

Ultimately, we perceive a progression of eight chords in which—according to Messiaen’s harmonic theory—every other chord is consonant: this isorhythmic material composed to represent heaven’s eternity is, it seems, constructed tightly. The fundamental journey of these eight chords is notated in Ex. II.6; in this reduction, the consonant melodic progression above the ubiquitous pedal, F3, is represented by the move from D5 to E5.

Example II.6 Reduction of the piano’s *color*, 1-8

The End

Transposing this understanding of the technical construction of Messiaen’s chords to the notated bars themselves meets a contradiction: the regular rhythms and stresses which constitute a traditional conception of musical time are at odds with the harmony and rhythms of the notes (see Ex. II.7). It is not that these conventions are subverted: there is no relation. Neither can there be a relation: an isorhythm is the ideal compositional device with which to achieve this. In an isorhythm the *color* must be linked to a *talea*: this is inherent. In this instance the *talea* has seventeen durations and is complex. When the *color* and *talea* play together—when the isorhythm is notated, in other words—conventions of musical time are not a concern. In effect, the barlines, the notational structure for these conventions, lose their traditional function; they are no more than a practicality. As such, in ‘Liturgie de cristal’ Messiaen quite literally represents in notation ‘the end of time’. And this representation is more complex still: these conventions that Messiaen renounces are conceptions of musical time rooted in a tradition of Bach, of Haydn, of Mozart, and of Beethoven. And so we have several observations: that the barline provides the notational representation for certain conventions of musical time, that Messiaen renounces these conventions, musically and verbally, and that these conventions of musical time are codified by a historically Germanic musicological praxis. When this analysis is situated in the context of Messiaen’s environment, *Quatuor pour la fin du Temps* presents itself as a representation of Messiaen himself behind literal German bars as a prisoner of war in Stalag VIIIA. Perhaps it is not surprising given Messiaen’s sensitivity to environment (reflected in his ordering of *Catalogue*, for example) that his environment is itself represented musically in ‘Liturgie de cristal’. Perhaps it is Messiaen’s absolute commitment to himself, to his musical technique and philosophy, and to his environment, that makes this representation an inevitability. And perhaps it is the acknowledgement of notation’s capacity to represent much more than durations and pitches that creates a work which seemingly defies time and yet is so particular to its circumstance. This very contradiction—when music renounces and *is* tradition—is elided: music, freed from a linear conception of convention, presents adaptation in its purest form.

Example II.7 The opening bars of ‘Liturgie de cristal’

The musical score for the opening of 'Liturgie de cristal' is presented in two systems. The first system includes staves for Violon, Clarinette en Si b, Violoncelle, and Piano. The Violon part is marked 'Bien modéré, en poudrolement harmonieux' and '(comme un oiseau)'. The Clarinette part is marked '(comme un oiseau)' and 'p expressif'. The Violoncelle part is marked 'ppp vibrato'. The Piano part is marked 'A Bien modéré, en poudrolement harmonieux (♩=54 environ)' and 'pp legato (très enveloppé de pédale)'. Below the Piano staff, four measures are labeled Ia, Ib, Ic, and Ie, with a slash and 'U' below each label. The second system includes staves for Violon, Clarinette, Violoncelle, and Piano. The Violon part is marked '4' and 'vers la pointe)'. The Clarinette part is marked 'p'. The Violoncelle part is marked 'glissando' and '(*)'. The Piano part continues the harmonic texture.

But in its historical presentation music can fall victim to its own individuality. While the quartet’s historical perception on a timeline is inevitable, naturally, it disregards its context, the essence of its individuality. To present this individuality on a timeline as part of a series of developments in musical practice, however, is to create a list as arbitrary as Borges’ taxonomy.

Every thread of ‘Liturgie de cristal’ defies linear presentation: the movement is highly structured—highly ordered—but in *cycles*, not in bars. The notion of an isorhythm is founded on cycles of varying repetitions; the piano’s *color*, within which Messiaen constructs a series of rotations through a complete cycle, functions cyclically, too, unmoved by the barlines. Like the various non-retrogradable rhythms throughout, Messiaen’s narrative is also cyclical: the description of the events occurring ‘between 3 and 4 in the morning’ provides the impression that this is a daily ritual, another kind of cycle. In 2016, the quartet’s dedication to

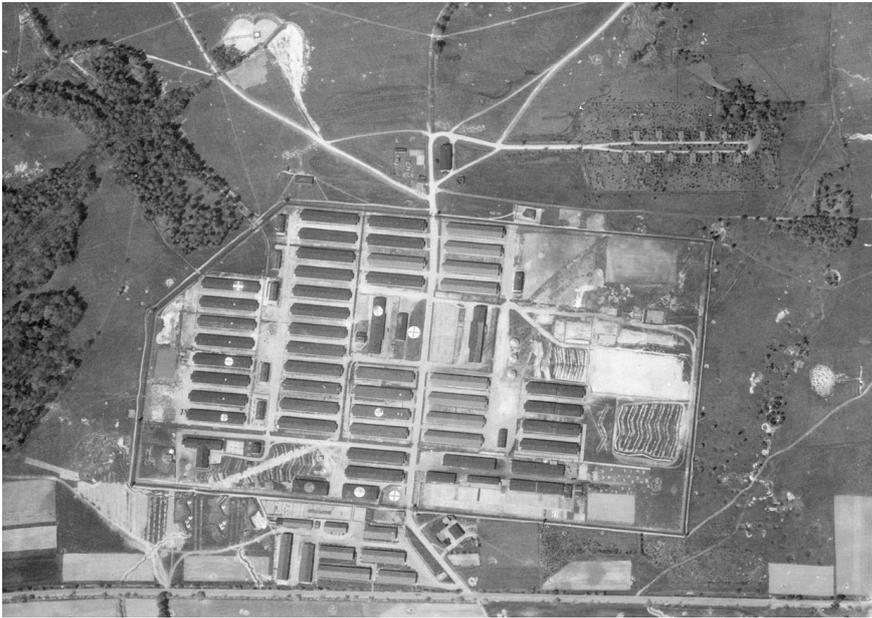
religion led me to ask ‘what is a religious cycle, a religious ritual?’. Observing Messiaen’s cyclic synthesis of religion, harmony, rhythm, and language, I stand by my conclusion that the movement is quite literally a liturgy.²⁹ Liturgy is a subset of ritual: an act *performed* according to a set sequence. The order of religious ritual provides the foundations for the development of a relationship with a divine agency.³⁰ However, in this context of notational representation ‘Behind Bars’, perhaps the quartet also represents the notational ordering of, as it were, conventional order itself. After all, the quartet takes its place in print alongside a treatise of Messiaen’s rhythmic language: an attempt to order his technique.

‘Liturgie de cristal’ is an excellent example since it represents in so many ways the multiple relationships between Messiaen’s environment and his notation. The isorhythms are highly constructed, but their internal order challenges the order of conventional notational structures, transcending the traditions of the barlines. Alongside this rigorous structure the birdsong is symbolically free, and yet its rhythms engage with these notational structures quite conventionally, the opposite manner to the isorhythms (just look at the violin entry in Ex. II.7). It is as if the notation—the same notation the isorhythms transcend—is itself the birds’ cage.

A more practical bird’s-eye view of Messiaen’s environment leads to strikingly similar conclusions. Fig. II.1 depicts Stalag VIIIA from above.³¹ Firstly we notice the division between the natural and the unnatural: the constructed camp and the surrounding countryside whose various roads resemble scars across its face. We perceive this duality not simply through the numerous inconspicuous structures but also through the order of these structures, whose regularity projects an unnaturalness. It is this same duality that we perceive between the free birdsong and the constructed isorhythms, this same unnaturalness that we observe in the order of the isorhythms. What’s more, within the structure of the camp prisoners are free to move (though this movement is somewhat limited to the horizontal and vertical); similarly, within the structure of the isorhythms, the restrictions of the predetermined rhythmic and pitch systems of the isorhythms are set against a freedom to move across the barlines. However these same notational structures—these same barlines—cage the birdsong, the ‘natural’ musical territory. Neither were the prisoners free in the natural, unstructured territory beyond the boundary of the camp, where their fate lay, of course, in certain capture.

Above all, ‘Liturgie de cristal’ represents a considered relationship with notation which we overlook at a risk to ourselves and to music: to do so, especially in a context of *Quatuor pour la fin du Temps*, is to perform our own imprisonment.

Figure II.1 Aerial photograph of Stalag VIIIA



NOTES

¹⁰ J. L. Borges, 'Pierre Menard, Author of the *Quixote*', *Labyrinths*, eds. D. A. Yates and J. E. Irby, trans. J. E. Irby (New York: Penguin Classics, 2000).

¹¹ *Ibid.*, p. 69.

¹² E. Gould, *Behind Bars* (London: Faber Music Ltd., 2011).

¹³ Antoine Goléa, *Rencontres avec Olivier Messiaen* (Paris: Slatkine, 1984), pp. 59-60. Translations in this publication from French to English are my own.

¹⁴ E. Pasquier, 'Hommage à Olivier Messiaen', in programme book to the cycle of Messiaen's organ works at La Trinité, Paris (1995), p. 91 in A. Pople, *Messiaen: Quatuor pour la fin du Temps* (Cambridge: Cambridge University Press, 1998), p. 8, no. 36.

¹⁵ Goléa, *Rencontres*, p. 62. 'I immediately wrote for them a modest little trio'.

¹⁶ While we cannot be certain of the precise provenance of every note of the quartet, the following can be ascertained: before his arrival at Stalag VIIIA, whilst held in a transit camp near Nancy, Messiaen had observed Akoka sightread what was to be the third movement of the quartet, 'Abîme des Oiseaux', for solo clarinet. The other solo movements have earlier roots, too: the eighth was refashioned for violin and piano from *Diptyque* (1930), an early organ work, and the fifth was transcribed from a section ('Oraison') of *Fête des belles eaux*, a work for six *ondes Martenots* commissioned for the 1937 Paris Exhibition.

¹⁷ Scholarship referencing *Quatuor pour la fin du Temps* is considerable (in particular, A. Pople, *Messiaen: Quatuor pour la fin du Temps* (Cambridge: Cambridge University Press, 1998), R. Rischin, *For the End of Time: The Story of the Messiaen Quartet* (New York: Cornell University Press, 2003), and R. Sherlaw Johnson, *Messiaen*, 3rd edn. (Great Britain: Schirmer Books, 2008)), but detailed scholarship on 'Liturgie de cristal' is surprisingly limited. Pople's analysis of the movement is certainly the most comprehensive. It is with the greatest admiration when, on occasion, I contradict his analysis.

¹⁸ 'This quartet was written for the end of time, not playing on words about the time of captivity, but the end of notions of past and future'. Goléa, *Rencontres*, p. 64.

¹⁹ The ‘end of time’ also finds parallel with the text of the Revelation, which Messiaen honours in his dedication of the quartet, revering ‘the Angel of the Apocalypse, who raises a hand to the heavens, saying: there will be no more time’. O. Messiaen, Preface to *Quatuor pour la fin du Temps* (Paris: Durand, 1942), p. I. All further extracts from this publication will be from this edition.

²⁰ The quartet is the first of Messiaen’s works to be published alongside a theory of his rhythmic language: an appropriate acknowledgement of the magnitude of his call for the end of conventions of musical time.

²¹ An isorhythm combines a *talea* (a predetermined rhythmic system) with a *color* (a predetermined arrangement of pitches). An isorhythm with a *talea* of five distinct durations and a *color* of three distinct pitches, for example, would take five iterations of the *color* (or three of the *talea*) to arrive back at the beginning state, where the same first rhythmic duration would align with the first pitch.

²² S. Crayton, *A Religion of Cycles: ‘Liturgie de cristal’ from Messiaen’s Quatuor pour la fin du Temps* (Unpublished Undergraduate Analysis Portfolio, University of Cambridge, 2017). In a paper submitted to the Faculty of Music I demonstrated how the piano’s *color* functions harmonically as a cycle: an early version of an analysis of the *color*’s opening eight chords can be found here.

²³ O. Messiaen, *Technique de mon langage musicale*, 2 vols. (Paris: Leduc, 1944). Vol. 1, trans. J. Satterfield, published as *The Technique of my Musical Language* (Paris: Leduc, 1956). Vol. 1, p. 50; vol. 2, p. 37, exs. 201 and 203.

²⁴ Messiaen describes the technique as ‘the effect of a stain glass [*sic*] window’; Satterfield translates this process in *Technique* as ‘inversions’ (p. 50).

²⁵ I have transposed the chord to the register of the piano’s *color*.

²⁶ Pople cites the chord on the dominant from Messiaen’s *Technique*, but writes that ‘Messiaen freely adapts this progression of two chords by rearranging the notes so that the lowest is not necessarily the fifth degree of the underlying diatonic scale’. This lowest note, F—in a context of these opening eight chords—Pople attributes as a manifestation of Messiaen’s synaesthesia; in fact it functions as the pivot note of the technique I describe. Pople, *Messiaen’s Quatuor*, p. 23.

²⁷ I use American Standard Pitch Notation throughout.

²⁸ I move C5 of 5 and G4 of 7 down an octave, to illustrate more clearly their harmonic function. Note in addition that Messiaen’s octave transposition of the former provides the aural illusion of the continuing preparation of dissonance.

²⁹ S. Crayton, *A Religion of Cycles*, p. 11.

³⁰ J. Begbie, *Theology, Music and Time* (Cambridge: Cambridge University Press, 2000), p. 167.

³¹ The image depicts Stalag VIII A, the prisoner-of-war camp which held Messiaen. The photograph was taken by the US army in 1945. The image is provided copyright to Luftbild Datenbank.