitch disparity in the initial note of a prominent repeated ascending motif: five or more repetitions of a stable pitch in demisemiquavers begin on c^2 (staff 2) and e^2 (staff 3) in the first notation, but on $g^{\sharp 1}$ in the second (staves 6 and 7). While this note is thus altered by four and nine semitones respectively, it is safe to assume that the bird delivered the motif on the same pitch each time. However, by the time

⁶⁷ Fallon, 'Messiaen's Mimesis', 213.



Example 10 *Les plus beaux chants d'oiseaux*, Track 13 at 0:48, with the author's transcription on the top staff and Messiaen's (*cahier* #23159.57.4) on the bottom.

#23159.55.10-12

très modéré

fluté, sifflé - cor aigu

duo du mâle et de la femelle

f *f* *p* *f* *p*

2 *f* *p* *pp* *f* *p* *pp* *f*

3 *p* *pp* *p*

#23161.41.6-9

modéré

4 *mf* *pp* *f* *pp* *mf* *f* *f*

(A) flûte en sol (velouté) (B) violon solo (discret) (C) Pte. Clar. perçant

5 modéré

pp *mf* *f* *f*

6 modéré

pp *mf* *p* *f* *pp* *mf* *p* *f*

(B) (A) (C) (B) (A) (B) (C) faible violon solo (A) velouté flûte et H. en sol (C) perçant Pte. Clar.

7 modéré

pp *mf* *p* *f*

Example 11 Messiaen's first (*cahier* #23159.55.10-12) and second notation (*cahier* #23161.41.6-9) of his Tamborine Mountain fieldwork.

Messiaen arrives at the highest notes of the phrase, the pitch disparity is all but ironed out. As in other transcriptions by Messiaen, semiquavers and demisemiquavers are the sole note values in both notations (along with quaver rests or fermatas to mark out the phrases). In the second transcription Messiaen is preparing orchestration ideas. For example, the *petites clarinets*, along with the flute, will indeed be given motif C in a Messiaen composition, as discussed in the next section.

Based on this and the other analyses presented here, I propose a provisional template of Messiaen's personal style of birdsong transcription, which is also informed by a previous study of Messiaen's transcription from *Lyrebirds for Olivier Messiaen*, and a less formal analysis of all the other Australian birds transcribed from the Curtis and Crouch recordings:

1. Rhythm: Rhythms are often underspecified and rely on beams and slur markings to suggest additional subtleties. Semiquavers and demisemiquavers are by far the most common note values; quavers make a rare appearance, and crochets are even rarer. No triplets or other tuplets are indicated. The marking of the end of a phrase is accomplished by a bar-line, a fermata sign embedded in an empty staff, or a rest (usually a quaver, although intra-phrase rests are most often semiquavers); when none of these is present, a new dynamic marking or the grouping of motifs by a slur can assist in parsing the phrase separations. A Messiaen transcription played back side-by-side with its bird model can seem to have undergone the technological processing of rhythm quantization, since with such a limited rhythmic palette, its rhythm matches the birdsong model only very approximately.

2. Tempo and Metre: No metronomic markings or time signatures are present. Tempo is occasionally indicated by text, such as *lent*.

3. Pitch: Although never marked as such, the pitch proportions are sometimes stretched. There is no indication that the proportions of the new intervals are applied consistently; instead, stretched intervallic proportions appear to be haphazard. Overall, pitch and pitch contour match the birdsong model moderately well, but there is a large fluctuation: some match well, while others poorly. Any number of events could contribute to ambiguity of pitch in the field or on a recording: when notes are noisy (where energy is distributed at multiple frequencies), microtonal, very short, very soft, very loud, or the victim of a recording fault. Although such notes could be marked in a variety of manners, including parentheses, question marks, half-sharps, and headless noteheads, Messiaen does not attend to these sorts of issues in his transcriptions. However, headless noteheads are sometimes in evidence for a series of repeated notes on the same pitch.

4. Portamento: Approximately 10–20% of portamentos are notated. These are indicated by a line between two noteheads (or occasionally by a slur marking) and are sometimes also marked '*gliss.*'

5. Dynamics: Even in the field, Messiaen takes the time to meticulously notate dynamic indications. Sometimes, a majority of notes in a phrase are each assigned a marking. These match to waveform analysis of the songs about half of the time.

6. Articulations: Messiaen notates detailed articulations. Since these are subjective assessments (or at least not easily measurable in sonographic and waveform analysis), this study makes no attempt to assess them.

7. Timbre: Messiaen regularly writes text in the marginalia referring to timbral characteristics.

8. Absence/presence: At times, notes or other elements of a song are disregarded, whilst at other times notes or other details not in the birdsong model are included.

What might it mean to be wrong in a pied butcherbird transcription – wrong to whom? Pied butcherbirds appear to possess absolute pitch, and phrases that endure more than a season are typically delivered on the same pitch in subsequent years, indicating that at least for them a stretched pitch profile is not equivalent.⁶⁸ Solo songs are always delivered discontinuously, with silent space between phrases; the fact that their mimicry can be delivered in continuous bouts of fifteen minutes or more indicates that these gaps are not the product of physical constraint but of avian choice. While no two mature pied butcherbirds sing exactly the same phrases in their solo songs, and these song phrases transform annually, group song phrases are their unchanging ‘classics’, featuring stable pitch and rhythm on phrases that are held in common in a ‘trading zone’ of up to 150 kilometres in distance.⁶⁹ Music is about relationships – the proportions of components and the subtleties of combinations are in a fragile dance with one another. Stretched intervals that are interchangeable for Messiaen may not be so for others, including avian others. To paraphrase Hold, this is Messiaen’s pied butcherbird, not the birds’, and not mine.⁷⁰

The Pied butcherbird in Messiaen's compositions and texts

While it is not my principal purpose to trace pied butcherbird vocalizations from transcription to score, nor how these motifs are harmonized, set in particular rhythms, combined to create certain timbres, or otherwise elaborated, I will briefly note the species’ presence or absence in Messiaen’s compositions and texts. A number of Australian birds figure in his final completed work, *Éclairs sur l’Au-Delà*.⁷¹ The pied butcherbird has the unique distinction of being named in three movements, IV, VIII, and X. However, reproducing the confusion noted earlier around Track 3 in the *Pour Messiaen* cassette, what is identified by the composer as a ‘pied butcherbird’ soloist in the tenth movement is actually a pair of grey butcherbirds.⁷² This and the pied butcherbird appearances in the other two movements are summarized in Table 2.

In movement IV, ‘Les élus marqués du Sceau’, Messiaen names the pied butcherbird in the score in Flute 3 at the end of Fig. 2², and in the next bar the flute takes up a near

⁶⁸ Taylor, ‘Towards a Species Songbook’, 112–13.

⁶⁹ Hollis Taylor, *Is Birdsong Music? Outback Encounters with an Australian Songbird*, book manuscript in preparation.

⁷⁰ Hold, ‘Messiaen’s Birds’, 114.

⁷¹ For a detailed analysis of this work, see Christopher Dingle, *Messiaen’s Final Works* (Farnham: Ashgate, 2013).

⁷² Correspondingly, Dingle’s assertion that ‘[a]s the sole bird to be heard in the tenth movement, it is also the last bird to be heard in the work’ (p. 143) is incorrect.

Table 2 Pied (PBB) and grey (GBB) butcherbird vocalizations (mistakenly identified as pied) in *Éclairs sur l’Au-Delà*.

Movement	Derivation	Vocalization Type	Instrumentation
IV	<i>Cahier</i> #23159.65.10–11 (Fieldwork with Curtis)	Call (PBB)	Piccolo 1
IV	<i>Cahier</i> #23159.6.1–3 (Crouch cassette)	Solo song (PBB)	Flute 3
VIII	<i>Cahier</i> #23159.65.10–11 (Fieldwork with Curtis)	Call (PBB)	3 Piccolos, 4 Flutes, 2 Petites Clarinettes
X	<i>Cahier</i> #23159.25.5–8 (Deskwork from Curtis recording)	Duet (GBB)	Xylophone, Xylorimba, Marimba

verbatim delivery of lines 1–2 of *cahier* #23159.6, the first transcription in this *cahier* of track 43 of the Crouch cassette (Example 12). There are only two minor deviations of this material: repetitions of the same pitch do not continue for more than two or three iterations, and two notes from line 1 (bb¹ rising to b²) are transposed up an octave. These motifs are almost the entire material assigned to Flute 3 in this movement and see several repetitions. Other motifs are sourced from line 3 of the transcription (notes 7–9 appear at Fig. 3⁺¹, transposed up a tritone) and line four (notes 1–4 find their way to Fig. 5⁺³). Flute 3 also is assigned the pied butcherbird ‘species call’ (in its last three notes of Fig. 7⁻¹), a motif of three, four, or five high-register notes that may be transposed by the birds when decontextualized and placed in song.⁷³ The call is diagnostic for the species, meaning that one can identify the bird by it, whether sighted or not (see Example 12 for another example).⁷⁴ In movement IV, Piccolo 1 is regularly assigned notes that are likely the species call (in the piccolo’s final three notes of b. 3, of Fig. 3⁺¹, of Fig. 6, and Fig. 8⁺⁴; in its first four notes of Fig. 8⁻²; and in its two notes of the final bar). We recall that Messiaen notated this recording three times (*cahiers* pages six, ten, and twelve, the last of which is reproduced in Ex. 3b); if we can trust the catalogue numbering, which is not always the case, he has here relied on his first impression.

Dingle provides an illuminating and detailed analysis of movement VIII, ‘les étoiles et la Gloire’, setting up the birdsong sections thusly:

[T]he term ‘birdsong’ covers an enormous variety of material. The C sections of ‘les étoiles et la Gloire’ are no exception. Indeed, Messiaen seems determined to give some indication of the full gamut of possibilities thrown up by his feathered protagonists. Broadly speaking, these lengthy ornithological passages start with songs that have clear harmonic associations, and gradually move towards songs and calls that are harmonically ambiguous, aharmonic or even little more than a noise.⁷⁵

In his own analysis of ‘les étoiles et la Gloire’ in the preface to the score, Messiaen divides the movement into ten sections.⁷⁶ He writes that section four includes four birds: in order of

73 Taylor, ‘Towards a Species Songbook’, 95–97. As a simple call, however, the pitch remains stable.

74 Hollis Taylor, ‘A Call of the Pied Butcherbird’, *AudioWings* 8/2 (2005), 4–8.

75 Dingle, *Messiaen’s Final Works*, 232. The full analysis appears on pp. 223–46.

76 Olivier Messiaen, *Éclairs sur l’Au-delà* for full orchestra, vol. 2 (Paris: Leduc, 1998), 10–100.

Pied
Butcherbird

(très flûté, très clair,
riche en harmoniques)

Example 12 *Bird Calls of the Inland*, Track 43 from beginning to end: Messiaen's transcription from cahier #23159.6, reproduced almost verbatim in movement IV of *Éclairs sur l'Au-Delà*.

entry, the mallee ringneck, the hooded butcherbird, the shama, and the pied butcherbird.⁷⁷ The latter is identified at Fig. 19⁺². The motif $d\sharp^3 - e^3 - e^3$ at 19⁺³ (circled in Example 13) is an exact match with the species call in the Tamborine Mountain field transcriptions.⁷⁸ This motif is also found in the Roché recording, although transposed down two semitones. I also note the slur in Example 13, indicated with an arrow, joining an anacrusic demisemiquaver to the high $d\sharp^3$, which suggests the occasional pied butcherbird strategy of a 'zip' up to the first note of the call.⁷⁹ Although this could be merely the product of Messiaen's imagination, it is possible he heard this zip on Tamborine Mountain and the subsequent tape, even though he never notated it. The three- (or four-) note motif (notated in semiquavers) matches the birdsong model in full. No other material in these four score pages is an obvious match with any pied butcherbird transcriptions we have examined, but the nineteen-bar section of the score between Figures 19 and 20 includes motifs with complex harmonisations that could have originated in the species models, or at least be their re-worked motifs, particularly the rolling three-note slurred groups found in this section and also in *cahiers* #23159.6, #23159.10, and #23159.12 (*Bird Calls of the Inland*) and #23159.25 (*Pour Messiaen*).

⁷⁷ Messiaen, *Éclairs*, vol. 1, 11–12.

⁷⁸ Flutes 1 and 2 share this staff, and thus both parts appear in this example; this is not to imply that Flute 2 provides the sole harmony – far from it. Dingle observes that 'at least from *La Transfiguration* onwards, the orchestration is often just as important as the melody, harmony or rhythm' (Messiaen's *Final Works*, 157), but the goal here is to simply trace the monophonic melodies, rather than to analyse the heterophonies.

⁷⁹ Taylor, 'A Call', 6.



Example 13 A pied butcherbird motif in Messiaen's score of movement VIII, 'les étoiles et la Gloire' from *Éclairs sur l'Au-Delà* is an exact match with the recorded bird model and in his field transcription (*cahier* #23159.65.10–11).

In movement X, 'le chemin de l'Invisible', only one species' song is featured, one that Messiaen describes as flute-like, clear, and rich in harmonics, the grey butcherbird mistaken for the pied.⁸⁰ The first entrance at Fig. 17⁺³⁻⁴ (and again at Fig. 18¹⁻³) of a trio of percussionists (xylophone, xylorimba, and marimba) suggests in its rhythm and contour, but not in intervallic fidelity, a motif from *cahier* #23159.25. Messiaen does not indicate a pied butcherbird entrance until Fig. 24 (Example 14), where the trio, beginning on b^3 , $f\sharp^3$, and b^1 , respectively, gives a faithful transposed rendition of the first seven notes of the grey butcherbird vocalization we examined earlier (bottom staff of Example 1). The three slurred notes that follow in the score (Fig. 24⁺²) find a close counterpart neither in Messiaen's nor the author's transcriptions, although they do hint at the melodic contour of several slurred three-note groupings in *cahier* #23159.25.5–8. The next seven notes in the score (Fig. 24⁺³ and the first note of Fig. 24⁺⁴) return with fidelity to the original grey butcherbird transcription. The last five of these notes are repetitions of a single pitch, which, as the reader will recall, the bird delivered as ascending and descending rattles. We can only speculate as to whether or not Messiaen re-listened to the original recording, but it seems that his original transcription satisfied him as it was first set down. Earlier in the movement (Fig. 15–15⁺³), he assigns ascending and descending portamentos and scale fragments to the strings, but no other grey butcherbird material is given to them; it is unclear whether this is a nod to the grey butcherbird recording, though it demonstrates that he was amenable to occasionally assigning the technique to instruments.

The pied butcherbird appears in several of Messiaen's texts. First, amongst his correspondence with Curtis is a 1989 letter (Figure 11), in which Messiaen singles out the pied butcherbird, grey butcherbird, golden whistler, grey shrike-thrush and Albert's lyrebird as being his particular favourites from the cassette *Pour Messiaen*.

The pied butcherbird is absent from the *Traité*. Six Australian birds from the *cahiers* are included (the superb lyrebird, grey butcherbird, willie wagtail, laughing kookaburra, Australian magpie and fantailed cuckoo). Amongst my 64 *cahiers* pages of Australian birdsong examples, only the Australian magpie matches with the example in the *Traité*. Messiaen writes that he returned from his Australian trip with over 100 pages of notation,⁸¹ so the Archives might house more pages devoted to Australian birdsong than have been found to date. Of the fourteen instances of magpie transcription, the match is with *cahier* #23161.41.11–12 from Tamborine Mountain, which Messiaen does indeed attribute to this site in the *Traité*, giving the date June 1988.⁸² This transcription is the re-worked version,

⁸⁰ *Éclairs*, vol. 1, 15.

⁸¹ Messiaen, *Traité*, vol. 5/2, 393.

⁸² Messiaen, *Traité*, vol. 5/2, 412.

Presque vif ♩ = 144
Pied Butcherbird (Australie)

The musical score is for a piece titled 'Presque vif' (Pied Butcherbird) from Australia, in 16/8 time with a tempo of 144 beats per minute. It is arranged for a percussion trio: Xylophone (Xylo), Xylorimba (Xylorim), and Maracas (Marim.). The score is divided into three systems. The first system (measures 1-3) shows the initial entry of the instruments. The second system (measures 4-6) shows a more complex rhythmic pattern. The third system (measures 7-9) shows a final, more melodic passage. The score includes various musical notations such as notes, rests, and dynamic markings like 'ff'.

Example 14 Grey (but attributed to the pied) butcherbird notes assigned to a percussion trio at Fig. 24 of movement X, 'le chemin de l'Invisible' from *Éclairs sur l'Au-Delà*.

presumably undertaken in Paris from a fieldwork tape. Intriguingly, there is also an example of a magpie in the ninth movement of *Des canyons aux étoiles... (1974)*: *Le moqueur polyglotte*.⁸³ Messiaen began work on this 1971 commission from Alice Tully in 1972.⁸⁴ This would indicate that he had access to an Australian birdsong recording well before the Curtis and Crouch cassettes. The lyrebird entry in the *Traité* is credited by the composer as a

⁸³ Messiaen, *Traité*, vol. 5/2, 412. Granted the *moqueur polyglotte* is a mockingbird; this example is cited as '9^e pièce des *Canyons aux étoiles*: "Le Moqueur polyglotte", page 326 (les 2 premiers systèmes). Gymnorhine flûteur à dos blanc (Australie)'. This pre-dates any Australian birdsong recordings in this paper.

⁸⁴ Hill and Simeone, *Messiaen*, 293.

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21 juin 1989 - À Sydney Curtis -

Cher Ami,

J'ai bien reçu, envoyés par Madame Laurence de Bonnevall, votre texte en anglais et votre cassette d'enregistrements du "Chant d'oiseaux du Queensland".

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 Butcherbirds, qui sont merveilleux. Golden Whistler est également remarquable. J'ai été très impressionné par Grey Shrike-Thrush qui est extraordinaire. Enfin, j'ai retrouvé avec joie, la magnifique Albert Lyrebird, que j'avais noté en votre compagnie, à Tamborine Mountain, et dont les Strophes notent d'une puissance, d'une joie et d'une solennité incomparables.

Merci de tout mon cœur pour ce somptueux cadeau, qui m'a fait un immense plaisir. Ma femme se joint à moi pour vous dire toutes nos meilleures amitiés.

Olivier Messiaen

Figure 11 Letter from Messiaen to Curtis dated 21 June 1989. Used with permission.

superb lyrebird (*Menura novaehollandiae*) from Sherbrooke Forest,⁸⁵ which is east of Melbourne in the state of Victoria (I have 21 *cahiers* pages with superb lyrebird transcriptions, but none is a match), and the grey butcherbird entry (a species which he notated three times from the Crouch recording, once on Tamborine Mountain, and another unattributed time in the *cahiers* – but none is a match) is also placed in the forests of Victoria.⁸⁶

Finally, the Messiaen Archives houses a 1988 letter from Australian Ivan Kinny, who (according to Hill and Simeone) ‘sent Messiaen his own notations of birdsong, and commended the musical possibilities of the Australian Butcher Bird: “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”’.⁸⁷

Conclusion

Birdsong transcription and fieldwork are easily romanticized and probably always will be. A case in point is Louvier, who begins his introduction to vol. 5/2 of the *Traité*: ‘For probably the first time in the history of music, a great artist agrees to thoroughly study ornithology, to go into the field in the company of scientists and expand research surveys with extra-

85 Messiaen, *Traité*, vol. 5/2, 393.

86 Messiaen, *Traité*, vol. 5/2, 405. There are also notable errors in the treatment of Australian songbirds in the *Traité*. First, the kookaburra is placed ‘in the forests of Victoria (near Brisbane) at Tamborine Mountain in June 1988 where I notated the superb lyrebirds (and many other Australian birds), guided by the ornithologist Sydney Curtis’ (vol. 5/2 p. 408). In fact, it was the Albert’s lyrebird and not the superb that Messiaen heard at Tamborine Mountain, which is in the state of Queensland and not Victoria. In addition, these kookaburra transcriptions in the *Traité* are in no way a match for any of the three *cahiers* pages from Tamborine Mountain or from the re-working from Tamborine Mountain. This leaves the question of where the kookaburras come from, and whether they are a compilation of various birds, particularly the second, which is a duo that could only be the product of deskwork. Fallon has problematized how Yvonne Loriod-Messiaen has inadvertently blurred the distinction between Messiaen’s work and her own in the *Traité* (see Fallon, ‘Various Messiaen Editions’, *Notes*, 60/3 (2004), 797), and these errata point to this very issue, since none of them appear in Messiaen’s handwritten notes on the *cahiers* pages. In addition, it is worth noting an error that does appear to come from Messiaen. He writes: ‘In the bird world, it is almost exclusively the male who sings’, and ‘the songs studied here are always those of the male’ (vol. 5/2, xxii and xxv). Messiaen claims to have read ethnologist W. H. Thorpe, who penned several papers about duetting songbird pairs where both male and female sing, including the monograph-length ‘Duetting and Antiphonal Song in Birds: Its Extent and Significance’ (*Behaviour*, Supplement, 18 (1972), 1–197). In the pied and grey butcherbird duets that Messiaen transcribed, it is almost certain that the duo would consist of a male and female. In fact, Messiaen notes in his own hand on *cahier* #23159.55.10-2: ‘duo du mâle et de la femelle’.

87 Hill and Simeone, *Messiaen*, 365–66. Kinny confirmed to the author that he sent transcriptions of three pied butcherbird songs from New South Wales (two from Muswellbrook and one from Raymond Terrace) to Messiaen along with a letter in French; these were delivered to Messiaen in Sydney via a colleague involved in the organization of Messiaen’s visit. Kinny ‘wanted Messiaen to be aware of the sheer beauty of the song of the pied butcherbird and the fact that the songs were diatonic’; he was unsure whether Messiaen had received his letter until I alerted him. Kinny is currently unable to locate the transcriptions (interview with Ivan Kinny, 25 July 2010).

ordinary tenacity, and to collect at all hours, in all seasons, in all weather'.⁸⁸ In a similar vein, Griffiths asserts that 'there can be no doubt that he is far more conscientious an ornithologist than any earlier musician, and far more musical an observer than any other ornithologist'.⁸⁹ Reverence for Messiaen as a person and as a master-composer has the potential to cloud an accurate assessment of his birdsong transcriptions. Without taking anything away from his accomplishments, it is clear from our sample of Messiaen's pied butcherbird transcriptions post-1974 that they match their models only to a very limited degree. For all of the meticulousness, time, and effort that went into the *cahiers* and *Traité*, the end result is (despite what Louvier suggests) of negligible use to scientists or naturalists. Messiaen's birdsong transcriptions serve predominantly as an *aide-memoire* and a preliminary sketch for composition. Granted, this modest study essentially limits itself to one species, but an earlier study of Messiaen's lyrebird transcription and an initial assessment of 64 pages of Australian birdsong transcription identify similar outcomes and stylistic conventions in matters of rhythm, metre, pitch, portamento, dynamics, and matters of absence/presence.⁹⁰ Whether this provisional template holds true when other birds are surveyed employing a comparable methodology remains to be seen.

Goehr asks provocatively: 'Why do birds sound like birds, but Messiaen's birds sound like Messiaen?'⁹¹ Messiaen's transcriptions suggest that he dealt with the tasks of collecting and composing as interwoven and interdependent components. What Messiaen heard, saw, thought and felt, was filtered by and through his personal musical vocabulary, which he had so robustly and systematically begun to define as early as 1942, when he wrote *The Technique of My Musical Language*. The above results confirm with new precision what has long been suspected: that Messiaen does not wait until the moment of composition to transform the birdsong he notates. The practice of composition and the richness of his musical language are ever with him, and he actively and methodically establishes his creative presence at the moment of transcription.

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88 Messiaen, *Traité*, vol. 5/2, IX.

89 Paul Griffiths, *Olivier Messiaen and the Music of Time* (Ithaca: Cornell University Press, 1985), 168.

90 Curtis and Taylor, 'Olivier Messiaen and the Albert's Lyrebird', 52–79.

91 Hill and Simeone, *Olivier Messiaen: Oiseaux Exotiques*, 4.

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