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Claude Vivier (photo: Jean Antonin Billard, courtesy of Boosey & Hawkes Music Publishers Ltd)

ON CLAUDE VIVIER'S 'LONELY CHILD'

Bob Gilmore

1. Introduction

There is an uncanny symmetry in the life of the French-Canadian composer Claude Vivier: we do not know the exact time or circumstances of his birth, and we do not know the exact time or circumstances of his death. The first of these two facts haunted Vivier all his life. Born to unknown parents in Montreal in April 1948 and placed in an orphanage, he became obsessed with the identity of his birth mother, whom he never knew. Several of his compositions can be heard as a poignant attempt to communicate with her. The second fact – his murder in March 1983 by a young Parisian criminal in circumstances that remain not fully investigated – has, you might say, haunted the posthumous reputation of his music. It seems impossible to discuss Vivier's work without mentioning the cruel and sordid circumstances of his death. For some, his murder is the key to an understanding of his life and – even more controversially – of his work.

Vivier's music inhabits a shadowy realm between reality and the imagination. His is a world where human beings express themselves in invented languages more often than 'real' ones; they are seduced by the allure of distant cities and embark on journeys, often symbolic ones, in search of love or companionship; and they are haunted by the omnipresence of death, which in Vivier's output holds dominion over everything else. All these themes characterize his largest works, the operas *Kopernikus* (1978–79) and the unfinished *Rêves d'un Marco Polo* (1977–83). Yet in the deepest sense the most frequently recurring subject in Vivier's compositions is himself: almost all his works are essentially autobiographical. The expressive intensity of his music, together with its compositional skill and innovation, makes his oeuvre among the most compelling of the late 20th century.

Nowhere do the various facets of Vivier's output come together more powerfully than in *Lonely Child* for soprano and orchestra. It was written on commission from the Chamber Orchestra of Radio-Canada Vancouver, to a text by Vivier himself, and completed in Montreal on March 5 1980.[1] *Lonely Child* has always held a special place in Vivier's output: partly because it is the first work in which, by widespread consensus, he found the musical language unique to him; and partly because of all his works it is the one that seems most fully to encapsulate the essence of his artistic personality. It is also the work in which Vivier first introduced the main technical innovation that underlies the composition of most of the large-scale works in the remainder of his short life. This technique, derived from the spectral techniques of the Paris-based new music of the 1970s, involves the use of 'combination tones' to produce a distinctive kind of spectral harmony (which Vivier called, more poetically, 'les couleurs'). The technique and its application in *Lonely Child* is the main focus of this article, which is the first extended analysis of the

[1] *Lonely Child* is published by Les Éditions Dobermann-Yppan in Quebec. However, in April 2005 Boosey & Hawkes in New York announced the signing of an agreement to publish all of Vivier's works, so the score is now available through them.

work in English. Drawing on the sketches housed in the Vivier Archives at the University of Montreal, I attempt to illuminate aspects of the finished composition and of the compositional techniques that underlie it.

2. Vivier and spectral music

While it would be misleading to categorize Vivier's music (even his later works) as 'spectral' in the fullest sense of the term, his music was nonetheless transformed by the use of spectral techniques from 1980 onwards; and he himself was a friend of those composers in whose work the spectral aesthetic first came to prominence. The term 'spectral music', misleadingly reductionist though it is, has remained in use since it was coined by the French composer Hugues Dufourt in an article published in 1979.[2] It has come to be associated primarily with the work of two of Dufourt's colleagues, Gérard Grisey (1946–98) and Tristan Murail (b.1947). Although the music that characterizes this approach first made itself heard in the mid-1970s, it is really only in the past decade that it has caught the imagination of the listening public, as well as that of younger composers, performers and musicologists. There seems now to be an increasing and widespread recognition that spectral music is one of the defining areas of late 20th-century musical thought. The pre-eminence of Grisey and Murail provokes an interest in the work of other composers who established their spectral credentials respectably early. If Dufourt, Michaël Lévinas and Roger Tessier (co-founders with Grisey and Murail of the ensemble L'Itinéraire in Paris in 1973) are not considered spectralists in the true sense, we can however make legitimate claims for the Romanian-French composer Horatiu Radulescu (b.1942), whose earliest spectral composition dates from 1969, and for Vivier, whose later works form a distinctive and highly personal contribution to the repertory of spectral music.[3]

To some extent, spectral music was a reaction against the prevailing norms of the day: against the post-serial aesthetic that was rampant in Paris in the 1970s, and against aleatoric music, improvisation and collage techniques. Murail has often cited the music of figures like Ligeti and Xenakis as more important in the development of his own thought than the music of Boulez or Barraqué, Cage or Stockhausen (even though the latter's *Stimmung* (1968) may be considered essentially a spectral work).[4] The essence of 'la musique spectrale' is its search for compositional models based on sound, rather than on mathematics, or language, or visual imagery. In 1982 Grisey famously declared: 'We are musicians and our model is sound, not literature; sound, not mathematics; sound, not

[2] Dufourt, 'Musique spectrale', Paris: Société Nationale de Radiodiffusion, Radio-France, March 1979. Reprinted in *Conséquences* nos.7–8 (1986), 111–115. The best history of spectral music to have appeared so far in English is Julian Anderson, 'A Provisional History of Spectral Music', in *Contemporary Music Review* 19 no.2 (2000), 7–22.

[3] There are interesting cases of composers close to, but not quite at the heart of, spectral music as we have come to understand it – Kaija Saariaho, for example, on whom Grisey's music made a considerable impression, or Jonathan Harvey; and, back-projecting, some critics even speak of Scelsi, Lucier, Tenney and a few others as 'proto-spectralists'.

[4] Vivier had heard *Stimmung* at the latest by September 1971, as he compares Stockhausen's *Sternklang* unfavourably to *Stimmung* in an undated letter to his friend Pierre Rochon written from Paris in the early autumn of that year (Archives Claude Vivier, Special Collections Department, University of Montreal). He encountered the work again at its performance in Darmstadt on August 3 1972. The Canadian composer and conductor Walter Boudreau, who also attended the Darmstadt Ferienkursen that summer, recalls himself, Vivier and Grisey incessantly imitating the vocal sonorities of *Stimmung* as they walked around the town or on trams, much to the annoyance of one particular driver who threatened to throw them off if they didn't stop. Walter Boudreau interviewed by the author, Montreal, November 14 2002.

theatre, or the plastic arts, or quantum physics, or geology, astrology or acupuncture!'[5] The permutation of *notes*, whether strictly serial or not, was replaced by a scrutiny of the inner life of *sounds*, which then became models for compositional forms. As early as the mid-70s Grisey and Murail undertook computer-aided analyses of the waveforms of complex sounds – studies that were sophisticated given the technology of the time but rather primitive in view of the means available today.

The natural harmonic series was one such object of study, and an important one; it is the basis of the opening of Grisey's *Périodes* and his *Partiels*, in which the low E of a trombone creates a spectrum that is simulated by the instrumental ensemble.[6] But the harmonic series was not the only model explored. In spectral music, harmonic spectra have no special priority as musical material over *inharmonic* spectra, which have just as much musical potential. Early examples of such 'distorted' spectra used as the basis of whole pieces are Grisey's *Jour, contre-jour* (1979) and Murail's *Gondwana* (1980). Models based on formant regions of the spectrum of a sound, rather than the whole spectrum, have also been used as compositional starting-points (for example in Murail's *Désintégrations* (1982)). Even smaller units, such as a single interval with its sum and difference tones, can yield material of great richness and complexity, as is the case in the music of Vivier.

We can trace Vivier's adoption of spectral techniques to a particular time: his month-long visit to Europe in November–December 1979. But the ground had already been prepared in his studies with his two main composition teachers, Gilles Tremblay (with whom he studied at the Conservatoire de Musique in Montreal in 1967–70) and Karlheinz Stockhausen (at the Hochschule in Köln in 1972–74). Gilles Tremblay, still little known in Europe, was the most distinguished of Messiaen's Canadian pupils; thanks to him Vivier would have absorbed many of Messiaen's ideas, including his 'chord of resonance', an eight-pitch aggregate spanning two octaves and comprising harmonics 4–15 of the harmonic spectrum (albeit distorted considerably by the limitations of 12-note equal temperament). In his treatise *Technique de mon Langage Musical* (1942), Messiaen also describes his use of 'added resonance' – dissonant upper pitches added to a triad in the middle register – and 'inferior resonance', dissonant clusters of notes in a low register with triadic configurations above them, citing the complex sounds of percussion instruments such as bells, gongs and tam-tams as an analogy for this type of harmony. This way of thinking about the nature of sound is highly prophetic of the spectral aesthetic.[7]

Studying with Stockhausen, Vivier became familiar with an even closer precedent to the type of approach he would adopt in *Lonely Child*: the use of ring modulation. More so than *Stimmung*, it is Stockhausen's *Mantra* (1970) for two pianists and live electronics that relates most interestingly to Vivier's later work. Two aspects of *Mantra* are notable in this regard: its use of a single melodic 'formula' to determine both large-scale form and small-scale detail; and its use of ring modulation to

[5] Grisey, 'La musique: le devenir des sons', originally written in 1982 and reprinted in Danielle Cohen-Levinas, ed., *Vingt-cinq ans de création musicale contemporaine: L'Itinéraire en temps réel* (Paris: L'Itinéraire/L'Harmattan, 1998), 298.

[6] Here we are talking not of actual resonance (of the type Grisey would explore a little later in his *Prologue* (1976) for solo viola and optional resonators) but of simulated resonance; a complex sound – in this case, a low trombone note – is treated as though broken down into its component partials and reconstituted by the ensemble. This technique has become known as 'instrumental synthesis'.

[7] Messiaen, *Technique de mon Langage Musical* (Paris: Alphonse Leduc, 1944); cf. Chapter XIV.

colour the piano timbre. The first of these two features suggests a comparison with Vivier's obsession with melody, increasingly the focus of his music from *Learning* of 1976 onwards, and essential to *Lonely Child*; but this is arguably fortuitous and, besides, Vivier's melodies are actually more conventional than the formula-type melody used by Stockhausen. The other aspect of *Mantra* is of greater consequence: the pianists modify the piano sound by operating a sine-tone generator and a ring modulator. This latter, a common feature on early modular synthesizers, is a device that enjoyed a degree of vogue in the late 1960s. A ring modulator takes two signals as input and produces a signal containing the sum and difference of their respective frequencies. If, for example, the inputs are two sine waves of 200Hz and 300Hz, the output from the ring modulator will be two frequencies of 500Hz (300Hz+200Hz) and 100Hz (300Hz–200Hz) – the sum and difference tones respectively. If richer waveforms than sine tones are used as input (in *Mantra*, the sound of the grand pianos) then the output signals from the ring modulator may be very complex; not infrequently the resulting sounds are like bells or various metallic sounds. Ring modulation was seized upon in the early studios as a way of creating inharmonic timbres; as we shall see in a moment, the analogous technique used by Vivier generates a sort of harmony that is likewise 'inharmonic', and not based on the natural harmonic series. (Shortly before his death Vivier remarked to Grisey: 'I'm also composing with spectra now. You've influenced me… only I twist mine a little!'[8])

3. 'l'addition des fréquences'

The new technique in Vivier's later music, the crucial innovation that underlies pieces like *Lonely Child*, *Prologue pour un Marco Polo*, *Wo Bist du Licht!*, *Bouchara* and several others, came not from Stockhausen but from Paris, and specifically from the work of Grisey and Murail. (Vivier had come to know Grisey fairly well in 1972, but had seen little of him between 1974, when he returned to Montreal upon completion of his studies in Köln, and his European trip late in 1979; it is not clear when exactly he first met Murail, whom he knew less well.) When he went to Paris in 1979 Vivier would have been relatively out of touch with their recent music, and his renewed encounter with it had the spirit of a new discovery. In a lecture he gave in Paris in November 1982, Vivier acknowledged that the music he was then composing made use of 'a very classical system that Murail uses: a system of *addition des fréquences*'.[9]

In English, this technique goes by different names. The literal translation, 'addition of frequencies', has not entered general usage. The technique is sometimes referred to as the 'sum and difference' principle of chord generation. François Rose, in a 1996 article on spectral music, calls the technique one of generating 'combination tones'.[10] Vivier himself, as we have noted, referred to the materials so produced as '*les couleurs*'.

[8] Gérard Grisey, 'Autoportrait avec l'Itinéraire' (1991), reprinted in Danielle Cohen-Levinas, ed., *Vingt-cinq ans de création musicale contemporaine: L'Itinéraire en temps réel* (Paris: L'Itinéraire / L'Harmattan, 1998), 49.

[9] Vivier, lecture at the Centre Culturel Canadien in Paris, 23 November 1982, entitled 'La couleur spectrale développé dans trois oeuvres: à la recherche d'une nouvelle mélodie': tape recording courtesy of the Fondation Vivier, Montreal. It seems odd that he should describe as 'très classique' a system that had been in use for less than a decade; perhaps he wanted to make the technique seem more of an established practice than it really was.

[10] François Rose, 'Introduction to the Pitch Organization of French Spectral Music', in *Perspectives of New Music* 34 no.2 (Summer 1996), 6–39; cf. especially pp. 20–29.

Let us examine this principle in detail, using first an extract from an early work of Murail, *Ethers* (1978) for flute and five instruments. Unlike Grisey's work with sonograms of trombone spectra, Murail did not begin from any spectrum analysis of the flute timbre, but rather with the possibilities of 'extended techniques' on the flute. Near the beginning of the piece the flautist (playing bass flute) enters quietly on a single pitch (C#4, 277 Hz), then sings the same pitch while still playing it; then keeps on singing the C# while playing a new pitch (Bb5, 932 Hz). The combination of the sung C# and the played B♭ gives two resulting sounds: a sum tone of 1209 Hz (932+277), which is D6 a quartertone higher; and a difference tone, 655 Hz (932–277), which is E5. The beginning of *Ethers* is entirely based on these pitches – the played notes, the sung note, and their sum and difference tones, which are then taken up by the other instruments. Because Murail is working with acoustic instruments rather than sine waves, he takes into account also the harmonics of the flute timbre and the vocal timbre; thus, as the music develops, the combination tones used are not only of the form a+b and a–b, but also 2a+b, 2a–b, a+2b, a–2b, 3a+b, 3a–b, and so on. These 'second-order' modulation sounds (all actually present, acoustically, as partials) are played – simulated – by the strings, thereby becoming 'real' pitches, and greatly enriching the harmony.

This is, in essence, the principle used by Vivier in his music of 1980 onward to create the complex sonorities that he called *'les couleurs'*. His technique does not require the use of electronics at any stage, merely the calculation of the frequency values (in cycles per second) of musical notes. Just as in electronic music, where one pitch is ring-modulated against another, so too do Vivier's calculations involve two pitches. Typically, this is a melody note and the bass note below it: these two

pitches are then subjected to an analogy of ring-modulation to produce new sum and difference tones, although in practice Vivier only makes use of sum tones. (The dyadic basis of Vivier's later music, essential to his use of this technique, will be discussed more fully later.)

As an example, let us look at bars 24–28 of *Lonely Child*, the first appearance of *'les couleurs'* in Vivier's output (Figure 1). The orchestral introduction to the piece, the first 23 measures, does not use them: the texture is entirely single melodic lines or dyads, always in octaves, punctuated by the occasional chiming of the *rin*, a Japanese percussion instrument that is a crucial ingredient in the overall sonority of *Lonely Child*. But when the soprano enters, *'les couleurs'* appear with her in the first violins, *divisi* in six parts. The first note she sings is an A, against a G in the bass (in the orchestral texture both notes are doubled in octaves, A by the two clarinets, first horn, second violins and violas, and G by the second horn, cellos and double basses).

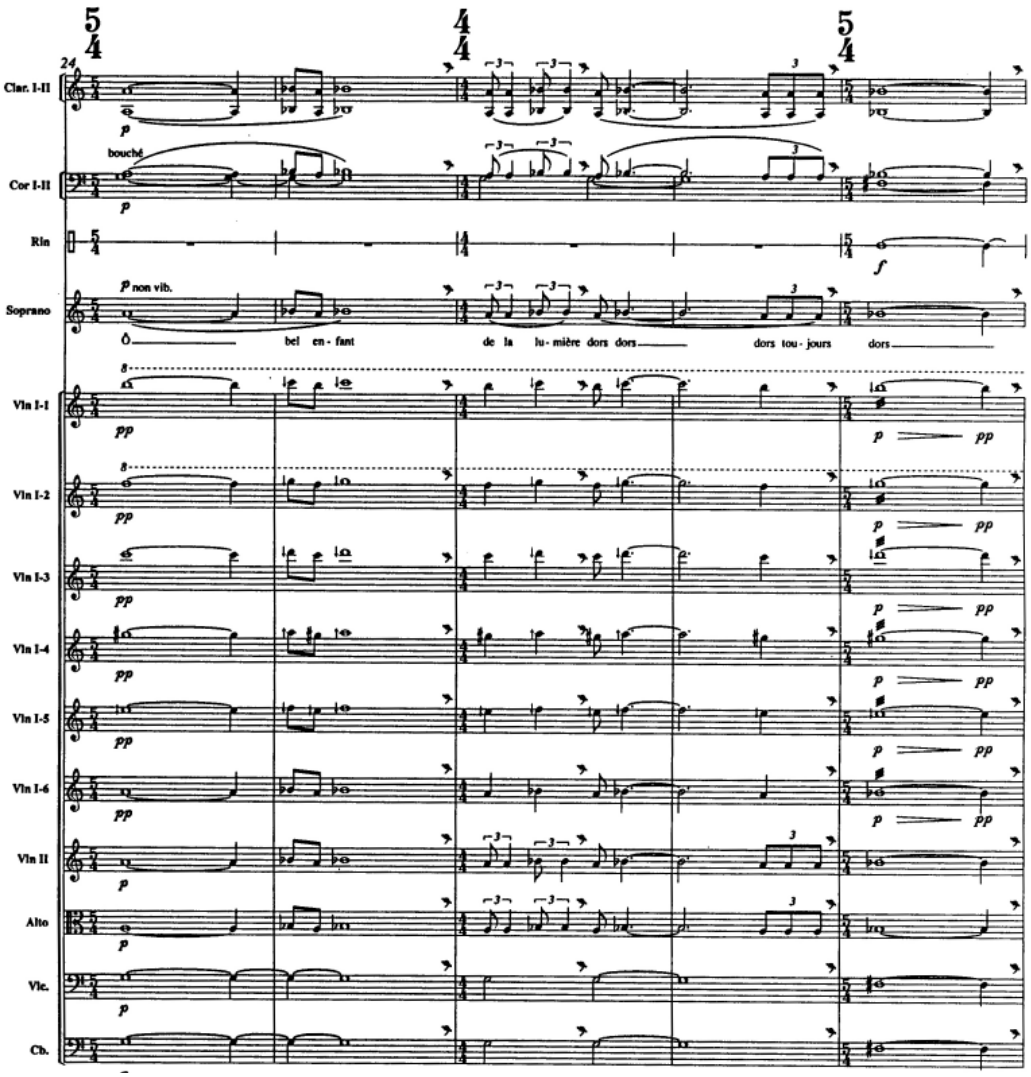

Figure 1:
Vivier, *Lonely Child* bars 24–28, showing the spectrally derived harmonies (in Vlns I) accompanying the soprano.

The A of the soprano, 440 Hz, and the G of the second horn and cellos, 196 Hz, when 'ring-modulated', produce the combination tone of 636 Hz (a+b), a pitch somewhere between the equal-tempered D# and E (622 Hz and 659 Hz respectively); Vivier notates it as an E with a downward-pointing arrow before it, indicating a quartertone lower. (The exact frequency of the quartertone between D# and E is 640 Hz, very slightly higher than the pitch in question, 636 Hz; but this slight degree of inaccuracy is not considered to be of much consequence.) The resulting pitch is played by the fifth of the six first violins. Then the process continues: the new pitch, E a quartertone lower, is itself ring-modulated against the original G: 636 Hz plus 196 Hz gives the combination tone of 832 Hz (a+2b), almost exactly a tempered G# (which is 830.6 Hz); this pitch is taken by player four of the first violins. This new note is in turn ring-modulated against the G: 832 Hz plus 196 Hz gives 1028 Hz (a+3b), a bit lower than the tempered C (1047 Hz) although not as low as the quartertone below it (1017 Hz); Vivier thus simply writes the note C without any inflection. This C is played by the third first violin. And so the process continues, with two more, still higher, combination tones. The total of five combination tones, played together, make up the '*couleur*' – the spectral harmony – of the generative interval G–A (196 Hz – 440 Hz).

When the soprano sings her next pitch, a Bb, still against the same G in the bass, a new set of calculations must begin, yielding a different array of combination tones. The B♭ is 466 Hz, which when ring-modulated against the G of 192 Hz gives a combination tone of 662 Hz, which falls between E 659 Hz and the quartertone above it (679 Hz); Vivier nonetheless opts for the quartertone, which he notates as F with a downward-pointing arrow (in this case artistic taste would seem to have won out over acoustical accuracy, as the combination tone generated is much closer to the E). And so begins the building up of another 'colour'.

This process, with the sheaves of calculations necessary to it, may seem exhausting, involving massive amounts of precompositional working-out; but in actual fact the process is somewhat less extensive than we might imagine. Because of the nature of the melodic writing in *Lonely Child*, which restricts itself to a relatively modest palette of pitches, there is a comparatively small number of different melody-note-and-bass combinations used in the work. The first extended soprano passage, which Vivier calls 'mélodie 1' (bars 24–66), uses only 15 different such combinations; the second, 'mélodie 2' (bars 78–111) uses 38, of which Vivier builds '*couleurs*' on 36 (two combinations are used only in passing); the third, 'mélodie 3' (bars 113–140), by far the most chromatically elaborate, uses 89; but 'mélodie 4' (bars 150–180) uses only 11. Figure 2 shows a page of Vivier's sketches for *Lonely Child*, showing 16 of the combinations from 'mélodie 3'. The melody note is here notated as the first of the pitches on the upper of the pairs of staves, followed by the combination tones they generate when ring-modulated against the bass note: sounded together, all five of these combination tones make up the '*couleur*' of that particular generative interval.

There is, in this manner of composing, an intriguing paradox: namely, that a process of pitch generation that is so precisely calculated (by working out Hertz values of the first-, second-, third- and even higher-order combination tones) should yield a considerable amount of approximation when the results are written down in musical notation. Clearly, the Hertz values must be 'translated' into values meaningful to performing musicians. In doing so, Vivier restricts himself to quartertones as a way of augmenting the limited pitch palette of 12-tone equal temperament – had he used eighth-tones also (as Grisey and Murail had already done

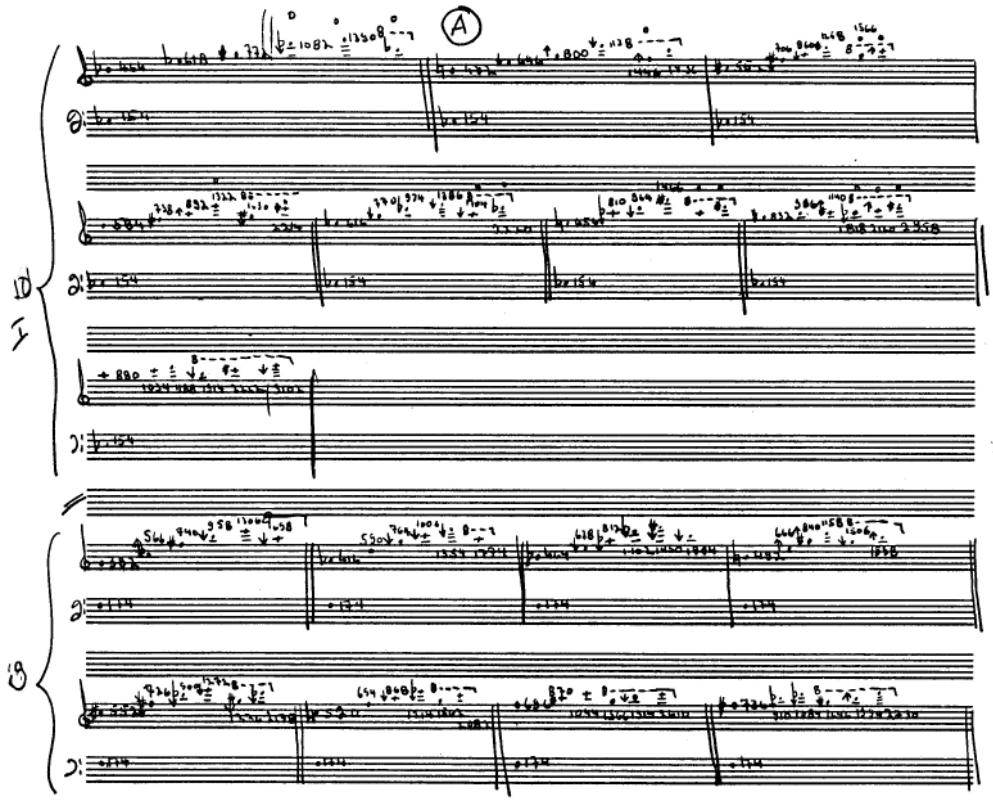

Figure 2:
From Vivier's sketches for *Lonely Child*, showing part of the derivation of *'les couleurs'* of mélodie 3.

in various of their works of the 1970s), the approximations would be much less but the work would be correspondingly harder to play, the players having to negotiate 48 divisions of the octave rather than 24. But perhaps this paradox is more imaginary than real. In an approach such as Vivier's – and this point has been made by the composer Joshua Fineberg as true of spectral music in general – microtones are simply approximations of a set of frequencies to the nearest available musical pitches; 'the ear is able to hear past these approximations and hear the underlying frequency structure whenever the approximation is within tolerable limits.'[11] (This then raises the fascinating question of how players should approach the intonation of the pitch materials used by Vivier, or indeed in spectral music generally; in a piece like *Lonely Child*, where the notated pitches are approximations of the ideal pitch relationships, the intervals need not, and perhaps ideally should not, be played as exact quartertones.)[12]

[11] Joshua Fineberg, 'Guide to the Basic Concepts and Techniques of Spectral Music', in *Contemporary Music Review* 19 no.2 (2000), 81–113; cf. p.84.

[12] It should be noted that Vivier's calculations of the combination tones used in *Lonely Child*, as seen in his sketches, contain a good many errors. These would seem to be the result of doing the calculations by hand (rather than with a calculator or computer), probably at Vivier's characteristic high speed. The errors remained for the most part undetected by him and were incorporated into the score. In working on this article I found what seem to me more than ten inexplicable pitch choices out of the 75 combination tones in 'mélodie 1' alone, the only plausible explanation for which is mathematical error. And yet, possible though it would be, it somehow seems utterly repugnant to imagine a 'corrected' version of the score. (W. B. Yeats, in his poem 'The Scholars', was surely right to castigate those 'old, learned, respectable bald heads' who 'edit and annotate the lines / That young men, tossing on their beds, / Rhymed out in love's despair'.)

4. Formal design

Lonely Child is, of course, 'about' much more than its innovatory use of this new timbral/harmonic principle, and in this section I will look at the overall form of the work and the nature of its musical materials in general before examining Vivier's use of '*les couleurs*' in context.

Although Vivier himself did not leave us a written analysis of *Lonely Child* he spoke of the work several times in interviews and lectures. The comments below were made in the context of an interview for Radio-Canada, and give an accurate although extremely condensed statement of the compositional techniques used in the piece:

> *Lonely Child* is a long song of solitude. In constructing it musically, I wanted to have total control in the expression and musical development of the work I was composing without using chords, harmony, or counterpoint. I wanted to arrive at a music that was very homophonic, that could transform itself into a single melody, which would then be 'intervalised'. I had already composed the first melody, heard at the beginning of the piece, for dancers. Afterwards I developed this melody into five melodic fragments that are 'intervalised', that is, by adding one note below another, giving intervals: thirds, fifths, minor seconds, major seconds, etc. If you make a sort of frequency addition of each of these intervals, you arrive at a timbre. So there are no longer any chords, and the whole orchestral body is transformed in this way into timbre. The roughness and the intensity of this timbre depends on the generative interval. Musically, I had one single thing to master which, in a way automatically, would give rise to the rest of the music: great beams of colour![13]

It is possible to trace the development of these elements by examining the sketches for *Lonely Child*. Vivier grouped his sketches for the work into four small bundles which bear the titles '1º mélodie', '2º mélodie', '3º mélodie', and '4º mélodie'. This shows that, in his mind, the primary sections of the work were the four long passages for the soprano which form the main substance of the piece. These are framed by a prologue and epilogue, the whole punctuated by four interludes (the first in the middle of mélodie 1, the second between mélodies 1 and 2, the third between mélodies 3 and 4, and the fourth between mélodie 4 and the epilogue). Each of the four bundles contains sketches towards the vocal lines themselves (and their bass lines), and page after page of calculations of the combination tones resulting from the various melody-note-and-bass dyads.

The overall form of *Lonely Child* is easy enough to describe, although the details of the description will vary slightly depending on which aspects of the work one hears as 'core'. Building from Vivier's conception of the four 'mélodies', a plausible division would be as follows:

Bars 1–23	prologue: opening melody in the orchestra, first a single line (doubled in octaves) then, as it proceeds, in two parts;
Bars 24–77	first *mélodie* for the soprano (in two halves, punctuated by an interlude for woodwinds with brake drums and violins at mm.42–53, and with a brief transition passage beginning at m.67);
Bars 78–112	second *mélodie* (with first use of invented language and the hand tremolo technique – 'ululation' – for the soprano);
Bars 113–140	third *mélodie* (which follows the second after a gap of only one measure);

[13] Vivier, 'Lonely Child', in Véronique Robert, ed., 'Les écrits de Claude Vivier', in *Circuit: Revue Nord-Américaine de Musique du Xxe siècle* vo.2. nos.1–2 (1991), 108.

Bars 140–149 *fff* passage for bass drum (with *rin* at the end);
Bars 150–180 fourth *mélodie*;
Bars 181–194 interlude (ending with harmonic series on the double bass);
Bars 195–214 epilogue: return to the opening melody in the orchestra, at a slower tempo and with addition of 'aleatoric colours' in the strings

However self-evident this may seem when one gets to know the work, there are some possible variations. Figure 3 shows Vivier's own idiosyncratic description of the form, as found in his lecture notes for a presentation he gave on his music at Feedback Studios in Köln on November 1, 1982.

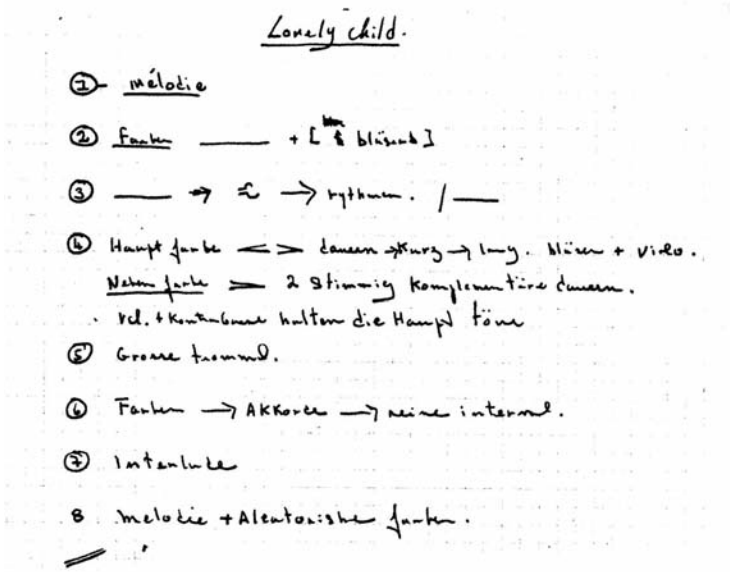

Figure 3:
A page from Vivier's lecture notes for a presentation at Feedback Studios, Köln, in November 1982, showing the outline of the form of *Lonely Child*.

A transcription of Figure 3 is given below:

Lonely Child

1 mélodie
2 Farben _____ + [bläsers]
3 _____ → huluement → rythmen. / ___
4 Haupt farbe < > dauern → Kurz → lang. bläser + violo.
Neben farbe > 2 Stimmig komplementäre dauern.
Vcl. + Kontrabasse halten die Haupt töne
5 Grosse trommel
6 Farben → Akkorde → reine interval
7 Interlude
8 Mélodie + Aleatorische farben.

Here, unlike in his sketches, Vivier somewhat confusingly uses the term 'mélodie' to correspond to the opening orchestral section, bars 1–23, before the voice enters. His second section, 'Farben', refers to the first appearance of '*les couleurs*' with what in the sketches he calls 'mélodie 1', the first long passage for the soprano. His third section corresponds to the new '*couleurs*' with mélodie 2, which features his characteristic voice hand tremolo (in French, 'huluement'), a tremolo produced by the hand

in front of the mouth; 'rythmen' signifies the increasing accumulation of written-out rhythms (as opposed to tremolos) on single pitches in the orchestra parts which begins at bar 84 and goes all the way to bar 105. In section 4, mélodie 3, he distinguishes between the 'main colour' ('Haupt Farbe') and the 'neighbouring colour' ('Neben Farbe'), a distinction we shall see later. Then comes the sequence of ten explosive *fff* bass drum stokes, spaced ever-closer together, that falls (symbolically, if not quite literally) at the Golden Section of the piece. It is followed by the fourth set of 'Farben' with mélodie 4, and, after an interlude with wordless soprano, by the return of the opening melody at a slower tempo, with 'aleatoric colours' (glissandi of harmonics) in the strings. Graphically, the overall dynamic contour of the piece, based on the 1995 recording by Susan Narucki with the Schoenberg Ensemble conducted by Reinbert de Leeuw, looks as shown in Figure 4: the bass drum passage stands out clearly.[14]

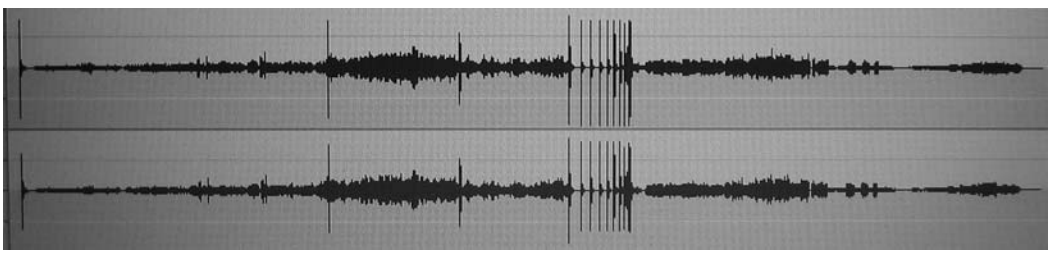

Figure 4:
The waveform of the Narucki/De Leeuw recording of *Lonely Child*, showing the dynamic shape of the work.

The most striking and, from a compositional point of view, courageous structural feature of the whole work is its wholesale reliance on an essentially two-part texture of melody and bass enhanced, 'in a way automatically', by *'les couleurs'*. There is, as Vivier himself was well aware, no real counterpoint to speak of, although even with two voices there is a kind of functional harmony. The dyad is a characteristic Vivier sonority; it is to his music what the triad is to tonal music. Earlier works like *Learning* (1976) or *Pulau Dewata* (1977) had been largely homophonic, their single lines sometimes becoming two-part but rarely contrapuntal in the strict sense. This type of texture reappears in subsequent works, such as the odd but wonderful *Greeting Music* (1978); the piano solo that opens that work juxtaposes gamelan-style melodic fragments with dyads treated with 19th-century-style octave doublings. Dyadic textures characterize parts of the opera *Kopernikus* (1978–79) and the last section of the orchestral work *Orion* (1979). However in *Lonely Child* this concentration on melody and bass becomes *the* predominant texture. In the same Paris lecture mentioned above, Vivier recounts an experience that made him realize the importance of two-part textures:

> One day I heard a rehearsal of a chorale by Bach and I only heard two voices; I heard the alto and soprano voices together. It was an extraordinary experience because I heard that the music was still fantastic… two sounds superimposed, as an interval, are musically as important as a chord.[15]

The overall 'sound' of *Lonely Child* – the sonic image that lingers in the mind once the music has stopped – has, arguably, less to do with the spectral elements than it does with Vivier's particular sense of melody and harmony. This is already evident from the opening section, which is a single line that occasionally becomes two-part; it is melodic, yet somehow unsure of its direction. Vivier uses almost entirely consonant

[14] Philips 454 231–2.
[15] Vivier, lecture at the Centre Culturel Canadien, Paris, 23 November 1982.

intervals both harmonically (minor and major thirds, perfect fourth, perfect fifth) and melodically (minor and major thirds, perfect fifth, major sixth). One simple but delicious harmonic effect is the recontextualization of a pitch in the melody that results from changing what was a major third to a minor third, or vice versa (Figure 5).

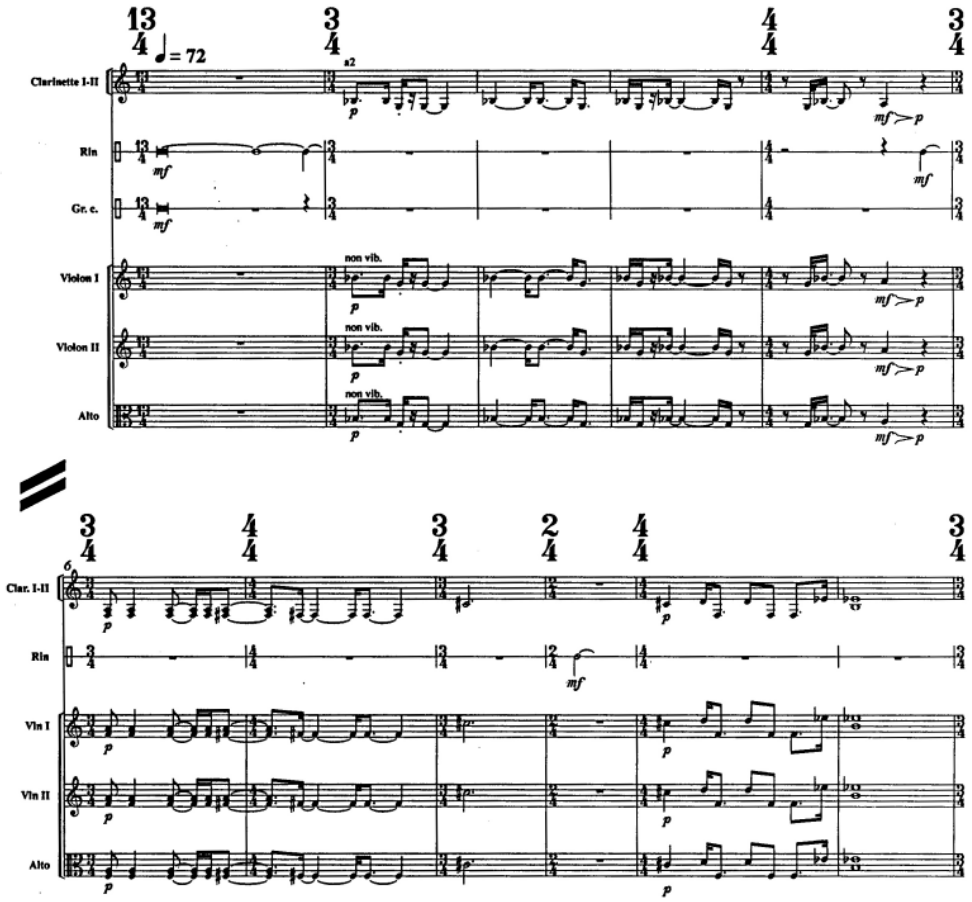

Figure 5:
Lonely Child, opening.

At the beginning of the work the other sonority that creates a special atmosphere is the *rin*, the Japanese percussion instrument, Buddhist in origin, shaped like a rice bowl and traditionally made of copper or bronze. Vivier had fallen in love with the instrument on his travels in Asia a few years previously (although he had probably encountered it before; Stockhausen had used it in the realization of several of the pieces in *Aus den sieben Tagen*). Struck with a padded mallet, the *rin* has a very long ring-time. (The instrument comes in different sizes with correspondingly different pitches, but Vivier specifies a 'very low' one.) The sound, not specifically identifiable to most listeners, unmistakably lends the piece a 'non-western' and quasi-ritualistic aura.

5. The four 'mélodies'

Having looked at the overall form of *Lonely Child* and at the constitution of its spectral harmonies, it is fascinating to see the various ways Vivier uses these '*couleurs*' in the four main vocal sections of the piece. In mélo-

die 1, as we have seen, the use of *'les couleurs'* could hardly be simpler from a textural point of view: they proceed in rhythmic unison with the changes of melody note, serving almost literally to colour the melody as it proceeds.

For mélodie 2, bars 78–111, there is a change. Here the generative intervals are not strictly speaking the soprano note and bass note, but the dyads in the cellos (*divisi*, with cellos 1 and 2 playing the upper note and cello 3 playing the lower note). *'Les couleurs'* change in rhythmic unison with the cellos, rather than with the voice part which, although having the same pitches as the upper cello line (one octave higher), staggers them rhythmically, anticipating or echoing each new cello note.

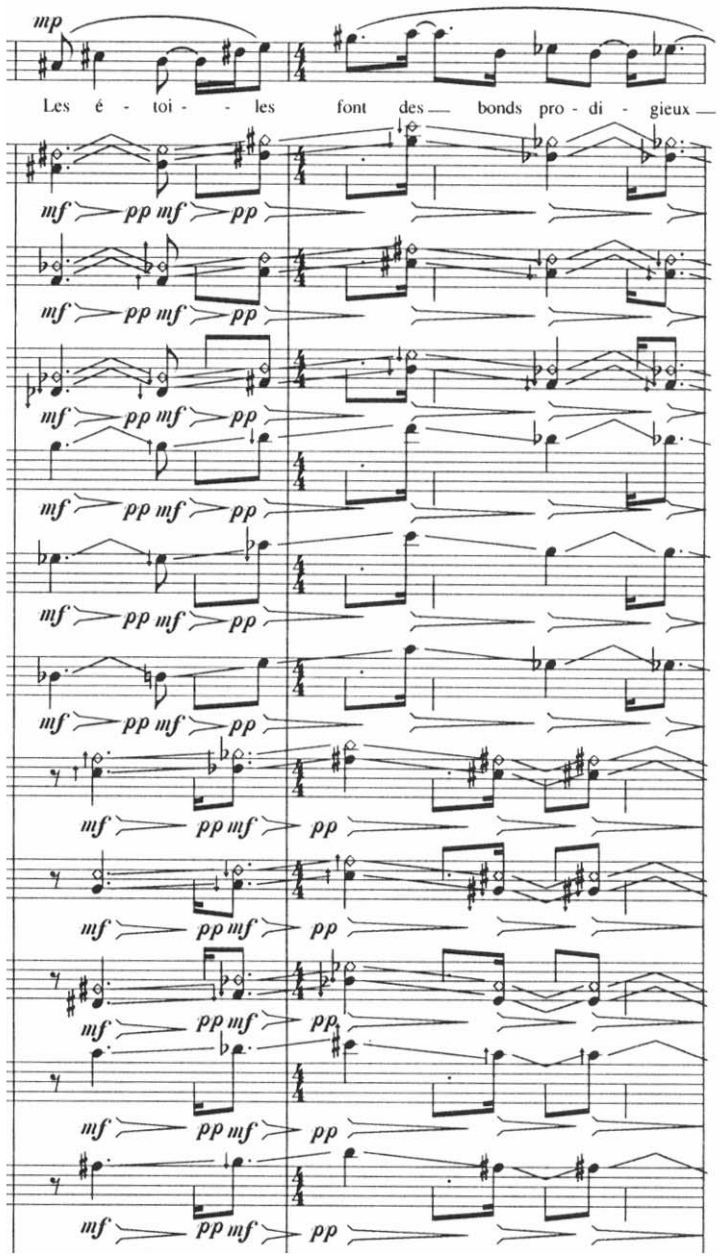

Figure 6:
'Les couleurs' from the beginning of mélodie 3, bars 113–114, voice and strings only.

The complexities go further, however, as Vivier mixes some of the spectra arising from the generative intervals. In bar 78, for example, the violins play the combination tones arising from the cello dyad E♭–B♭; but against them the woodwinds play a chord using combination tones of the interval F–G, the next dyad along, but not yet heard. (This mixing of sets of combination tones recalls Murail's technique of premonitions and echoes, as found for example in his *Treize Couleurs du Soleil Couchant* (1978), although the connexion is possibly fortuitous.)

For mélodie 3, bars. 113–140, Vivier introduces yet another new use of *'les couleurs'*. Because the soprano melody (to the words 'The stars make amazing leaps') is relatively fast-moving, and has more agile pitch movement than any of the other mélodies, Vivier elects not to have the first violins play their chords note-for-note against the melody line as previously. Instead, the chords are hocketed between first and second violins, so that the combination tones generated by the first interval are played by Violins I (*divisi*, as before), those of the second interval by Violins II, those of the third by Violins I, and so on. To this principle he introduces yet a further modification: the violins do not play discrete pitches but glissando constantly from one note to the next. However, their glissando is not a 'straight line'; they move first in the direction of the intermediary note played by the other violin group, as though aiming for that pitch (whether higher or lower), before changing direction to move to their own next note (Figure 6). The resulting violin texture, in which every note is marked with a diminuendo (as though its resonance was continually dying away, as with bell- or piano-tones), persists throughout this third mélodie, creating what Vivier calls 'aleatory colours' (a similar texture appears towards the end of the work).

For mélodie 4, bars 150–180, Vivier employs at first a selective principle by which only certain melody-note-and-bass combinations (chosen, it would seem, freely) generate a *'couleur'* which is then sustained through changes of pitch in the soprano and bass. This creates a sort of resonance effect, the sonority lasting longer than its generative dyad. Then, as the melody gains in emotional intensity and rhythmic momentum, the 'couleurs' change more frequently until, by the end, they are moving in rhythmic unison with it. There follows an interlude, culminating (at mm. 192–4) with a solo double bass sounding in sequence the first eleven partials of its E string. Curiously, in a work so rich in spectral thinking, this is the only audible presence of the natural harmonic series in the whole piece. Its appearance seems symbolic of something, perhaps the attainment of a certain calm – a mood that is, however, destabilized by the work's very last dyad, G–D doubled across five octaves, and by the two final strokes on the *rin*, the second of them suddenly, even cruelly, damped before it has lived out its natural sonic lifetime.

6. Conclusion

What, then, is this beautiful, innovatory, haunting masterpiece ultimately 'about'? Almost everyone seems to hear the work as autobiographical, with Vivier himself as the 'lonely child' of the title. The text, a curious amalgam of the beautiful and the maudlin, the vivid and the incomprehensible, offers us some possible meanings, but only some. 'Oh beautiful child of the light', it begins, 'sleep, sleep, sleep on'… 'dreams will come / sweet fairies will come to dance with you … fairies and elves will celebrate with you / the joyful farandole will intoxicate you'. A simple benediction from mother to child? Is Vivier himself, as author of the text, then speaking as his own mother, the mother he never knew, hear-

ing words he so desperately wanted to hear? The second mélodie, with its sudden introduction of invented language ('Ka rè nou ya zo na-ou dè wa ki') pulls us away from the world of possible meanings into linguistic *terra incognita*. Who is saying these words – is the child now 'speaking' to the mother? (It may or may not be relevant to note that Vivier did not know his birth mother's own native language, and therefore in which language he should address her.) The text ends in the same benedictory spirit in which it began – 'And the hope of time / of time outside time / appears, my child / the stars in the sky shine for you, Tazio, and love you forever' – although the loved child has now, at the beginning of mélodie 4, acquired a name: Tazio, with its resonances of the beautiful youth, Tadzio, of Thomas Mann's *Death in Venice*. This act of naming suggests other possible readings: what had seemed at the outset like the love of a mother for her child can now be understood as love of a sexual, perhaps homoerotic, kind.

Any great work of art, of course, has multiple meanings, which enlarge and enrich themselves as the work itself moves further into history. The autobiographical, self-revelatory nature of *Lonely Child*, so rich a part of its meaning, has an added poignancy given the fact that Vivier himself never heard the work in concert. Its first performance was for a studio recording by the Canadian radio in Vancouver by the soprano Marie-Danielle Parent, for whom it was written, and the Chamber Orchestra of Radio Canada, Vancouver conducted by Serge Garant (7 January 1981). Vivier himself was not present: recently returned from another trip to Europe, he was unable to attend the session for reasons that are not certain but are probably to do with the lack of money for a plane ticket. (Marie-Danielle Parent has pointed out that although Vivier had a commission fee he didn't necessarily have a travel grant to attend the recording: 'I remember that Claude had told me he couldn't be there but that he had every confidence in Serge Garant and myself to give a good performance of the work.'[16]) Although he never heard *Lonely Child* live, he at least had a copy of the tape made in Vancouver, which he presented several times in lectures and public talks.[17] The first public performance of *Lonely Child* was not until nearly two years later, 18 November 1982, in the Salle Claude Champagne in Montreal, with the same soloist and conductor and the Orchestre des Jeunes du Québec. This, however, was during the period when Vivier was in Paris for what would turn out to be the last months of his life. The next public performance was given as part of the commemorative concert for Vivier in Montreal on 2 June 1983, three months after his death. By then, the request that ends mélodie 3 of *Lonely Child* – 'please give me eternity' – had already been granted.

Note

I would like to thank Rozalie Hirs and Donnacha Dennehy for their encouragement as I worked on this article. I also wish to acknowledge the stimulus of the work of two Canadian scholars who have written on *Lonely Child*: Jacques Tremblay's 'L'écriture à haute voix: *Lonely Child* de Claude Vivier', in *Circuit* 11, no.1 (2000), 45–67; and Patrick Lévesque's

[16] Marie-Danielle Parent, e-mail to the author, 18 September 2004.

[17] 'Claude must have heard this version', notes Marie-Danielle Parent, 'because he gave me some excellent comments' (email to the author, 18 September 2004). The recording by Marie-Danielle Parent and the Orchestre métropolitain de Montréal conducted by Serge Garant, presently available on the CD *Montréal Postmoderne* (Centredisques CMC-CD 5194) is not the Vancouver performance but a slightly later one, recorded in the Salle Claude Champagne in Montreal some months after Vivier's death.

'LES VOIX DE VIVIER: Langage harmonique, langage mélodique et langage imaginaire dans les dernières oeuvres vocales de Claude Vivier' (Masters thesis, McGill University, Montreal, 2004). My thanks also to the President of the Fondation Vivier in Montreal, Madame Thérèse Desjardins, for permission to quote from unpublished materials of Claude Vivier; and to Marie-Danielle Parent for talking with me about Vivier and *Lonely Child*. All translations from the French in this article are my own.