MESSIAEN AND TIME: PHILOSOPHICAL REFLECTIONS ON THE PERFORMANCE OF *VISIONS DE L'AMEN* FOR TWO PIANOS

by

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ABSTRACT

This thesis focuses on the performance of *Visions de l'Amen* by Olivier Messiaen. The approach taken is broadly philosophical, concentrating on the work of three philosophers, Henri Bergson, Vladimir Jankélévitch and Theodor W. Adorno, whose thought will guide our analysis of *Visions* and its performance.

In the Introduction, we will first introduce Messiaen's emphasis on the notion of time in music, and how he translates Bergson's notion of time into musical perception. Different philosophical views, relating to the pursuit of genuine experience, will be introduced for further philosophical reflection on music and performance, particularly with respect to *Visions de l'Amen*. In Chapter 1, we will analyse Messiaen's rhythmic thinking. Here, Messiaen's Stravinsky analysis will feature prominently, and different notions of compositional ethics will be discussed. Chapter 2 will analyse the construction of *Visions* and its musical perception from both Bergsonian and Adornian perspectives. Different theories of performance, derived from Bergson's, Jankélévitch's and Adorno's philosophies, will be also be presented here. In Chapter 3, a section from the second movement of *Visions* will be analysed to demonstrate the compositional technique of superimposition before we present related philosophical reflections on the Messiaens' and others' recordings of the work. Finally, Chapter 4 will explore Loriod and Messiaen's pianism and performance aesthetics. This thesis is submitted together with my performance of the piece (as first pianist), and the dissertation concludes with reflections on the ways in which my performance was informed by my research.

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A place in these acknowledgements should also be reserved for my dear friend Tom Caddick. In addition to his intellectual influence from the time I began my undergraduate study, which motivated me to think about music in a more profound way and which provoked ideas that I have pursued in my doctoral research, he also encouraged me to continue my academic pursuits beyond my Master's degree, without which my PhD studies might never have happened.

Finally, the utmost credit for the completion of this thesis should go to my supervisor Ben Earle, whose advice and criticism have been constantly illuminating and inspiring. I have always been impressed by his expertise and insightful ideas, which have directed me to a better understanding of the music, and I feel particularly lucky that he was able to lead me to an area of research which I have become very passionate about.

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INTRODUCTION: MUSICAL TIME AND GENUINE EXPERIENCE

Temporality was one of the most imperative concerns for composers during the twentieth century, and 'how time passes', as Darla Crispin recognises, 'became one of the key issues confronting music in the Modernist age' (Crispin 2009: 7). In recent years, the tendency to concentrate on 'how [music] is perceived within the sonorous unfolding of a performance', or the increasing 'focus upon musical time as it is *experienced*, rather than *conceived* has been given added impetus … with … the phenomenon of practice-based research' (Crispin 2009: 8). In fact, the tendency to recognise the significance of time in music already began to emerge, as Karol Berger suggests, 'at some point between the early and late eighteenth century' (Berger 2007: 179). Although Beethoven's music, the late Piano Sonatas for example, invites us to 'meditate upon the nature of time in music' (Taylor 2016: 17), and, as Jonathan Kramer puts it, 'deals with subtle and often profound structuring of the listener's time-experience' by its 'command over the dimension of time' (Kramer 1973: 122–3; Taylor 2016: 17), composers such as C.P.E Bach, Haydn and Mozart were already 'capable of great flexibility and subtlety in the articulation of musical time' (Taylor 2016: 61). Haydn has been described as 'a master at problematising musical succession and the corresponding sense of temporality', and C.P.E. Bach's music presents 'wilful temporal discontinuities' which 'suggest the extreme subjectivisation of musical time' (Taylor 2016: 60).

In the Baroque era, by contrast, or so Benedict Taylor suggests, 'time is merely an unstated precondition' (Taylor 2016: 59–60), and 'an indifferent, external homogenous medium' in which 'events happened' (Taylor 2016: 56, 54). In addition to the predictable and orderly harmonic progressions with the 'centripetal arrangement of the keys around the tonic' (Taylor 2016: 58), the rhythm that runs through Baroque music (albeit certainly with exceptions), 'based on the principle of the subdivision of the equal measure' (Taylor 2016: 59), prompts Taylor to conclude that, in this repertory, 'one time is identical to another: each has the same measure, the same laws apply throughout. Music inhabits an orderly and predictable universe, where the future is in essence no different from the past' (Taylor 2016: 56). If Baroque music suggests a 'static conception' or spatialised conception of time (Taylor 2016: 54), 'proceeding from a view of the whole, an extra-temporal view of time from a synoptic, God-like perspective' (Taylor 2016: 59), in the late eighteenth century, musical time becomes temporalized, as composers, performers and listeners start to pay attention to 'the temporal

disposition of events' and 'the experience of linear time' (Berger 2007: 179, 9). Contrary to the Baroque notion that 'time belonged to God', time becomes subjectivised, especially in Beethoven's music, such that the diverse rhythmic structures, and various and ambiguous harmonic progressions, which are organised to 'build up and dissipate tension', aim to control and subdue time, and, instead of merely being in time, start to contain time within the music (Taylor 2016: 54, 59).

Apart from 'the gradual secularisation' of musical temporality in the eighteenth century (Taylor 2016: 54), the most fundamental reason for the increasing capacity to convey temporal meaning in music is, as Taylor identifies, the rise of the genre of 'instrumental music', and 'its connotations for musical syntax and attendant modes of listening' (Taylor 2016: 57). Unaided by external factors, such as 'a text's pre-given structure', music's temporal unfolding can be conceived 'as a more unmediated shaping of time' (Taylor 2016: 57). Thus Taylor confirms that, from around the late eighteenth century to the twentieth century (and continuing in recent years, as Crispin indicates), a sensitivity to temporality in music 'becomes fundamental to its construction and cognition' (Taylor 2016: 55–6). The listener is directed not to hear music passively, 'in the ever-fleeting present', but to actively cognise 'music's temporal flow and its necessary retention in memory' (Taylor 2016: 57).

The composer on whom we will focus in this dissertation is Olivier Messiaen (1908–92), one of those who clearly recognised the significance of the perception of time in music. Messiaen expresses the importance of time in the first volume of his own writing *Traité de rythme, de couleur et d'ornithologie*, which remained unpublished until two years after his death. Although the first volume was published only in 1994, Messiaen had already started to work on *Traité* from 1949 (Shenton 2007: 173). Evidence shows that, as Jean Boivin indicates, 'as early as 1949 … Philosophical, aesthetical, literary and even scientific reflections on time and durations were laid out and compared' by Messiaen (Boivin 2007: 138). In the opening chapter of the first volume of his *Traité*, devoted to the discussion of time, Messiaen refers to numerous studies by various authors on the subject. Not only does Messiaen recognise how these studies are related to music, but all the notions on time derived from or inspired by the various authors also contribute to Messiaen's own musical thinking and creative process. Further examination in the thesis will demonstrate that some of these philosophical thoughts are quite thoroughly developed in Messiaen's composition and performance.

For Messiaen, 'the perception of time is the source of all music and all rhythm', which, as Andrew Shenton indicates, 'may seem like a simple truism', and yet, on examination, 'it is both a statement of fact and a statement of compositional philosophy, and as such it is of paramount importance to any engagement with Messiaen's music' (Shenton 2007: 173). Scholars have analysed Messiaen's music in relation to time, but much less discussion has been dedicated to the temporal quality audible in performance. As Taylor notes, 'most commentators are understandably hesitant to assign too great an audible reality to such techniques [in this case, Messiaen's advanced rhythms], preferring instead to focus on their symbolic qualities' (Taylor 2010: 267). Thus, this project will attempt to examine temporality in *Visions de l'Amen* (1943), especially regarding its advanced rhythms, not only in terms of its construction, but also its actualisation in performance and the temporal perception of the music, from both the listener's and the performer's perspectives.

As a devout Catholic, Messiaen attributed a great deal of religious meaning to his music. *Visions de l'Amen* and Messiaen's most well-known work, *Quatuor pour la fin du temps*, (1940), are concerned with apocalyptic themes and devoted to the religious mysticism of Messiaen's Roman Catholicism. The programmatic intention of Messiaen's *Visions* to express very specific ideas and images is confirmed by the 'Author's Note' in the published score, in which Messiaen gives descriptions for the seven religious visions, inspired by Ernest Hello's *Paroles de Dieu* (Words of God). The reader might therefore expect a discussion of the theological aspect of the music in this thesis. However, since numerous scholars have already explored the religious dimensions of Messiaen's work, this thesis will not touch on this topic. Since our approach to analysing the music is non-theological, our approach to the compositional materials, as will become clear later in the thesis, will be quite different, for example, to that of Siglind Bruhn, who mainly focuses on the religious aspect of *Visions*.[1]

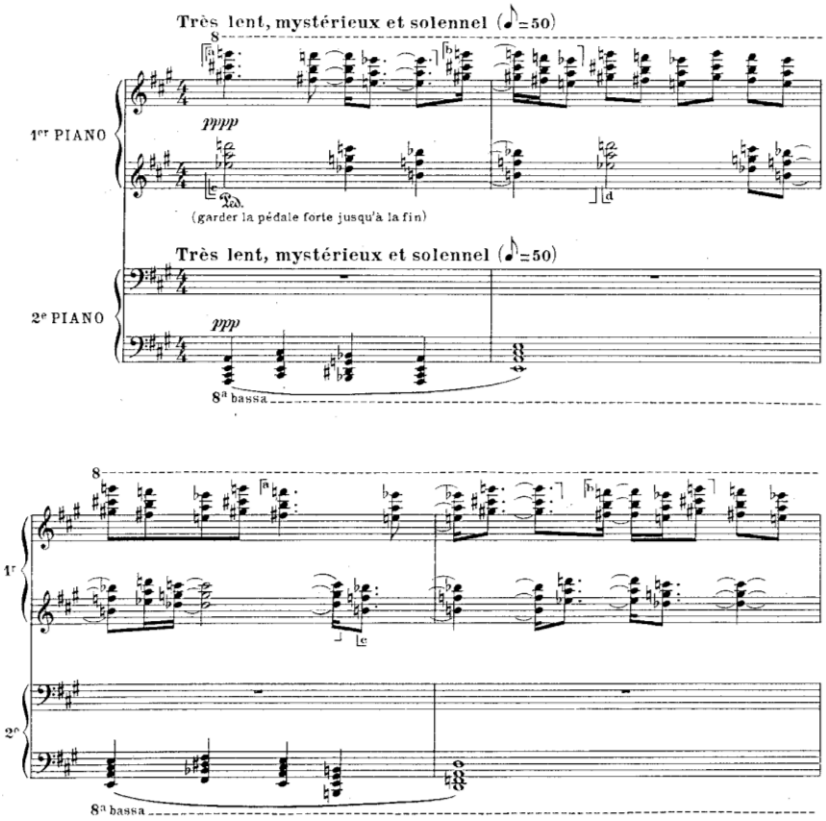
A Performer's Quest

The music of *Visions de l'Amen* certainly reflects Messiaen's sensitivity to temporality, which not only challenges the listener's perception, but also compels the two performers to

[1]See, for example, Schloesser (2014), which includes a painstaking unravelling of the 'Author's Note', and offers a very insightful discussion of the theological implications of, and background to, the music. Siglind Bruhn also devotes almost half of a book to *Visions* (Bruhn 2007). There are many other books and articles dedicated to the discussion, not only of the theological aspect of Messiaen's music, but also of Messiaen as a Catholic: Bruhn (1998; 2008), Maas (2009), Shenton (2010), etc.

think carefully about how the music is experienced in time. At the very beginning of the first movement, 'Amen de la Création', Messiaen assigns very different materials to the two pianists (Example 0.1). There is no sign of functional tonality in piano 1, in which the right-hand part repeats three chords, each of which is formed by a perfect fourth and a diminished fifth. The left-hand part also repeats three chords, each of which is formed by an augmented fourth (diminished fifth) and a perfect fourth. The chords in both parts descend in whole tones. As well as the difference in terms of pitches between the two hands, they have different rhythms. In complete contrast, the second piano part presents a simple chorale, moving steadily in line with the 4/4 time signature. As well as metrical stability, functional tonality can be detected in piano 2's music. Thus, unlike the music of piano 1, which has a repetitive and static quality, its linear movement lacking any kind of tension, the tonal tension of the second piano part, together with the clarity of its two-bar phrases, endows this music with a sense of direction. Unquestionably, the construction, employing contrasting materials, forces the two pianists to perceive them differently.
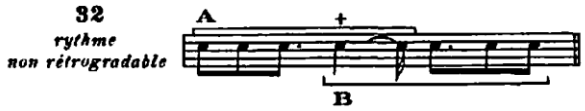
Example 0.1: Messiaen *Visions de l'Amen*, 'Amen de la Création', bars 1–4



Performers might be expected to be happier with piano 2, where the material conforms to the notated metre. The metrical character is confirmed by the way the tonic A major chord is

placed on the first beat both in the first and in the second bar. By contrast, instead of presenting a clear correspondence between the rhythm and the time signature, piano 1 features many syncopations. The rhythm in the first piano part is not constructed according to the metre but instead formed, as Messiaen instructs us in the Author's Note to the printed score of *Visions*, by a 'double rhythmic pedal', which consist of non-retrogradable rhythms (Messiaen 1943: Author's Note). Both rhythmic pedal and non-retrogradable rhythm will be investigated in detail later in the thesis, but at this stage we can briefly introduce the conception of non-retrogradable rhythm. In *Technique de mon langage musical* (1944), Messiaen introduces the conception of a non-retrogradable rhythm, which, regardless of whether it is read 'from right to the left or from left to right, the order of their values remains the same' (Messiaen 1944: 20). In *Technique*, Messiaen gives an example of non-retrogradable rhythm (Example 0.2) and explains that 'the group B is the retrograde of group A; the quarter tied to a sixteenth-note (central value whose duration equals that of five sixteenth-notes) is common to the two groups' (Messiaen 1944: 21). If we follow the way Messiaen numerates the central rhythmic value and numerate the rest of the values accordingly, the numeration of the non-retrogradable rhythm is: 2, 2, 3, 5, 3, 2, 2. This numeration makes clear that the order remains the same when the rhythm is read from left to right or from right to left.

Example 0.2: Messiaen's example of non-retrogradable rhythm



At the beginning of the first movement, Messiaen indicates a small bracket (a) for the first non-retrogradable rhythm in the right-hand part of piano 1. If we divide each value into semiquavers, the values in bracket a can be listed as: 6, 3, 6. And the second non-retrogradable rhythm in the right-hand part of piano 1 (bracket b) from the end of bar 1 can be numerated as: 2, 1, 2. If the performer wants to perceive this rhythm as it was constructed, s/he needs to count in semiquavers. For example, in the first non-retrogradable rhythm (a) s/he should count six semiquavers for the first value, three for the second, and six for the third. If it is sufficient for the second pianist steadily to count four beats in each bar and to perceive the two-bar phrasing, the first pianist is obliged to count semiquavers to perceive the non-retrogradable rhythms. Nevertheless, for the first pianist, this way of counting seems only possible without having to play the left hand as well. The first pianist's left-hand part
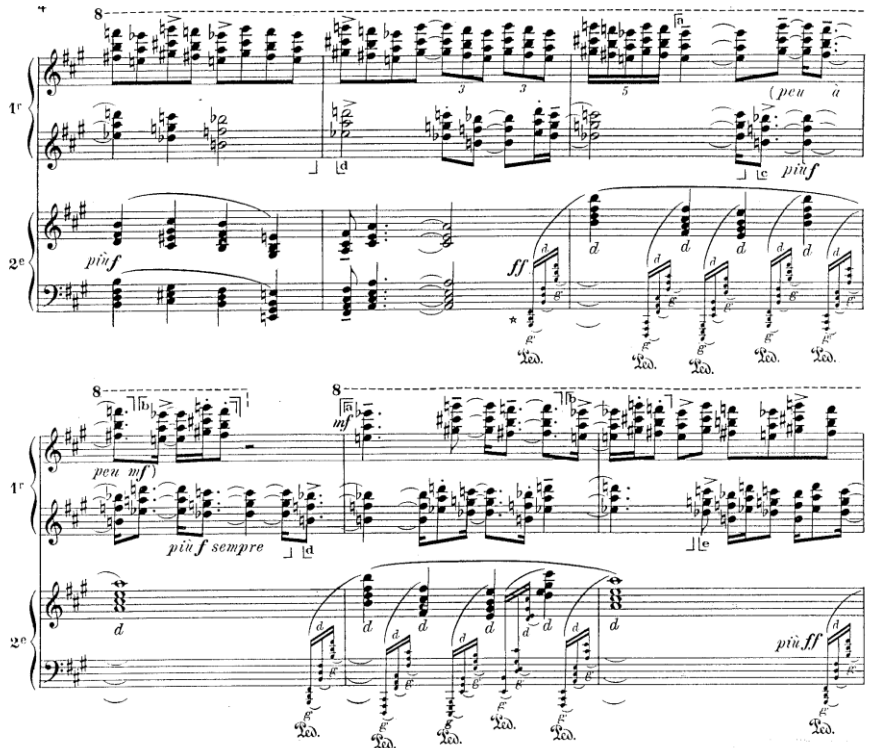
also consists of non-retrogradable rhythms in which the values are different to those of the right-hand part. The rhythm in bracket c can be numerated as 8, 4, 8. It seems impossible for the first pianist to count in semiquavers for two different rhythms simultaneously. Does this mean that, in performance, the first pianist must abandon perceiving non-retrogradable rhythms as they were constructed?

If we look again at the score, we see that instead of notating the first non-retrogradable rhythm in the right-hand part by a dotted crotchet, a dotted quaver and a dotted crotchet, Messiaen arranges the rhythm according to the metre. For example, Messiaen does not notate a dotted quaver for the second value; instead, in line with the time signature, he ties the quaver, which is the second half of the second beat, to the following semiquaver, which belongs to the third beat of the bar. Also, the last value of the first non-retrogradable rhythm is not notated as a dotted crotchet; instead, Messiaen ties the two dotted quaver chords, formed by E, A and E flat, the second of which indicates the start of the fourth beat in bar 1. By means of syncopation, the non-retrogradable rhythms, which operate without regard for metre, are notated in such way that each of the four regular beats within a bar can be clearly perceived. Does this mean that the first pianist needs to follow the metre? If so, s/he can no longer perceive the non-retrogradable rhythms when s/he performs this music. In this case, not only can the first pianist play the part according to the metre by counting the regular beats, but also the first pianist's way of counting is unified with that of the second pianist, whose part is constructed according to the time signature. Therefore, despite the fact that the two pianos have very different materials and the non-retrogradable rhythms are constructed without regard to the metre, both pianists can follow the regular beats in performance.

But if the difficulty of playing piano 1's double rhythmic pedal, as Messiaen calls it, is solved by notating syncopations according to the regular beats, such that the manner in which the two pianists count is unified, does this kind of superimposition of different materials engender other problems? As mentioned before, one of the differences between the two piano parts is that piano 1 is atonal, whereas piano 2 embodies clear traits of tonality. In the tonal progression, identified in piano 2, each chord has a different role and a different weight. For example, a dominant chord has the tendency towards the tonic and the tonic chord has a sense of confirmation. In the cadence from bar 25 to bar 26 (Example 0.3), the four chords in bar 25, each of which is preceded by three broken chords, present a clear direction (II-VI-V-II) towards the tonic chord (A major) in bar 26, which also confirms the first beat of the bar. It seems certainly plausible for the second pianist to make the interpretive choice to emphasise

the tonic by a slight delay on the arrival of the A major chord. While the second piano manifests tonal tension, the first pianist merely continues the double rhythmic pedal, with each hand keep repeating the three atonal chords introduced at the beginning of the movement. With no sign of tonal progression, the first piano part seems to create a distant decoration floating at the top of the piano, compared to the more dynamic piano 2. Thus, a kind of incoherence can be identified here: although both pianists follow the regular beats, they are in no way unified, neither harmonically and rhythmically, nor gesturally. Instead of emphasising the tonic on the first beat of bar 26 like piano 2, both hands of piano 1 happen to be off-beat, holding the values prolonged from the previous bar. If the second pianist can interpret the cadence by a delay of the tonic, what can the first pianist do with this tension-free part? Should the first pianist follow the second pianist's tempo fluctuation like an accompaniment or keep to the music's rigidity? If, for example, the first pianist waits for the second pianist to confirm the first beat in bar 26, which can be slightly delayed to emphasise the tonic, the duration of the first rhythmic value of the non-retrogradable rhythm in bracket c in the left-hand part of piano 1 from the end of bar 25 to the beginning of bar 26 needs to be prolonged to match the tempo fluctuation of piano 2, such that the correct duration of each value in the non-retrogradable rhythm written on the page will not be achieved in performance. Should the second pianist then abandon any tempo fluctuation in order to achieve the ideal of ensemble and at the same time to ensure the accuracy of the rhythmic values in piano 1? If there is no harmonic relationship between the two pianos, is the idea of ensemble still essential?
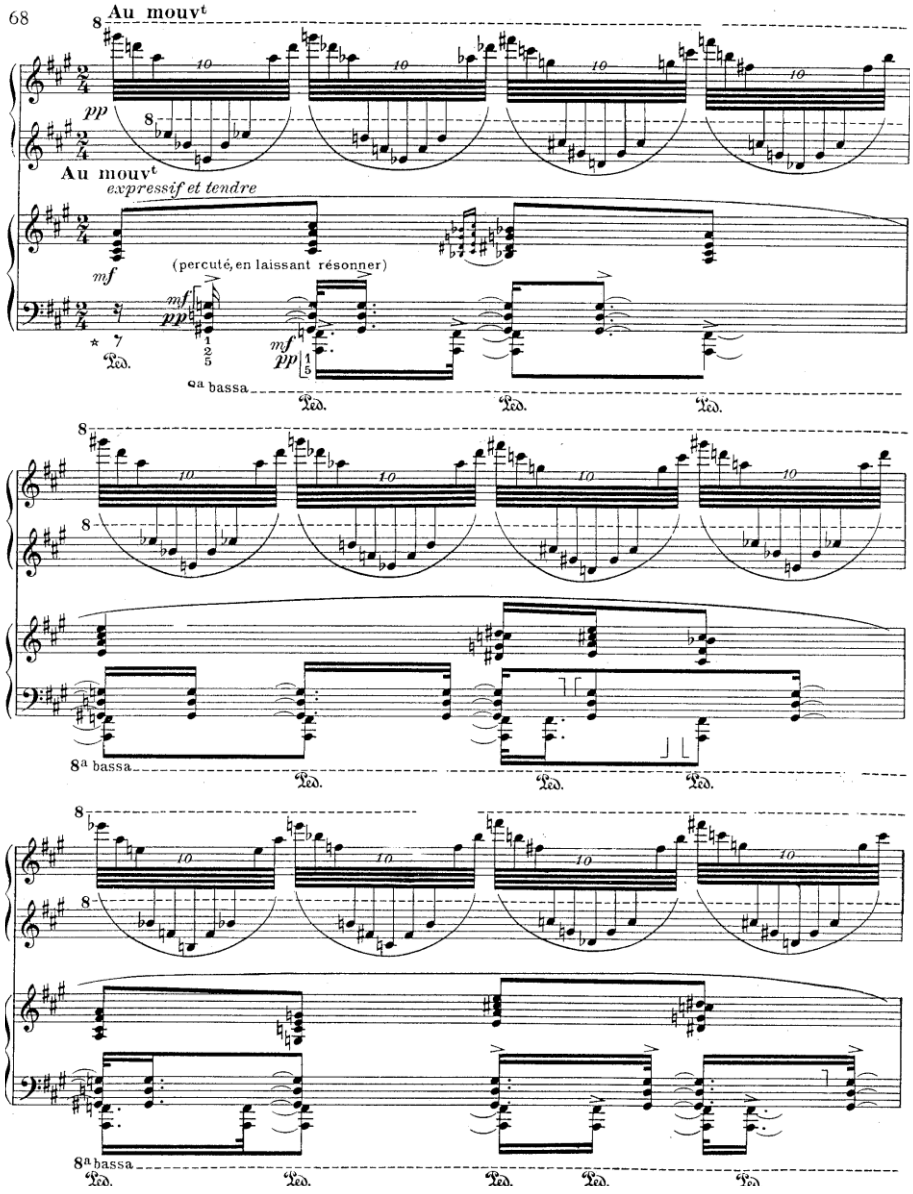
Example 0.3: Messiaen *Visions de l'Amen*, 'Amen de la Création', bars 23–8



This kind of superimposition of different materials is evident throughout the whole seven-movement cycle. In the fifth movement, 'Amen des Anges, des Saints, du chant des oiseaux', the different materials are assigned to the second pianist alone from bar 172 (Example 0.4). The right hand plays the part which is tonal and moves according to the metre, whereas the left hand plays two-layered non-retrogradable rhythms in canon, which are atonal and are constructed independently from the notated metre. Yves Balmer, Thomas Lacôte and Christopher Brent Murray state that the right-hand part of piano 2 keeps 'a grip on the harmonic direction' (*la mainmise sur la conduite harmonique*), and they call the left hand part of piano 2 'accompanying figures' (*figures d'accompagnement*), which 'are not harmonically integrated' (*pas harmoniquement intégrées*) with the right-hand part (Balmer, Lacôte and Murray 2017: 538). Similar to the second piano part in the first movement, the right-hand part of piano 2 in this section also embodies a sense of phrasing and vocal quality. Messiaen marks *expressif et tendre* for the right hand. It is undoubtedly reasonable for the second pianist to shape the phrase and to bring out dynamic nuances in the right hand. If we see the left-hand part of piano 2 as accompaniment, can we integrate this atonal and non-metrical part into the right-hand part? In other words, should the left-hand part follow the dynamic fluctuation expressed by the right-hand part? If we want to go further and interpret

the right-hand part with *rubato*, can the left-hand part, which consists of non-retrogradable rhythms, be led by the right hand's tempo fluctuations?

Example 0.4: Messiaen *Visions de l'Amen*, 'Amen des Anges, des Saints, du chant des oiseaux', bars 172–4



In addition to answering the questions asked above in relation to the particular case of Messiaen's *Visions de l'Amen*, our investigation will need to focus on more general questions with regard to performance. For example, how does the performer tackle the task of moving from perceiving the score as spatial material to performing the music as temporal becoming? To put it another way, the notes and markings on the page are spatial prior to performance, so how does the performer temporalise the spatial? These are the questions that will guide our

research. In attempting to answer them, we will be assisted by the reflection of a number of philosophers, who have certainly pondered the issue of temporality and music.

Introducing the Philosophers

Of all the authors mentioned in the first chapter of the first volume of Messiaen's *Traité*, Henri Bergson (1859–1941) seems to be the most prominent influence on the composer's conception of time. In addition to the passages in *Traité* devoted to Bergson, Messiaen also brought 'reflections of Bergson on time' to his class at the Paris Conservatoire (Boivin 1995: 134). As Gareth Healey notes, 'Bergson undoubtedly had the strongest direct musical influence on Messiaen and surely prompted him to consider time from a non-conventional point of view' (Healey 2007: 170–1). Taylor also recognises that, 'at the largest level, Messiaen aligns himself with the theories of Henri Bergson, who assumes in the *Traité* an importance greater than any other philosopher' (Taylor 2010: 263). In *Traité*, Messiaen eloquently explains how Bergson's idea of number is realised in musical perception (rhythmic perception in particular), and Messiaen also attempts to translate Bergsonian *durée* into his rhythmic construction. Further to pointing out Bergson's direct influence on Messiaen, our investigation will lead us to recognise how Bergsonian philosophy is reflected, without Messiaen explicitly telling us, in Messiaen's musical construction and performance.

Although Bergson mentions music in his discussion of time, he does not develop and refine his view of musical perception. However, through Vladimir Jankélévitch, Bergson's student, Bergsonian philosophy found its way into the realm of music, casting a light on musical temporality. Our discussion will also make use of the work of the German philosopher, Theodor W. Adorno, in order, first, to gain some critical distance from Bergson's and Jankélévitch's views of time and music, and second, to permit a critique of their philosophies, and also of Messiaen's ideas about musical construction and performance. In turn, as will be demonstrated, Adorno's view not only enriches this discussion of musical construction and performance, but also enhances our understanding of Bergson's (and Jankélévitch's) philosophy, as well as Messiaen's composition and performance. Our goal is not simply to defend either Bergson's or Adorno's positions; instead, by exploring both Bergson's and Adorno's work, we will come to recognise how certain of their ideas are realised in Messiaen's music, as well as in music more generally. More generally, the ways in which

performers as well as listeners engage with music performance can be elucidated by way of these philosophers' thoughts.

In the introduction, we will first outline Bergson's notion of *durée,* which will be elaborated by Jankélévitch for the discussion of music. We will also show ways in which Messiaen's thought is derived from Bergson's philosophy and how this relates to musical perception. The exposition of the opposing views of Bergsonian *durée* and Adornian dialectics on how to revive genuine experience, presented at the end of the introduction, will then serve as a preparation for the discussion of Messiaen's composition and performance.

Bergson and His Dualistic View of Time

For Immanuel Kant, as Michael Gallope indicates, 'in order to produce knowledge', we use concepts to 'make reality genuinely intelligible' and 'the active faculty of understanding', associated with intellect, 'must remain superior in function' to 'sensibility and intuition' (Gallope 2017: 169–70). In the *Kritik der reinen Vernunft* (*Critique of Pure Reason*) (1781), Kant claims that 'sensibility [as the source of intuition], subordinated to understanding, as the object to which the latter applies its function, is the source of real cognitions', because intuition or sensibility, by which 'the action of the understanding' is influenced and judgements are determined, is 'the ground of error' and can potentially mislead us (Kant 1998: 385). Bergson suggests the opposite, and maintains that, as Gallope recognises, 'intuition goes in the direction of life', while 'intellect is complicit with the domination of matter's lifeless inertia' (Gallope 2017: 171). Bergson proposes to grasp the 'immediate data' of experience, and instead of thinking time by means of the process of cognition and representation, insists that we feel it, or live through it; if we could give up the habits of thinking and negate the mediations of our intellect, we could perhaps embrace the true experience of life. In short, Bergson wants to revive genuine experience through intuition, without intellectual mediation, which, for him, merely produces illusions crucial for communication, survival and practical life.

The idea of *durée* is the foundation of Bergson's philosophy, introduced in his doctoral dissertation *Essai sur les données immédiates de la conscience*, first published in 1889. In the dissertation, Bergson presents two different kinds of time that our consciousness perceives. One relates to space, in which we perceive objects, events, moments of our lives, and even states of consciousness, in a homogeneous medium. Intellect, for example, is tied up with the

idea of space. According to Bergson, mathematical calculations are operated in space, in which numbers and symbols are represented with clarity. For instance, when we try to work out what 5 plus 3 equals, both numbers must 'stay' in order to be added to a sum, and the medium in which they 'stay' is space. Can this calculation be operated in duration? Bergson argues that 'a moment of time … cannot persist in order to be added to others' (Bergson 1910: 87). Although space enables us to succeed in calculations, it cannot help us to understand the fundamental self.

In order to have true knowledge of the fundamental self, we also need to be aware of another famous concept of Bergson's, vital impetus or vital impulse (*élan vital*). For Bergson, it is the idea of vital impetus alone that can adequately explain the creation and evolution of life. In *Les Deux Sources de la morale et de la religion* (1932), Bergson argues that 'positive science' provides certain theoretical ideas as 'mere hypotheses', which may draw nearer to our view of life, but 'it would only be entering into its own again' (Bergson 1935: 91). If we aim to grasp the true experience of life by scientific and intellectual investigation, we can only obtain scientific results and will restrict ourselves to science itself, which do not yield the notion of life. We can attempt to predetermine 'the creations of life' or calculate the future by embracing 'the doctrine of pure mechanism or that of pure finality', but 'pure experience suggests nothing of the sort' (Bergson 1935: 95). For Bergson, it is 'the vital impetus … inherent in life …, like life', that urges 'us forward' and it is 'in speaking of a "vital impetus"' that we can keep as close as possible to 'actual experience' (Bergson 1935: 44, 91). In other words, intelligence does not give us the reality of life by calculating and dividing in space, for only the knowledge of vital impetus can offer us 'the idea of that real and effective duration which is the essential attribute of life' (Bergson 1935: 95). Therefore, by committing ourselves to embrace the 'vital impetus', we experience time in pure duration, in which the fundamental self can be revealed. Bergson's definition of 'pure duration' is

> the form which the succession of our conscious states assumes when our ego lets itself live, when it refrains from separating its present state from its former states. For this purpose it need not be entirely absorbed in the passing sensation or idea … Nor need it forget its former states: it is enough that, in recalling these states, it does not set them alongside its actual state as one point alongside another, but forms both the past and the present states into an organic whole, as happens when we recall the notes of a tune, melting, so to speak, into one another. (Bergson 1910: 100)

Our inner states are constantly changing, and penetrating one another, which constitutes the image of duration, and which can simply be grasped by intuition (Pogson 1910: x). But as soon as we attempt to define or give names to our feelings or sensations, we must separate them, and the interpenetrated states become juxtaposed in a homogeneous medium, namely space. In other words, it is in duration that we perceive the self, the fundamental self, in which 'our deepest conscious states exclude numerical multiplicity', yet when 'duration expressing itself in extensity exhibits moments as distinct as the bodies scattered in space' (Bergson 1910: 218), for the purpose of perceiving phenomena with well-defined outlines, the symbols represented in space will appear to have nothing in common with the successive inner states.

In the quotation above, Bergson briefly touches on music, linking 'pure duration' with 'the notes of a tune'. He uses music as an example to show how pure duration is perceived on several occasions in *Essai sur les données immédiates de la conscience*, which suggests that, for Bergson, music or 'the notes of a tune' are exclusively perceived in duration. However, can we perceive 'the notes of a tune' in space? As a temporal art, music certainly exists in time, but is it only in this kind of time, pure duration, that we perceive music, as Bergson suggests? Could there be any spatial elements involved and operating in consciousness when we either perform or listen to music?

If Bergson simply ignores the possibility of spatialization in musical perception, Jankélévitch, one of Bergson's students at the École Normale Supérieure in Paris, fills the gap that Bergson left. In *La Musique et l'Ineffable* (1961), Jankélévitch inherits Bergson's view of musical perception. Jankélévitch recognises the possibility of perceiving music in space; as he writes, 'it is vision layered upon hearing, and projects the diffluent, temporal order of music into the dimension of space' (Jankélévitch 2003: 90). Without giving any significance to this kind of perception, Jankélévitch instantly denies its validity in musical experience. He claims that spatialization in music corresponds to 'the dubious, vague, controversial truth of musical Becoming [that] solicits metaphors', and 'we would need a second Bergson to root out the mirages of spatialization that are scattered throughout musical aesthetics' (Jankélévitch 2003: 90). Jankélévitch also thinks that music reveals the essence of life, which is the perpetual becoming of duration that excludes itself from being set out in space. Bergson does not specifically indicate the relationship between life and music, but Jankélévitch confirms this: 'music is not calligraphy projected into space, but a lived experience analogous to life' (Jankélévitch 2003: 93). And at this point we should start to look at *Traité* and see whether

Bergson's influence also encourages Messiaen to seek the essence of life in musical perception.

Bergson in Messiaen's *Traité*

Through a close reading of both Bergson's philosophy and Messiaen's ideas of rhythmic construction and perception, as explained in *Traité,* it can be discerned that it is not the fundamental notion of Bergsonian duration which Messiaen embraces and applies to musical perception and construction. Instead, he seems to extract elements from Bergson's philosophy of time in order to support his ideas about compositional technique.

Apart from the last section E) 'Temps Bergsonien et rythme musical' in the chapter called 'Le temps', Messiaen also mentions Bergson in the second section B) 'Philosophie de la durée' (Philosophy of Duration), in which Messiaen writes that, 'Time and Space are intimately related. Their perception is of considerable importance to the formation of the human spirit. They are both intellectual instruments which allow us to see the construction of the world' (Messiaen 1994a: 9). [2] Initially, Messiaen links time with space, and endows this kind of perception with such significance that it contributes to 'formation of the human spirit'. The fact that Messiaen emphasises the idea of space, related to intellect, seems closer to Kant's claim mentioned earlier. By contrast, Bergson asserts that it is in duration that we perceive or express the fundamental self, which can be gradually lost by perceiving the self 'refracted, and thereby broken to pieces' in space (Bergson 1910: 128).

For Bergson, duration, as a continuous process of becoming, can be grasped by intuition, and duration is also what consciousness first arrives at in any experience. Bergson maintains a dualistic view by distinguishing between 'duration as quality, that which consciousness reaches immediately', and 'time so to speak materialized, time that has become quantity by being set out in space' (Bergson 1910: 127). Bergson also recognises that 'we usually think in terms of space' to adapt to social and practical life (Bergson 1910: xxiii); however, 'duration

[2] Translations from Messiaen's first volume of *Traité* are taken from Melody Baggech's doctoral dissertation, *An English Translation of Olivier Messiaen's Traité de rythme, de couleur, et d'ornithologie* (1998), with the original French given in the footnotes. Baggech's translation will be modified when necessary, and occasionally a new translation will be supplied. Page numbers of her translation are indicated in the footnotes, here Baggech 1998: 18.
Original French: 'Le Temps et l'Espace sont intimement liés. Leur perception est d'une importance considérable pour la formation de l'esprit humain. Ils sont les deux instruments intellectuals qui nous permettent une construction du monde.'

is presented to immediate consciousness, and it retains this form so long as it does not give place to a symbolical representation derived from extensity' (Bergson 1910: 128).

For Bergson and Jankélévitch, music seems to exclude the notion of space, whereas Messiaen, in *Traité,* is more accustomed to discussing music in terms of space. Messiaen relates rhythmic values to Bergson's idea of number, from which Messiaen derives a way of numerating rhythmic values through spatial representations. It should be mentioned that, for Bergson, music or the notes of a tune prompt us to perceive moments 'one in the other, each permeating the other', which form 'a continuous or qualitative multiplicity with no resemblance to number' (Bergson 1910: 105). The idea of number involves the spatial image (Bergson 1910: 79), and applying it to music reveals the fact that Messiaen has selected excerpts from Bergson to illustrate his own view, rather than presenting a comprehensive account of Bergson's philosophy. Messiaen, in the section, 'Temps Bergsonien, et rythme musical' (Bergsonian Time and Musical Rhythm), mainly discusses music in terms of space, which is not what Bergson encourages us to do and is certainly not how Bergson perceives music. In other words, this section does not offer a genuine discussion of 'Bergsonian Time', as the title suggests.

Numeration in Music

At the beginning of this section, Messiaen quotes from *Essai*: 'every number is one; but this unity is the result of a sum' (Messiaen 1994a: 31).[3] In the original text, Bergson writes, 'every number is one, since it is brought before the mind by a simple intuition and is given a name; but the unity which attaches to it is that of a sum, it covers a multiplicity of parts which can be considered separately' (Bergson 1910: 75–6). Then Messiaen quotes: 'the idea of number implies the simple intuition of a multiplicity of parts or units, which are absolutely alike' (Messiaen 1994a: 31). [4] Before we look at how Messiaen relates number to rhythmic perception, we need to gain a further understanding of Bergson's idea of number and its relationship with space. For Bergson, a spatial representation is involved when we count, and he asserts that it is a misunderstanding to think that we count a number only in time rather than in space. The quotation below clarifies the inevitability of introducing a spatial representation when we count a number:

[3] Baggech 1998: 42. Original French: 'Tout nombre est un; mais cette unité est celle d'une somme.'
[4] Translation by F.L. Pogson (Bergson 1910: 76), not by Baggech.

> It is certainly possible to perceive in time, and in time only, a succession which is nothing but a succession, but not an addition, i.e. a succession which culminates in a sum. For though we reach a sum by taking into account a succession of different terms, yet it is necessary that each of these terms should remain when we pass to the following, and should wait, so to speak, to be added to the others: how could it wait, if it were nothing but an instant of duration? And where could it wait if we did not localize it in space? We involuntarily fix at a point in space each of the moments which we count, and it is only on this condition that the abstract units come to form a sum. (Bergson 1910: 78–9)

Without the idea of space, for Bergson, we will never reach a sum when we count, or we will not have the idea of a number. To obtain the idea of five, for example, as opposed to an abstract number, we must have an extended image. He maintains that number in the abstract does not prompt the idea of space because it is only symbolic, not an image or an idea of a number, but 'as soon as we wish to picture number to ourselves, and not merely figures or words, we are compelled to have recourse to an extended image' (Bergson 1910: 78). In a word, in order to have a real idea or an image of a number, we need to 'build up' to it, and this process of 'building up' takes place in space.

Following the idea or the image of number presented by Bergson, Messiaen introduces a kind of rhythmic perception which includes numerical multiplicity. Messiaen writes that, 'to appreciate a long duration, one must know in advance a unity of value that can divide it into equal parts, and be aware of these possible divisions. There is also the possibility of retrospective appreciation of the long duration if it is followed by unity of short values' (Messiaen 1994a: 31).[5] For example, a minim can be divided by eight semiquavers, and for Messiaen, when we listen to a minim, we appreciate it by knowing that there are eight semiquavers contained in it; if the minim is followed by a semiquaver or semiquavers, once we know the length of the semiquaver, we can retrospectively appreciate the minim by dividing it into eight parts. This kind of rhythmic perception, which includes numeration, gives rise to an extended image, namely an image in space, where we count or gather the identical parts contained in a rhythmic value. Moreover, dividing time with equal portions, according to which the values are counted, also involves the notion of space, which will be

[5] Baggech 1998: 42. Original French: 'Pour apprécier une durée longue, il faut connaître au préalable une unité de valeur qui puisse la diviser en parties égales, et avoir conscience de ces divisions possibles. Il y a aussi possiblité d'appréciation rétrospective de la durée longue si elle est suivie d'unités de valeurs brèves.'

discussed in detail in the second chapter. Ironically, Bergson perhaps would not seem aware of this kind of rhythmic perception, given his repeated assertions of the correspondence between music and pure duration.

Messiaen indicates that different values are 'influenced by space' (*influencée par l'espace*) and 'only supposedly contain the possibility of divisions or multiplications' (*divisions ou les multiplications possibles n'existent que supposément*); thus the numerically evaluated values are 'quantitative and spatial' (*quantitatives et spatiales*) (Messiaen 1994a: 32).[6] There are questions to be asked about this rhythmic perception: must rhythmic values be appreciated by numeration in space? Are there any other elements that influence rhythmic values besides space? A further examination will show us that, in *Traité*, Messiaen adopts parts of Bergson's philosophy, and at the same time negates the fundamental purpose of it.

From Bergson's perspective, instead of dividing each of the values in a rhythmic group and appreciating their numbers, the values can be appreciated in duration, in which we perceive one value after another, or, in Bergson's words, retain the sense of their 'enduring', 'without any tendency to externalize themselves in relation to one another, without any affiliation with number' (Bergson 1910: 104). The passage from *Essai* could certainly challenge the idea that rhythmic values are appreciated in space: 'pure consciousness does not perceive time as a sum of units of duration: left to itself, it has no means and even no reason to measure time; but a feeling which lasted only half the number of days, for example, would no longer be the same feeling for it; it would lack thousands of impressions which gradually thickened its substance and altered its colour' (Bergson 1910: 196).

If we could give up measuring rhythmic values and pay attention to our conscious states, we would certainly perceive the difference between a crotchet, and a quaver, for example, but this difference would be qualitative as long as we retain this kind of perception. In such a case, we appreciate the qualitative difference of the two values, not their numerical durations. Instead of obtaining a clear idea of the values, our appreciation of them through duration is 'confused, ever changing and inexpressible' (Bergson 1910: 129). The idea of space helps us to get a clear and precise notion of the values, but it is impersonal, and it prevents us from recognising the inner states that constitute our fundamental selves. Once the values have been counted and projected into space, the numbers will always remain the same each time we

[6] Translations by the author.

listen to the rhythm, but the sensations, as we observe them, change. Bergson gives an example to show that, unlike object(s) solidified in space, we ourselves change:

> Every day I perceive the same houses, and as I know that they are the same objects, I always call them by the same name and I also fancy that they always look the same to me. But if I recur, at the end of a sufficiently long period, to the impression which I experienced during the first few years, I am surprised at the remarkable, inexplicable, and indeed inexpressible change which has taken place. It seems that these objects, continually perceived by me and constantly impressing themselves on my mind, have ended by borrowing from me something of my own conscious existence; like myself they have lived, and like myself they have grown old. (Bergson 1910: 129–30)

Like the houses in Bergson's example, the values in a rhythm are the same values if we perceive them in space, and we 'fancy' that they always sound the same to us. This is because the difference of the impressions that we receive between, for example, the first listening and the second listening to the rhythm, 'escapes the attention of most of us', and 'we shall hardly perceive it, unless we are warned of it and then carefully look into ourselves' (Bergson 1910: 130).

Instead of endowing spatialization in music with significance, Jankélévitch emphasises the changing and inexplicable quality of music. For Jankélévitch, the ultimate goal for us to find in music is 'the Charm', which is akin to what we perceive in Bergsonian duration. The musical charm that endures in time is 'unknowable' and 'indeterminate', analogous to the way conscious states engendered by music cannot explain an idea 'word by word, nor does it signify point by point' (Jankélévitch 2003: 51–2). For Bergson, we can never clearly identify our states of consciousness, unless we stabilise them at a certain moment of time, separate them out and arrange them in space, which means that they lose their original movement and shape; Jankélévitch asserts that music, experienced in pure duration as perpetual becoming, is 'infinitely equivocal' (Jankélévitch 2003: 63–4). This is because the search for the 'Charm' in music, as indicated by Jankélévitch, requires a concentration on the inner self. As he states, 'the art of sounds – and this is said without metaphor – is the intimate interior, the heart of hearts of other arts' (Jankélévitch 2003: 76). Bergson indicates that the soul constitutes a process in duration, in which 'the states of consciousness … permeate one another' (Bergson 1910: 98); in a similar way, Jankélévitch suggests that 'the soul is the Charm' (Jankélévitch: 2003: 52). According to Bergson, the soul, in its original shape, is comprised of 'a thousand

different elements which dissolve into and permeate one another without any precise outlines, without the least tendency to externalize themselves in relation to one another' (Bergson 1910: 132). Jankélévitch also believes that 'the soul cannot be pinpointed here or there in the body: the soul is not localizable, but more a diffuse presence, like the grace that is scattered everywhere to the senses' (Jankélévitch 2003: 52). Just as Bergson recognises the inexplicability of the fundamental self, Jankélévitch, listening to the 'the art of sounds', perceives the 'interior' (Jankélévitch 2003: 76), which is ever ineffable.

Apart from aligning himself with Bergson's position in terms of perceiving music's charm in duration as excluding the idea of space, Jankélévitch also assigns a mysterious power to music, which has religious and mystical connotations. Jankélévitch seems to equate 'a Charm', which is 'not a thing', to 'a mystery', which is 'not some material secret', and like 'the enigma of God', musical charm can never be found in words and verses; instead, when we give up dissecting and conceptualising music and rely 'on the moment in time, the spontaneous lurch of our hearts', we might be able to experience 'the Charm created by music' as 'true state of Grace' (Jankélévitch 2003: 110). Jankélévitch goes further with this kind of mystical connotation assigned to music by claiming that music allows us to have 'brief glimpses' of 'divine, sublime things' which are 'once dazzling and dubious' (Jankélévitch 2003: 127). We need to accept that fact that Jankélévitch's terms, such as 'the Charm', and states of grace and mystery, suggest a kind of religious mysticism, even though, as mentioned earlier, we will not dwell in this thesis on issues of theology.

Messiaen also mentions charm in the discussion of his music relating to Modes of Limited Transpositions and non-retrogradable rhythms, which, somewhat along the lines of Jankélévitch, are also taken to embody religious meanings. Messiaen claims that the music that contains Modes and non-retrogradable rhythms evokes the listener's desire 'to be charmed' and that s/he will

> submit to the strange charm of impossibilities: a certain effect of tonal ubiquity in the nontransposition, a certain unity of movement (where beginning and end are confused because identical) in the nonretrogradation, all things which will lead him progressively to that sort of *theological rainbow* which the musical language, of which we seek edification and theory, attempts to be. (Messiaen 1944: 21)

If Jankélévitch encounters 'the Charm', the divine and 'true state of Grace' in Bergsonian *durée*, how can we 'submit to the strange charm of impossibilities' and be led to '*theological*

rainbow' by Messiaen? In the second chapter, we will discuss Messiaen's non-retrogradable rhythm in detail, and we will see that the manner in which we are 'charmed' by Messiaen's rhythm is rather different to the way we experience 'the Charm' in music indicated by Jankélévitch. We can now reveal more divergences between what Messiaen says about musical perception in *Traité* and the Bergsonian account of duration, which will foreshadow the discussion of the way we perceive 'charm' in Messiaen's non-retrogradable rhythm.

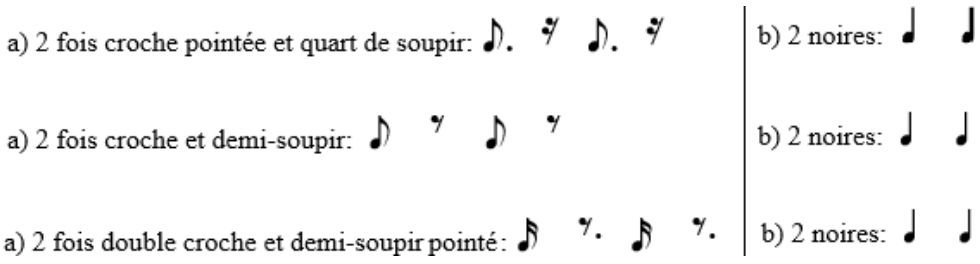
Durée as Determined

Working with Bergson's idea of *durée*, Messiaen writes:

> Lived duration also depends on biological time. The rhythms of our organic life: heartbeats, breathing, chemical reactions of the human body – affect our sense of duration. Finally, our assessment of duration depends essentially upon the number of events for which it is filled for each of us: psychological events, physiological events, events that are desired and executed by us (actions), the external events acting on us (shocks). The tempo of duration changes depending on whether these events are past or current. Consequence: two laws that perfectly summarise duration lived (or experienced):
>
> *a) Sense of duration in the present.* Law: in the present, the more time is filled with events, the shorter it seems to us – the more it is empty of events, the longer it seems to us.
>
> *b) Retrospective appreciation of the past time*. Inverse of the previous one: in the past, the more time was filled with events, the longer it seems to us now – the more it was empty of events, the shorter it seems to us now. (Messiaen 1994a: 10)[7]

[7] Translation by the author. Original French: La durée vécue dépend aussi du temps biologique. Les rythmes de notre vie organique: battements du cœur, respiration, réactions chimiques du corps humain – influent sur notre sentiment de la durée. Enfin, notre appréciation de la durée dépend essentiellement du nombre d'événements dont elle est remplie pour chacun de nous: événements psychologiques, événements physiologiques, évènements coulus et exécutés par nous (actions), événements extérieurs agissant sur nous (chocs) – et le tempo de la durée change suivant que ces événements sont antérieurs ou actuel. Conséquence: deux lois qui résument parfaitement la durée vécue:
a) Sentiment de la durée présente. Loi: dans le présent, plus le temps est rempli d'événements, plus il nous paraît court – plus il est vide d'évènements, plus il nous paraît long.
b) Appréciation rétrospectice du temps passé. Loi invers de la précédente: dans le passé, plus le temps était rempli d'évènement, plus il nous paraît long maintenant – plus il était vide d'évènements, plus il nous paraît court maintenant.

Messiaen borrows an example from Pierre Lecomte du Noüy to show that the younger we are, the less time it takes for a 20 cm^2 wound to heal, and inversely, the older we are, the longer it takes to heal. Messiaen indicates that, 'during the same sidereal period, there is much more organic work in the child than in the elderly person' (Messiaen 1994a: 13 [translation modified]).[8] This difference between different ages influences our perception of duration Therefore, a child, for example, experiences more physiological and psychological events and an old person experiences fewer events; as a result, according to the first law listed by Messiaen, for the child, in the present, a year feels shorter than it feels to the old person, and in retrospect, a year of childhood seems longer than a year of adulthood. As Messiaen suggests, 'despite a number of years inferior to the rest of life, childhood seems to us *really longer*' (Messiaen 1994a: 22).[9] Messiaen suggests that the second law is more evident than the first, because, as he writes, 'the first [law] addresses the present and the present is not easily appreciable, completely charged, as it is, with echoes of the past and anticipations of the future … [whereas] the second sums up the sentiment of our own duration: my childhood has lasted longer than all the rest of my life' (Messiaen 1994a: 23).[10] Messiaen indicates that our perception of duration is determined by the second law and he relates this law to musical perception. Then Messiaen creates another law that governs our musical perception, named the 'law of the attack-duration relationship' (*loi des rapports attaque-durée*) (Messiaen 1994a: 23). According to this law, the examples marked 'a' seem longer than those marked 'b', even though they are all within a same length of time (Messiaen's table is replicated below) (Messiaen 1994a: 23). This is because each example marked 'a' consists of four events: two sounds and two silences, and each example marked b consists of two events: two sounds.



[8] Baggech 1998: 22. Original French: 'au cours de la même durée sidérale, il y a beaucoup plus de travail organique chez l'enfant que chez le vieillard.'
[9] Ibid: 32. Original French: 'malgré un nombre d'années inférieur au reste de la vie, l'enfance nous paraît, et *elle est réellement plus longue*.'
[10] Ibid. Orginal French: 'La seconde loi paraît beaucoup plus évidente que la première. D'abord parce que la première s'adresse au présent et que le présent est difficilement appréciable, tout chargé qu'il est des échos du passé et de l'attente du futur. Ensuite parce que la seconde loi résume parfaitement le sentiment de notre propre durée: mon enfance a duré plus longtemps que tout le reste de ma vie.'

At first glance, Messiaen's idea of 'psychological time' might seem to be connected with the deep-seated psychic states that constitute psychological duration and which are free from the fixity of 'clock time', but a closer look will show us that Messiaen's idea and its laws are devoted to a notion of psychological determinism which Bergson rejects. According to the 'law of the attack-duration relationship', Messiaen lists four factors that affect our experience of duration: various modes of attack (struck, plucked, sustained) (*frappé, pincé, soutenu*), different nuances, different registers (treble and bass) (*vers l'aigu ou vers le grave*) and various instruments (Messiaen 1994a: 25). Messiaen suggests that a relatively slow melody (*une mélodie, demouvement assez lent*) played on the xylophone, would sound qualitatively longer than the same melody played on the violin, because of their different executions (Messiaen 1994a: 24). This is because every note of the melody played on the xylophone creates more events than the same note played one the violin. While the xylophone, in every note, creates a sound of attack which quickly dies down, the violin only creates a sustained sound in the notes of the slow melody.

It is certainly true that in contrast to the examples marked 'a', the example marked 'b' will invoke a different sensation. But to assert that our experience of duration is determined by Messiaen's laws is to reduce such plurality of the psychic states – which can only be comprehended in duration – to symbols spread out in space. Therefore, the psychological states described by such laws are no longer 'the states of consciousness themselves, but their symbols, or, speaking more exactly, the words which express them' (Bergson 1910: 163). Different musical events produce different affective states which are personal, and yet as soon as we attempt to give an account of each sensation, in terms such as the claim that the examples on the left seem longer in duration than the example on the right, these feelings or sensations will be resolved into 'impersonal elements external to one another, each of which calls up the idea of a genus and is expressed by a word' (Bergson 1910: 163). In the following passage, Bergson adequately expresses the fallaciousness of psychological determinism – the school to which Messiaen seems to belong – and its inferiority to a free act:

> A dynamic series of states is thus formed which permeate and strengthen one another, and which will lead by a natural evolution to a free act. But determinism, ever craving for symbolical representation, cannot help substituting words for the opposite feelings which share the ego between them, as well as for the ego itself. By giving first the person and then the feelings by which he is moved a fixed form by means of sharply

> defined words, it deprives them in advance of every kind of living activity … But this mechanism, to which we have condemned ourselves in advance, has no value beyond that of a symbolical representation: it cannot hold good against the witness of an attentive consciousness, which shows us inner dynamism as a fact. (Bergson 1910: 171–2)

Thus, when Messiaen claims that our appreciation of duration is determined by certain laws, he does not perceive duration as Bergsonian duration, or encourage us to perceive it as such, and he presupposes that psychological duration, which for Bergson is a constant becoming with qualitative changes, can be defined and pin-pointed, such that he can arrest time through symbols represented in space. The 'psychological time' indicated in *Traité* seemingly resembles a Bergsonian duration that is incommensurate with 'clock time', but in fact it is nothing but the manifestation of the perception of time in space that Bergson denounces.

Messiaen's deterministic view is shown most evidently when he quotes from Jean Thibaud and draws inspiration from Thibaud's book *Vie et transmutation des atomes* (1937). There, in the chapter 'Le Problème du temps', Thibaud writes:

> Without the future being narrowly determined, it would be surprising if, in the material world, the present does not already potentially contain something of future events. I make allusion there to a possible alteration of present events by those that must happen *later*. When we admit that the present is partially able to condition the future but that the inverse is impossible, we accept an uncompromising irreversibility of the sense of temporal evolution which is difficult to justify in the domain of micro-mechanisms, On the contrary, the law of temporal symmetry seems perfectly plausible, if it would become possible to admit that the chain of successive events of a material system could be described as well in one sense as in the other, that which drives us to suppose *a certain conditioning of the present by the future* as well as the contrary. (Messiaen 1994a: 27)[11]

[11] Ibid: 37. Original French: 'Sans que l'avenir soit pour cela étroitement determine, il serait surprenant que, dans le monde matériel, le présent ne contienne pas déjà en puissance quelque chose des événements futurs, je fais allusion ici à une altération possible des événements présents par ceux qui se doivent se passer *plus tard*. Lorsque nous admenttons que le présent puisse conditionner en partie le futur mais que l'inverse soit impossible, nous acceptons une irréversibilité du sens de l'évolution temporelle d'un caractère d'intransigeance difficile à justifier dans le domaine des micromécanismes: au contraire la loi de symétrie du temps paraît parfaitement plausible, si bien qu'il devient possible d'admettre que la chaîne des événements successifis d'un système matériel puisse être décrite aussi bien dans un sens que dans l'autre, ce qui nous conduit à supposer *un certain conditionnement du présent par le futur aussi bien que le contraire*.'

For Thibaud, the future can be determined by conditions of the present, and inversely, the present is determined by the awareness of the future. Messiaen concludes from this passage on 'Inverse Determinism' (*le Déterminisme inverse*) that the present influences the future and the future influences the present, 'determinism in both senses!' (*déterminisme dans les deux sens*) (Messiaen 1994a: 28). He also indicates that this inverse determinism is revealed in the working process of a composer. As he writes, 'is not the composer-rhythmicist a little demiurge, having all power over the work that is his creation, his microcosm, his child, his thing? He knows in advance all the pasts and all the futures, they are all present in his mind. At will he can transform the present so that it touches the past or the future, and make corrections to the before and the after' (Messiaen 1994a: 28 [translation modified]).[12]

This kind of determinism is applicable less to a process that endures in time, than to a 'mathematical operation which we carry out on a given quantity [that] implies the permanence of this quantity throughout the course of the operation' (Bergson 1910: 150). In other words, as Bergson states, 'in order to foresee the state of a determinate system at a determinate moment, it is absolutely necessary that something should persist as a constant quantity throughout a series of combinations' (Bergson 1910: 151). The present conditions need to stay constant without any special or accidental changes during the process, so the future can be foreseen or determined. Bergson suggests that this view can be applied to physico-chemical phenomena, but not to psychological phenomena or conscious states (Bergson 1910: 151–2). If we apply this kind of determinism to musical perception, it means that we have agreed that a certain musical duration will always produce the same effect. For example, a crotchet will engender a certain sensation, or, according to Messiaen's law, a crotchet followed by a rest will always feel longer to us that a minim. This implies a form of consciousness, as Bergson indicates, that 'can only be intelligibly applied to a system of which the points, after moving, can return to their former positions' (Bergson 1910: 152). But this form of consciousness does not exist in the realm of life. For Bergson, our states, 'being infinitely complex, have no chance of ever occurring again all at the same time' (Bergson 1910: 153). Therefore, according to Bergson, we can neither suppose that we possess a certain psychic state before perceiving the music, nor can we predetermine a certain psychic

[12] Ibid: 38. Original French: 'Le compositeur-rythmicien n'est-il pas un petit démiurge, ayant tout pouvoir sur cette œuvre qui est sa création, son microcosme, son enfant, sa chose? Il en connaît d'avance tous les passés et tous les futur, elle est tout-entière présente à son esprit, il peut à son gré transformer cette présence en touchant soit aux passés, soit aux futurs, et en accomplissant les corrections qu'entraînent dans l'avant et dans l'après tel ou tel changement.'

state after it. Messiaen cannot know 'all the pasts and all the futures', because the conscious states that the music engenders are indefinable, and when we listen to the same music twice, the experiences are different. Thus, 'the pasts and futures' of a piece of music cannot be foreseen by the composer as Messiaen claims, and they can only be seen (rather than foreseen) during the experience of the music as it is performed.

The reason why Messiaen adopts this deterministic view here is that he treats his composition as 'a thing', not a process occurring in time. A musical passage, perceived as a thing in space, is a totally different experience to the same passage heard in psychological duration, and it is, therefore, impossible to reduce the notes heard successively in time to the notes as symbols represented in space without excluding a qualitative dimension of duration. If music is a temporal art, 'one is bound to live this duration whilst it is unfolding' (Bergson 1910: 198).

Messiaen is aware that this theory of 'Inverse Determinism' might be disputed by other scholars. As he states, 'this text is perhaps distracting to practical intelligence … despite the prudence of expression and all the precautions of terminology taken by the author … It seems quite simple when transferred to the rhythmico-musical domain' (Messiaen 1994a: 28).[13] Given the prominence of Bergson in Messiaen's *Traité,* it could be surmised that Messiaen here acknowledges Bergson's disagreement with the deterministic hypothesis in the realm of life. It is in space – in which there is no duration, and no life – that Messiaen could justify this perception in 'the rhythmico-musical domain'. Just as Bergson tries to demonstrate the fallacy of spatialization in terms of its ignorance of the essence of life, Jankélévitch similarly maintains that, a piece of music perceived as 'a thing' in space is no longer music. A sonata, for example, 'is properly speaking a succession of expressive contents that unfolds itself in time: it is an enchanted chronology, a melodious form of becoming, *time itself*' (Jankélévitch 2003: 70). Opposed to determinism, Jankélévitch also insists on unpredictability in music; as he writes, 'music refuses to take us where we would like to go'; but it 'takes us somewhere else, ushers us into the presence of beauty not foreseen' (Jankélévitch 2003: 28). In this sense, Messiaen is a demiurge only in space, in which, for Jankélévitch, there is no music, and therefore, it seems that no one, in the face of a musical performance, can be in control of 'the beauty of the unforeseen'.

[13] Ibid. Original French: 'Ce texte est peut-être affolant pour un intelligence pratique … malgré la prudence d'expression et toutes les précautions terminologiques prises par l'auteur … Il semble tout simple, transporté dans le domaine rythmico-musical.'

Messiaen also writes of 'durations thought and appreciated by an individual – and incommunicable, like [how] an internal prayer without words is incommunicable' (Messiaen1994: 32),[14] which does resemble Bergsonian philosophy, in that the listener perceives music in duration, in which the qualitative becoming is inexpressible or 'incommunicable'. But Messiaen devotes much of his writing on musical perception to spatialization and determinism, and barely gives any emphasis to the perception of Bergsonian duration in music. Is this because of the very fact that it is 'incommunicable'?

At this point, having demonstrated Bergson's and Jankélévitch's opposition to spatialization in music, we can introduce Adorno, as an 'outsider' to the Bergsonian tradition, who also opposes attempts to govern our experience by the idea of space. Roger Foster offers an excellent study of the relationship between Bergson and Adorno. In a chapter of his *Adorno: The Recovery of Experience* entitled 'Failed Outbreak II, Bergson', he clearly indicates the similarities as well as divergences between Bergson's and Adorno's thoughts. Foster recognises that both Bergson and Adorno aim at recovering 'spiritual experience against its usurpation by abstract conceptuality' (Foster 2007: 114). Similar to the perception of the Bergsonian 'fundamental self', spiritual experience, in Adorno's understanding, is also often hidden in practical and social life. The idea of space is linked to conceptuality, which is made possible by separating and representing phenomena in space. The kinship between the two terms, space and conceptuality, is well described by Foster: 'fine dissections of reality that are the basis of conceptual classification are themselves made possible by the homogeneous milieu structured by mathematized space' (Foster 2007: 117). Like Bergson's idea of number and its relationship with space, Adorno relates number to conceptual classification:

> The difficulty in defining the concept of number stems from the fact that its own essence is the mechanism of concept formation, with the aid of which one would try to define it. The concept itself is subsumption and contains thereby a relationship of number. Numbers are arrangements that seek to make the nonidentical commensurable with the subject under the name of the many, the model of unity. They bring the multiplicity of experience under abstraction. (Adorno 1970: 18)[15]

Conscious states are unmeasurable and heterogeneous, and constitute 'the nonidentical commensurable with the subject'; the idea of number reduces and determines what is

[14] Ibid: 42. Original French: 'durée pensées et appréciées par un seul individu – et incommunicables comme la prière intéreure sans mots, est incommunicable.'
[15] Translated in Foster (2007), p. 117.

experienced to quantification. Foster thus recognises that 'number provides a structure for categorizing experience as comprised of homogeneous elements that are repeatable' (Foster 2007: 117). It is true that when we apply the idea of number to rhythmic perception, the numerical aspect of a rhythmic value is repeatable. Foster then points out that the 'idea of conceptual subsumption as operating by way of a subtraction from what is given in experience is absolutely central to the understanding of how concepts work for both Bergson and Adorno' (Foster 2007: 117). For Bergson, concepts work under the quantitative multiplicity that operates in space. Bergson demonstrates that conscious states live in duration, permeated by one another, and 'by separating these moments from each other, by spreading out time in space', we have caused these conscious states to lose their life and colour (Bergson 1910: 133); similarly for Adorno, as Foster indicates, the idea of 'conceptual subsumption', which operates in the realm of number, is a reduction of reality to repeatable units that 'cuts away everything that does not fit in' (Foster 2007: 117–18). In other words, 'rationality', which works within concepts, as Andrea Sakoparnig summarises in her useful account, 'developed destructive traits by negating everything not commensurable to and identifiable with the subject's categorical and discursive framework' (Sakoparnig 2014: 55). There are 'innumerable moods' reflected in music, as Jankélévitch suggests (Jankélévitch 2003: 31), but as we concentrate on the numerical aspect of a rhythm, we reduce the experience to perceiving repeatable numbers in space, and therefore dismiss the experiential richness and qualitative becoming in music. Adorno believes that this kind of perception is 'the elimination of the experiencing subject incumbent on disenchantment' (Foster 2007: 118).

Bergson almost equates music, which excludes spatialization or classificatory concept, with the notion of duration; similarly for Adorno, as Sakoparnig recognises, 'artworks transgress the boundaries of rationality [or conceptuality]', and can help us to experience what is denied in and outside the sphere of conceptual subsumption (Sakoparnig 2014: 57). For Adorno, art, as 'a reality sui generis', possesses 'an objectivity freed from the categorial structure' and has 'the capacity to perceive more in things than they are' by way of opposing its irrational element to the dominance of rationality (Adorno 1997: 279, 330). While Bergson and Adorno are in agreement in recognising the problem, rooted in a conceptuality which assumes 'a quantitative multiplicity, as units that are identical and distinct, spread across empty space' (Foster 2007: 118), the ways in which the two suggest music can overcome the delusional spell of rationality, and can attain spiritual experience in general, are rather different.

Bergson's Intuition, Duration, and Adorno's *Selbstbesinnung* (Self-Reflection)

The observations of *Traité*, discussed above, on musical perception – numeration of rhythmic values, determination of the perception of duration in music, perception of music as 'a thing' – can be attributed to the idea of space, whereby Messiaen tends to translate duration into defined elements with precise outlines. While for Adorno, as Foster observes, these notions operating in a homogeneous medium can be regarded as 'classificatory concepts' which pick out 'one part of an item of experience' (Foster 2007: 125, 118), Bergson considers these classificatory concepts to be practically useful to engage with the world, though they prevent us from experiencing the fundamental self in pure duration. Life itself progresses and develops as an indivisible whole that is irreducible to a collection of logical contents, and yet, 'the practical focus of the body and its rootedness in the exigencies of life' transforms the indivisible and unrepeatable whole into 'repeatable, general characteristics' (Foster 2007: 123). Concepts that translate life and concepts that translate *durée* and qualitative becoming of music are 'practically useful' in a sense that they signify and communicate certain meanings or messages to us, but through the deed of translating, the concept fails to properly present what is occurring in consciousness. Bergson illustrates this incommensurability between the inner self and conceptuality very clearly:

> When I myself pass through a certain psychic state, I know exactly the intensity of this state and its importance in relation to the others, not by measurement or comparison, but because the intensity of e.g. a deep-seated feeling is nothing else than the feeling itself. On the other hand, if I try to give you an account of this psychic state, I shall be unable to make you realize its intensity except by some definite sign of a mathematical kind: I shall have to measure its importance, compare it with what goes before and what follows. (Bergson 1910: 185–6)

The tendency to spatialise or to conceptualise for practical needs, for Bergson, can become rather negative; as he writes in one of his last books, *The Creative Mind*, 'the world into which our senses and consciousness habitually introduce us is no more than the shadow of itself: and it is as cold as death' (Bergson 2007: 106). Bergson also criticises the deficiency of language, which cannot grasp personal elements, or express them, without arresting the mobility of duration. For example, 'each of us has his own way of loving and hating; and this love or this hatred reflects his whole personality. Language, however, denotes these states by the same words in every case: so that it has been able to fix only the objective and impersonal

aspect of love, hate, and the thousand emotions which stir the soul' (Bergson 1910: 164). We should also add that the emotions of love and hatred change through time; we might say we still love something now that we loved a few years ago, yet these two emotions of love are different; we can use words to describe the difference, but they will never sufficiently present what these deep psychic states can tell us. Bergson recognises that 'social life is more practically important to us than our inner and individual existence', so 'we instinctively tend to solidify our impressions in order to express them in language' (Bergson 1910: 130); the verbal translation of music, presented in *Traité*, certainly shows a tendency to use words to solidify and to communicate musical experience.

Even though Messiaen explicitly indicates the perception of music following a deterministic method, he also realises that the factors that affect musical experience 'are too numerous and subtle to be generalised' (*trop multiples et subtiles pour être généralisées*) (Messiaen 1994a: 25). We observed earlier that Messiaen rigorously defines or arrests musical movement through numbers and words, but here Messiaen suggests that words or concepts will never exhaust the inconsistency of musical temporality. This transition in Messiaen's text, from spatialization to a recognition of the inadequacy of spatialization, is also one of the aspects of his work that our thesis aims to unveil.

For Bergson, by embracing this form of knowledge, namely *durée*, the nonconceptual, which works outside of the notion of space or classificatory concepts, we can come closer to the experience of life. This is achieved not by intelligence, which 'would be more likely to proceed in the opposite direction' (Bergson 1935: 180), but by intuition, which 'consists in entering into the thing, rather than going around it from outside' (Lawlor and Moulard-Leonard 2016: online). Just as we can experience *durée* by embracing the vital impetus, Bergsonian intuition is accompanied by 'the inner working of the vital impetus', which is to be 'made clear in its significance and in its object' (Bergson 1935: 214). In order to have knowledge of life and of our experience, 'we [must] seize ourselves from within' (Lawlor and Moulard-Leonard 2016: online). Therefore, Bergsonian intuition is the effort to enter into ourselves to grasp the inner self, which is often hidden amid daily social and practical life. Bergson writes in *Les Deux Sources de la morale et de la religion*:

> For this intuition was turned inward; and if, in a first intensification, it made us realize the continuity of our inner life, if most of us went no further, a deeper intensification

> might carry it to the roots of our being, and thus to the very principle of life in general. (Bergson 1935: 214)

Instead of outwardly separating phenomena in order to define them or to express them in words, 'I may introspect and sympathize with my own duration', by which 'the intuition of duration puts me in contact with a whole continuity of durations' (Lawlor and Moulard-Leonard 2016: online).

In order to experience duration reflected in the fundamental self, we need intuition and at the same time we ought to give up classificatory concepts that work within the notion of space. For example, intellect – which operates in space, 'the juxtaposition of discrete units linked externally by causal principles' – is insufficient to 'seize life in its fullness' (Foster 2007: 128). In *L'Évolution créatrice*, Bergson states that 'we do not *think* real time. But we *live* it, because life transcends intellect' (Bergson 1998: 46). A 'leap', which we recognise in Bergson's philosophy, is required to go beyond intellect and reasoning, which 'is rooted in practical needs' (Foster 2007: 127), in order to comprehend life itself. Therefore, the inner self, in which conscious states permeate one another, cannot be 'thought' or spatialised without altering its nature and duration; we have to take a leap out of the intelligence or the idea of space, and by 'living' in pure *durée*, and enduring one moment after another without extensity, we can experience life's qualitative changes in their fullness. In addition to being unable to grasp inner life, intellect and reasoning, which operate in space, also suffer from the incapacity to learn new things (Bergson 1998: 192). For example, we will never be able to swim until we throw ourselves into the water; only by doing so, will we understand the mechanism of swimming. We may speculate as intelligently as we like with the mechanism of the intellect, yet, we will 'never, by this method, succeed in going beyond it' (Bergson 1998: 193). Messiaen can speak about the perception of music by offering various descriptions of different effects produced by a note being played under different circumstances, whereby, according to Bergson, we 'may get something more complex, but not something higher nor even something different' (Bergson 1998: 193); in music, it is only by actually listening to it, performing it, and living through its durational intervals, that we know its different effects.

For Jankélévitch, intuition is also the key to access the Charm presented in music. 'In general', he writes, 'the creative imaginations are completely absorbed in a naïve state of being, taken up by the deep, blind toil of Doing' (Jankélévitch 2003: 81). Instead of using the

intellect to identify a musical form, for example, or to numerate a rhythmic value, we need to remain 'in a naïve state of being'; instead of visualising a piece of music in space, we need to be 'blind', to grope our way through musical time. Jankélévitch suggests that, without a panoramic view of the world, 'consciousness will be plunged into the immanence of darkness and will test things and objects as it goes along, little by little, as a succession of events' (Jankélévitch 2003: 95). By means of analysis, as a means of 'sundering the covenant made with innocence and naïveté', (Jankélévitch 2003: 102), we recognise a sonata's exposition, development and recapitulation on a 'spatial map', and the 'spatializing and associative intelligence', skimming over the unfolding of the music, might distinguish the form, but, for Jankélévitch, the ear – 'caught in the immediacy and innocence of succession as experienced live' – 'does not perceive such things at all', because the form is 'something conceived', 'not at all something heard' and 'not time subjectively experienced' (Jankélévitch 2003: 17).

Foster notes that both Adorno and Bergson aim to recover spiritual experience and they 'undertake a similar critique of the classificatory concept' (Foster 2007: 135); however, unlike Bergson and Jankélévitch, who attain experiences of this sort by giving up the conceptual, spiritual experience, for Adorno, 'is possible only through breaking apart the classificatory concept from within' (Foster 2007: 132). For Bergson, 'through intuitive sympathy', the classificatory concept 'can more easily be reversed', and, as Gallope indicates, 'one can fight it upstream to regain a mystical sense of the true nature of reality' (Gallope 2017: 171). But for Adorno, positive access to utopia or to the experience of *durée* and the full richness of life remains blocked. Bergson recognises, as we saw, that the world is 'as cold as death' when it is perceived through the notion of space without noticing the inner self, and he recovers 'life' by abandoning space. Adorno would think that it is undialectical to ignore death, and he maintains that 'one may not cast a picture of utopia in a positive manner' (Bloch 1988: 10).[16] Adorno admits that 'the elimination of death' or 'the notion of an unfettered life, freed from death' is inherent in the very idea of utopia, which '*cannot* even be thought at all' without it (Bloch 1988: 10).[17] But it is 'only in a negative way', Adorno argues, that 'one can actually talk about utopia', for we cannot talk about the elimination of death in utopia without admitting the notion that death exists (Bloch 1988: 10).[18] This is something 'profoundly contradictory in every utopia', that is to say if 'the heaviness of death

[16] Although the reference necessarily attributes the words to Bloch, they are actually Adorno's words in a conversation between Bloch and Adorno on the topic of utopia.
[17] Ibid.
[18] Ibid.

and everything that is connected to it' are not included or 'the threshold of death is not at the same time considered, there can actually be no utopia' (Bloch 1988: 10).[19] Similarly, if purely relying on conceptual classification, the experience of which is 'cold like death', leads to disenchantment, ignoring or dismissing conceptual classification is equally invalid and does not solve the problem; instead, for Adorno, utopia must acknowledge the existence of death in order to conduct a 'determined negation' of it (Bloch 1988: 12).[20] Or as Richard Leppert puts it, 'for Adorno to imagine a better reality, the actuality of the present dystopia must be directly confronted' (Leppert 2005: 93). Adorno also Bergson indicates that we break through the confinement of the idea of space by 'an act of will' (Bergson 1998: 193), or simply by 'looking into ourselves', whereas Adorno believes that the outbreak from dystopia of empirical life is only possible through self-reflection (*Selbstbesinnung*).

Apart from in the 1965–66 lectures (*Vorlesungen über Negative Dialektik*) in which Adorno mentions the notion of self-reflection referred to by Foster, Adorno also brings out the idea in the 1964–65 lectures (*Zur Lehre von der Geschichte und von der Freiheit*). In the latter, Adorno claims that under the spell of the '*domination of nature*', human beings' own inner nature is subjected to 'the process of rationality'. Forced to wield the power of domination, we are no longer 'self-reflective', but assert control over materials by 'subsuming, classifying, subordinating and otherwise cutting them short' (Adorno 2006b: 13). In response, rather than attempt to abandon rationality, we should practice a kind of self-reflective attitude towards it. In *Dialektik der Aufklärung* (*Dialectic of Enlightenment*), Max Horkheimer and Adorno indicate that 'the self-reflection of thought (*Selbstbesinnung eben des Denkens*) … enables the distance [from rationality or the concept] which perpetuates injustice to be measured' (Horkheimer and Adorno 1969: 47).[21] The outbreak as self-reflection is well-expressed by Foster:

> beginning from secure self-possession, [Bergson] wants to move outside the subject by showing that what is outside can be comprehended by what is inside, thereby surmounting the boundary between the two; Adorno's *Selbstbesinnung* wants to show that what is 'outside' is always already inside … Rather than moving outward to show that there is nothing that cannot be assimilated by the subject, self-reflection

[19] Ibid.
[20] Ibid.
[21] Translated by Edmund Jephcott: Horkheimer and Adorno 2002: 32.

> demonstrates the extent of the subject's dependence on what is outside it. (Foster 2007: 130)

Instead of giving up on rationality or the notion of space, Adorno relies on it throughout the dialectical process, and by self-reflection, he seeks connections and contradictions between the self and 'the outside' in space. In other words, as Sakoparnig recognises, 'the achievements of rationality' should not be denigrated, yet we need to secure the 'epistemic competence' of rationality 'by bringing it into a critical relation with the moments in which it forsakes itself' (Sakoparnig 2014: 55). Birgit Hofstaetter observes that *Besinnung*, reflection, refers to 'an activity that involves both the mind and the body'; instead of being encouraged to merely 'come to our senses' and going along 'without thinking', a kind of conscious activity Bergson would recommend, *Besinnung* involves thinking, and this kind of thinking 'draws on and develops emotive and sensual qualities' (Hofstaetter 2014: 160).

Adorno recognises that Bergson 'created another type of cognition for nonconceptuality's sake' and this type of cognition involves the idea of using concepts, as Foster writes, to 'bring to the surface the experiential conditions that cannot be said within those concepts' (Adorno 2004: 8; Foster 2007: 127). Indeed, Bergsonian duration always remains inexplicable and no concept will suffice to grasp the essence of it. Jankélévitch inherited this thought, and applied it to music: the unknowable or the inarticulable is the very essence of music, which is 'unable to be grasped as the mystery of artistic creation'; like *durée*, 'the divine instant' of music, as 'confusing secret', is 'most obstinately hidden from us' (Jankélévitch 2003: 102–3). Adorno criticises Bergson's philosophy for containing a kind of 'arbitrariness' in the suggestion that we can simply leap 'from space to duration' by an act of will. For Adorno, Bergson's idea of intuition or duration is not tenable without the classificatory concept, which is to say that even though Bergson rejects conceptual classification, *durée* cannot in fact be conceived without a concept. To put it simply, we cannot use language to convince someone that language is incapable of convincing. Here is Adorno's criticism of Bergson in the 1965–66 lectures:

> With Bergson a duality of cognition is assumed with a certain sort of arbitrariness: on the one side the profound knowledge of essence nourished by images, and on the other the cognition of the conventional classifying science, which remain next to one another in dualistic fashion as two possibilities … Thereby it escapes his notice that the so-called intuitive cognitions or those images, which should have objectivity as

> pre-conceptual moments in the subject, cannot be expressed other than through the concept. (Adorno 2003: 108)[22]

For Adorno, instead of stepping outside the concept or space as we go through the 'points within space', we realise something beyond the concept. Instead of fully immersing ourselves in duration or embracing the 'Charm' in music, Adorno indicates that only in 'a flash' (*aufblitzende Erkenntnisse*), while we are working through the concept, 'those officially "incorporated" cognitions are expunged from the temporal'; in that moment, 'the knower is overwhelmed in the moment of intuition' (Adorno 1970: 53–4).[23] For Bergson, we recognise the indeterminacy and unpredictability of life when we experience duration without substituting its process with inert symbols or the idea of space; contrastingly, Adorno perceives the new, the unpredictable, or the 'non-spatializable' via a dependence on the concept, through which the new appears 'as a blind spot in the process of cognition' (Adorno 1970: 54).[24] Adorno relates this kind of ephemerality of spiritual experience to music, in which, as Stephen Decatur Smith puts it, 'death and transience are as essential as creation and the emergence of the new' (Smith 2014: 219):

> *On the metaphysics of musical time*. Relate the end of my study to the teachings of Jewish mysticism about the grass angels, who are created for an instant only to perish in the sacred fire. Music – modeled on the glorification of God even, and especially, when it opposes the world – resembles these angels. Their very transience, their ephemerality, is glorification. That is, the incessant destruction of nature. (Adorno 1998: 176–7)

Adorno recognises that spiritual experience can be achieved by arduously working through the lifeless concept, and that only in a flash are we able, as critical subjects, to reach beyond the lifelessness of conceptual classifications. In music, while Bergson sees the temporal unfolding of musical time, as Smith indicates, 'as a vital continuum of positivity' (Smith 2014: 219), Adorno's musical time frustrates each individual whose creative force is constantly diminished and blocked by the lifeless. In the next chapter, we will explore what, for Adorno, is the lifeless in music that we must confront.

[22] Translated in Foster (2007), p. 126.
[23] Translated in Foster (2007), p. 133.
[24] Ibid.

Structure of the Thesis

Thus we have outlined two different philosophical views on reviving genuine experience, on the one hand the Bergsonian leap, and on the other Adornian dialectics, which together will form the guiding thread throughout the following discussion of Messiaen's *Visions de l'Amen* and its performance. We will start with the motivation behind Messiaen's advanced rhythms in Chapter 1, in which Stravinsky, who influences Messiaen's rhythmic thinking, will be an important presence in the discussion, and here we will also indicate the different notions of compositional ethics expressed by Adorno and Jankélévitch.

The second chapter will illustrate the musical construction of *Visions* and its musical perception, which will be discussed from both Bergsonian and Adornian perspectives. Different theories of performance, derived from Bergson's, Jankélévitch's and Adorno's philosophies, will also be presented in this chapter.

In the third chapter, a section in the second movement of *Visions* will be analysed to demonstrate the compositional technique of superimposition, which is widely employed in *Visions*, before we go on to present philosophical reflections on Yvonne Loriod and Messiaen's recordings of the work, as well as on recordings by other artists.

In addition to Loriod's pianism and Messiaen's pianism and their relations to the twentieth century performance aesthetics and to French tradition, the pianistic aspects of Messiaen's writing will be explored in the final chapter. Messiaen's writings in *Traité* about musical perception largely depend upon the idea of space, which almost seems to suggest that the spatialised score *is* music. This raises a number of important questions. Does Messiaen's performance also reveal a spatial quality? Or does it present an 'outbreak' from the confinement of spatialization? If so, does his performance reveal a kind of self-reflection while working through the concept, or does he proceed by way of a 'leap' from space and immerse himself in duration? In the final chapter, we will attempt to address these research questions and to give an account of Messiaen's performance aesthetics.

As part of the bipartite submission, which includes a performance component, in this thesis we will not only discuss the Messiaens' – and others' – performances of *Visions de l'Amen*, but also my own performance. This thesis – which includes analysis of the music, discussion of different theories of performance, and reflections on various recordings – should also be seen as an anticipation of my own performance. After the research process, the answers to the questions asked at the very beginning of the Introduction certainly became much clearer from

the performer's perspective. Although Messiaen's music is consistently viewed from the performer's perspective throughout the thesis and there is a thorough discussion of different recordings by a number of performers, my own performance and the preparation for it are not topics in the main body of the text. Rather, the question is how different performance theories, interacting with Messiaen's *Visions*, become potential for my own tackling of the piece. My experience of *Visions de l'Amen* as performer will be discussed at the end of this dissertation, where not only will the manner in which both Bergsonian *durée* and Adornian dialectics inform my performance be explained, but also other details – my work on the piece, including the preparation (practice), rehearsals with Benjamin Frith who played the second piano part, and the concert, which took place at the Barber Institute, University of Birmingham, on 1 November 2019 – will be thoroughly examined.

CHAPTER 1: FROM *PERSONNAGES RYTHMIQUES* TO MIMESIS OF NATURE

Visions de l'Amen for two pianos (1943) was the first music that Olivier Messiaen composed for Yvonne Loriod, after recognising Loriod's exceptional musicality and technical ability. Messiaen wrote the first piano part for Loriod and the second for himself. The most obviously discernible characteristic of the first piano part is its greater technical difficulty, which mainly results from the complex rhythms and rapid chords.

In the Introduction we mentioned that in the first movement, 'Amen de la Création', the rhythm of the chorale played by piano 2 moves in equally divided beats according to the 4/4 time signature, whereas in piano 1, the complex rhythmic structure always creates syncopation. The contrast between simple rhythm with equal divisions in piano 2 and complex rhythm in piano 1 is also evident in the last movement. The rapid chords in the second movement, 'Amen des étoiles, de la planète à l'anneau', and the last movement, 'Amen de la Consommation', can be regarded as the greatest technical challenge for the first pianist in the entire cycle. From bar 72 in the second movement, both hands of piano 1 play three-note chords in semiquavers for over a page. The difficulty lies not only in the fact that the passage for piano 1 needs to be played fast (♩ = 69), but also in the way it constantly requires different hand positions for the chords, especially in the left-hand part, which contains many small jumps. From bar 71 in the last movement, both hands of piano 1 play rapid chords relentlessly for over four pages (20 bars). Apart from the technical skill required to play these chords at a fast speed, the first pianist needs considerable stamina to maintain energy over this long section. There is also relatively fast chordal playing required for piano 2. In the fourth movement, 'Amen du Désir', from bar 55, the second piano ascends in triplets and the speed gradually becomes faster. Although the combination of black keys and white keys constantly changes in the passage, the structure of the chords are rather similar and there are no leaps between the chords. Compared to the rapid chords for piano 1 in the second and last movements, the second pianist can keep a relatively similar hand shape and has only to adjust slightly the hand position between each pair of chords in the ascending triplets. In the fourth movement, there are big leaps required for left hand of the second pianist in bars 61–2, but the chords are rather simple, repeating in F major in three different octaves. The greater

difficulty of the piano 1 part, written for Loriod, in terms of the chordal playing presented in *Visions*, certainly confirms what Messiaen says: 'I'll never have the transcendent virtuosity and the absolutely amazing technical facility of Yvonne Loriod' (Messiaen 1994: 113).

Peter Hill and Nigel Simeone point out how Messiaen was dazzled by Loriod's playing, but it seems rather ironic that he not only 'made no attempt to share material between the two pianos', but also made Loriod's part subservient to the second piano part throughout the cycle, with no control of the themes and pace (Hill and Simeone 2005: 123–4). In *Visions*, it is not difficult to align the distinct compositional materials with different characters, textures, pianistic perspectives and musical ideas. The contrasting styles adopted in *Visions*, often superimposed, can be generally divided into two categories. The material of one category is tonal and metrical and conforms broadly to traditional harmonic progressions and a regular rhythmic pulse; we can categorise this kind of material as the 'old'. The material of the other category is atonal and does not operate within a regular metre; it falls under the category of the 'new'. Jean Boivin indicates:

> In art, the concept of tradition is heavily loaded with meaning. We accept it, we feel more or less bound to it, or we refuse it, wishing to establish new standards. We … know that Messiaen's attitude was to reconcile these two tendencies.[25] (Boivin 1995: 398)

Messiaen's reconciliatory 'attitude' is rather manifest throughout *Visions*, and the way in which the attitude is communicated, in the superimposition of traditional and new materials, will also be one of the main themes in our discussion of the music. It needs to be pointed out that, even though the material categorised as 'old' is mostly mixed with Messiaen's Modes of Limited Transpositions, which endows the harmonic progressions with peculiar colours, the musical direction is still dominated by tonal function.

The distinction between the two pianos is explicitly presented at the very beginning of the cycle.[26] In the first piano part, each hand takes three chords moving in a whole tone relationship, in a quasi-atonal manner, operating with a different rhythmic pattern to the other

[25] Original French: 'En art, le concept de tradition est lourdement chargé de sens. On l'accepte, on s'y sent plus ou moins lié, ou alors on la refuse, en souhaitant établir de nouvelles normes. Nous savons … que l'attitude de Messiaen consistait à concilier ces deux tendances.'

[26] Readers of this dissertation will need to have a score of *Visions* to hand. Musical examples from the score of *Visions* will be provided in the dissertation only for the purpose of clarification.

hand at the top of the piano, in which the two rhythmic patterns, unrestricted by the metre, have no rhythmic or harmonic relationship with piano 2. In contrast to piano 1, piano 2 starts with a regularly paced chorale in the key of A major, mixed with Messiaen's modes. The second piano phrases very much in accordance with the time signature 4/4, which can also be confirmed by Messiaen's phrase marks in the printed score. In this example, the presentation and construction of piano 2's music are more easily intelligible than the complicated rhythmic patterns in piano 1, which can be identified as the 'new'. Therefore, the advanced rhythmic construction in piano 1 seems to require more attention. The rhythmic invention in Stravinsky's music is certainly a catalyst for Messiaen's own rhythmic construction. Before observing the advanced rhythms in *Visions* and their presentation in performance, we will first look at Messiaen's analysis of Stravinsky's *The Rite of Spring*, which reflects Messiaen's rhythmic perception and conception.

Before Stravinsky, composers tended to adhere to regular time signatures, such as 2/4, 4/4, and 6/8 etc. Their rhythms therefore varied according to these metres, and within a certain metre that provides a regular pulse for the music, the expression of the music would be embodied in the interaction between the rhythms and the pulse engendered by the time signature. The breakthrough made by Stravinsky of often alternating different metres and employing irregular accentuations, as is especially in *The Rite of Spring*, served to dismantle the stability of metrical pulse established in the Western tradition. As Angelo Cantoni notes, while 'the *Danse sacrale* from *The Rite of Spring* is the more radical example, metric changes were to remain a constant in his personal language', such that 'the irregularity of the metric shifts' renders the music unpredictable (Cantoni 2014: 166, 203). Messiaen acknowledges the significance of Stravinsky's contribution to rhythmic development in the twentieth century, evident in his conversation with Claude Samuel. Messiaen says:

> Stravinsky is of immense importance because he was the first to restore the emphasis on rhythm: through the use of exclusively rhythmic themes, superimposed rhythmic ostinatos, and especially by creating (consciously or not) the procedure of rhythmic characters … "The Glorification of the Chosen One" and, even more, "The Sacrificial Dance" in *The Rite of Spring* are striking examples of the juxtaposition of and manoeuvring through augmentation, diminution, or immobility of the rhythmic characters. (Messiaen 1994: 193)

Rhythmic Music

Messiaen's unique definition of 'rhythmic music' is manifest in Stravinsky's and his own rhythmic constructions. He claims that 'schematically, rhythmic music is music that scorns repetition, squareness, and equal divisions, and that is inspired by the movement of nature, movements of free and unequal durations' (Messiaen 1994: 67). Messiaen also claims that, 'the classicists, in the Western sense of the term, were bad rhythmicians, or rather, composers who knew nothing of rhythm. Bach's music 'incorporates harmonic colors and extraordinary contrapuntal craftsmanship', which is 'marvellous and brilliant', 'but there's no rhythm' (Messiaen 1994: 68). Of course, Messiaen does not mean that 'there's no rhythm' in Bach's music in a literal sense; he was attempting to emphasise the lack of variety in rhythm with reference to the steady beats of regular metres within which the music operates. As he explains, works by Bach or Prokofiev 'seem rhythmic precisely because they have no rhythm', because in their works 'we hear an uninterrupted succession of equal durations that puts the listener in a state of beatific satisfaction; nothing interferes with his pulse, breathing, or heartbeat', such that 'he is very calm, receives no shock, and all this seems perfectly "rhythmic" to him' (Messiaen 1994: 68). From this, we can understand that music, which is formed by a regular metre, 'an uninterrupted succession of equal durations', can be perceived by the listener to have a steady pulse that might seem rhythmic, but, for Messiaen, it is not truly so. The rhythmic inventions in Stravinsky's music, *The Rite* in particular, prompt Messiaen not only to analyse their rhythmic structures, but also to consider their rhythmic characters (*personnages rythmiques*).

The Origin of *Personnages rythmiques*

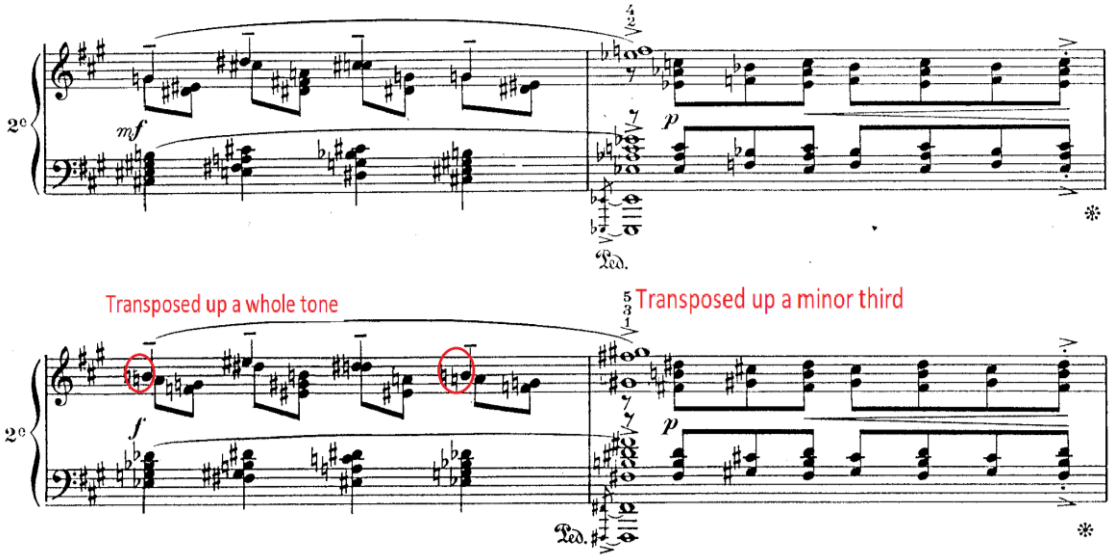
In Beethoven's Fifth Symphony, Messiaen recognises in the first movement that the theme is 'treated as a living being. It becomes the theme, it becomes the figure, it multiplies itself (doubled, tripled). It develops itself. It is shortened by a value. All this was very new to the Classical period' (Messiaen 1995: 402).[27] For example, the theme at bars 179–210 is gradually reduced: from three quavers followed by three minims, to three quavers followed by two minims, to two minims, to only a minim (𝅘𝅥𝅮𝅘𝅥𝅮𝅘𝅥𝅮𝅗𝅥𝅗𝅥𝅗𝅥 → 𝅘𝅥𝅮𝅘𝅥𝅮𝅘𝅥𝅮𝅗𝅥𝅗𝅥 → 𝅗𝅥𝅗𝅥 →𝅗𝅥). Messiaen calls

[27] Translated by Gareth Healey (2004: 12). Original French: 'traitée comme un être vivant. Elle devient thème, elle devient trait, elle se multiplie (doublée, triplée). Elle redevient elle-même. Elle est amputée d'une valeur. Tout cela était très nouveau à l'époque Classique.'

this gradual reduction of a theme 'development by elimination' (*développement par élimination*) (Messiaen 1995: 402), which he considers to be 'a sketch of the personnages rythmiques of *The Rite of Spring*' (Healey 2004: 12). Schoenberg highlights this technique for developing a theme or a motif and defines gradual reduction through repetition as 'the condensing technique of "liquidation"', by means of which a theme develops not by the typical modes of expansion and augmentation, but by 'reduction, condensation and intensification'; 'the purpose of liquidation', as Schoenberg indicates, 'is to counteract the tendency toward unlimited extension' (Schoenberg 1967: 58). Messiaen identifies a 'thematic death and resurrection' (*une mort et une résurrection thématiques*) in the symphony, which is achieved by the elimination and following return of the theme (Messiaen 1995: 402).
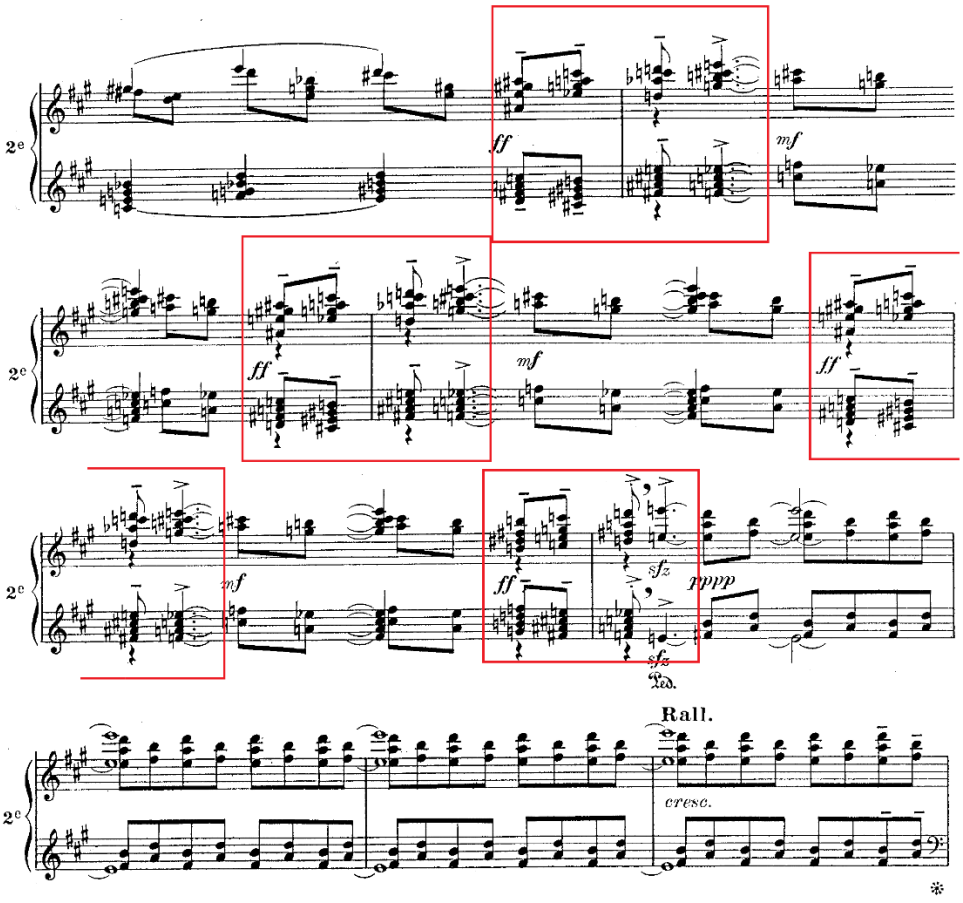
We can identify the employment of such a technique of 'liquidation' or 'thematic death and resurrection' in the second piano part of the last movement of *Visions*, 'Amen de la Consommation'. Like the first movement, this starts with the Creation Theme (bars 1–8) in piano 2. 'The Theme of Creation' (*La thème de la création*), as 'the principal theme of the whole work' (*thème principal de tout l'ouvrage*) (Messiaen 1943: Author's Note), is first introduced at the beginning of the first movement in piano 2 at bottom of the keyboard. Apart from the second and sixth movements, the other movements all include the theme or variation(s) of the theme. In the last movement, the theme is varied at bars 9–17. Then the theme is repeated in C sharp major (bars 18–25), before the repeating cadence (bars 26–37), which can be found in the first movement at bar 25 onwards. Apart from the tonal differences, this whole section of the last movement (bars 38–54) is a repetition of the opening section (bars 1–17). In the 'transition period' (bars 55–70) (*période transitoire*), as Messiaen calls it in *Traité* (Messiaen 1996: 271), not only does the music become tonally ambiguous, but also the Creation Theme is fractured and interrupted. For example, a 'deformed version' of the first phrase of the theme (bars 1–2) can be identified (bars 55–6), with the notes of the melody harmonised, as Messiaen indicates, successively by a ninth chord with added augmented fourth, a 6-4 chord with added augmented fourth and sixth, a seventh chord with added sixth, a ninth chord with added augmented fourth, and finally a 6-4 chord (in bar 56) (Messiaen 1996: 271). The 'deformed version' of the first phrase of the theme (bars 55–6) reappears and is transposed at bars 57–8 (Example 1.1). The first half of the 'deformed version' is transposed up a whole tone in bar 57, with two added Bs in the first chord and the last chord of the bar (circled in Example 1.1); the second half is transposed up a minor third (or an augmented second) in bar 58.

Example 1.1: Messiaen *Visions de l'Amen*, 'Amen de la Consommation', bars 55–8 (piano 2)
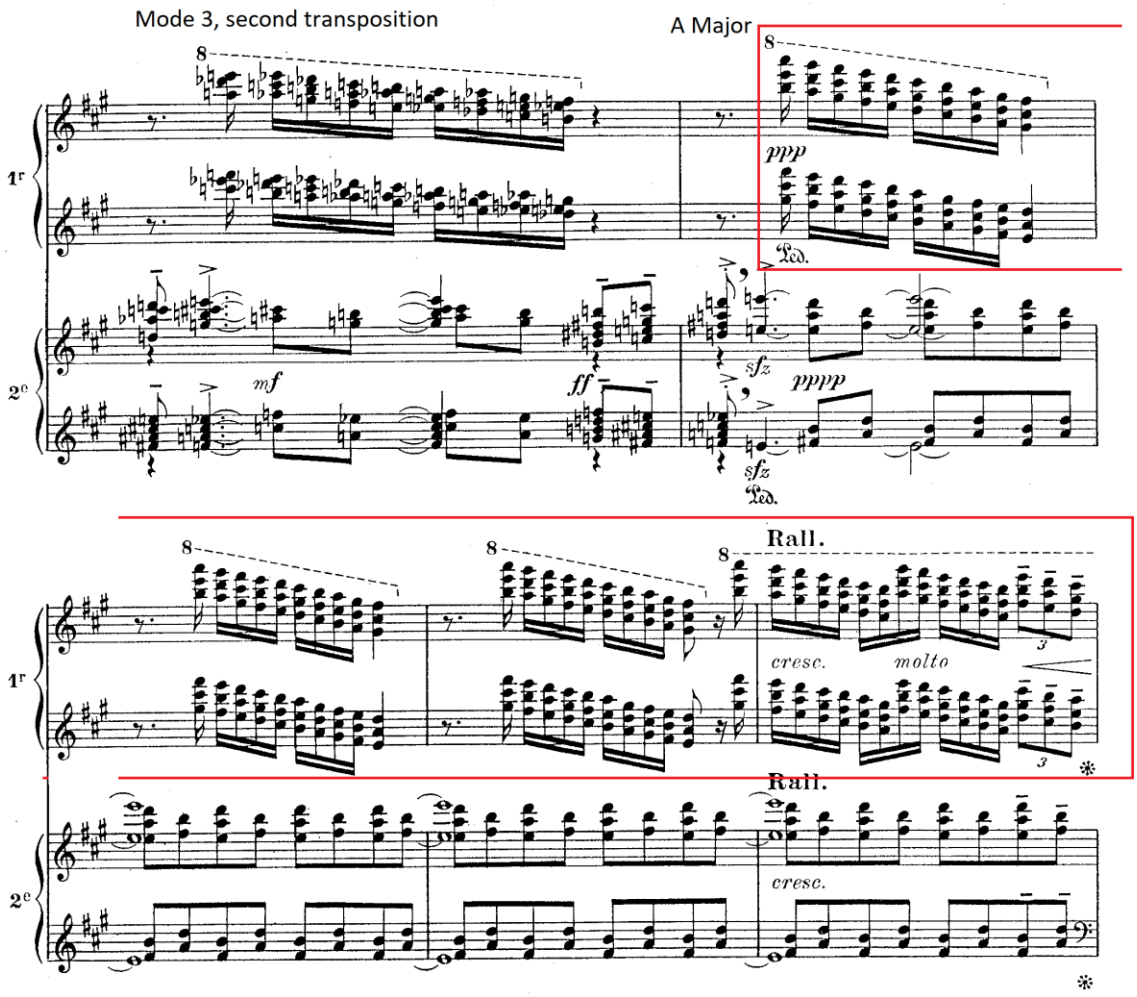


In bar 59, Messiaen eliminates the 'deformed version' by only presenting the first two chords, and in the same bar he repeats the two chords, again transposed up a whole tone. This tonal ambiguity and thematic elimination perhaps signify what Messiaen calls 'a thematic death'. From the end of bar 63, the theme is reduced to just the repetition of the four-chord motif (three quavers and a long value: see the boxes in Example 1.2), also used in bars 16–17 and bars 53–4.

Example 1.2: Messiaen *Visions de l'Amen*, 'Amen de la Consommation', bars 63–70 (piano 2)



As a result of the gradual reduction of the theme, as well as the harmonic deformation from bar 55 to 63, there are only three quavers followed by a long value left from the end of 63 to bar 70. Harmonically speaking, the four chords that repeat in piano 2 from the end of bar 63 are purely based on the different modes without tonality: the first chord on the third transposition of mode 3, the second chord on the second transposition of mode 3, the third chord on the third transposition of mode 3, and the fourth chord on the second transposition of mode 3 (Messiaen 1996: 271). In bar 67, piano 2 goes to the ninth chord which is the dominant of A major, and at the same time, piano 1 also turns from the second transposition of mode 3 (bars 64–6) to A major (Example 1.3), so that the pianos form a tonal unity.

Example 1.3: Messiaen *Visions de l'Amen*, 'Amen de la Consommation', bars 66–70



Proceeded by a *crescendo* in bar 70, the Creation Theme is resurrected from bar 71 with more energy, as the tempo marking (♪=138) is faster than at the beginning (♪=120), accompanied by piano 1 playing the semiquaver chords in the top register of the piano, adding more resonance and rendering the musical image with abundant light. In terms of compositional technique, this development by elimination relates to Schoenberg's term 'liquidation'; for Messiaen, the technique also conveys a religious meaning. Just as, for Messiaen, the theme in Beethoven is treated as 'a living being' (*un être vivant*) which experiences its 'death' and 'resurrection', so the development of the theme in *Visions* signifies a similar process: from being gradually shortened to a mere four-quaver motif to a triumphant return. Gareth Healey recognises the 'religious overtones' implied in Messiaen's use of terminology 'death and resurrection' (Healey 2004: 12). Considering 'his overriding notion of music as a microcosm

of divine Creation' (Healey 2004: 12), the deployment of this technique with respect to the Creation Theme in *Visions* is surely not coincidental.

Personnages rythmiques in *The Rite of Spring*

According to Jean Boivin, 'when a former Messiaen pupil is asked about his/her experience in his class, it usually takes little more than a few minutes before the analysis of Stravinsky's *The Rite of Spring* is mentioned' (Boivin 1995: 282).[28] The fact that *The Rite* was regularly included in Messiaen's class indicates 'the artistic value and the historical importance' (*la valeur artistique et l'importance historique*) of the work for the French composer, which constituted 'in a way the *alpha* of Messiaen's [musical] language' (*en quelque sorte l'*alpha *du langage de Messiaen*) (Bovin 1995: 282). We will first introduce Messiaen's own idea of *personnages rythmiques*, as identified in Stravinsky's *Rite*. As Messiaen said, 'I don't know if Stravinsky himself realized the great innovation of the *Rite*, which I've called "rhythmic characters (*personnages rythmiques*)." I'm very proud of this term because it seems truly explicit to me' (Messiaen 1994: 70). Messiaen further explains:
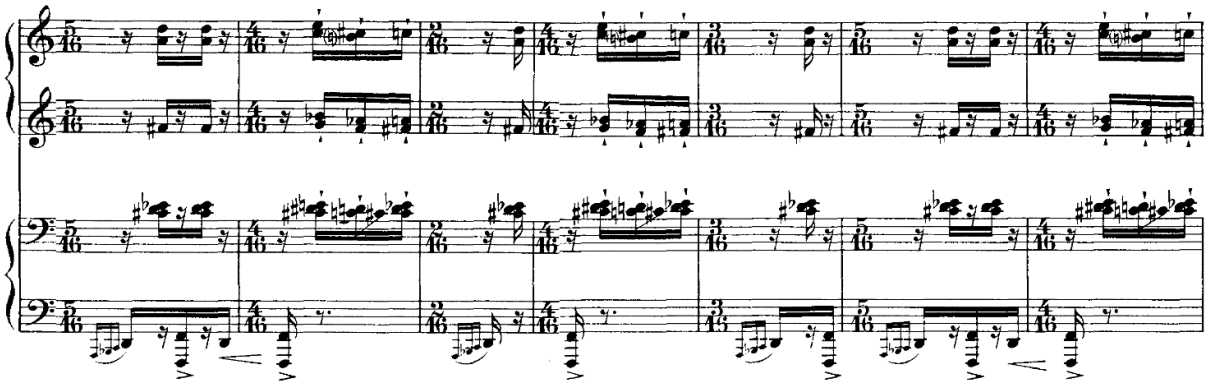
> In the system of rhythmic characters you have, as a rule, several characters present. Let's imagine a scene in a play in which we place three characters: the first one acts, behaving in a brutal manner by striking the second; the second character is acted upon, his actions dominated by those of the first; finally, the third character is simply present at the conflict and remains inactive. If we transport this parable into the field of rhythm, we obtain three rhythmic groups: the first, whose note-values are ever increasing, is the character who attacks, the second, whose note-values decrease, is the character who is attacked; and the third, whose note values never change, is the character who doesn't move. (Messiaen 1994: 71)

The rhythm that Messiaen considers rhythmic is formed by 'free unequal durations', by which, for Messiaen, endow the rhythm with life and character. Messiaen demonstrates in *Technique de mon langage musical* that, 'consciously or subconsciously', Stravinsky's rhythm (Example 1.4) in 'Sacrificial Dance' from bar 20 is related to the Hindu rhythm

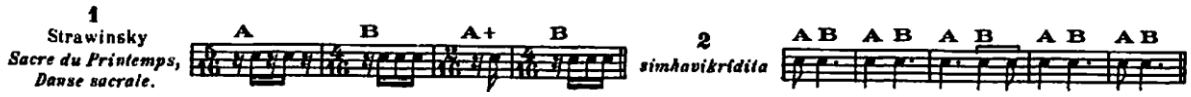
[28] Original French: 'Lorsqu'on interroge un ancien élève de Messiaen sur son passage à sa classe, il ne s'écoule généralement guère plus de quelques minutes avant que l'analyse du *Sacre du printemps* de Stravinsky ne soit mentionnée.'

'Simhavikrîdita' (Example 1.5), in that both rhythms show 'the augmentation and diminution of one rhythm out of two' (Messiaen 1944: 14).

Example 1.4: Stravinsky *The Rite of Spring*, 'Sacrificial Dance', bars 20–6 (piano reduction)



Example 1.5: Musical examples from Messiaen *Technique de Mon Langage Musical*
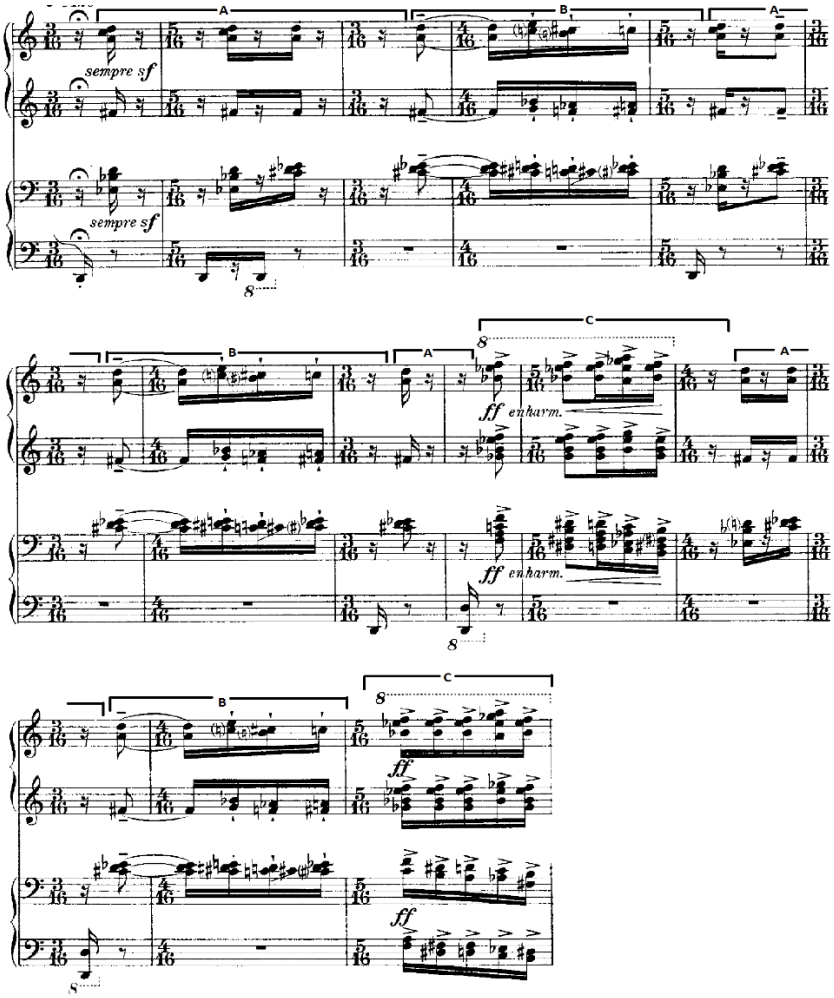


In both Stravinsky and Hindu rhythm 'Simhavikrîdita', Messiaen observes that one rhythmic cell varies (A) and the other remains the same (B). For Messiaen, the rhythmic construction in Stravinsky's music, via 'the uneven distribution of semiquavers' (*la distribution inégale des doubles croches*) (Boivin 1995: 189), fulfils his quest for 'true' rhythms. He viewed the 'manipulation of both the variable and stationary cells in the dance as comparable to that of living entities and hence referred to them as rhythmic characters' (Benitez 2013: 7).

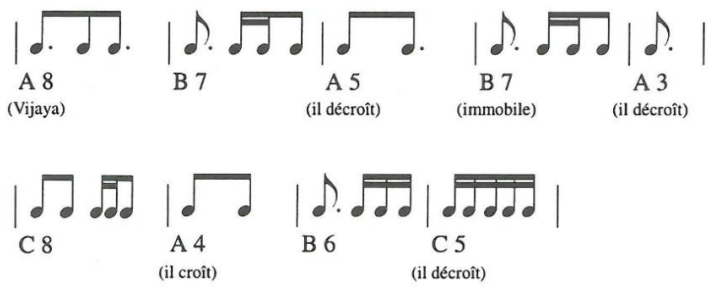
The analysis of *The Rite of Spring* in *Traité* will help us to understand how rhythmic characters are conveyed in music. At the beginning of the 'Sacrificial Dance', Messiaen finds three rhythmic characters (Example 1.6), grouped according to their harmonic identity. Example 1.7, from Messiaen's *Traité*, is the illustration of the rhythmic scheme for this passage: the numbers indicate how many semiquavers each character contains (Messiaen 1995: 130). Both characters A and C are mobile, as they change in every appearance, and character B is immobile, except for the last appearance in the example, which is a semiquaver shorter than the previous two. It is noticeable that Messiaen bars the rhythmic groups in the illustration based on his own understanding of the rhythm in a manner unrelated to Stravinsky's own barlines. Messiaen does not consider the rhythm with the time signatures and indicated barlines as a whole, but focuses instead on the note values themselves; also,

Messiaen perceives a sound as a whole duration together with the following rest or rests. In Messiaen's class, Alexander Goehr relates that, 'he [Messiaen] observed duration without regard for metre or accent, or regarded accent as the beginning of a duration and continuing silence as resonating sound, the whole all together comprising a single durational identity; this is the principle behind his analysis of the *Rite of Spring*' (Goehr 1998: 52–3). Vincent P. Benitez further confirms the analytical view that 'silences that follow attacks should be included when determining the theme's durational profile' (Benitez 2013: 6). For example, Messiaen does not think of the third bar of 'Sacrificial Dance' as starting with a semiquaver rest followed by a chord played on the upbeat and the four semiquavers in the next bar with an opening tie that results in a syncopation; instead, the chord in bar 3, for Messiaen, is the beginning of the duration and the first semiquaver in bar 4 is not the cause of a syncopation but just the lasting duration of the chord in the previous bar. As Messiaen hears sound and the following silence 'together comprising a single durational identity', therefore the semiquaver rest in bar 3, as a 'resonating sound', simply belongs to the last chord in bar 2.

Example 1.6: Stravinsky *Rite of Spring*, 'Sacrificial Dance', bars 1–14 (piano reduction)



Example 1.7: The rhythmic scheme at the beginning of ‘Sacrificial Dance’ analysed by Messiaen (Messiaen 1995: 130)



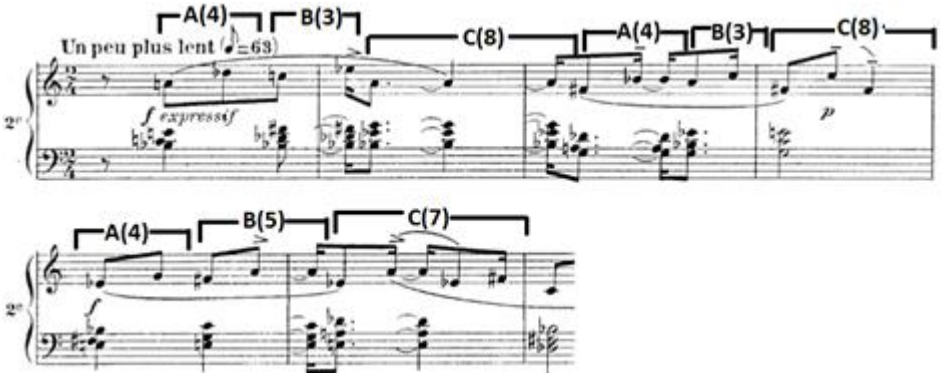
Another interesting fact is that Messiaen not only observes the rhythm free from the constant metrical changes, but also ignores the bass notes in his account of Stravinsky’s rhythm. Jean Boivin also notices that ‘Messiaen makes certain choices regarding character A, based on his own aural perception and understanding of the music. He does not take into account the accentuated D (and later F) heard in the bass … and hears each silence following a strong attack as part of the preceding duration’ (Boivin 2007: 153). Based upon his own analysis, Messiaen relates the rhythmic characters to the characters in the choreographic narrative of *The Rite*. Messiaen associates the characters A and C, which vary irregularly, with ‘a young girl’, who ‘danced and swirled to death’ (*une jeune fille dansait et tourbillonnait jusqu’à la mort*), and character B, which is immobile, with ‘a group of immobile and impassive old men’ (*un groupe de vieillards immobiles et impassibles*) (Boivin 1995: 284). According to Messiaen, in the ‘Sacrificial Dance’, ‘the opposition of the static principle and the dynamic principle’ (*l’opposition du principe statique et du principe dynamique*) describes ‘the strength of life [represented by the young girl] that manifests itself despite the rigours [represented by the group of old men] surrounding it, the strength of the living bud that, in Spring, pierces the rough bark of the tree’ (*la force de la vie qui se manifeste malgré les rigueurs environnantes, la force du bourgeon vivant qui, au printemps, transperce l’écorce rugueuse de l’arbre*) (Boivin 1995: 284–5). However, Messiaen’s characterisation seems to show a divergence to Nijinsky's original choreography, which was reconstructed by the Joffrey Ballet in the 1980s, where the Chosen One dances alone throughout the section from figure 142 to 149, before the old men start their heavy steps. One certainly could have doubts about the credibility of the analysis and a number of scholars would disagree with this interpretation, as we shall soon see. However, the significance of Messiaen’s thinking about Stravinsky’s rhythmic inventions – which allows us to understand how Messiaen constructed his own rhythmic devices – should not be ignored.

Personnages rythmiques* in *Visions

The use of *personnages rythmiques* is not widely employed in *Visions* and Messiaen himself does not mention when the technique is employed in his own analysis of *Visions* in *Traité*. Although a number of rhythms in *Visions* do not adhere to the 'rule' of rhythmic characters, this manner of manipulating cells is extensively adopted.

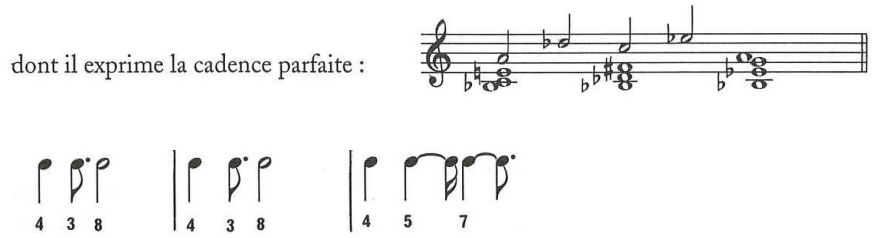
Given that in his analysis of Stravinsky's *Rite,* Messiaen divides rhythmic cells according to their harmonic identity, the recognition of each rhythmic character in *Visions* also seems to rely on the identification of its harmony, something which applies to the passage in the third movement highlighted in Example 1.8. From bar 17 in the second piano part, the cells A, B and C are indicated in the Example. There are three phrases where every cell has its own harmonic identity, where the harmonic sequence remains the same, and where each recurrence of the sequence is transposed down by a minor third. In the first two phrases, the value of each cell stays the same; in the third phrase, two cells are varied. While cell A remains the same, the value of cell B is increased by a quaver and the value of cell C is decreased by a semiquaver. While other elements remain almost identical in each phrase, such as melody and harmony, Messiaen concentrates on manipulating the rhythmic cells.

Example 1.8: Messiaen *Visions de l'Amen*, 'Amen de l'agonie de Jésus', bars 17–23 (piano 2)



In his own analysis of *Visions*, Messiaen illustrates the harmonic sequence and rhythm of this passage (Messiaen 1996: 245–6). The barlines in Example 1.9, shown in the third volume of *Traité*, unrelated to the time signature indicated in the score, divide the passage according to the harmonic sequence.

Example 1.9: Messiaen's illustration of the harmony at bars 17–18 and the rhythmic scheme at bars 17–22 in 'Amen de l'agonie de Jésus' (piano 2) (Messiaen 1996: 245–6)



For Messiaen, the time signature 2/4 becomes a mere tool for ease of performance. Although the metre is undermined in the rhythmic construction, it is, as Messiaen indicates,

> the easiest for performers since it disarranges their habits in no way. It consists, by means of syncopes, of writing in a normal meter a rhythm which has no relation to it … This notation is false, since it is in contradiction to the rhythmic conception of the composer; but if the performers observe the indicated accents well, the listener hears the true rhythm. (Messiaen 1944: 29)

We could also see that Messiaen is aware of the impact of metres, in that he thinks that they would contradict the composer's rhythmic conception. If the performer maintains the pulse of 2/4, s/he cuts up the rhythmic cells conceived by Messiaen. It seems to suggest that the true rhythm in Stravinsky is shown by the rhythmic scheme in Messiaen's analysis of *The Rite* (Example 4), and that what appears in the score, where each of the rhythmic cells seems to be disturbed by the barlines, is not the proper conception of the rhythm. Is this idea justifiable in Stravinsky? Do the time signatures have no more significance in regard to the rhythm than a mere aid for performance?

False Interpretation or Conflict of Interest?

In Stravinsky, Messiaen finds a rhythmic feature that mirrors his own concept of rhythmic music, and applies this feature to his own compositions, in such a way that the concept might not be adequate to interpret Stravinsky's rhythmic construction. As Healey notes, 'as with several of his technical procedures, it seems likely that they are a by-product of his observations on the work of other composers' (Healey 2004: 11). Messiaen notes the possibility that Stravinsky might have been unconscious of the idea of rhythmic characters

presented in his analysis, and confirms that 'I am probably the first to have used these characters consciously' (Messiaen 1994: 71). Yves Balmer, Thomas Lacôte and Christopher Brent Murray point out that Messiaen uses 'the figure of Stravinsky' – who occupies 'the position of rhythmic master' (*la position de maître rythmicien*) and in whose *Rite of Spring* Messiaen was particularly interested – to justify his own rhythmic constructions (Balmer, Lacôte and Murray 2017: 90). Although Messiaen attempts to link Stravinsky's rhythm and Hindu rhythm in his analysis in order to 'explain the reasons for his own use of this rhythmic vocabulary … as a logical argument based on the authority of Stravinsky (*l'autorité de Stravinski*)', in fact, 'it is Messiaen himself, and he alone', who locates an analogy between Stravinsky's rhythm and Hindu rhythm (Balmer, Lacôte and Murray 2017: 90). When the Canadian composer Harry Freedman – who played the cor anglais in *The Rite of Spring* under the direction of the composer – alluded to the classes of Messiaen, Stravinsky replied with a smile: 'but you know, when I did this, I didn't know anything about Hindu rhythms!' (*Mais vous savez, quand j'ai fait ça, j'ignorais tout des rythmes hindous!*) (Boivin 1995: 296).

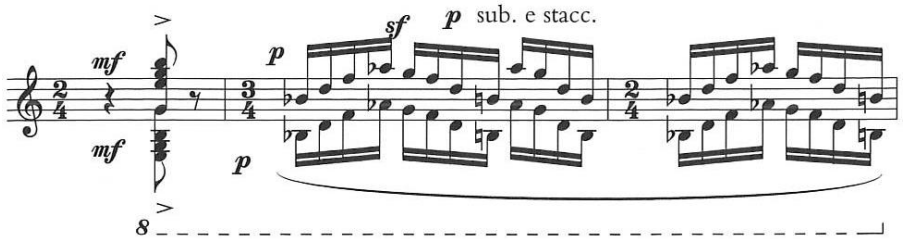
Does Messiaen's idea leave out any crucial factors for comprehending Stravinsky's music (or even Messiaen's own music)? If metres and barlines are fictitious, as in Messiaen's analysis, why does Stravinsky write them, and why does he not indicate a 'normal metre', like Messiaen, in order to assist the performer, instead of alternating different time signatures? And does the bass D at the beginning of 'The Sacrificial Dance', which Messiaen dismisses in the analysis, have some importance in the music? Numerous studies of Stravinsky's rhythm here diverge from Messiaen's view.

The attempt to diminish metrical force – embodied in pre-modernist compositions, and denounced by Messiaen – is clear in Stravinsky's rhythmic procedures, but according to Stravinsky himself, contrary to Messiaen's rhythmic conception, rhythm is still communicated through the notion of metres. In conversation with Robert Craft, Stravinsky was asked: 'Meters. Can the same effect be achieved by means of accents as by varying the meters? What are bar lines?' Stravinsky replied that, 'to the first question my answer is, up to a point, yes, but that point is the degree of real regularity in the music. The bar line is much, much more than a mere accent, and I don't believe that it can be simulated by an accent, at least not in my music' (Van den Toorn 1983: 206). The irregularity of the rhythm is displayed in uneven rhythmic cells, with respect to which Messiaen conceives his idea of

rhythmic characters, but underneath this irregularity there is a more crucial element being conveyed and this element is expressed through barlines and metres, which Messiaen ignores.

Hans Keller writes that, 'there is no communication without a minimum of pre-established terms of reference', and the rhythms of 'Stravinsky, Bartók or Hindemith are by no means unrelated to these metrical backgrounds, which in fact, serve as implied, if suppressed terms of reference' (Keller 1994: 201–2). Keller gives an example from the *Symphony of Psalms*, in which Stravinsky distorts the emphasis between upbeats and downbeats (Example 1.10). The examples below, quoted from Keller's essay 'Rhythm: Gershwin and Stravinsky', show that, instead of admitting that the upbeats have a tendency to lean towards the downbeats, by which they create an implicit accent on the downbeats, Stravinsky contradicts the metrical pulse by accentuating the upbeats and marking the downbeats *p*. The deviation from the habitual nuance of regular metre, indicates, as Keller notes, Stravinsky's 'antipathy to upbeat structures' (Keller 1994: 205), and this confrontation with the metrical pulse which had been foundational to metre in pre-modernist music.

Example 1.10: Stravinsky *Symphony of Psalms*, bars 1–3 (piano reduction)



Pieter C. van den Toorn agrees with Keller's understanding of the contradiction in Stravinsky's music of conventional upbeat structures. Thus:

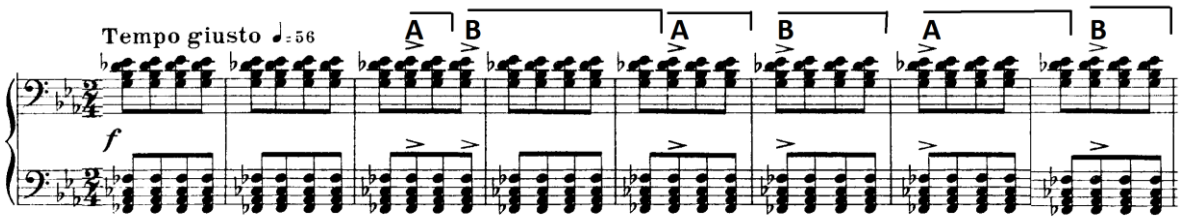
> Stravinsky manifested himself in these rhythmic (or metric) matters as a counterpuncher. That is to say, he sailed against the tide, moved against the grain … His material encompassed – built-in, so to speak – a reference both to the progressive, developmental, forward-moving upbeat tendency or flow of our modern Western tradition (rhythm), and to this tradition's "background," downbeating "square metrical dance schemes" against which this upbeat flow was set in motion (metre) … Stravinsky vented not only the "background," downbeating "square metrical dance schemes," but the suppressed, forward-moving upbeat tendency as well. He would in

> fact often introduce the latter as a point of departure, and then, impulsively (or sadistically) contradict or reverse. (Van den Toorn 1983: 214–5)

Boris de Schloezer holds the same view: that 'Stravinsky has never destroyed the measured bar; he struggles against it, he multiplies and hooks up the different metres' (Van den Toorn 1983: 207). Messiaen similarly challenged the metrical background, but he went much further in removing metres from his rhythmic perception, analysis and his own rhythmic formation. Messiaen, instead of recognising the struggle in Stravinsky's music, extracts irregular accents themselves, which help to counter the squareness of regular metre, and discovers the augmentation and diminution of rhythmic cells, which, as Healey puts it, 'can increase or decrease, seemingly at will and without overall direction' (Healey 2004: 13).

In *Traité*, Messiaen includes one of the most famous passages in *The Rite*, the opening of 'Augurs of Spring'. In this passage, Messiaen sees an accent as the beginning of a duration. From the third bar, he identifies two rhythmic cells where, similar to the idea of rhythmic characters, both cells vary by expansion or contraction (Example 1.11); cell A increases its value from two, to three, to five quavers, and cell B decreases its value from six, to four, to three quavers (Messiaen 1995: 100–1).

Example 1.11: Stravinsky *Rite of Spring*, 'Augurs of Spring', bars 1–8 (piano reduction)



Again, Messiaen does not take the 2/4 time signature into consideration, and the grouping of the rhythmic durations shows that 'for its part, the time signature 2/4 represents a fictitious meter that is designed for ease of performance' (Benitez 2013: 6). And he does not include the first nine quavers in the analysis. The first two bars could be the preparation – which confirms the metrical pulse – of the contradiction in bar 3, where the accents are marked on the weak beats.

For Van den Toorn, the 2/4 time signature indicates a metrical pulse that includes the notion of upbeat/downbeat structure; as he notes, 'the forging of upbeat/downbeat or off-the-

beat/on-the-beat contradictions or reversals always implies regular metric periodicity' (Van den Toorn 1983: 227). Therefore, the accents marked on the two weak beats contradict the periodicity of the regular metre, the 'off-the-beat/on-the-beat' structure which is subsequently reversed.

Although Arnold Whittall mostly deals with tonal aspects in his article, 'The Theorist's Sense of History: Concepts of Contemporaneity in Composition and Analysis', the two characteristics he presents, which outline the general tendencies of modernist composition, helpfully reflect the contrasting rhythmic notions of Stravinsky and Messiaen. Whittall writes that, 'I see the most essential and particular characteristic of twentieth century post-tonal music in terms of a fundamental distinction between what I will call confrontation on the one hand and complementation on the other' (Whittall 1986–7: 2). In the category of 'confrontation', composers 'attempt to preserve essential features of an old system … in radically revised forms, yet in such a way that the music cannot be convincingly explained solely in terms of that preservation'; complementation means to compose without creating conflicts with the old principle, regular metre for example, which is absent, such that the music floats free of the gravitation of metres (Whittall 1986–7: 2).

In terms of rhythm, Stravinsky belongs to the former, preserving and at the same time challenging the tradition, whereas Messiaen excludes the metrical background from his rhythmic considerations. Freeing himself from regular metres, Messiaen 'replace[s] the notions of "measure" and "beat" by the feeling of a short value and its free multiplications, which will lead us toward a music more or less "ametrical"' (Messiaen 1944: 14). If Stravinsky destabilises music by constant metric shifts, as well as irregular accentuations, it could be said that Messiaen, in his advanced rhythmic formulas, totally abandons metres and diverts his attention to focusing on varying durations themselves.
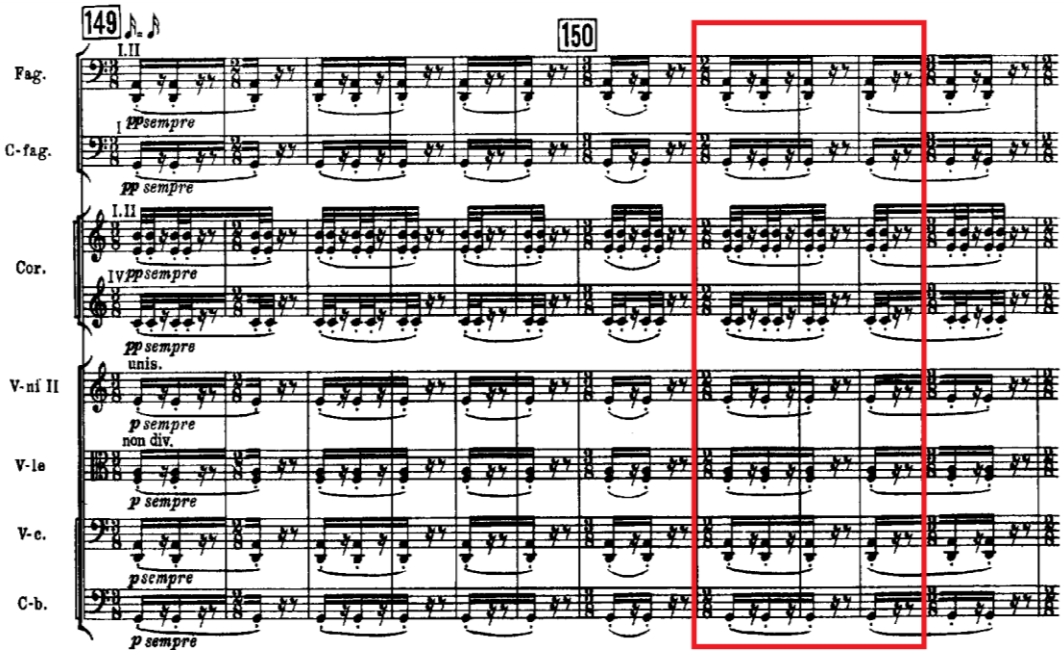
With regular metre in mind, we hear that Stravinsky's rhythms constantly contradict the metrical pulse. As Keller remarks, 'Stravinsky knows full well that he is contradicting' the upbeat structure with the rhythm in the *Symphony of Psalms* … and 'the tension created by the contradiction is part of the composition' (Keller 1994: 204). If we now return to the opening passage in 'Sacrificial Dance' (Example 1.6), we will be able to recognise an essential feature of the rhythm, left out in Messiaen's analysis. The D in the bass, which Messiaen ignores, is typically situated on the downbeat, and Stravinsky tends to accentuate the following chord on the upbeat. Thus, the emphasis of the downbeat and upbeat structure

is reversed, which contradicts the regular rhythmic flow. By fitting the bass D and the accentuated chords to the regular metrical pulse, Stravinsky's rhythm, as Keller writes, 'develops against the background of implied terms of reference shared by composer and listener' (Keller 1994: 204).

Keller also recognises a 'large-scale reversal of musical "time"' in Stravinsky, which is to say, the overall rhythmic structure counters 'the physically natural movement of music', 'the simple, primitive regular rhythmic flow' (Keller 1994: 208). For Keller, the hidden regular flow is elemental 'across the constantly changing time signatures' in Stravinsky's music. In the essay, 'Rhythm: Gershwin and Stravinsky', Keller asks the reader to 'count 3/16 across the constantly changing time signatures in the first section of the Sinfonia from the Octet': we will find in certain places that the notated metre 'emerges to the fore', coinciding with the 3/16 that we are counting, before it is 'resubmerged' in the constant changing metres (Keller 1994: 208).

We can take a section from of 'Sacrificial Dance' to demonstrate Keller's view. If we count 2/8 from figure 149 across the changing time signatures (Example 1.12), we recognise that the rhythm constantly contradicts the regular flow of 2/8, until the second bar of figure 150, where the metre 'emerges to the fore', and the rhythm also confirms the metrical flow, before it is 'resubmerged'. By momentarily confirming 'the simple, primitive regular rhythmic flow', Stravinsky 'never forgets to define, by overt or hidden implication, the flow against which he moves' (Keller 1994: 208). Although Messiaen ignores the metrical background in his analysis and the advanced rhythmic construction, his advanced rhythm in *Visions* often works much more explicitly than Stravinsky against the regular rhythmic flow, as we shall see in the next chapter.

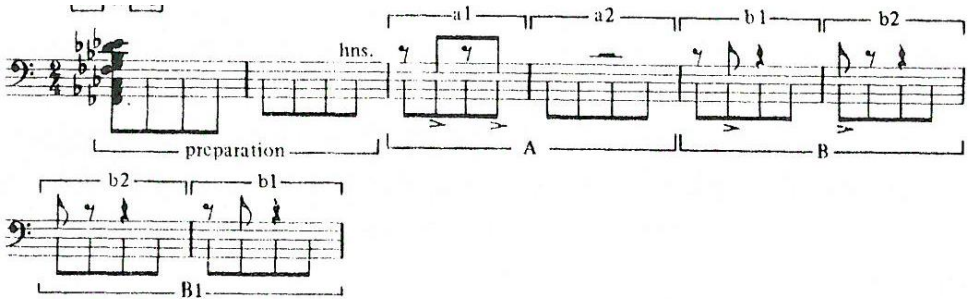
Example 1.12: Stravinsky *The Rite of Spring*, 'Sacrificial Dance', bars 34–44



'Passing the Torch'

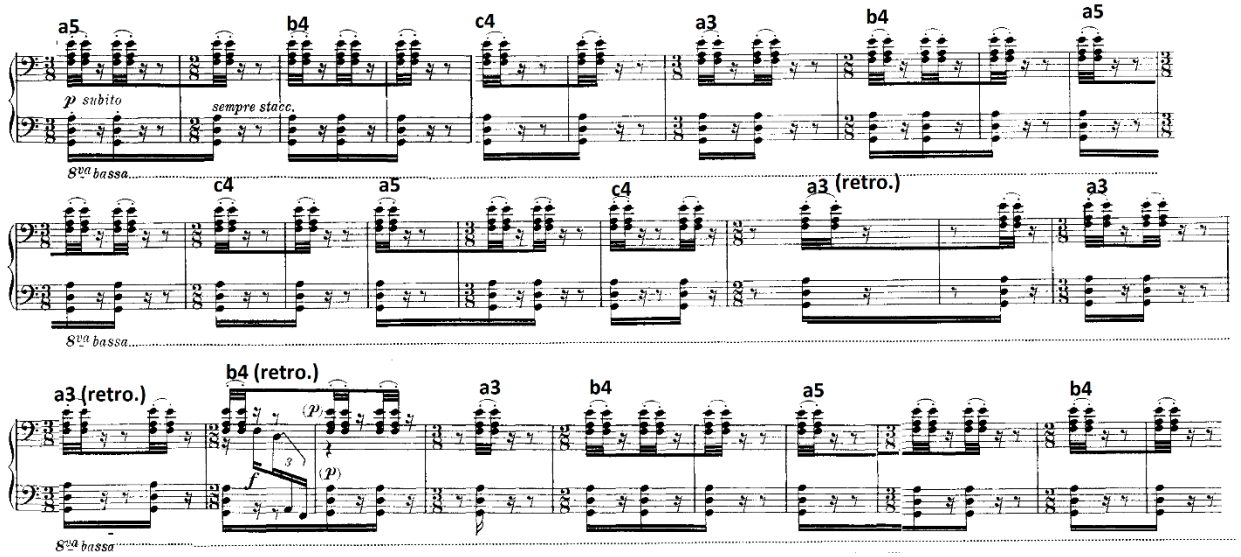
Messiaen tells Samuel that 'Pierre Boulez is the one most influenced by my rhythmic research' (Messiaen 1994: 82). In Boulez's analysis of *The Rite*, despite its direct influence from Messiaen, there are disparities with Messiaen's conception of rhythm. In the analysis of the beginning of 'Augurs of Spring', Boulez considers the rhythm with the metre, and divides the passage into rhythmic cells according to the barlines (Example 1.13). He also points out that 'cell A is divided into an accent on each weak quaver of the first bar (a1), and an accentual rest in the second (a2). Cell B is divided into an accent on the weak part of the strong beat of the first bar (b1) and an accent on the strong beat of the second bar (b2). The second B cell [B1] is a retrograde of the first: b2-b1 with the same characteristics' (Boulez 1991: 68). Boulez shows awareness of the regular metre and the upbeat/downbeat structure, but unlike Keller and Van den Toorn, he does not mention that the accents contradict the regular rhythmic flow or the metrical background; instead, he divides the rhythm into cells and notices the relationships between them.

Example 1.13: Boulez's illustration of the rhythm from 'Augurs of Spring', bars 1–8

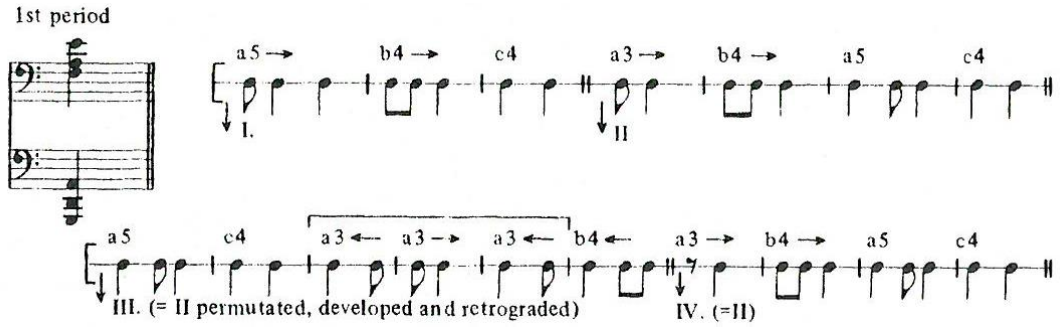


In the section between figures 149 and 167 in 'Danse sacrale', only three rhythmic cells (a, b and c), found by Boulez, vary through retrogradation and permutation. Boulez states that Stravinsky manipulates the rhythmic cells 'through a technique of extreme subtlety … extraordinary richness of rhythmic variation can be achieved, without change to the cell durations, but by simple permutation and the operation of a process as simple as retrogradation' (Boulez 1991: 72–3). Example 1.14 is the first period of the section and Example 1.15 shows Boulez's rhythmic scheme for this period. In Example 1.15, we see that Boulez also considers the rests as part of the durations, and that the barlines that separate the rhythmic cells in the scheme are not related to the barlines in Stravinsky, which reveals a close relationship with Messiaen's rhythmic thinking on Boulez's part. Benitez writes that, 'ultimately, what Messiaen conveyed to his pupils about *The Rite* was Stravinsky's manipulation of rhythmic cells, particularly their progressive augmentation and diminution, and superimposition of different rhythmic layers' (Benitez 2013: 2). Boulez makes no reference to Messiaen's teaching in this analysis, and yet the way of dissecting the rhythm and observing the various characteristics of the cells clearly relates to Messiaen's discussion of *personnages rythmiques*.

Example 1.14: Stravinsky *The Rite of Spring*, 'Sacrificial Dance', bars 30–58 (piano reduction)



Example 1.15: Boulez's illustration of the rhythm from Stravinsky *The Rite of Spring*, 'Sacrificial Dance', bars 30–58



An Elusive Coincidence

Messiaen's concept of varying rhythmic cells constitutes an intriguing perspective on Stravinsky's rhythm and the concept shows its strength in Messiaen's own compositions, but the lack of elements in his analysis – such as metre, which communicates a crucial aspect of the music, acknowledged in Keller and Van den Toorn's studies – is obviously open to criticism. Benitez writes that, 'despite its more positive aspects, we may still be disappointed with Messiaen's interpretation of *The Rite of Spring*. We can criticize him for a lack of a

systematic methodology, along with a seeming indifference to Stravinsky's artistic intentions. In fact, Stravinsky admitted that he did not recognize himself in Messiaen's analysis of *The Rite* (Benitez 2013: 11). It seems that the analysis of *The Rite* should not be considered a comprehensive study of Stravinsky's music, but rather a bridge through which we can recognise Messiaen's unique way of perceiving music and how it operates and impacts on his own compositional process.

Adorno, instead of showing admiration like others, expresses his disapproval of Stravinsky's rhythmic construction and his music in general. Adorno specifically critiques the arbitrary shocks in Stravinsky's repetitions, remarking that 'just as catatonic acts are at once rigid and bizarre, so Stravinsky's repetitions unite conventionalism and mutilation' (Adorno 2006: 133). Adorno, in Keller's view, does not recognise the upbeat/downbeat tendency in regular metre that Stravinsky struggles with. Analysing the music without applying the internal logic, which is tightly connected to the metrical background, Adorno, as Keller writes, 'cannot identify the "grain"', and, unable to perceive the motivation of the accentuation in the music, he 'thinks Stravinsky's music mad' (Keller 1994: 204–5). In *Philosophy of New Music*, Adorno suggests that in Stravinsky, 'there is neither anticipatory anxiety nor a self that endures; rather, it is accepted that the shock cannot be integrated into the self' (Adorno 2006: 117). The shock cannot be integrated into the self only because Adorno fails to see the object that Stravinsky fights against. Stravinsky's rhythmic image, without the awareness of the metrical force, will certainly look, as Adorno describes, like 'someone gravely wounded, the victim of an accident that he cannot absorb and that he therefore repeats in the hopeless exertions of dreams' (Adorno 2006: 118).

Keller and Van den Toorn perceive an opposite quality in Stravinsky's music, in which the music engages in a clear aim, and instead of repeating 'in the hopeless exertions of dreams', stimulates both mental and physical activity (especially for the performer), in order to communicate the rhythmic characteristics of the music. Nicolas Nabokoff recalled that when Stravinsky played his own composition on the keyboard, 'his neck, his head, his whole body accentuated the ingenious rhythmical design of the music by spasm-like bobs and jerks' (Van den Toorn 1983: 205). The 'spasm-like bobs and jerks' are not only a reaction to the unexpected and irregular accents, described as arbitrary shocks by Adorno, but also the struggle against the upbeat/downbeat tendency ingrained in the tradition. As Van den Toorn emphasises, 'a stressed, downbeating *sf* >*p* on an upbeat had to be discerned and forcefully

articulated as such; one had to feel the downbeating upbeat, feel the contradiction, feel the friction, the sparks' (Van den Toorn 1983: 214). Keller recognises that in order to understand the rhythmic innovation in Stravinsky's music, we must take traditional metrical pulse or 'the physically natural movement of music' – 'the simple, primitive, regular rhythmic flow' – as part of ourselves or as our natural breath, and therefore the accents counter our own nature, 'the primitive, sexual rhythmic impulse itself' (Keller 1994: 208).

It seems that a parallel can be drawn between Messiaen and Adorno in the manner that they conceive of Stravinsky's rhythm, although they draw very different conclusions, with one showing great admiration and the other undisguised disdain. In a similar manner to Adorno, who struggles to recognise the 'grain', the metrical tension derived from upbeat/downbeat structure in Stravinsky is equalised in Messiaen's analysis and his own rhythmic constructions. Messiaen credits Stravinsky's rhythm for breaking the certainty of equal divisions and bringing 'shocks' to the listener. For Adorno, the shock of the accents in Stravinsky are arbitrary and 'too great for him to absorb' (Keller 1994: 204). In contrast, Messiaen appreciates the capricious element in Stravinsky's rhythm, whereby the cells resemble the 'free movement of nature' and 'can increase or decrease, seemingly at will and without overall direction' (Healey 2004: 13).

If the 'arbitrary shocks' in Stravinsky's rhythm can be justified by the knowledge of the metrical background and the upbeat/downbeat structure, the shocks in Messiaen's rhythmic characters, from an Adornian perspective, are purely arbitrary. So what kind of music is not arbitrary for Adorno? Before we start to observe the construction of *Visions* more in detail, we will outline Adorno and Jankélévitch's ideas on compositional ethics.

To Fracture from Within

Adorno believes that our history is directed neither by Hegel's notion of unrelenting spiritual force, nor by productive forces and productive relations, a view held by Marx; instead the flow of history is controlled by 'all-governing reason', which prevails upon everything particular and claims its universality by eliminating diversity according its principle (Adorno 2004: 317–18). Out of practical need, we are compelled to submit ourselves, as Michael Gallope indicates, to 'the irreversible momentum of a rationalized reason that has dominated consciousness with unreflective mechanics' (Gallope 2017: 119). Within such a tendency to

rationalisation, or, in Bergson's word, spatialization (replacing the genuine experience of *durée* with inert symbols), ideological power takes 'society's domination over nature to unimagined heights' and 'holds mind captive in ever deeper blindness' (Horkheimer and Adorno 2002: xvii). If we observe the economic realm, for example, the fervour for rapid progress is so unreflective that even our intellect – the true concern of which is, according to Horkheimer and Adorno, 'a negation of reification …[–] perish[es] when it is solidified into a cultural asset and handed out for consumption purposes' (Horkheimer and Adorno 2002: xvii).

Just as conceptual classification or spatialization prevents us from obtaining a genuine experience (as observed in the Introduction above), so our actions become reified and lifeless amid the domination of reason and modern mechanization. Adorno's solution to the recovery of genuine experience is to stay within the classificatory concept and to be aware of the domination of reason; by self-reflection, involving the subject, we can hope momentarily to perceive something more than the concept. Adorno brings this notion of dialectic to music: for him, 'the power of an original musical intuition traces figures in the fine dust of discarded opportunities and it is these which often have to be deciphered if the nature of the composition is to be revealed' (Adorno 1992: 14). That is to say 'in the world of machines' (Adorno 1992: 14), composers cannot gain unmediated access to original innovations in the creative process; instead, they are confronted by fixed materials and what has been left or what has been used, as 'figures in the fine dust of discarded opportunities', prior to their creative work. In other words, composers produce works not by mere creative ingenuity, rather they must constantly face materials which are historically mediated. For example, metres and downbeat/upbeat structures, as historical products, constitute part of composers' creative processes.

Just as, for Adorno, we need to acknowledge the power of reason in order to conduct a determined negation, we must be aware of the historical characteristics of musical materials before we can find solutions to revive a genuine experience of music. As Adorno writes, 'only through its historical characteristics does music acquire its relation to the unattainable. Without historical mediations, understood as a mere principle or primal phenomenon, it would be utterly impoverished, abstract, and in the most real sense lacking in essence' (Adorno 2002: 141). Regular rhythmic flow and traditional harmonic progression have become historical, for example, by which Adorno means that, 'music … is transformed into a

more or less stable system', such that its traditional materials such as tonality and metre – which embodies the 'idiomatic character' – has transformed 'into convention … by virtue of its reification' (Adorno 2002: 145). In other words, as Gallope puts it, 'generations of rule-based compositions have codified conventional and expressive attributes of tonality [and regular metres] into a set of clichés', so that the expressiveness of a piece of music formed by traditional harmony and regular metre 'became reified … by virtue of their independently repeatable objectivity' (Gallope 2017: 126–7). Birgit Hofstaetter also recognises that although music with 'harmonious arrangements of tonality' and a regular pulse still appeals to us, it becomes exhausted as its 'forms and functions become empty' (Hofstaetter 2014: 162).

Therefore, for Adorno, modern rationalisation, mechanisation, and reification of traditional harmony and metrical flow develop, as what Gallope calls, 'opaque barriers' and block direct access to 'music's utopian potentiality' (Gallope 2017: 136, 114), akin to the way that conceptual classification prevents us from attaining spiritual experience. According to Adorno, we need to be clear that 'through its material, music must give clear form to the problems assigned to it by this material which is itself never purely natural material, but rather a social and historical product' (Adorno 2002: 403). The Adornian resistance to musical reification is well summarised by Gallope: 'we first recognize it and fracture it from within' (Gallope 2017: 115), which is what was discussed in the Introduction, namely that spiritual experience can only attained through breaking apart the classificatory concept from the inside. Murray W. Skees also recognises the struggle against traditional materials in Adorno's view of aesthetic production:

> It is art's affinity with the objects of the world that allows art to express the 'suffering' of objects in the world … aesthetic production is not 'given', but is instead a struggle to formulate the new within the confines of traditional aesthetic form by pushing that tradition to yield the new by overcoming limitations in technique. (Skees 2011: 929)

In order to make a breakthrough that fractures tonality, for example, it is not enough undialectically to produce mere dissonance, instead we must realise and present the tension between tonality, which has been reified, and the dissonance that goes against conventional tonality. Adorno's dialectical thinking on music and dialectical thinking more generally is well captured by his view on interpretation in performance, where he demonstrates an acute

awareness of the downbeat/upbeat structure. In *Towards a Theory of Musical Reproduction*, Adorno writes:

> The rule of going against all things schematic in music-making, of bringing out the subcutaneous, playing weak beats and dissonances etc. must not be understood in a mechanical and undialectical manner. For the schematic was not *only* external to traditional music, and the greater the music, the less external. It was rather constitutive, and also showed the opposing forces themselves. But this means: it was a tension field (the fact that there is no radically nominalist music, that even radical new music, however concealed, contains the rudiments of traditional forms, is another side of the same matter). Interpretation must renew this force field. That is, not *only* playing the dissonances and dropping the consonances, but also realizing the *tension* between the two according to the compositional sense. One must feel one's way through the consonances, the strong beats, the basic beats – the other lives only in relation to these. (Adorno 2006a: 81)

When Adorno 'feels the way through the strong beats', how could he not realise the tension in Stravinsky's music between the rhythm and the regular rhythmic flow? If Adorno's opinion is not thoroughly tenable as a view of Stravinsky's music, however, it seems that his criticism could be directed at Messiaen's rhythmic construction. Messiaen, who regards music that adheres to regular beats as unrhythmic, would agree with Adorno that traditional materials such as regular metre have become clichés. In order to overcome the constraint of regular metre, Messiaen totally removes it from the construction of his advanced rhythm. Messiaen's rhythmic conception does not involve reified and materialised regular metre as a 'barrier', but each rhythmic character, analysed above, increases and decreases 'seemingly at will and without overall direction' (Healey 2004: 13). Thus a Bergsonian 'leap', described in the introduction, is reflected in Messiaen's resistance to what has been reified. Adorno's view on modern reification resembles Bergson's conception of space, inasmuch as regular metre has been represented in a homogeneous medium, precisely space, in which the regular rhythmic flow loses its quality and becomes a repeatable object. Facing such a tendency to spatialization, Messiaen, instead of fracturing the spatialised object from within, 'leaps' outside the spatialised historical material, and by giving up the notion of metre, seems to have no concern to create any tension between his rhythm and the regular pulse.

The criticism of this kind of 'leaping', which Adorno ascribes to Stravinsky, can now be applied to Messiaen. For Adorno, by escaping from the tradition which Stravinsky 'abhors as a technician of style', Stravinsky's music emancipates itself 'from the meaning of the whole'. Its 'effects adopt a physically material, palpable, athletic quality' (Adorno 2006: 124, 129). The ecstasy of the bodily and sexual excitement in music leads to primitive mimesis which is acted out 'without any aesthetic aim' (Adorno 2006: 129). Adorno writes:

> The ecstasy takes possession of its object by its own compulsive character. It is stylized like the ecstasies savages go into in beating the war-drums … Passion itself seems to be produced by defects. But the ecstatic ritual betrays itself as pseudo-activity by the moment of mimicry. People do not dance or listen 'from sensuality' and sensuality is certainly not satisfied by listening, but the gestures of the sensual are imitated. An analogue is the representation of particular emotions in the film, where there are physiognomic patterns for anxiety, longing, the erotic look; for smiling; for the atomistic expressivo of debased music … Dance and music copy stages of sexual excitement only to make fun of them. (Adorno 1991: 53)

According to Brian O'Connor, mimesis is 'the preconceptual human desire to imitate and to seek affinity with an other', and 'in a non-reified realization of the subject-object relationship, this desire is pursued through the activities of conceptualization and judgement and through the correction of the content of those activities when contradictions emerge' (O'Connor 2013: 150). Adorno's idea of mimesis is also well defined by Richard Leppert: our activities operate within the conceptual, within which 'the subject comes to the object', not 'as an act of domination', but 'as one of regard, seeking the difference', and 'otherness' 'upon which it insists' (Leppert 2005: 105), and this is where the object may fleetingly be revealed in the insufficiency of the concept. Instead of freeing 'ourselves from the distortions of the social totality by adopting a more generally aesthetic mode of behaviour' – which seems apt to describe Bergson's *durée* – 'aesthetic mimesis (for Adorno) is rather a diagnostic concept' (O'Connor 2013: 150). Unlike Messiaen's rhythm that leaps from the reified metre, Adorno's idea of mimesis involves 'the rational manipulation of musical materials', such as form, melody, harmony and rhythm, in such a way as to render the conventional usage of materials problematic; therefore, for Adorno, as Leppert recognises, only by 'insisting on history' can 'artworks express the possibility of something different'

(Leppert 2005: 105) and he does not accept that mimesis should operate outside historically mediated materials, which would lead us only to a primitive mimesis.

In *Traité,* Messiaen demonstrates the sexual mimeticism involved in his rhythmic conception, which further confirms an opposition in musical aesthetics between him and Adorno. As Adorno states, 'erotic excitement … whenever it appears in art literally, undefracted, it has infantile quality' (Adorno 1997: 14). Messiaen's construction of irregular rhythmic cells and values and their varied recurrence, conceived without the notion of metre, is justified by the fact that 'the different activities of man all carry the mark of a periodic variation', and that 'from political activity to artistic activity, from sexual activity to spiritual and religious activity' (*de l'activité politique à l'activité artistique, de l'activité sexuelle à l'activité spirituelle et religieuse*), 'alternations of a similar movement never remain identical' (*jamais identique*) (Messiaen 1994a: 29).[29] In *Traité,* the following René Boit quote proves that Messiaen allows for sexuality to be imitated in his rhythmic formations: 'the functions of the human organism are marked by rhythmic imprints. But it is essentially in the domain of sexuality that this reveals itself further' (Messiaen 1994a: 29).[30] Undoubtedly, Adorno would not deny musical variations in recurrence or rhythmic irregularity in general, but this process should be found within the context of the reified metrical flow wherein the variations momentarily 'flash' against the regular pulse.

Jankélévitch's Innocence

In contrast to Adorno, Jankélévitch could accept that music need not necessarily commit itself to the determined negation of reification. In other words, if Adorno maintains that musical resistance requires struggle within the confines of traditional materials and forms, which have become congealed or empty formulas in the modern world, Jankélévitch believes that music making proceeds in a rather mysterious and undetermined manner, which does not necessarily acknowledge historically handed-down materials and forms as a 'barrier'. Jankélévitch suggests that when a composer is given a particular poem, 'it is impossible to predict the song that a composer will extract from it – for this is the secret of genius, its freedom, a secret far more mysterious than that of time yet-to-come and its potential novelty'

[29] Baggech 1998: 38.
[30] Baggech 1998: 39. Original French: 'Les fonctions de l'organisme humain sont marquées par l'empreinte des rythmes. Mais c'est surtout dans la sexualité qu'elle se révèle davantage.'

(Jankélévitch 2003: 62). Jankélévitch confirms that music does not need to be appreciated through historical forms; instead, we submit to the Bergsonian *durée*, allowing an inconsistent becoming. Instead of admitting that resistance is only possible by passing through modern reification, Jankélévitch maintains that spatialization or reification of musical forms and ideology are burdens to 'the arrival of the unexpected, a genuine event' (Gallope 2017: 193). For Jankélévitch, the 'overinformed conscience' is an obstacle for us to receive grace:

> Overinformed conscience transforms despair into the theater of the Disperato. But grace has a surprise in mind, and it sweeps us off our feet: the grace that is refused to those who overact, whose repentance is interested or mercenary, will fulfill us when we stop posing for the gallery or eyeing our own merits, when the agent no longer usurps the position of witness. (Jankélévitch 2003: 85)

Therefore, for Jankélévitch, acknowledging reified materials is no longer an indispensable step; instead, 'overinformed' thought can prevent us from embracing the immense possibilities that music has to offer. For Jankélévitch, musical creation is not a process of going through the reified object and fracturing it from within, rather, it is engendered by a musician's innocence. He gives a few examples to show that composers generally do not compose according to musical form and that by instead committing themselves to the 'doing', the inconsistency of *durée*:

> More often … the composer has only one mode in which to reflect upon creation: to do it. His unprecedented neologisms will, themselves, become a precedent; hence Fauré, using antique modes without actually having conceived of doing so and recognizing only in retrospect that the hypolydian mode appears in the dance music of *Caligula*. Musorgsky … speaking a brilliant new language: and afterward the grammarians came along and pasted labels on their configurations. Hence Prokofiev, instinctively using atonal language when some unidentifiable impulse dictated the choice, looked at the reporter who questioned him about the 'crisis of atonality' with astonishment, because he never asked himself any such questions. (Jankélévitch 2003: 80)

Like Bergson, Jankélévitch is inclined to credit the idea that the process of musical creation is the duration of life which cannot be translated into symbols represented in space, such that by

‘remaining at a certain distance from semantics, logic, and analytical specificity’, and by heightening ‘our attention to its (musical) inconsistency’, we might be able to touch on the incommensurable mystery or ‘Charm’ of music (Gallope 2017: 182).

As a result of permitting the inconsistency of music’s nature, Jankélévitch seems more empathetic to the kind of music that Adorno criticises, such as the primitive mimesis involved in Messiaen’s rhythmic conception. For example, Jankélévitch claims that natural and worldly noises, ‘raw and naked, are immediately present in Musorgsky’s music: their uncouth ingenuity did not have to run through thickets of symbols, nor through the idealizing and stylizing distance that art interposes between the mind and the noises of the world’ (Jankélévitch 2003: 32–3). This shows an unquestionable contrast to Adorno’s idea of musical mimesis which must negotiate the reification of historical materials. Jankélévitch also recognises this kind of mimesis in Messiaen’s birdsong: ‘Messiaen’s *Catalogue des oiseaux,* without the literary onomatopoeias or imitative conventions of a Daquin or a Saint-Saëns, wants to be a faithful notation of real birdsong’ (Jankélévitch 2003: 34). In Jankélévitch’s view, the ‘raw mimetic quality of music’ is still alive, not by ‘a primitivism, or an erotic means’, but as imitations of the natural (Gallope 2017: 189).

Messiaen’s advanced rhythmic construction certainly proceeds with a leap in respect to regular metre, which inheres in the upbeat/downbeat tendency. This leap is defended by Messiaen’s claim that rhythm is inspired by the movement of nature and the rhythmic pulse of the human organism. But do Messiaen’s rhythms and their conception really agree with the Jankélévitchian inconsistency of music? Does he rely on the ‘doing’ and embrace the ever-changing quality of a real living being that Bergson describes? Is his rhythm a direct mimesis of nature? In brief, is Messiaen’s rhythm *durée*? We will attempt to answer these questions in the following chapters by analysing one of the most prominent compositional techniques that Messiaen employs in *Visions* as well as in other compositions in the 1940s, rhythmic pedals. Therefore the task will be to discover the construction of the rhythm and how it is combined with other materials in order to unveil the relationship between the work as a construction and the listener’s and performer’s perception of the work in performance, the work that ‘endures’ in time.

CHAPTER 2: RETRIEVING LIFE FROM *TEMPS ESPACE*: THE MUSICAL CONSTRUCTION OF *VISIONS DE L'AMEN* AND PHILOSOPHIES OF MUSICAL PERCEPTION AND INTERPRETATION

This chapter is divided into three parts. First, we will examine the construction of the rhythmic pedal, which is the most often employed advanced rhythmic technique in *Visions de l'Amen*, and unveil its mechanism. Inspired by Bergson, we will show how the perception of *temps espace* can be associated with musical perception. By observing Messiaen's accounts of rhythmic perception in his analysis classes, writings and conversations, we can draw a parallel between the conscious operation of Messiaen's rhythmic perception and Bergson's notion of spatial time. In addition to revealing how rhythmic pedals can be perceived by means of Messiaen's method, we will also attempt to demonstrate the impossibility of perceiving rhythmic pedals through this very same method. In the second part, we will extend Bergsonian and Adornian philosophies to the realm of musical performance, demonstrating that two different theories of musical perception and interpretation can be derived from their philosophies, which will form the basis of our analysis of recordings in the next chapter. In the third part, we will return to the construction of *Visions* and, informed by Bergson's, Jankélévitch's and Adorno's views, we will seek to uncover the interpretative implications of the piece for performance.

Part 1 – The Rhythmic Pedal and its Temporal Unfolding

The Independence of Rhythm

In his analysis of Stravinsky's *The Rite of Spring,* Boulez suggests that 'since the end of the Renaissance, rhythm has not been regarded as the equal of the other musical parameters, but has been left too much to intuition and good taste' (Boulez 1991: 109). Rhythm is certainly emphasised by Stravinsky and Messiaen. Goehr writes that 'in analysing music, [Messiaen] implied that a sequence of absolute durations could be in its way as expressive as could be a melody of pitch levels' (Goehr 1998: 52). It is true that none of the rhythmic pedals in *Visions* has much melodic interest. We have already seen the two rhythmic pedals in piano 1's part in the first movement, in which both hands just play three chords repetitively. In the fifth movement, 'Amen des anges, des saints, du chant des oiseaux', Messiaen employs the technique of rhythmic canon from bar 24, from bar 160 and from bar 172. Rhythmic canon shares traits with rhythmic pedal. In the rhythmic canons employed in the fifth movement, different non-retrogradable rhythms are juxtaposed in each layer, wherein the rhythm proceeds with different durations, but the pitch levels do not vary.

The technique of rhythmic characters is achieved by manipulation of the rhythmic cells, and their lengths are measured by the monometrical unit. The term monometrical unit is derived from Nicolas Nabokov who identifies in Stravinsky, 'the single beat which determines the life of his musical organism' (Taruskin 1995: 117). This is especially clear in Stravinsky's neoclassical pieces, such as the *Sonate* (1924), where the first movement's monometrical unit, a quaver, runs throughout the whole movement. Based on the monometrical unit or the basic unit, different values are formed in Messiaen's advanced rhythmic construction, and every value can be measured and determined by it.

Although, in *Visions,* the use of rhythmic characters can only be identified in a few places, the construction of a rhythm by augmentation and diminution based on the monometrical unit is extensively employed. Gareth Healey writes that 'the technique of personnages did not firmly establish itself either in Messiaen's work or in that of later composers'; however, 'the relatively limited use of personnages within Messiaen's output is consistent with his attitude to rhythmic technique(s) in general' and 'it does have a significant place in the history of compositional manipulation of rhythm as a separable parameter' (Healey 2004: 19, 17). Rhythmic pedals are 'one of the simpler techniques, and they play a prominent role in *Visions*

de l'Amen (1943) and other works of the 1940s' and they share a similar trait with *personnages rythmiques* (Healey 2004: 17). A rhythmic pedal is formed by a set of values, and each of them contains a certain number of monometrical units (sometimes a value only contains one unit). In *Visions*, each rhythmic pedal is combined with a group of notes or chords. The number of values in the rhythmic pedal is not divisible by the number of notes or chords in the group and, therefore, the repetition of the rhythmic pedal creates different combinations.

The rhythmic pedal is associated with isorhythm, which is constructed by 'the rigid dimensions of a plan which determined beforehand the tiniest details of rhythmic structure'; 'isorhythmic canon is strictly observed' in motets of in the fourteenth century (Boulez 1991: 109). The rhythmic pedal – as an independent and pre-existent parameter which, as Boulez writes, is 'something unthinkable to many listeners and even many composers of our day' (Boulez 1991: 109) – releases rhythm from the dictates of metre, harmony and melody.[31]

Rhythmic pedals, formed from values with unequal lengths, might seem irregular, unlike rhythms that operate within regular metres (which Messiaen would call 'unrhythmic'), and yet, Messiaen's rhythms still contain regularity. For these rhythms cannot be constructed without the regularity that is contained in equally divided monometrical beats. Therefore, what appears irregular to the listener is actually achieved by something regular and steady. Also, although Messiaen dislikes 'equal divisions' (Messiaen 1994: 67), he 'appreciate[s] a … duration' by dividing 'it into equal parts' (Messiaen 1994a: 31). In other words, Messiaen tends to free his rhythm from metre, but he still constructs and perceives, or 'appreciates', rhythm metrically, in the sense that each rhythmic value in a rhythm is measured by equal units. This kind of confusion between metre and rhythm is confirmed by Messiaen's student Jean-Louis Florentz: 'I believe that Messiaen has always confused the two [metre and rhythm]. He judges rhythm metrically. The notion of swaying, of incantatory force, which comes from the need to perceive and control rhythmic irrationality, is something that has always eluded him' (Boivin 1995: 205).[32] The 'swaying and incantatory force' of rhythm is lost if Messiaen persists in measuring it by equally divided units.

[31] Although isorhythm is 'old', it is rather 'new' to modern listeners. Therefore it needs to be clarified that rhythmic pedal in our discussion still appears as the 'new', even though it resembles isorhythm, which is something very 'old'.

[32] Original French: '… je crois que Messiaen a toujours confondu les deux. Il juge métriquement la rythmique. La notion de balancement, de pression incantatoire, qui vient de la nécessité de percevoir et de contrôler l'irrationnalité rythmique, c'est une chose qui lui a toujours échappé.'

Messiaen's 'escapism', from an Adornian perspective (identified in the previous chapter), not only conveys a kind of arbitrariness and erotic flux, but also shows that Messiaen's advanced rhythmic construction is inseparable from 'collective practice'. This 'inseparability' is reflected in Adorno's critique of the idea of a new music that would seek to make a break from the tradition without the mediation of historical materials. As Adorno states, 'that music altogether … arose out of the collective practice of dance and cult is not simply left behind as a mere "point of departure" through music's development toward freedom. Rather, the historical origin remains palpably implied long after music has broken from any collective practice' (Adorno 2006: 18). The attempt to escape from the 'old' cannot be successful without, to a certain extent, falling back on the 'old'. Although Messiaen detested the equal divisions found in metrical music, it was impossible to form his own unequal divisions without them.

The Rhythmic Pedal and its Mathematical Scheme

One of the most often employed rhythmic pedals in *Visions* is the combination of the Hindu rhythms *Ragavardhana, Candrakala* and *Lakskmica*, which will be used here to illustrate the construction of the rhythmic pedal. The rhythmic pedal that first appears in the second movement from bar 107 in the left-hand octaves of piano 1 (as indicated by Messiaen's brackets) is also employed in the third movement from bar 64 and from the beginning of the last movement. The basic rhythmic unit is a semiquaver, so the values in this rhythmic pedal can be listed as: 4, 4, 4, 2, 3, 2, 2, 2, 2, 3, 3, 3, 1, 2, 3, 4, 8. The pitches used in this section from bar 107 in the second movement, 'Amen des étoiles, de la planète à l'anneau', are derived from a five-note motif introduced at the beginning of the movement. Although each repetition of the motif is a semitone lower than the preceding one, the intervals between the pitches remain the same in each repetition. In the other movements, Messiaen uses the same rhythmic pedal but combines it with other pitches.

When the five-note pattern and the seventeen values are combined, the whole does not repeat until eighty-five (5 x 17) values have been played. Although the five-note pattern repeats with the same rhythm after eighty-five octaves, the pitches in each pattern are no longer the same, as the pattern descends a semitone after each repetition. In other words, we will not hear the five-note motif with the same rhythm until eighty-five octaves have been played. In

fact, the section ends when the eighty-five octaves are completed in bar 139. In such a construction, each repetition of the motif is rhythmically different to the one before and after, and each repetition of the rhythmic pedal contains a different order of the five-note pattern.

In the first movement of *Quatuor pour la fin du temps*, 'Liturgie de cristal', Messiaen employs the rhythmic pedal, used in the second movement of *Visions*, with twenty-nine chords. Like the rhythmic pedal, the twenty-nine chords are also played in order, such that it would take an extremely long time for the pattern to repeat. Therefore, in performance, each rotation of the rhythmic pedal will be harmonically different to the preceding one, and each rotation of the twenty-nine chords will be rhythmically different to the preceding one.

The rhythmic pedal seems to convey a non-identical repetition which, as Messiaen sees it, is true to the type of recurrence that we find in nature. As Messiaen writes in the first volume of *Traité*:

> True *recurrence*, that of the wave of the sea, is – we are beginning to realize – the opposite of a pure and simple repetition. Each wave is different from the preceding and the following, by its volume, height, duration, the slowness or brevity of its formation, the power of its climax, the prolonging of its fall, flow, and scattering. … To suppose an absolute recurrence, duplicating the same thing over and over again, as is the current practice in music with rhythmic pedals and ostinati, it is necessary to remember that there is a difference between each textual repetition: no note can be found in the same place within the sonorous unfolding; there is a first occurrence, a second occurrence, a third occurrence, and so on. Although all are similar, they are situated in a perpetual state of change. (Messiaen 1994a: 42–3 [translation modified])[33]

But it needs to be clarified that while the construction gives the illusion of nature, in which recurrences are never the same and therefore appear indeterministic, the truth remains that the precompositional structure *is* deterministic and that same pattern will reoccur after a

[33] Baggech 1998: 54. Original French: 'La vraie *périodicité*, celle des vagues de la mer, est – nous venons de le voir – le contraire d'une répétition pure et simple. Chaque vague est différente de la précédente et de la suivante, par son volume, sa hauteur, sa durée, la lenteur ou la brièveté de sa formation, la puissance de son climax, la prolongation de sa chute, de son écoulement, de son éparpillement. À supposer une périodicité absolue, ajoutant au même le même et encore le même, comme cela se pratique couramment en musique dans les pédales rythmiques et les ostinato, il faudrait encore remarquer qu'il y a une différence entre chaque répétition texturelle: c'est qu'aucun terme ne se trouve à la même place dans le déroulement sonore; il y a un 1er terme, un 2e terme, un 3e terme, et ainsi de suite; bien que tous semblables, ils se situent dans un perpétuel devenir.'

sufficient period of time in this mathematical structure. In other words, Messiaen creates an image that resembles his idea of nature using a mode of construction that itself is purely deterministic. This illusion of true recurrence also suggests the idea of duration. As Bergson writes in *L'Évolution créatrice*, 'the more we study the nature of time, the more we shall comprehend that duration means invention, the creation of forms, the continual elaboration of the absolutely new … duration in which the past, always moving on, is swelling unceasingly with a present that is absolutely new' (Bergson 1998: 11, 199–200). In this combination of the five-note motif and rhythm, both of which repeat, the repetition of the motif is perceivable, whereas the rhythm seems too complicated to be perceived by the listener in performance. Therefore, in performance, the listener perceives that the five-note motif is constantly renewed, through a mathematical trick, such that the rhythmic pedal somehow comes to resemble the idea of duration, which is changing and nonrepeatable. But the hidden mechanism has nothing of the qualitative changes reflected in the inner self, in which conscious states operate in real duration.

From Beats to Space

This section will demonstrate that, in order to measure rhythmic values and beats in music, we need a perception of structured time, which involves the idea of space. The section will suggest how the consciousness of the listener and performer relates to the idea of space in a temporal sense through the Bergsonian notion of time. For Bergson as well as for Jankélévitch, as Gallope notes, 'to practice philosophy well, one must become oriented towards the lived temporality of actual experience' (Gallope 2017: 172–3). The awareness of the temporal-spatial element, derived from a Bergsonian perspective, is able to not only inform us how consciousness operates as we listen, but also to form a significant foundation for our examinations of different performances in terms of tempi. Once the relationship between regular beats and the notion of space is established, we will be able to identify whether a performance adheres to or deviates from the spatial element.

How is space formed in consciousness? For Bergson, in short, the answer is that it is an act of the mind. When we perceive objects or sensations, we introduce a space in which we can represent them symbolically: 'if we seek to characterize this act, we see that it consists essentially in the intuition, or rather the conception, of an empty homogeneous medium'

(Bergson 1910: 94–5). Bergson indicates that when we deal with material objects, which can be seen and touched, ‘we localize them in space’ and ‘no effort of the inventive faculty or symbolical representation is necessary in order to count them’. But this is not the case when we deal with ‘mental images other than those built up by means of sight and touch’ because they are no longer given in material space, therefore we can only count them as ‘some process of symbolical representation’ (Bergson 1910: 85–6). In other words, we need to spatially represent them in consciousness in order to count them.

According to Bergson, ‘the homogeneous is … supposed to take two forms, according as its contents co-exist or follow one another’ (Bergson 1910: 98). Bergson illustrates these two symbolic modes of spatial representation with the example of the attempt to picture the beats of a pendulum. After ‘a pendulum, beating the seconds, has completed sixty oscillations’, I can ‘picture these sixty oscillations to myself all at once by a single mental perception’, such that I represent the sixty beats as ‘sixty points on a fixed line’ (Bergson 1910: 104). This kind of spatial representation, ‘co-existence’, excludes the idea of succession. If we want instead to picture the oscillations in succession, we need to ‘retain the recollection of the preceding oscillation together with the image of the present oscillation’ (Bergson 1910: 105). This successive mode of picturing will engender two possibilities: one through a homogeneous medium, another in pure duration. The homogeneous medium that involves succession is associated with time. Bergson suggests that, as ‘consciousness has organized them [the oscillations] as a whole in memory, they are first preserved and afterwards disposed in a series’ (Bergson 1910: 109) and by continually setting ‘the two images [of the preceding and present oscillation] side by side’ (Bergson 1910: 105), we enable ‘the movement of [the oscillations of] the pendulum’, such that ‘we create for them a fourth dimension of space’, which we call ‘homogeneous time’ (Bergson 1910: 109). As the sixty oscillations equally divide a minute, the intervals between the oscillations must be equal; if we successively picture the oscillations in consciousness while retaining the interval between the two images of the preceding oscillation and the present oscillation, we thus form, as Bergson calls it, ‘a discrete multiplicity’ of the oscillations (Bergson 1910: 90). Bergson indicates that, in order to form a discrete multiplicity, ‘we are compelled to borrow from space the images by which we describe what the reflective consciousness feels about time and even about succession’ (Bergson 1910: 91).

Why is the idea of space also involved, and not just time, when we picture the equally divided oscillations successively? By retaining an equal interval between every two oscillations, measuring becomes involved when we move through the 'sixty points on a fixed line'. In order to produce the oscillations in consciousness according to the pendulum, which divide time into equal portions, we must consistently measure the intervals between the preceding and present oscillation and compare the positions of the two points which represent the two oscillations. In other words, we need to rise above the fixed line which we traverse and take up a position outside the line by thinking of 'a space of three dimensions', so that we can measure the intervals between the points (Bergson 1910: 103). In this case, time, which 'our clocks divide into equal portions', becomes 'a measurable and therefore homogeneous magnitude' and as soon as we start to measure time by picturing the beats of a clock, we introduce the notion of space (Bergson 1910: 107). Adorno refers to this kind of time, in a Bergsonian vein, as '*temps espace*', time as measured, in contrast to '*temps durée*', time as experienced (Iddon 2013: 132). The beats of a clock can certainly be compared to the regular beats in music, which also divide time into equal portions. This kind of perception can be applied to performance. For example, by representing beats as points in space, we can measure the beats produced in performance. Moreover, the score is spatial because the length of each note is measured and therefore has a position in time. The score is, therefore, a form of space in which the symbols 'co-exist'. In order to endow the written notes with movement, we need time or *temps espace* to perceive the notes successively one after another. In a Bergsonian sense, when we follow the score, we need to know the measurements indicated by the score and, when we play the notes successively, we need to be aware of the positions between the present note and the preceding one in order to consciously represent the interval between the two. In short, it is in spatial time that we follow the written score and are able to perceive equally divided beats.

The Perception of Rhythmic Pedals

If Bergson ignores the idea of space in music, Messiaen's rhythmic perception seems to depend on *temps espace*. In the introduction, we have seen that Messiaen, instead of experiencing the qualitative impression of rhythms, numerates each value in a rhythm. This rhythmic perception is further confirmed by a rather intriguing observation offered by Goehr. In 'the Messiaen class', Goehr writes:

> Being a realist, and concerned with the real world, he [Messiaen] perceived real time: clock time. We spent a long time doing tests to develop our consciousness of time. He would bang on the table and, after a longish silence – possibly twenty seconds – bang again. We were expected to identify the duration between the two bangs and compare it with others often only minutely longer or shorter than the first. This was done by counting, but I think he himself supposed that he could, and that we might learn to, recognise durations of silence as if they had specific characteristics (at least when they were constructed as short chains) … This kind of test was locked together in Messiaen's mind with number … as always with him, numerology was neither merely mathematically nor merely symbolically fascinating. As with natural phenomena, numbers had personalities. (Goehr 1998: 52)

Alain Louvier also had a similar experience, recognising that Messiaen had 'completely unknown methods' (*des méthodes complètement inconnues*) at the Paris Conservatoire (Boivin 1995: 203). Louvier recalled that Messiaen offered the exercise of rhythmic perception by beating 'a complicated and very long rhythm' (*un rythme compliqué, très long*) on the table, such that 'by the fourth measure, no one could follow anymore' (*qu'après la quatrième mesure, plus personne n'était d'accord*); then Messiaen would tell his students: 'a Hindu can do it' (*un Hindou, lui, peut le faire*) (Boivin 1995: 203–4). Despite the confusion and puzzlement caused by the 'completely unknown method', Louvier was rather convinced by, or sympathetic to, Messiaen's unusual way of training:

> His [Messiaen's] idea was that our ear, very sensitive, able to recognize very complicated chords, very fine micro-interval differences – Western musicians are very acute when it comes to the chord, that of an orchestra, for example –, that our ear could not distinguish a duration of thirteen [units] from another of eleven! He thus encouraged us to reflect tremendously on what the perception of a rhythm, of a duration, is. We thought we were very competent and suddenly, on a crucial level of music, we were worthless. This forced us to rethink the real basics of music.[34] (Boivin: 1995: 204)

[34] Original French: 'Son idée était que notre oreille, très fine, capable de reconnaître des accords très compliqués, des différences de micro-intervalles très fines – les musiciens occidentaux sont très chatouilleux en ce qui concerne l'accord, celui d'un orchestre, par exemple –, que notre oreille ne pouvait par contre distinguer une durée de treize [unités] d'une autre de onze! Il nous incitait ainsi à une réflexion formidable sur ce qu'est la perception d'un rythme, d'une durée. Nous nous croyions très forts et tout à coup, sur un plan capital de la musique, nous ne valions rien. Cela nous forçait à repenser les bases réelles de la musique.'

With the pendulum example, as explained by Bergson, we can get a better understanding of the kind of counting initiated by Messiaen in his class and how it operates in consciousness. As soon as we hear the first bang, we start to picture the ticks of a clock in spatial time and count the points that represent the ticks until the second bang. So, what is the purpose of this training? It is nothing less than practice designed to improve our ability to measure time and to divide it into equal portions by picturing the ticks of the clock in *temps espace*. But it also seems that Messiaen's students were being trained to recognise the number of ticks in order to perceive a given number's inherent quality. Perhaps the numbers, as Messiaen suggests, eventually do communicate their 'personalities' in an immediate and almost mystical manner but we will not dwell on Messiaen's fascination with this task. Instead, we will look to examine the intelligibility and practicality of such numeration in the realm of performance.

It is certainly the case that this training helps to numerate note values in music. In *Traité*, Messiaen writes, '𝅘𝅥𝅯 𝅝 In this example, I view the whole note in relation to the 𝅘𝅥𝅯 that precedes it' (Messiaen 1994a: 32).[35] In order to numerate the semibreve, we need to retain the length of the semiquaver; when the semibreve is played, we start to count in semiquavers, and by doing so, we successively place the semiquavers as points in spatial time. For Bergson,

> if time, as the reflective consciousness represents it, is a medium in which our conscious states form a discrete series so as to admit of being counted, and if on the other hand our conception of number ends in spreading out in space everything which can be directly counted, it is to be presumed that time, understood in the sense of a medium in which we make distinctions and count, is nothing but space. (Bergson 1910: 91)

In the Introduction we already showed that, according to Bergson, pure consciousness has 'no means and even no reason to measure time' and 'does not perceive time as a sum of units of duration' (Bergson 1910: 196). While Bergson believed that the perception of space is impersonal, Messiaen thought that 'numbers had personalities' (Goehr 1998: 52).

[35] Baggech 1998: 43.

Messiaen says in the conversation with Bernard Gavoty:

> Rhythm is a matter of intelligence; the more perfect the human brain becomes, the more one will be able to use complex rhythms. One will be able to appreciate more easily the difference between very short values of only slight divergence, and, more difficult, between very long values of only a slight divergence. Everyone can achieve this with patience and study. (Messiaen and Gavoty 1961: 35)

Benedict Taylor reacts negatively to this idea of identifying the number of each value. Taylor writes:

> For Messiaen's listener, it appears, every subjective duration must be spatialised, numerated … Messiaen's contention of audible rhythmic subdivision seems only the more ambitious when it is taken into account that the listener encountering his music is not presented with a simple two-note rhythmic unit heard on its own with ample time to numerate its rhythm but with an ongoing succession of highly complex musical rhythms, often superimposed. Even a relatively simple passage of Messiaen surely presents an information overload if needing to be processed in the manner the composer advocates, let alone something like the Epode to *Chronochromie*. (Taylor 2010: 265–6)

Taylor then quotes the passage in the conversation with Gavoty (quoted above), and writes:

> This seems optimistic. To be sure, it is quite possible that Messiaen's rhythmic irregularities may be perceived qua irregularity by the listener, but this is likely to be in a qualitative sense as a general feeling of metric irregularity (heard against the cultural expectations drawn from previous metrically regular music), not as something that can be easily quantified and numerated in the manner Messiaen suggests. (Taylor 2010: 266)
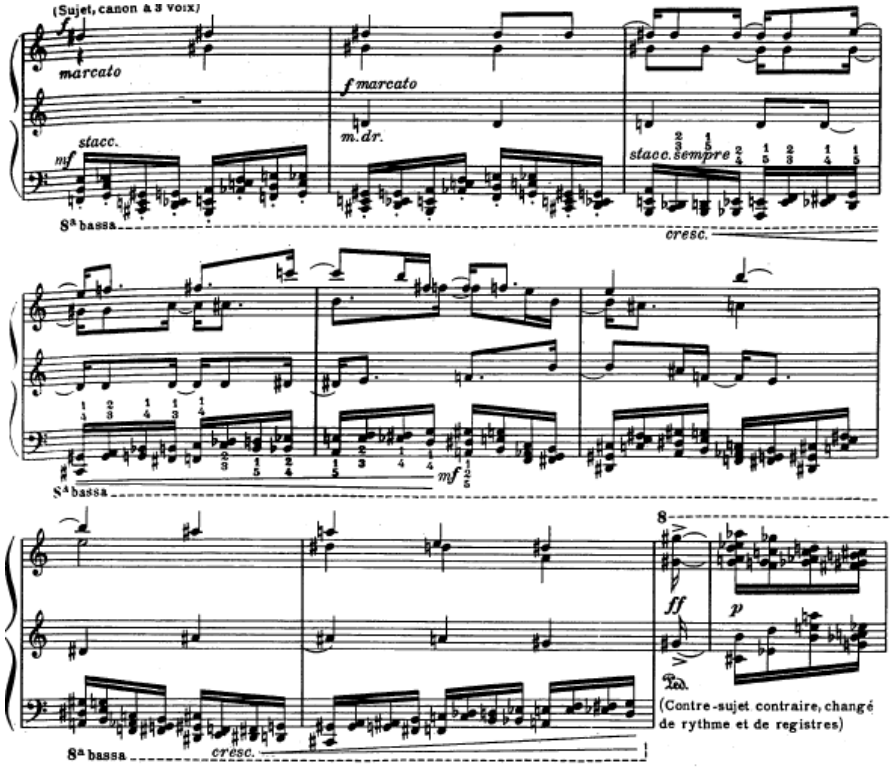
The durational plan of Messiaen's rhythmic pedals, for Richard Taruskin, 'could be mentally conceptualized but … could not be followed perceptually (that is, sensorily) during performance' (Taruskin 2008: 295). Taylor and Taruskin seem to agree on the impossibility of identifying or counting the values, but for Messiaen, the ability to count or to spatialise the values is 'a matter of intelligence' that can be cultivated. Here we notice that Messiaen seems to prefer to reduce the experience of perceiving a rhythm to a series of numbers rather than to

perceive the rhythm's qualitative changes. The 'personalities' of the numbers, in this sense, may be more interesting for Messiaen than the temporal inconsistency of the rhythm. Adorno suggests that 'spatialization is by its nature controllability' (Adorno 2006a: 173). As mentioned in the Introduction, Messiaen supposes composers to be demiurges who know the work's past, present and future; this tendency to control extends to the perception of a rhythm that unfolds in time. However, what is controllable are the numbers, not the rhythm in a constant becoming of duration. Whether the listener can numerate a rhythm accurately and appreciate the personalities of the numbers, like Messiaen himself, seems doubtful, but a question remains: does Messiaen also adhere to the spatialised conception of the rhythm when he performs?

In 'Par Lui tout a été fait' from *Vingt regards sur l'Enfant-Jésus* (1944), the same rhythmic pedal, used in the second movement of *Visions*, appears in the form of a three-layered rhythmic canon (Example 2.1). For Messiaen, it would be ideal to numerate the values as they proceed against the constant semiquavers being simultaneously played in the left hand. However, not only are the complex rhythmic values in each voice difficult for the listener to immediately perceive, but the listener is also very likely to be confused by the voicing of the three layers, which are all heard in the middle register of the piano. Messiaen himself is aware of such a difficulty and he writes that 'it is evident that several superimposed rhythms cannot be followed if the voices that execute them all have the same timbre' (Messiaen 1994a: 30).[36] Although Messiaen suggests that 'with patience and study', we can more easily appreciate complex rhythms, it seems that, in such a complicated rhythmic construction, it is more likely that the listener will appreciate the qualitative irregularity rather than quantifying it in space.

[36] Ibid: 40. Original French: 'Il est évident qu'on ne peut suivre plusieurs rythmes superposés si les voix qui les proposent ont toutes le même timbre.'

Example 2.1: Messiaen *Vingt Regards sur l'enfant-Jésus*, No. 6, 'Par Lui tout a été fait', bars 26–35



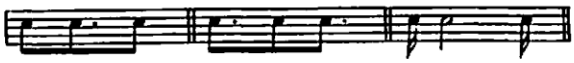
Apart from Hindu rhythms, Messiaen also employs non-retrogradable rhythms in his rhythmic pedals. The perception of *temps espace*, required to numerate rhythmic values, is necessary to identify the non-retrogradability of a non-retrogradable rhythm.

Non-retrogradable Rhythm
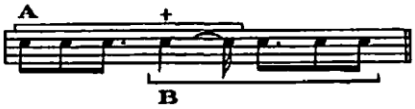
In the Introduction, we briefly introduced Messiaen's nonretrogradable rhythm; at this stage, we look at its conception and its temporal unfolding in detail. In *Technique*, Messiaen describes the construction of a non-retrogradable rhythm, which can be formed by three values, with the two 'outer values identical' and the 'middle value free' (Messiaen 1944: 20). The examples of three-value non-retrogradable rhythms below are quoted from Messiaen's *Technique* (Example 2.2). 'If we go beyond the figure of three values, the principle grows, and we should say: all rhythms divisible into two groups, one of which is the retrograde of the other, with a central common value, are nonretrogradable' (Messiaen 1944: 20) (Example 2.3). In the fifth movement of *Visions,* 'Amen des Anges, des Saints, du chant des oiseaux', for example, non-retrogradable rhythms are employed in the three-layer rhythmic canon in

piano 1 from bar 160.[37] Non-retrogradable rhythms also appear on their own, for example, in the fifth movement at bars 19–21, which has the same rhythm as the one shown in Example 2.3.

Example 2.2: Messiaen's examples of non-retrogradable rhythm



Example 2.3: Messiaen's example of non-retrogradable rhythm



In *Traité,* Messiaen declares:

> In music, as in the plastic arts, as in the decorative arts, as in the human body, symmetry is not only the art of the similar, it is also the mirror that inversely reproduces, it is *retrograde* … Perceived upon hearing, retrogradation and movement from right to left both go toward the future, but *memory recognizes in retrogradation the primitive text rising again towards the past*. (Messiaen 1994a: 43)[38]

Bergson would deny 'the primitive text rising again' in music; as he writes, 'the fact is that each increase of stimulation is taken up into the preceding stimulations, and that the whole produces on us the effect of a musical phrase which is constantly on the point of ending and constantly altered in its totality by the addition of some new note' (Bergson 1910: 106). This is because Bergson believes that music endures in duration, excluding the possibility of spatialization. But to recognise in Messiaen's non-retrogradable rhythm that the same values come back after the centre value(s), we must perceive the rhythm in a homogenous medium, namely space. Bergson indicates that 'if we assert that it is always the same sensation, the reason is that we are thinking, not of the sensation itself, but of its objective cause situated in space' (Bergson 1910: 106).

[37] Each non-retrogradable rhythm is bracketed in the score.

[38] Baggech 1998: 55. Original French: 'En musique, comme dans les arts plastiques, comme dans les arts décoratifs, comme dans le corps humain, la symétrie n'est pas seulement l'art du semblable, elle est aussi le miroir qui reproduit en sens inverse, elle est *rétrograde*. Bien entendu, à l'audition, la rétrogradation et le mouvement droit vont tous deux vers l'avenir, mais *la mémoire reconnaît dans la rétrogradation le texte primitif remontant vers le passé*.'

When Messiaen says that ‘memory makes us recognize exactly the same rhythm’, for Bergson, it is not memory itself that recognises the same rhythm, but ‘images drawn from space’ (Bergson 1991: 148). Keith Ansell-Pearson indicates that ‘for Bergson, memory is linked to creative duration and to *sense*’ (Ansell-Pearson 2010: 62). Memory itself, as Ansell-Pearson writes, consists of ‘traces jostling each other at random and exerting mysterious forces to produce the desired contiguity and resemblance’ (Ansell-Pearson 2010: 72). Therefore, the defined and numerated rhythm before the centre value in a non-retrogradable rhythm does not stand for memory itself, but borrows ‘its apparent clearness and universality from the necessity laid upon us of always opening out space in front of us and of always closing duration behind us’ (Bergson 1991: 148–9). The record of rhythmic values in memory is ‘primarily affective’ (Ansell-Pearson 2010: 73), since all values are ‘unique in their kind’ and they take place ‘at every moment of duration’ (Bergson 1991: 83). By contrast, the numeration or the measured quantity of values ‘isolate[s] the affects of memory, setting out time in space’, such that the rhythmic values become lifeless (Ansell-Pearson 2010: 73). Messiaen’s idea of memory can be associated with ‘the prevailing conception’, which Bergson denounces, ‘that conceives memory as a faculty of repetition or reproduction, in which the past is repeated or reproduced in the present and is opposed to invention and creation’ (Ansell-Pearson 2010: 62).

Like Bergson, who rejects the idea that the perception of space can better our understanding of life and living being, Jankélévitch also opposes the notion of space and denies that symmetry can be recognised in an irreversible musical becoming. Gallope indicates that ‘Jankélévitch heard music as exemplary of an inexhaustible improvisation fueled by the inconsistent vitality of life itself’ (Gallope 2017: 181–2). Jankélévitchian listening resembles the notion of experiencing phenomena ‘enduring’ in *durée*, in which our states of consciousness are inexplicable, changing and never representable in space without altering their nature. Jankélévitch states that ‘the “mirror games”, the inverted forms, and so forth … are opaque to the ears’ (Jankélévitch 2003: 92):

> One must also accuse the visualism of all those who talk about inversions, not to mention musical rhymes, because to do so is to forget that music is made to be heard and not to be read, not at all, and to forget that symmetry, as a product of visual intuition, is not recognizable to the ear. Because, in effect, a trajectory in space can be traced by two senses, one cycle or a round trip to music, as if musical movement were

> reversible. There may be a memory of something repeated, but there are no symmetries, nor is there a 'center' of an irreversible Becoming, oriented in one direction, where even the recapitulation *takes over*, and where the *seconda volta* – even if indistinguishable from the first – differs from it imperceptibly by mere fact of its secondary position, that is, by the simple chronological priority of the first time. The arrival of the future, without excluding memory, prevents the circle from ever being closed. (Jankélévitch 2003: 92)

Another French philosopher, Gaston Bachelard, also recognises the irreversibility of musical temporality. Bachelard writes that, 'were music a matter of counting up different durations, making it therefore a rigorous chronometry, we would find a new melody by moving backwards through this collection of temporal fragments', but 'this idea could only occur to someone who transcribes music' (Bachelard 2000: 126). Bachelard then quotes from Lionel Landry to the effect that 'the *spatialization* of the musical phrase is not natural, it is irreversibility that the temporal flow of music seems to present to us'; the retrograde movement heard in Messiaen's rhythm, for Landry, is 'artificial, academic, and only perceptible on paper' (Bachelard 2000: 126). It seems that French philosophers tend to reject the idea of spatialization as a means to recognise retrograde movement in music. Messiaen was aware of Bachelard and Landry's criticism:

> '*Non-retrogradable rhythms*' (of which I am author and apostle) have been critiqued by the claim that the expression 'non-retrogradable rhythm' is itself superfluous and redundant, since rhythm flows in irreversible time and, like time, can never return to the past … music and rhythm unfold in time, in perpetual evolution … retrograde movement and other permutations would then be counter-duration, counter-sense. (Messiaen 1994a: 43, 45)[39]

Messiaen responds to the objection:

> First response: one of the great qualities of the musician-rhythmicist is this power to juggle different treatments of duration! Second response: retrograde movement and

[39] Ibid: 55, 57. Original French: 'On a critiqué les «*rythmes non rétrogradables*» (dont je suis l'auteur et l'apôtre) en disant que l'expression même «rythme non rétrogradable» était un pléonasme et un tautologie, puisque le rythme s'écoule dans le temps irréversible et, comme le temps, ne peut jamais revenir en arrière … la musique et le rythme se déroulent dans le temps, donc dans un perpétuel devenir … Le mouvement rétrograde et les autres permutations seraient donc des contre-durée, des contre-sens.'

> the other permutations unfold toward the future and are only appreciated as such by the listener retrospectively in relation to what was heard earlier in the forward sense. (Messiaen 1994a: 45[translation modified])[40]

In the conversation with Samuel, Messiaen says, similarly to the first response, that, 'as a rhythmicist, I've endeavoured to divide this time up and to understand it better by dividing it … as composers, we have the great power to chop up and alter time' (Messiaen 1994a: 34). We mentioned in the Introduction that pure duration, as the internal time of consciousness, cannot be measured without altering its nature. 'States and changes' of the self, reflected in duration, 'permeate one another'; 'as soon as we separate them from one another', we 'set them out in space' (Bergson 1910: 125). Creating a non-retrogradable rhythm – by 'juggling different treatments of duration' or chopping up time – must be done in spatial time, in which the different values can be arranged in a certain order and each value can be measured based on a monometrical unit. According to Bergson, 'we could not introduce order among terms' without 'setting them side by side', 'first distinguishing them and then comparing the places which they occupy', and 'if we introduce an order into what is successive, the reason is that succession is converted into simultaneity and is projected into space' (Bergson 1910: 102). Therefore, the power of a musician-rhythmicist is the ability to represent a homogenous medium in which they can arrange a number of values according to a law of measurement and a certain kind of order.

Considering the second response to the objection, the listener is required to spatialise the values to appreciate the non-retrogradability, which is unrecognisable in the continuous flow of duration. The measured lengths and different numbers 'are capable of recurring in a homogeneous space, their relation can be expressed in terms of a law, whereas deep-seated psychic states occur once in consciousness and will never occur again' (Bergson 1910: 219). Messiaen's response merely repeats what he states earlier in *Traité* and does not seem to justify the validity of his rhythm except by reference to the notion of space. In a word, from a Bergsonian perspective, Messiaen insists on drawing the lifeless part of rhythm into perception and also (as Jankélévitch would say) rejects the 'Charm' revealed in duration and embraced by the 'whole personality' (Bergson 1910: 172).

[40] Ibid: 57. Original French: 'Première réponse: c'est une des grandeurs du musicien-rythmicien que de pouvoir jongler avec les différents sens de la durée! Deuxième réponse: le mouvement rétrograde et les autres permutations se déroulent à leur tour vers l'avenir, et ne sont appréciés comme tels par l'auditeur que rétrospectivement, par rapport au même texte entendu antérieurement en sens droit.'

In the Introduction, we mentioned that for Jankélévitch 'Charm' is achieved by experiencing music in *durée*; therefore he would be unlikely to find 'Charm' in spatialising Messiaen's non-retrogradable rhythm. Nevertheless, this is precisely how Messiaen himself suggests his listeners should 'submit to the strange charm of impossibilities' (Messiaen 1944: 21). Messiaen indicates that the reason listeners must 'submit to the strange charm' is that in a non-retrogradable rhythm, the 'beginning and end are confused because identical' (Messiaen 1944: 21). For listeners, knowing that the beginning and end are identical is only possible if they count the rhythmic values in space, because if they listen to the rhythm in *durée*, there will be 'no symmetries', or anything identical repeated, but only 'irreversible Becoming' (Jankélévitch 2003: 92). In *Traité*, Messiaen claims that non-retrogradable rhythm consists of an '*impossibility in power*' (*impossibilité en puissance*) (Messiaen 1994a: 43). Only if listeners spatialise the rhythmic values in a non-retrogradable rhythm, can they recognise that it is 'impossible' to reverse the order of the rhythmic values because the order of them will remain the same.

Taylor, again, is rather certain about non-retrogradable rhythm's invalidity in a temporal sense; as he points out, 'a palindrome is not heard as a palindrome. It is only a palindrome on paper, or when removed from time by being spatialised in consciousness' (Taylor 2010: 268). Stefan Keym also concludes, in his detailed survey of Messiaen's rhythm, that 'Messiaen's mirror-image reversal of time is a purely symbolic art and represents a clear-cut paradigm of the surrender to spatial categories that Bergson denounced, which are irrelevant for subjective experience' (Taylor 2010: 269). Thus, it is not only that rhythmic dependence on spatialization makes musical experience lifeless and impersonal, leading to Bergsonian philosophers seeking to 'root out' spatialization from musical perception (Jankélévitch 2003: 90), but also, even for 'the most accomplished of listeners', the rhythm presents an intractable difficulty with respect to spatialization during performance, especially when it is superimposed in a complex construction (Healey 2007: 170).

Part 2 – The Philosophies of Musical Perception and Interpretation

Music: in Space or not in Space

Apart from the possibility of picturing the pendulum's oscillations in *temps espace*, Bergson indicates a way of producing them in pure duration, which he calls, 'a qualitative multiplicity' (Bergson 1910: 105). Instead of setting them side by side in order to measure the intervals,

> I shall perceive one in the other, each permeating the other and organizing themselves like the notes of a tune, so as to form what we shall call a continuous or qualitative multiplicity with no resemblance to number. (Bergson 1910: 105)

This is one place where Bergson links musical experience or the perception of 'the notes of tune' to the experience of pure duration. He also mentions that if we forgo the idea of space, whereby we take up a position outside the line of our successive phases of conscious states in order to measure and identify them, instead our 'sensations will add themselves dynamically to one another and will organize themselves, like the successive notes of a tune by which we allow ourselves to be lulled and soothed' (Bergson 103–4). Although the regular beats in music, which resemble the ticks of a clock, divide time into equal portions, and the beats in performance can be measured by successively picturing beats as points in *temps espace*, Bergson seems to insist that the notes of a tune are heard in pure duration. On this view, when listening to a tune, we experience 'a succession of qualitative changes, which melt into and permeate one another, without precise outlines, without any tendency to externalize themselves in relation to one another' and without 'the idea of a homogeneous medium or a measurable quantity' (Bergson 1910: 104–5). The paragraph below shows that Jankélévitch also offers a challenge to the spatialization of musical practice:

> In fact, three-quarters of all musical vocabulary, from Design to Form to Interval to Ornament, is borrowed from the realm of vision. Must we renounce it? But the aesthetics of metaphor wants more still: it wants the musical phenomenon to become a particular object, easy to locate; it aspires to answer the question *what* and the question *where* in unambiguous ways, the first by definitions and the second by localization. But exactly *where*, in the end, is music? Is it in the piano, or on the level of the vibrating string? Does it slumber within the score? Or maybe it sleeps in the grooves of the record? Is it to be found at the tip of the conductor's baton? In effect,

> the general characteristics attributed to ‘music’ often exist only for the eye, by means of the conjuring trick of graphic analogy. The simple particularity of writing, which results from the symbolic projection of a musical act into two dimensions as a score, will suffice for us to characterize the melodic ‘arch’; and a melody that is outside all space, as a succession of sounds and pure duration, is subjected to contagion of graphic signs inscribed horizontally on the staff. In the same way, the chord, a harmony composed of simultaneously perceived sounds, tends to be confused with the vertical aggregation of notes that form its schema; and the parts in polyphonic music seem to be ‘superimposed’, placed in space on top of and underneath one another. (Jankélévitch 2003: 91)

Adorno recognises that notation is spatialised temporality, which belongs to a ‘geometric-musical category’ which is itself ‘anti-mimetic and anti-expressive’ (Adorno 2006a: 53). However, for Adorno, unlike for Bergson, this spatialization should not be ignored in music, as Hofstaetter writes: ‘notation, [or] the musical score that forms the basis for interpretation, [does] not present a homogenous system’ (Hofstaetter 2014: 163). For Bergson and Jankélévitch, the notion of space seems to be solely associated with invariant organisation and unchanging order, whereas with Adornian thought, as Alastair Williams recognises, ‘one can distinguish between an empty, mechanistic experience of space … and a non-subsumptive experience of space in music’ (Williams 1997: 40). Through Adorno’s ‘technique of immanent analysis of the object’, it can be shown that space need not be simply ‘synonymous with reification’ (Williams 1997: 40). Instead, an articulation of ‘spatial experience’ can be envisaged in which ‘the non-coercive interaction’ between the subject and the spatialised score, for example, ‘opens up a critical response to the dead space of empty repetition and image’ (Williams 1997: 40). It remains true that for Bergson, Jankélévitch and Adorno, ‘an uncritical mode of spatial thought is certainly not desirable’, and yet, ‘spatial organization’, as Williams indicates, may ‘give voice to those unchanging … constraints of human life which can enter into relationships with dynamic possibilities of change’ (Williams 1997: 40).

Instead of rejecting the written score, as material in which notes and markings are scattered as points in space, Adorno maintains that ‘the subjective component is contained in this [the material], but not as something that can be separated from the matter itself, something

contingent; rather something that coincides with it' (Adorno 2006a: 56). By involving the subject, Adorno reads the score, not as impersonal symbols, but as constant becoming:

> The written notes have an independent existence that is in motion: this is the subjective side, [in] which music, because it is not unambiguous in itself, but reified only through the force of signification, continues to go against reification. (Adorno 2006a: 64)

For Adorno, it is crucial to recognise the neumic element, which is 'mimetic' and 'gestural', and is 'the true element of immediacy' (Adorno 2006a: 67, 94). The idea of the neumic element can be understood as subjectivity that is mediated by the object. Notation, the spatialization of music, for Adorno is not a mere negation of the expressive and the neumic, but it already contains 'life' which remains to be retrieved. This reminds us of Foster's remark on Adorno's idea of *Selbstbesinnung* (self-reflection): instead of showing that 'there is nothing that cannot be assimilated by the subject', the subject depends on 'what is outside it' and recognises that 'what is "outside" is always already inside' (Foster 2007: 130). For Adorno, this idea of 'self-reflection' applies more generally to music's dependence upon the symbols in musical writing. Musical notation – which contains an 'anti-mimetic, significative, as it were rational element' – 'does not simply diverge from the mimic nature of music, however, but is rather interwoven with it' (Adorno 2006a: 172). Instead of reducing the notes and markings to a static unity of fundamental elements, we go through them with an active subjectivity, and by *Selbstbesinnung* or 'contemplative immersion', 'the immanent processual quality of the work is set free', such that life, or 'the enactment of antagonisms that each work [or the spatialised score, for example] necessarily has in itself', is retrieved, as if 'it becomes something that moves in itself' (Adorno 1997: 176). Adorno gives an example to show that musical writing contains what can be assimilated by the subject: phrase marks are '*not* mensural lines' – 'otherwise they would indicate legato' – but they are instead 'units of structure, of sense' (Adorno 2006a: 94). For Adorno, a line that indicates a group of notes as a phrase is not merely a symbol, for it already has the element of immediacy reflected in the subject. Adorno indicates that, by 'appropriating it [the score] through the subject', we will find that 'the writing … carries its dynamics within itself', and the symbols '*all* have a "neumic" meaning separated from their "mensural" meaning' (Adorno 2006a: 77, 64, 73). Adorno confirms this dialectical relationship between musical writing and music's expression:

> Reading music means imitating it, apprehending its image means understanding it. In other words, the image of the writing is the graphic trace of the construction, as the dialectical counterpart to the expression. (Adorno 2006a: 185)

It is clear that the notion of space is a central aspect of music for Adorno. We could presume that Bergson would think that the rigid line, spatially represented in the score, resembles nothing in a complex conscious state. However, the idea of space is undoubtedly involved in music; at the very least, the performer reading the score is engaged with spatialised material. Jankélévitch also realises that it is necessary, especially for the performer, to include the spatial element in the working process, which fills a gap in Bergson's account of music.

Before the performer can embrace the inconsistency of pure duration, the spatialised score must be carefully learned. As Gallope recognises, 'Jankélévitch harboured no naive supposition that one could simply enter into some kind of sympathy or presence with the quoddity of musical time. Rather, a philosophy based in real experience required a highly learned form of fidelity' (Gallope 2017: 177). Along the lines of Bergson's dualism, Jankélévitch, in *Philosophie première* (1954), also develops a dualism between quiddity, as Gallope summarises, 'a conceptual and intellectual order', and what he calls 'quoddity', which is 'the "thatness" of something, its indescribable and contingent existence as a specific fact', which represents 'the qualitative multiplicity of *durée*' (Gallope 2017: 173–4).

According to his colleague Emmanuel Lévinas, Jankélévitch punctuated his talk with musical examples played by himself in his public lectures and was also said to speak in a rhapsodic manner, as if the lectures were improvised. This allowed Jankélévitch to show 'his audiences in real time how language and music might try to keep up with the astonishing evanescence of *durée*' (Gallope 2017: 175). Lévinas recalls:

> Jankélévitch had a certain way of speaking; a bit haltingly, in such a way that, in the perfect charity of the statement, each word sprang up new, as if unforeseeable in the word that preceded it. As if thought never left the flowing water of its spontaneity, mistrusting the facile aspects of language, its verbal habits and its rhetoric. An original thought – from the depths – but a poetic thought as well: inspired words, which is to say a thought that, by some marvel, only keeps or recreates the secrets of its source in the act of expression. (Lévinas 1994: 84)

However, the improvisation-like lectures 'weren't really wholly improvised'; Jankélévitch's performances 'required a whole range of quidditive supports – detailed preparations, skills, structures, and idioms' (Gallope 2017: 177). In an interview with Vera Feyder, when Jankélévitch was asked whether he improvised his lectures, he replied that, 'not at all. I do not improvise. I pretend. What cunning! I prepare my course very carefully' (Gallope 2017: 177). Jankélévitch had to commit to a kind of preparation that is structured and spatialised before his lectures could convey an impression of *durée* which appeared spontaneous and unpredictable.

While Adorno maintains that we must rely on spatialised notation to retrieve the neumic, the goal of music-making, Jankélévitch says that 'charm' should be 'exuded, without mediation, like a perfume' (Jankélévitch 2003: 59). So, whilst Jankélévitch encouraged us to pursue the 'Charm' in music without the intervention of the idea of space, he contradicted his thesis by failing to prepare his performances and lectures without the aid of space. Jankélévitch writes of 'a human being that sings expresses him- or herself through pure efferent spontaneity, apart from any utility or rational argument' (Jankélévitch 2013: 29), but this 'pure efferent spontaneity' remains mediated. As Gallope notes, for Jankélévitch, 'the improvisation is scored' and 'scripted mediation is always necessary' (Gallope 2017: 177). In contrast to the performer, the listener may be able to immerse themselves in duration. Gallope indicates that, 'Jankélévitch heard music as exemplary of an inexhaustible improvisation fueled by the inconsistent vitality of life itself' (Gallope 2017: 182). Jankélévitch is aware of the importance of spatial writing, the perception of which, however, should not be retained. Instead we need to aim to reduce it, or ideally to remove it from consciousness.

As mentioned in the Introduction, while unfettered life is unthinkable for Adorno, Bergson maintains that, so long as we retain the experience of *durée*, utopia is presented to us. Bergson uses the example of the strokes of a clock. Instead of setting the strokes side by side, counting them by 'a process of addition', and 'bringing in the image of a juxtaposition of distinct terms', we perceive the strokes as a quality, such that we do not measure their intervals or observe their number, but notice the qualitative changes of our feeling from the first to the last stroke; thus, *durée* is 'presented to immediate consciousness' and 'it retains this form so long as it does not give place to a symbolical representation' (Bergson 1910: 128). If we question what has taken place, we notice that 'I perceive that the first four sounds had struck my ear and even affected my consciousness, … that the sensations produced by

each one of them … had melted into one another in such a way as to give the whole a peculiar quality, to make a kind of musical phrase out of it' (Bergson 1910: 127).

We can also identify the Bergsonian leap from 'fettered life' to spiritual or utopian experience in *Les Deux Sources de la morale et de la religion*. By adhering to and forming patterns, our consciousness, as if 'it were from a mould', becomes shaped like a 'tool-making intelligence', which is 'the condition of the individual' in a society where 'organization is highly perfect', and yet, 'the effect of it is sheer automatism' (Bergson 1935: 178). If we recognise that 'life is a thing at least … desirable', why not, as Bergson suggests, recover 'the confidence' that we lack by 'turning back for fresh impetus', or acknowledging the vital impetus? (Bergson 1935: 180). Amidst the utilitarian aspect of life, our consciousness is occupied by intelligence, but Bergson affirms that 'all around intelligence there lingers still a fringe of intuition, vague and evanescent' (Bergson 1935: 180). Once we become aware of the 'fringe of intuition', we can 'fasten upon it, intensify it, and above all, consummate it in action' (Bergson 1935: 180). This grasp of the 'fringe of intuition' is, as Bergson indicates, the 'attachment to life' (Bergson 1935: 180, 181). Thus it is possible for us to experience the higher significance of life: 'a soul strong enough, noble enough … would be content to feel itself pervaded, though retaining its own personality, by a being immeasurably mightier than itself, just as an iron is pervaded by the fire which makes it glow' (Bergson 1935: 181). Unlike Adorno, Bergson remains optimistic that human beings are capable of removing the burden of the practical element of life and experiencing life in its spiritual richness.

It seems possible for the listener to make a 'total leap' from the notion of space or day-to-day practical life to the experience of pure duration and yet, for the musical performer, a complete shift from space to duration may remain unachievable. For Jankélévitch, 'in the lecture hall, at the piano, making music or philosophical thought purely and immediately present' without scripted mediation 'was strictly speaking impossible' (Gallope 2017: 177). Bergson's dualistic view of memory will inform the performer's transition from the learning process to performance.

Bergson on Memory

In *Matière et mémoire: essai sur la relation du corps à l'esprit* (1896), Bergson introduced two kinds of memory. Habitual or motor memory 'exists in the forms of motor mechanisms,

the acquired, habitual responses to objects of certain kinds, from evolutionarily basic responses such as those prompted by a food source, or a physical danger, to more fine-tuned responses such as those called for by activities such as playing the piano, or driving a car'. The other kind of memory is pure memory, which 'consists of the entirety of past experiences stored independently of the motor mechanism and its relation to the instrumental demands of action' (Foster 2007: 121). It can be recognised that this dualistic view of memory is derived from the two perceptions of time – space and duration – demonstrated in *Time and Free Will*. As Foster suggests, 'Bergson's distinction between habitual memory and pure memory develops the earlier distinction in the *Essay* concerning quantitative and qualitative multiplicity' (Foster 2007: 124).

Bergson gives the example of a lesson. When we say we have learnt the content of the lesson, a poem by heart, for example, it can be recited from memory, which means that each word of the poem has been imprinted on our memory; this memory 'has *all* the marks of a habit' (Bergson 1991: 80). As Bergson indicates:

> Like a habit, it is acquired by the repetition of the same effort. Like a habit, it demands first a decomposition and then a recomposition of the whole action. Lastly, like every habitual bodily exercise, it is stored up in a mechanism which is set in motion as a whole by an initial impulse, in a closed system of automatic movements which succeed each other in the same order and, together, take the same length of time. (Bergson 1991: 80)

This is habitual memory, which can be repeated, and repetition 'is merely to utilize more and more the movements by which the first was continued, in order to organize them together and, by setting up a mechanism, to create a bodily habit' (Bergson 1991: 83–4). But pure memory is the memory of 'the successive phases of the process': in the process of studying the lesson, each reading has 'its own individuality' in memory, such that the second reading, for example, is distinguished from the first and the third reading and it 'stands out in my mind as a definite event in my history' (Bergson 1991: 79). From the first reading to the last, the lesson's content has not only become better known, but each reading is also seen as something new; it is the memory of 'personal memory-images', as Bergson writes, which 'picture all past events with their outline, their color and their place in time' (Bergson 1991: 80, 88).

Pure memory, 'in the form of memory-images … neglects no detail … regardless of utility or of practical application' (Bergson 1991: 81). Motor memory, on the contrary, is goal-orientated: it comes into play as a mechanism which is 'bent upon action, seated in the present and looking only to the future' (Bergson 1991: 82). Bergson also claims that pure memory is 'memory par excellence', whereas habitual memory or motor memory is '*habit interpreted by memory* rather than memory itself' (Bergson 1991: 84).

We are often inclined to place this mechanical memory in the foreground because of its usefulness (Bergson 1991: 83). The memory-images, stored in pure memory, on the other hand, would 'distort the practical character of life', as Bergson indicates, 'if our actual consciousness, a consciousness which reflects the exact adaptation of our nervous system to the present situation, did not set aside all those among the past images which cannot be coordinated with the present perception and are unable to form with it a useful combination' (Bergson 1991: 84). In Bergson's view, mechanical memory constantly inhibits pure memory, insofar as we are generally happy to complete our present tasks in a useful way, so that 'confused recollections, unrelated to the present circumstances', normally 'fade away into an immense zone of obscurity' (Bergson 1991: 85).[41] But let us suppose that, instead of only doing what is useful, we free ourselves from utilitarian dictates for a moment. In this freedom, when there occurs 'an accident which upsets the equilibrium maintained by the brain between the external stimulation and the motor reaction', 'these darkened images [can] come forward into the full light' (Bergson 1991: 85). But Bergson realises that, unfortunately, we do not normally allow 'these darkened images' to emerge in daily life, except in dreams (Bergson 1991: 85).

The habitual memory, which for Bergson is somewhat artificial, can be linked to the process of learning a piece of music: we pass a number of objects before our eyes, such as notes and

[41] Notice that Bergson, instead of being merely dualistic, does suggest some interaction between motor memory, which enables us to accomplish a task in a practical and useful way, and 'confused recollections', which are present under the practical operation. In *Time and Free Will*, Bergson also asks: 'when we explicitly count units by stringing them along a spatial line, is it not the case that, alongside this addition of identical terms standing out from a homogeneous background, an organization of these units is going on in the depths of the soul, a wholly dynamic process, not unlike the purely qualitative way…?' (Bergson 1910: 123). The interaction between the perception of space and inner states is presented rather clearly here. In Foster's words, 'Bergson is tantalizingly close to uncovering something like a dialectic of the concept in Adorno's sense, that is, a type of writing that would use concepts to bring to the surface the experiential conditions that cannot be said within those concepts. This would be, for Adorno, a way of reaching the nonconceptual while staying rigorously within the concept' (Foster 2007: 127). However, Bergson neither develops this dialectical relationship between space and duration, nor does he attribute any spiritual significance to this kind of interaction. Instead of experiencing 'flashes' in space like Adorno, it seems that for Bergson, only abandoning the notion of space and looking into ourselves can 'lead us into the "beyond"' (Foster 2007: 131).

markings (dots or tenuto markings, etc.), each of which, as it is perceived, 'provokes on our part movements, at least nascent, whereby we adapt ourselves to it':

> these movements, as they recur, contrive a mechanism for themselves, grow into a habit, and determine in us attitudes which automatically follow our perception of things. This, as we have said, is the main office of our nervous system. The afferent nerves bring to the brain a disturbance, which, after having intelligently chosen its path, transmits itself to motor mechanisms created by repetition. Thus is ensured the appropriate reaction, the correspondence to environment – adaptation, in a word – which is the general aim of life. (Bergson 1991: 84)

Thus, when we say a piece of music is learnt or memorised, we are more likely to refer to the habitual or motor responses to the notes and markings, or to the ability to repeat what is memorised. Bergson confirms that it is necessary to employ motor memory to learn something: 'when we really wish to know a thing, we are obliged to learn it by heart, that is to say, to substitute for the spontaneous image a motor mechanism which can serve in its stead' (Bergson 1991: 85). Nevertheless, if we rely only on motor memory to play music, we fail to present a genuine experience of the music. This is because 'a learned recollection' of the notes and markings in motor memory, even though it plays an important role in the learning process, 'passes out of time in the measure that the lesson is better known' through the process and 'becomes more and more impersonal, more and more foreign to our past life' (Bergson 1991: 83). Furthermore, the recollection of music in motor memory reduces experience of a performance to a mere set of habitual responses which can be repeated, such that we dismiss the unique flux of music that endures in duration. So how do we overcome this reductive tendency and recover genuine experience?

For Bergson, it is an error to believe that 'the mathematization of experience' – by which memories are divided up and 'lined up side by side, distinct from one another, like marbles in a bag' – is genuine (Forster 2007: 124). To recover the experience of the 'moving, changing colored, living unity of *durée*', memories should be 'integrated into a perception by a process' that Bergson calls 'expansion' or 'dilation' (Foster 2007: 126, 124; Bergson 1991: 165). Here we notice the tension between the two poles: on one side there is a process of contraction (Adorno's term), where we reduce experience to points in space for practical use, and on the other side there is a process of expansion or dilation, where we instead gain the richness of experience which is 'ordinarily hidden by the focused working of the habitual

scheme of action' (Foster 2007: 125). In order to visualise this process of expansion, Bergson offers the metaphor of 'a nebulous mass, seen through more and more powerful telescopes', which consequently 'resolves itself into an ever greater number of stars' (Bergson 1991: 166).

In Théodule-Armand Ribot's *Les maladies de la mémoire* (1881), we find an idea of 'organic memory' that in many ways anticipates Bergson's notion of mechanical memory or habitual memory. Ribot indicates that 'the true type of organic memory' is not merely found in 'the simple form of reflex action' as an automatic and primitive function, but rather, organic memory – acquired by man, as 'the very basis of our every-day existence' – requires 'the formation of associations', by which 'primitive reflex actions … must be properly grouped, some combined and other excluded' (Ribot 1882: 14–15). Ribot gives an example of a child learning to write: at the beginning, he not only uses his hand, but 'must also move his tongue, the facial muscles, and perhaps his feet'; by exercise, 'certain movements are fixed to the exclusion of others', such that memory is formed 'in the nervous elements corresponding to the motor organs' (Ribot 1882: 15–16). Through repetition, the movement becomes 'better and better known', the process of which is 'analogous to the formation of acquired states (habits)' (Ribot 1882: 52). For Ribot, the type of memory employed in learning to write is very similar to Bergson's notion of motor memory, which, as a kind of motor mechanism, involves nervous elements for the production of a movement and becomes gradually more stable through repetition. Just as Bergson recognises that the mechanism of some habitual movements, stored in motor memory, belongs to 'the main office of our nervous system' (Bergson 1991: 84), Ribot believes that a state of consciousness requires 'a particular condition of the nervous system', and 'this nervous action is not accessory, but an integral part of the given state, … the fundamental condition of its existence' (Ribot 1882: 36).

Ribot's theory of memory does not seem to leave room for what Bergson calls 'confused collections' or 'darkened images' in pure memory (Bergson 1991: 84). As Ribot confirms, 'organic memory supposes … *the formation among them* [that is, nervous elements] *of determinate associations for each particular act*', which become more and more stable through repetition (Ribot 1882: 26). In *Matière et mémoire*, Bergson notices this kind of determinism in Ribot, whereby the repetition of a particular act corresponds to 'the building up of motor apparatus' organised in the 'nervous system', which ignores 'anything mysterious in the mechanism of the operation' (Bergson 1991: 94). As mentioned before, for

Bergson, ‘the mysterious’ is always hidden in practical life, but he strives to revive ‘the mysterious’, or ‘the darkened images’. As Bergson indicates, by ‘the mysterious operation … [,] the same organ, perceiving in the same surroundings the same object, discovers in it a growing number of things’ (Bergson 1991: 101). In *Les maladies de la mémoire*, Ribot categorises ‘hallucination, vertigo, and dreams’ as illusions, which are not recollections (Ribot 1882: 47–8). As Ribot claims, these illusory images remain ‘isolated as if suspended in consciousness, with no relation to other states having a fixed position, incapable of classification’ (Ribot 1882: 48). Unlike Bergson, who attempts to revive pure memory, Ribot seems to emphasise, or to be compelled to concede, the impersonal aspect of memory by which every state of consciousness is to be subsumed under classification and organisation. Ribot writes:

> In what we designate under the collective name of memory there are series having every degree of organization, from a nascent state, to that which is most highly developed. There is an incessant transition from the unstable to the stable, from a state of consciousness with indeterminate acquisition to an organic state the acquisition fixed. Thanks to this continual movement toward organization, there is a simplification, an order, which leaves room for the highest form of thought. Left to itself, with no opposing forces, the process of registration would tend to the progressive destruction of consciousness, and would transform man into an automaton. (Ribot 1882: 65–6)

Ribot, following William Benjamin Carpenter, also admits that organic memory enabled ‘an accomplished pianist’ to render ‘a piece of music while asleep, a fact which must be ascribed less to the sense of hearing than to the muscular sense which suggested the succession of movements’ (Ribot 1882: 17). Organic memory or motor memory help us adapt to practical life, and yet we might not allow this kind of memory to dominate our piano playing. Bergson certainly provides ‘opposing forces’ and prevents mechanical memory from transforming us into automatons.

Theories of Performance

To Dream

Both Bergson and Adorno realise the tendency to reify or to spatialise is a 'barrier', but while Adorno's method is to 'have it in order to negate it', Bergson's is to reduce it or even remove it:

> Our eye perceives the features of the living being, merely as assembled, not as mutually organized. The intention of life, the simple movement that runs through the lines, that binds them together and gives them significance, escapes it. This intention is just what the artist tries to regain, in placing himself back within the object by a kind of sympathy, in breaking down, by an effort of intuition, the barrier that space puts up between him and his model. It is true that this aesthetic intuition, like external perception, only attains the individual. (Bergson 1998: 177)

For the performer as an artist, the aim is not to 'repeat' the spatial representation of the music or the habitual responses to the symbols, instead we should try to reveal the irreversible *durée* or 'confused recollections'. We do not normally show the 'darkened images' in daily social and practical life (Bergson 1991: 85), but in music we need to be unafraid in bringing out the colourful and non-repeatable *durée*. As performers, to quote Bergson on recalling a pure memory, 'we must be able to withdraw ourselves from the action of the moment, we must have the power to value the useless, we must have the will to dream. Man alone is capable of such an effort' (Bergson 1991: 82–3). Therefore, for Bergson, by repressing the notion of space and letting the 'darkened images' in pure memory emerge, the performer has the potential to encounter the same conditions that we experience in dreams. Bergson writes:

> For sleep, by relaxing the play of the organic functions, alters the communicating surface between the ego and external objects. Here we no longer measure duration, but we feel it; from quantity it returns to the state of quality; we no longer estimate past time mathematically: the mathematical estimate gives place to a confused instinct, capable, like all instincts, of committing gross errors, but also of acting at times with extraordinary skill. (Bergson 1910: 126–7)

As in a dream, we should no longer play music with mere motor responses to the written symbols and no longer perceive the score in *temps espace*, in which we measure the beats or

temporal positions of the notes according to strict definitions of notation; instead, in Bergson's words, 'we feel it'. Therefore, the perception of *temps espace* 'gives place to a confused instinct', which might cause the performer to commit errors. For example, if we apply this transition from measuring to feeling to the notion of tempo, it allows the performer to deviate from the equally divided beats and clearly indicated lengths of the notes through the use of *rubato*. In the Introduction we already observed that, according to Bergson, the idea of space prevents us from acting freely through our 'whole personality'. From a Bergsonian perspective, this kind of *rubato* is achieved through our 'free act' by giving up the perception of space (Bergson 1910: 172).

Just as we revive a pure memory through expansion, by which 'our entire personality, with the totality of our recollections, is present, undivided within our actual perception' (Bergson 1991: 165), so we reveal the 'Charm' in performance through pursuit of the 'whole personality'. As Jankélévitch puts it: 'the Charm … is always total; that is, it exists, or does not; it is not a total equal to the sum of its parts but an indivisible and impalpable totality' (Jankélévitch 2003: 53). This freedom can also be challenging, as Jankélévitch notes, since musical performance exists only in 'the dangerous half-hour' (Jankélévitch 2003: 78) where we do not simply follow the notes we already know, but we instead have the 'dangerous' task of exploring the inconsistent flux of *durée* that we have not yet experienced. In Carolyn Abbate's well-known essay, 'Music – Drastic or Gnostic?', which 'negotiates and explains the accommodation of her recent critical and performative practice to Jankélévitch's positions' (Ayrey 2006: 352), Abbate argues that performances 'need not remain a protected half-hour' and 'need not become just another object awaiting decipherment, a recordable text subject to some analytical method yet to come' (Abbate 2004: 513).

If Bergson attempts to revive 'the feeling' of duration by excluding intellectual mathematical calculations, the father figure of modern philosophy, René Descartes, on the other hand, in his *Meditations on First Philosophy*, seems in many ways to repudiate the faculty of sensory perception. As Descartes indicates, 'it [sensory perception] presupposes no intellectual act on my part' and 'in many cases the grasp of the senses is very obscure and confused', such that 'the ideas … are produced … often even against my will' and I can often be deceived by these sensory ideas (Descartes 2017: 62, 63, 66). If we merely follow the sensory perception of things, we might easily fall into errors. Descartes gives an example of someone being tricked 'by the pleasant taste of some food into eating the poison concealed inside it'

(Descartes 2017: 66). In this case, we need to be 'under the control of the will or, consequently, of the mind' in order to detect the possibility of being poisoned (Descartes 2017: 66–7). Unlike Bergson, for Descartes, 'the will' is not employed to free ourselves from the constraint of an utilitarian way of life and commit ourselves to the useless yet colourful *durée*, but instead, 'the will', or 'the mind', is adopted to use the intellect in order to examine 'all the causes of error' and to maintain 'the continued well-being of the body' (Descartes 2017: 70, 69). Descartes also admits the fact that we make mistakes and commit errors about particular things. However, the errors are not derived from Bergson's notion of the fundamental self, but are signs of 'the weakness of our nature' (Descartes 2017: 71). In practical life, we might not want thoroughly to follow our 'feelings', which open us up to the danger of committing errors or of damaging our bodies, but for the Bergsonian philosopher, we should be courageous enough to 'dream' and to let the 'half-hour' of a musical performance remain dangerous.

The Work or the Inconsistent Flux?

Like Bergson, who does not encourage us to perceive the impersonal, for Adorno, mere fidelity to spatialised writing is not enough, because it will not 'provide insight into the state of the work' (Adorno 2006a: 197). Adorno instead argues that performance requires an 'imitation' or 'x-ray image of the text' – the task of which is to render visible 'all the relations, transitions, contrasts, characters, fields of tension and resolution' concealed in the notation and 'the sound's sensory surface' – which can be destroyed by the mere 'fidelity of reading' (Adorno 2006a: 197, 202). In other words, 'an all-too-faithful interpretation that mechanically reproduces what is presented in the score' is 'senseless' (Hofstaetter 2014: 164). Adorno also believes that 'a subjective experience of the context' is what we need to reveal the musical sense (Adorno 2006a: 10). Just as the process of *Selbstbesinnung*, mentioned in the Introduction, involves 'emotive and sensual qualities' (Hofstaetter 2014: 160), interpretation should similarly elucidate the 'sensual suchness' of the musical symbols that remains resistant to being 'arrested, spatialized' (Hofstaetter 2014: 164). Adorno suggests that 'to the extent that music is 'interpreted', it is *always* "rubato"' (Adorno 2006a: 7). *Rubato,* for Adorno, is not achieved by shifting our attention from the spatialised score to the 'whole personality' but rather, in contrast to the Bergsonian method, is realised through a dialectical relationship between the self and the score. Instead of chasing after temporal

inconsistency as ‘infinite creativity’ in performance (Gallope 2017: 180), for Adorno the subjective element of a piece of music ‘does not exist [independently] but rather only ever as a relationship to the material’ (Adorno 2006a: 56). Barbara R. Barry acknowledges that for Adorno, the ‘focused attention on notation is the bedrock of performance, enabling the work to be articulated with the utmost care’ (Barry 2009: 83). For Adorno, analysis of the score is needed to recognise the tensions and dynamics beneath the symbols. In Barry’s words, ‘the outpouring of unbridled emotion’ should be controlled by ‘serious analytical investigation’; Dionysus should be restrained by Apollo (Barry 2009: 91). ‘Play’ or performance for Adorno, in contrast to Jankélévitch and Abbate, is not ‘equated with ambiguity or infinite deferral, but, informed by analytical insights’ which ‘[bestow] precision and exactness onto the abstract character of the written text’ (Hofstaetter 2014: 165).

Abbate, following Jankélévitch’s position, refuses analytical interventions, and claims that it is in ‘the irreversible experience of playing, singing, or listening that any meanings summoned by music come into being’ (Abbate 2004: 505). ‘Retreating to the work’ or ‘dissecting the work’s technical features’ displaces the irreversible experience and demonstrates ‘the wish *not* to be transported by the state that the performance has engendered in us’ (Abbate 2004: 505–6). For Abbate, focused attention on the work and analytical insights not only bypass ‘the uncanny qualities’ of performance, but also elude the possibilities of musical becoming by ‘trying to domesticate what remains nonetheless wild’ (Abbate 2004: 508).

Indeterminacy and Determinacy of Interpretation

Just as the perpetual becoming of *durée* reflected in the soul cannot be determined, interpretation as free act through the whole personality cannot be foreseen. Viewing music through the lens of the inner self and refusing the idea that the score contains music, Jankélévitch recognises precisely the indeterminacy of interpreting a work:

> In effect, inexpressible nuances of disposition, the states of mind and feelings, are as innumerable in the process of creation as are the musics to which they could give rise. How would the performer – or the philosopher – in turn know how to choose among the infinitude of qualitative nuances or happen upon precisely that specific image or intuition – not subject to articulation – that has given rise to this or that musical work?

> And more still: finding that it is standing before infinity, possibility, and indeterminacy, the mind loses itself in an inextricable crisscrossing of bifurcated bifurcation, in a labyrinthine network of crossroads that branch into crossroads of crossroads. (Jankélévitch 2003: 63)

As discussed in the previous chapter, for Jankélévitch, musical creation is not determined, but is based on states of mind and feelings. Along the same lines, interpretation is not determined when we let intuition 'speak'. Bergson notes 'that under the influence of the same external conditions I do not behave to-day as I behaved yesterday is not at all surprising, because I change, because I endure' (Bergson 1910: 209). And according to the constant becoming of consciousness, we allow interpretation as free act to change with it. Abbate admits that Jankélévitch's acknowledgement of music's indeterminacy 'frees us': by submitting to the indeterminacy, we will be able to experience music's 'range of effects', including 'seeming to be strange or beautiful noise as well as firing up social or poetic or visual or other associations' (Abbate 2004: 516). For Abbate, focusing on the text, like Adorno, or 'restricting music to any determinate meaning' means 'not taking advantage of it', and she asks, 'why repay the freedom we are given by putting the gift-giver in a cage …?' (Abbate 2004: 517). By allowing the inconsistent flux of musical becoming, we receive, as Abbate puts it, 'a category of knowledge that flows from drastic actions or experiences and not from verbally mediated reasoning' (Abbate 2004: 510). In contrast to Adorno's text-based method, Abbate evaluates what she calls 'drastic knowledge', engendered at the moment of performance (Abbate 2004: 535), which for her is what dominates the performer's consciousness. In the next chapter, we will discuss how performance can be informed by this kind of 'drastic knowledge'.

Adorno also recognises 'polyvalence' in terms of interpreting a piece of music, yet instead of relying on the contingency of consciousness, 'the polyvalence is determinate' and 'subject to Right and Wrong' (Adorno 2006a: 65, 56). Polyvalence can sometimes mean that, within the same key, different harmonic functions are used simultaneously (Leeuw 2005: 87). Instead of giving advice on harmony, however, Adorno here seems to suggest that there are different possibilities for interpreting a piece of music. Adorno believes that the changes are 'predetermined by the works themselves, not dependent on preference or even on the dominant manner among performers' (Adorno 2006a: 194) and that a dialectical interpretation is the only adequate way to perceive the particularity of works as 'they are

encountered in experience' (Hofstaetter 2014: 158). Bergson and Jankélévitch present themselves, for Adorno, as relativists who mark a clear distinction between subject and object, such that the self and the score or work 'are hopelessly estranged' (Adorno 2006a: 213); in this case, the score is treated as raw material for the subjective will, which Adorno thinks 'will end up repeating the idealist error of conceiving objectivity as a projection of the subject' (Foster 2007: 129). For Adorno, this idealist approach to musical interpretation, of the kind Jankélévitch seems to present, only accounts for 'the specific "aroma" of things' and fails to recognise 'the expressive dimension' of the score (Hofstaetter 2014: 158). Interpreting a work with an overdependence on the subject, as Adorno writes, 'presupposes a separation of the object that is-for-itself and the observing subject, which can view it in different ways as it pleases' (Adorno 2006a: 213). Adorno instead proposes the idea of a 'true interpretation' that does not consist in 'the perspectival observation of a work', but rather, recognises that 'the work itself incorporates the dialectic of its observation and thus grants it objectivity through change' (Adorno 2006a: 213).

Part 3 – The Combination of Irreconcilables

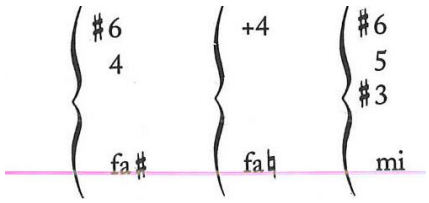
Messiaen's Anachronism

Thus far, we have discussed Messiaen's 'advanced' or 'new' constructions, so now we should turn our attention to the 'old' ones. In the first movement, the second piano part strictly adheres to the metrical beats and the tonal direction and musical phrasing abundantly reflect the upbeat/downbeat structure. Instead of manipulating values with free augmentation and diminution, as piano 1 does, the second piano paces itself very much in accordance with the given time signature of 4/4 and this strong dependence provides a certain rhythmic security of the kind established in past centuries. One of the prominent features in piano 2, as distinguished from the first piano, is the metrical and tonal construction of phrases, as indicated by the phrase marks. The first phrase confirms its tonality by starting with a root-position A major chord and finishing with the second inversion of an A major chord; the second phrase moves to the 'borrowed' subdominant from the parallel minor key in bar 4, providing variety through the contrasting scale form; then, in bar 6, the harmony ends on the supertonic triad, which functions as a pre-dominant; in bar 7, the dominant chord arrives, before resolving to the tonic in bar 8. All the harmonies are connected and contrasted, such that each chord realises its function in the linear movement. For example, from the tonic chord in bar 3 to the 'borrowed' subdominant in bar 4, since the tonic is the centre of the harmonic progression, the harmony displays the process of moving from certainty to uncertainty, and the D minor chord in bar 4 creates ambiguity in the key of A major. The pre-dominant, B minor chord in bar 6 has a tendency toward the dominant, and the dominant is conditioned to be resolved by the tonic, and so on. Particular functions, attributed to the chords in piano 2, offer different weights, and consequently the music naturally presents an internal dynamic throughout the first movement. The phrasing marked by Messiaen is also in cooperation with this progressive movement.

In the fourth movement, 'Amen du Désir', from bar 11, the second piano plays 'the passionate theme (*Le theme passionné*) (Messiaen 1996: 250), maintaining a metrical pulse in 3/4 with an exacting consistency. Here the downbeats are emphasised by their harmonic importance and longer values, whilst the upbeats tend to lean towards the downbeats in accordance with the tonal direction. This adherence to metrical pulse is most clear at bar 19 onwards. From bar 19 to the first chord in bar 20, the chords exemplify what Messiaen calls a 'résolution exceptionnelle' (Messiaen 1996: 250). Example 2.4 from *Traité* shows the

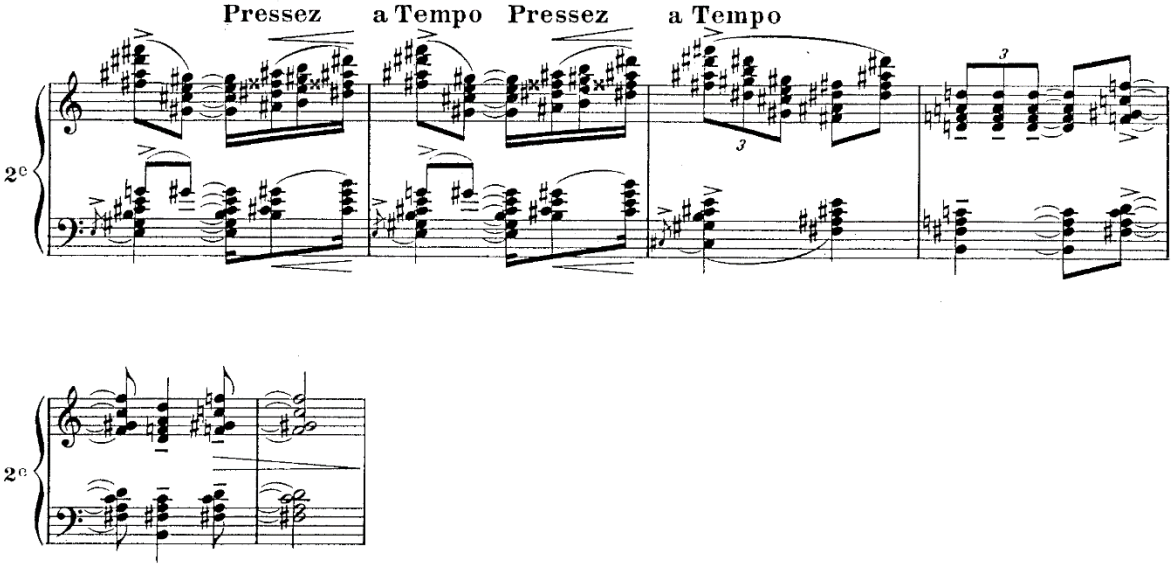
harmonic progression from bars 19 to 20. The B major chord with an added sixth is written on the downbeat and the passing chord is written on the upbeat, and it is resolved in E major also with an added sixth, which is , according to Caroline Rae, 'very French' (Rae 2008: 199).

Example 2.4: Messiaen's illustration of the harmony at bars 19–20 in 'Amen du Désir' (Messiaen 1996: 250)



Then from bar 20 to bar 22 (Example 2.5), the E major chord is emphasised three times in the left-hand part with the descending and ascending triads in the right hand. It should be noted that in bars 20–1 of the right-hand part, the C sharp minor chord – which participates in the harmony of the E major chord (with added sixth) in the left hand – is preceded by an expressive appoggiatura emphasised on the downbeat of each bar. We can see that these chords are neatly organised within each bar, and that phrasing, dynamics and harmony (including melody) in the second piano part all conform to the metrical tradition.

Example 2.5: Messiaen *Visions de l'Amen*, 'Amen du Désir', bars 20–5



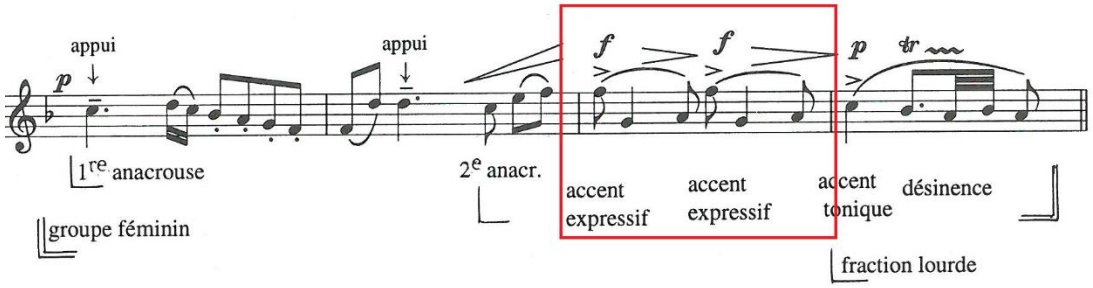
Putting the fourth volume of *Traité* together with the score of *Visions*, Balmer, Lacôte and Murray find a link between the passage at bars 20–1 in 'Amen du Désir' (Example 2.5) and a passage in the first movement of Mozart's Piano Sonata K. 333. They notice in this passage of 'Amen du Désir' not only that Messiaen borrows Mozart's melodic contours (*contours mélodiques*), but also that the melody and accentuation (*la mélodie et l'accentuation*) are linked to Mozart's work (Balmer, Lacôte and Murray 2017: 442). In the revised and expanded version of Robert Sherlaw Johnson's well known book, *Messiaen*, Rae indicates that Mozart's music 'epitomises the principles of terseness, clarity and logic that have long been prized by the French' (Rae 2008: 198). The principles of terseness and clarity are reflected in compositions of French composers, but also in French pianism, which will be discussed in detail in the fourth chapter. In addition to the resemblance of Mozart in 'Amen du Désir', Mozart's music 'figured prominently in Messiaen's teaching at Paris Conservatoire' (Rae 2008: 198). Among the other composers included in Messiaen's analysis class, 'Mozart appears at the top of the list' (Boivin 1995: 38). As Boulez recalls, 'I also remember Mozart's *Don Juan*, which he analysed not only for harmony but also for the melodic aspect, which he found very rich, as well as for the rhythmic articulation' (Boivin 1995: 37).[42] The Mozartian passage in 'Amen du Désir' in bars 20–2 certainly presents Messiaen's affinity to 'the melodic aspect' and 'the rhythmic articulation' of a passage in Mozart's Piano Sonata K. 333.

In *Traité*, Messiaen gives an example of a passage from the first movement of this Mozart Sonata (Example 2.6). Messiaen indicates that the 'expressive accent' is stronger than the 'tonic accent' (Messiaen 1997: 138). The sonata is actually in B flat major; the passage quoted by Messiaen is in B flat major's dominant region, F major (Example 2.7). As the key signature shown in his example suggests (Example 2.6), Messiaen seems to ignore the key of the first movement of the Mozart Sonata and analyses this passage as in F major. It is also necessary to point out that when Messiaen mentions 'tonic accent', he does not mean an accent on tonic harmony. The notion of tonic accent refers to melodic/rhythmic accentuation, akin to accentuation in spoken language. As Vincent P. Benitez recognises, following Vincent d'Indy, who believed that 'accents affected music in a manner analogous to the effects of accents on spoken language', Messiaen thinks of accents in terms of 'both spoken and musical language' (Benitez 2000: 134). In *Technique*, Messiaen mentions an approach to
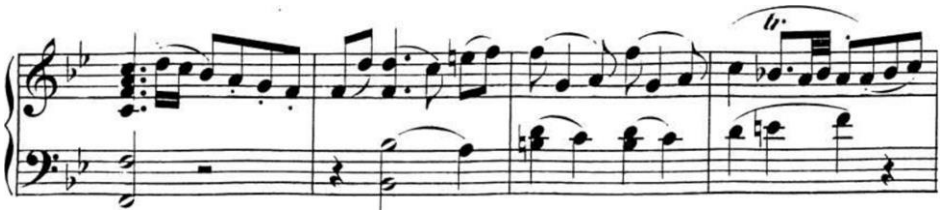
[42] Original French: 'Je me souviens aussi du *Don Juan* de Mozart, qu'il analysait non seulement pour l'harmonie mais aussi pour l'aspect mélodique, qu'il trouvait très riche, ainsi que pour l'articulation rythmique.'

melodic accentuation, widely found in Mozart, which consists of a three-fold phrase: 'upbeat [or preparation]-accent-termination' (Messiaen 1944: 56). As Benitez indicates, this is 'an extension of the tension-relaxation principle (Benitez 2000: 134). These three parts can be identified in Messiaen's annotated Mozart example, which includes the *anacrouse* as upbeat or preparation, accents (the expressive accent and tonic accent) and *désinence* as termination (Example 2.6). The idea of 'groupe féminin' (feminine phrase), as shown in the example, is informed by d'Indy. In *Cours de composition musicale*, d'Indy distinguishes two types of phrase: masculine and feminine. The difference between the two types of phrase is recognised by distinguishing whether the heavy part of the phrase contains only one note or more than one note. A masculine phrase, in which the heavy part contains 'only one note', is contrasted by a feminine phrase, in which the heavy part, as Gareth Healey clarifies, is formed of 'an accented principal note followed by one or many notes whose intensity decreases' (Healey 2016: 21). According to d'Indy, in a masculine phrase, 'the tonic accent is placed on the weak part of the phrase' (*la place de l'accent tonique est sur la fraction légère du groupe*), whereas in a feminine phrase, 'the tonic accent will naturally be placed on the heavy part of the phrase, which contains the ending' (*l'accent tonique sera naturellement place sur la fraction lourde du groupe, qui contient la désinence*) (d'Indy 1912: 33). In the case of the passage in Mozart, Messiaen identifies this passage or phrase as 'groupe féminin', in which the heavy part (*fraction lourde*) at the last bar of Example 2.6 contains 'an accented principal note followed by one or many notes whose intensity decreases' (Messiaen 1997: 139; Healey 2016: 21). By following d'Indy's doctrine of tonic accent, Messiaen detects the the tonic accent (*accent tonique*) in the heavy part (*fraction lourde*) of the phrase in Mozart (Messiaen 1997: 139). Messiaen also identifies that the tonic accent is preceded by the expressive accent which is in the weak part of the phrase and which, following d'Indy's notion of expressive accent, 'prevails in intensity over the tonic accent' (d'Indy 1912: 36).

Example 2.6: Messiaen's example of a passage from Mozart Piano Sonata K. 333 (Messiaen 1997: 139)



Example 2.7: Mozart's Piano Sonata K. 333, First Movement, bars 24–7



The expressiveness of the appoggiatura on the downbeat of bar 26 of the Mozart Sonata is rather evident (Example 2.7). In *Technique*, Messiaen suggests, 'let us prepare what is most essential in the appoggiatura: the expressive accent' (Messiaen 1944: 56). The appoggiatura in bars 20–2 of Messiaen's 'Amen du Désir' certainly resembles the expressive accent in Mozart and the expressiveness of the appoggiatura in Messiaen also overwhelms the ending of the phrase in bars 23–5 (Example 2.5). As well as the fact that the melody in *Visions* is transposed up a semitone by comparison to Mozart, the rhythm is slightly changed in order to add more impetus, with three semiquavers, in place of Mozart's single quaver, in the ascending part of the melody (Example 2.5). In his imitation of Mozart's melodic and rhythmic structure, so Balmer, Lacôte and Murray indicate, Messaien employs 'borrowing both as a melodic guide and as a model of rhythmic structuring and phrasing' (*tant comme guide mélodique que comme modèle de structuration rythmique d'un phrasé*) (Balmer, Lacôte and Murray 2017: 443).

The analysis above shows not only that the rhythm and other elements in the example obey a traditional metre, but also that they present a rather direct imitation of music from the classical period. Messiaen could alternate quite dramatically between the two types of construction: one tightly connected with the 'metrical past' and another in which rhythm is unrelated to metre. In other words, in the two distinct materials found in *Visions*, Messiaen on the one hand attempts to leap outside the past completely, despite requiring traditionally equal divisions to construct his rhythms, and on the other hand, he conforms to the past.

As suggested before, Adorno would not have praised Messiaen's rhythmic invention, neither would he have approved of the strictly metrical material. As Adorno claims, 'not everything is possible in every age' (Adorno 2006: 31). For Adorno, 'musical means themselves have a historical tendency' and specific traits of different musical materials, which 'contract and expand in the course of history', are 'marks of the historical process' (Adorno 2006: 31). Adorno denies the 'psychology of music', which presupposes 'an unchanging subject' and

fails to recognise the fact that music develops against the backdrop of social and historical progress (Adorno 2006: 31). 'The historical process through which', as Adorno confirms, the diminished seventh chord, for example, 'has lost its weight is irreversible' (Adorno 2006: 33). According to Adorno, composers cannot arbitrarily seek freedom, but instead are constrained by 'society and the era', in which they live, 'not externally but in the rigorous demand for correctness made on [them] … by the composition' (Adorno 2006: 33). If Messiaen is justified to use an 'expressive accent' by borrowing, almost directly, a melodic line in Mozart, for Adorno, 'music [within a certain social and historical setting] objectively demands' from the composer that he or she do justice to the composition and 'give the one right answer' that 'technique in that moment permits' (Adorno 2006: 34, 33). The use of strictly metrical and tonal material in the mid-twentieth century might not constitute 'the one right answer' for Adorno. The Adornian denial of archaic materials in the modern world is recognised both by Gallope and Hofstaetter. Materials such as regular metre and traditional harmonic progression, utilised in an unmediated way, as Gallope indicates, are reified in the modern world as 'the blind repetition of musical thoughts that have already been realized', and have become 'congealed formulae' that no longer have 'luster' (Gallope 2017: 127, 129). According to Hofstaetter, they no longer 'fulfil a necessary function in articulating the sense of musical works' (Hofstaetter 2014: 162).

The harmonic progression in the material that presents the 'old' seems quite alien and exotic compared to traditional harmony, since it is mixed with Messiaen's Modes of Limited Transpositions. For example, by mixing A major tonality with mode 2, first transposition, a distant E flat major chord is included in the first phrase (bars 1–2) of the first movement, and in the next phrase, an A major chord is directly followed by an F sharp major chord. Messiaen describes the strange charm of the modes as follows: 'they are at once in the atmosphere of several tonalities, without polytonality, the composer being free to give predominance to one of the tonalities or to leave the tonal impression unsettled'. Thus, 'by the frequent return of the tonic of the chosen key', A major in the case of the first movement of *Visions*, 'or by the use of the dominant seventh chord in that key, we mix the mode with the major tonality' (Messiaen 1944: 58, 64). Although the distant harmonies unsettle the tonal impression of A major, the musical direction relies on tonality, whilst the musical phrasing and syntax are governed by tonal function. Especially from bar 25 in the first movement, the harmonic progression of each phrase becomes overtly ordinary and square in its traditional tonal cadence. If, in harmonic terms, the 'old' material combined with the modes

momentarily resists conventional formulae, the rhythm remains utterly archaic. For Adorno, as Brian O'Connor writes, 'to turn … to the archaic for aesthetic materials is to detach aesthetic experience from the possibility of critical relation to the present' (O'Connor 2013: 183).

The Interpretable and the Uninterpretable

Now we should begin to discuss the problems that the performer must face in the performance of *Visions*. We can take as an example the double rhythmic pedals, formed by non-retrogradable rhythms, in piano 1 in the first movement. We notice that neither rhythmic pedal has a tonal function; instead, all the chords are formed by intervals such as the diminished fifth (or augmented fourth) and perfect fourth. Each hand in piano 1 plays a three-chord pattern, which repeats throughout the first movement in a descending motion. As the three chords in the pattern alternate in a relationship without tonality, we can sense a kind of equalised tension in this chordal succession. In tonal music, every note or chord has its own weight and fulfils a specific harmonic role in a given key, but each chord in Messiaen's pattern is formed by the same intervals, which seems to destroy the forces operating in major-minor tonality. Paolo Susanni and Elliott Antokoletz write that, in tonal music, 'individual scale degrees play different melodic and harmonic roles in creating motion' (Susanni and Antololetz, 2012, p. xii). This can be seen, for example, in piano 2, where the A major tonic triads have more tonal significance than other passing chords, while the E major dominant triads have a tendency to go towards the tonic. The whole-tone relationship in the pattern also diminishes the sense of direction in the linear movement of the first piano, which seems to operate as a static and non-developmental texture and acoustic resonance. Vilko Ukmar's observation on atonal music can be a valid description of the first piano part: 'the revolutionary movement, beginning at the turn of the century, first destroyed the traditional major-minor system by introducing complete atonality', so that 'all tonal cadencing disappeared, and with it also the feeling of the security of individual existence': thus atonality offers 'a feeling of uncertainty, of suspension' (Ukmar 1972: 113).

Through the recognition of its harmonic tension, in an Adornian sense, the second piano in the first movement shows that it can be 'interpreted'. This is to say that, by reading the notes or symbols, we have the potential to recognise the neumic element that contradicts the

mensural element, the result of which is that *rubato* remains available to present the neumic element. The chords here are arranged in strict accordance with the regular metre but the different chords have different weights and colours in the harmonic progression and these differences need to be liberated, rather than remain imprisoned by metrical regularity. Adorno asserts that the musical text is 'no set of performance instructions, no fixing of the imagined, but rather something objective, … incomplete, *in need* of interpretation to the point of ultimate convergence' (Adorno 2006a: 3). Thus, in order to reveal the harmonic tension in performance, our interpretation should explore the nuances in the music by using *rubato* to emphasise (or de-emphasise) certain chords, and this will consequently contradict the equally divided beats that appear on the page. For example, the tonal direction is clear from first B minor chord of bar 27 to the tonic A major chord in bar 28, meaning that each crotchet chord has a harmonic role in the cadence, such that the neumic element can also be realised. Given that the A major chord, as the tonic, has more importance and weight in the cadence, *rubato* can certainly be used to emphasise it, in order to mark the tonal significance of the chord and to present a sense of arrival at the cadence. Pianists such as Rachmaninoff used 'subtle anticipations and delays to emphasise melody notes' (Philip 1998: 91) and so, similarly, we can adopt a subtle delay after the dominant seventh, which omits the fifth and adds the sixth, in order to stress this resolution.

This cadence and the section from bar 11 in the fourth movement 'Amen du Désir' not only demonstrate a coherence between rhythm, melody, harmonic progression, but also convey a kind of human quality: the build-up and release of tonal tension in the harmonic progression reveal human expressivity. In addition, the syntax and phrases, according to Adorno, resemble spoken language, which says something humane (Adorno 1992: 1). If the neumic element in piano 2 is realised through a thoroughly subjective reading of the musical text, which, as mentioned before, involves the active subject in articulating the dynamic, neumic or gestural elements contained in the score, we are unable to perceive anything neumic in piano 1. Consequently, in the first movement, for example, a subjective reading cannot trace the harmonic function and coherence between pitches and rhythm, resulting in a tension-free construction in which the human quality – which requires the articulation of syntactical features through varied intensities – identified in piano 2 remains hidden. Furthermore, as mentioned in the Introduction and the previous chapter, the performer does not even perceive the 'true rhythm' by following the metrical beats (the metre). That is to say, in 'Amen de la Création', it is impossible for the first pianist to count the small unit (the semiquaver in this

case) for each rhythmic value in two rhythmic pedals simultaneously. We have noted at the beginning of the thesis how the double rhythmic pedals in the first movement of piano 1 are not written out as they were conceived but are mapped onto the 4/4 metre. Messiaen writes that this type of notation, fitting a rhythm to a regular metre, is 'the easiest for performers since it disarranges their habits in no way' (Messiaen 1944: 29). It certainly helps the performer to play the rhythm in a regular metre, and yet the construction of the rhythm is disarranged in the performer's perception. Therefore, in the right hand of piano 1, instead of counting six monometrical units for the first value and three for the second value, as conceived, the performer, by following the metre, perceives the first value as one and half beats and the second value as an off-beat. It prompts us to ask Edward T. Cone's question: 'if music is a language, then who is speaking?' (Taruskin 1995: 136). This divergence reflects a certain kind of twentieth-century aesthetics, exemplifying a 'distancing of voice from utterance' (Taruskin 1995: 135). All these factors make manifest the construction as an objectification that cannot be assimilated by the subject. If the interpretation of piano 2 requires a dialectical process between the subject and the object, the first piano part, on the contrary, requires nothing but to be followed as it is according to the noted symbols. This construction conveys the kind of abstraction wherein, as Adorno puts, 'the *pure* work-in-itself … coincides with the uninterpretable' (Adorno 2006a: 5).

If we adopt Bergson's view that an artist should de-emphasise the perception of the spatialised score, *rubato* will be required, and yet this *rubato* may fail to adhere to an analysis of the score, since it operates through 'a confused instinct' that springs from the mass of consciousness, such that, in Bergson's words, we just 'feel it' (Bergson 1910: 126). From an Adornian perspective, the first piano part appears uninterpretable, and yet even the oscillations of a clock, like the notes of a tune, can be felt in duration by Bergson. Therefore, it can be concluded that, for Bergson, given that perceiving music in duration does not depend on spatial construction but on the subjective will, piano 1 can also be felt in duration when, in a dream-like state under the influence of constant becoming, the performer subjectively transcends metrical regularity.

Expressive or Not?

This lack of subjective expression in piano 1 of the first movement again reveals the antinomy of new music that, following Hegel, 'has freed content by means of its emptiness':

‘the idea of humanity’ seems to be lost with ‘the stringency of the structure’, which is ‘so radical that it puts in question the very possibility of expression’ (Adorno 2006: 19). For Adorno, in the absence of subjective assimilation, music such as that found in piano 1, ‘puts in question the very possibility of expression’. But for Jankélévitch and Bergson, anything can become expressive and musical, with the latter even reporting to feel the oscillations of a clock in pure duration as if they were notes of a tune (Jankélévitch 2003: 104). This led Jankélévitch to show his interest in ‘inexpressive music [that] allows things themselves to speak, in their primal rawness, without necessitating intermediaries of any kind’ (Jankélévitch 2003: 32). Thus, we recognise a kind of levelling between music that does speak through formal harmonic progression or spatial confines, and music that speaks as it is; both types of music express temporal inconsistency free of any formal structures. The difference between Adorno and Jankélévitch described by Gallope is illuminating:

> By comparison with Adorno, the exact criteria for an ethical form of resistance have been eased substantially; Jankélévitch’s mode of attentive fidelity is not one of historically aware dissent, but is instead one of innocent, seemingly naive, and paradoxical distancing. His musical ethics will motion toward atmosphere, toward coolness, toward neoclassicism, toward multiplicity, toward mechanism and magic. (Gallope 2017: 183)

The inexpressive or thing-like construction which remains detached from the subject, as reflected in piano 1 in the first movement, evokes ‘a sort of derisory humanity, an automaton humanity midway between the human being and the pendulum’ (Jankélévitch 2003: 43–4). Instead of confirming the absence of any meaning in this kind of music, as maintained by Adorno, Jankélévitch indicates that the expression of inexpressive music resides in its inhuman quality and that its dissonance, by ‘torturing tonality’, may be ‘the source of a strange poetry, a more refined sort of musical delight’ (Jankélévitch 2003: 40, 42).

Jankélévitch seems to suggest a view on the interpretation of the ‘inhuman’ that is contrary to Bergsonian duration. Instead of ‘feeling’ it, he acknowledges the ‘non-interpretability’ of mechanical construction. As he suggests, this kind of music shows ‘suspicions about *rallentando* and *rubato*’, the prohibition against which means that ‘implacable chronometrics must cast out all weakness and ignore human lassitude’ (Jankélévitch 2003: 44–5). Jankélévitch knows that this kind of inhuman music presents itself as ‘an automaton [that] has no knowledge of the irregularities and inequalities that result from the caprices of human

nature' (Jankélévitch 2003: 45). This Jankélévitchian view would mean that the performance of piano 1 should remain only spatial: the performer needs to perceive the music in *temps espace* and adhere to the spatialised beats. Jankélévitch seems to forget that for the performer to reveal such an inhuman quality, the music must be played by rigorously counting within *temps espace*, which is contrary to Bergsonian duration and to his own idea of pursuing the 'Charm' in music.

To Say Something

For Adorno, 'music resembles a language. … But is not identical with language. The resemblance points to something essential, but vague' (Adorno 1992: 1). For example, 'uttering the name 'a' cites the phoneme *a*, while naming the note A does not', and '"A" can be removed from the note A without the slightest loss of musical definition' (Adorno 2006a: 168). Yet, we cannot deny the fact that, as Adorno writes, music does

> contain things that come very close to the 'primitive concepts' found in epistemology. It makes use of recurring ciphers. These were established by tonality. If tonality does not quite generate concepts, it may at least be said to create lexical items. Among these we may start by singling out those chords which constantly reappear with an identical function, well-established sequences such as cadential progressions, and in many cases even stock melodic figures which are associated with the harmony. Such universal ciphers were always capable of entering into a particular context. (Adorno 1992: 2)

This language-like feature can be identified in piano 2 in the first movement, for example. The chords in a harmonic progression resemble words in a sentence, such that the harmonic function of each chord can be related to the syntactical function of each word. The most obvious feature in piano 2 that can be related to language is its phrasing. Each phrase in the music is comparable to parts of a linguistic sentence. Adorno also points out that 'there is no element in which language resembles music more than in the punctuation marks' (Adorno 1990: 300). We can certainly insert a comma after every two bars from the beginning, and mark a semicolon at the end of bar 8, indicating the first cadence before the progression repeats from bar 9; from bar 25, there are exclamation marks implicitly indicated at the end of each repeating cadence.

It is because the ‘unchanging identity’, embodied in traditional harmonic progressions, for example, ‘has become sedimented like a second nature’, that our consciousness finds it difficult to ‘bid farewell to tonality’. This is also why modern composers rebel so passionately ‘against the illusion implicit in such a second nature’ (Adorno 1992: 2). Musical compositions need to say something, so Adorno claims, and ‘the better the music, the more forcefully they say it’ (Adorno 1992: 1). Therefore, for Adorno, in order to say something, modern composers need not totally abandon the language-like features, reflected in regular metre and ‘well-established sequences such as cadential progressions’ (Adorno 1992: 2). As he writes:

> It [modern music] dismisses as mechanical these congealed formulae and their function. However, it does not dissociate itself entirely from the analogy with language, but only from its reified version which degrades the particular into a token, into the superannuated signifier of fossilized subjective meanings. (Adorno 1992: 2)

Therefore, it seems crucial for Adorno, as Gallope recognises, that ‘resistant … composition requires the punctuation of tonality speaking back in a way that breaks apart’ (Gallope 2017: 133). For Adorno, it is the critical relationship between music and language which needs to be acknowledged in the modern era. From an Adornian perspective, the employment of traditional harmonic progressions combined with regular meter, identified in the second piano part of *Visions* as ‘well-established sequences’, is certainly uncritical.

Harmonically speaking, from an Adornian perspective, piano 1 is unable to say anything. However, Messiaen does not seem to give up on ‘speaking’ to us with his advanced construction, such that he tends to make piano 1 speak through rhythm. If tonality constitutes a part of what music has to say, metrical pulse and traditional rhythmic forms can also be regarded as part of the language. It is necessary to note the two important features of metre: one is equal division, another is the distinction between the downbeat and upbeat, or the strong beat and weak beat. Messiaen totally removes the latter, but he still preserves the former in his advanced rhythms. Adorno would perhaps assert that such a construction that attempts to escape from the idea of ‘we’, the ‘collective practice’, obstructs the quality of ‘being heard by many’ which ‘underlies music’s objectivation’, such that the music ‘is indeed actually unable to say anything at all without also positing a “we”’ (Adorno 2006: 18). But equal division, operating in regular metre, is the ‘we’ retained in Messiaen’s advanced rhythm. If we observe the rhythm as construction, or if we read piano 1 in the score, it says

something to us, because through dividing each value by the monometrical unit, we can recognise each value's quantitative measure, through which the non-retrogradability can be presented in a non-retrogradable rhythm. But does it speak to us in performance?

As mentioned before, guided by Messiaen, we can learn to appreciate his rhythm by counting, such that it speaks to us through its numbers. Perhaps, to a certain extent, the rhythm will speak to us through its numbers' personalities, as Goehr observes, just as the rhythm speaks to Messiaen. This is precisely what Messiaen attempts to convince us of: rhythm can only gain the validity of 'saying something' if the listener is capable of numerating the values. Both Taruskin and Taylor, as noted above, do not think the values in an advanced rhythm can be accurately numerated in performance, especially when they are superimposed upon a complex texture. Healey also asserts that, 'the recognition of the simplest palindromic rhythm is perhaps achievable, but once the complexity increases, identification without prior knowledge of the score would in all likelihood be beyond even the most accomplished of listeners' (Healey 2007: 170). The palindrome of a nonretrogradable rhythm or the numbers in any rhythmic pedal remain pure visual-music in the score if the listener cannot numerate each value. If the well-established tonal progressions and regular metre are too uncritical from an Adornian perspective, the demise of linguistic gesture in the rhythmic pedal reveals the 'masochistic self-destruction of the subject':

> The emancipation of music from language cannot succeed by arbitrarily taking supposedly pre-linguistic structures as its models while abandoning music's own characters, which developed alongside language, or by imagining that Being would speak from within music if only the subject stops speaking and instead reverts to poorly quoted ornaments. (Adorno 2002: 146)

Indeed, Messiaen hoped his advanced rhythmic construction, which consists of mysterious 'Being', or the personality of numbers, assigned by Messiaen himself, would indeed speak 'from within music', but in reality, by excluding historically mediated means, which we can 'grasp', the atonal and ametrical chords and notes are mere decoration, if not 'poorly quoted ornaments'.

Problematic Combination

We should notice that this type of 'inhuman' construction is nearly always played together with a 'human' construction in *Visions de l'Amen*, and that rhythmic pedals never appear on their own in the work, apart from in the fourth movement, where from bar 97, piano 1 plays a double rhythmic pedal for just three bars as a preparation before the second piano reenters. The superimposition of these two distinct materials is one of the most prominent features in *Visions*. For example, superimposition appears in the second movement from bar 107 and in the fourth movement from bar 100. In the fifth movement, from 160, in piano 1, each layer in a three-layered rhythmic canon does not even vary in pitch, so that the layers are purely rhythmical, and the second piano plays a variation of the Creation Theme. In the same movement the superimposition of the 'human' and 'nonhuman' is assigned to the second piano alone from bar 172. The rhythmic pedal that includes Hindu rhythms also appears in the double rhythmic pedals in the last movement; the double rhythmic pedal is superimposed upon the Creation Theme in piano 2.

For Adorno, while Messiaen's music could 'speak' through the part that is tonal and metrical, this 'human' part would seem, with its tonal and especially metrical conventionality, out of date or archaic in the modern world. Alternately, Messiaen's advanced rhythmic constructions and Stravinsky analysis become mute because they operate in an 'inhuman' manner, without regard for metre or for Stravinsky's contradiction of the downbeat/upbeat structure and large-scale reversal of the metrical tendency, as identified by Keller. Therefore, Messiaen's rhythmic pedal, without being numerated in performance by the listener, conveys nothing but unexpected shocks against a metrically regular background. Messiaen openly claims that 'it is no longer of interest' (*cela n'a plus d'intérêt*) to perceive a group of rhythmic values – each of which consists of, for example, three units, five units or seven units – as 'irrational values' (*des valeurs irrationnelles*), which can enter into, or can be defined by, a classical metre such as 3/4 or 4/4 (Boivin 1995: 199–200). In order to perceive the rhythmic values in an 'interesting' way, the notion of regular metre, according to Messiaen, needs to be replaced by 'the feeling of a short value and its free multiplications', by which the 'ametrical' characteristics of the values can be perceived (Messiaen 1944: 14). Messiaen explains that it is interesting to perceive the values ametrically without confining them to a metre; the fact that the 'ametrically' constructed values in the rhythmic pedal *are* perceived

metrically, and ‘uninterestingly’, by the majority of the listeners as shocks against the metrically constructed ‘human’ can hardly be denied.

Human/Machine or Human/God?

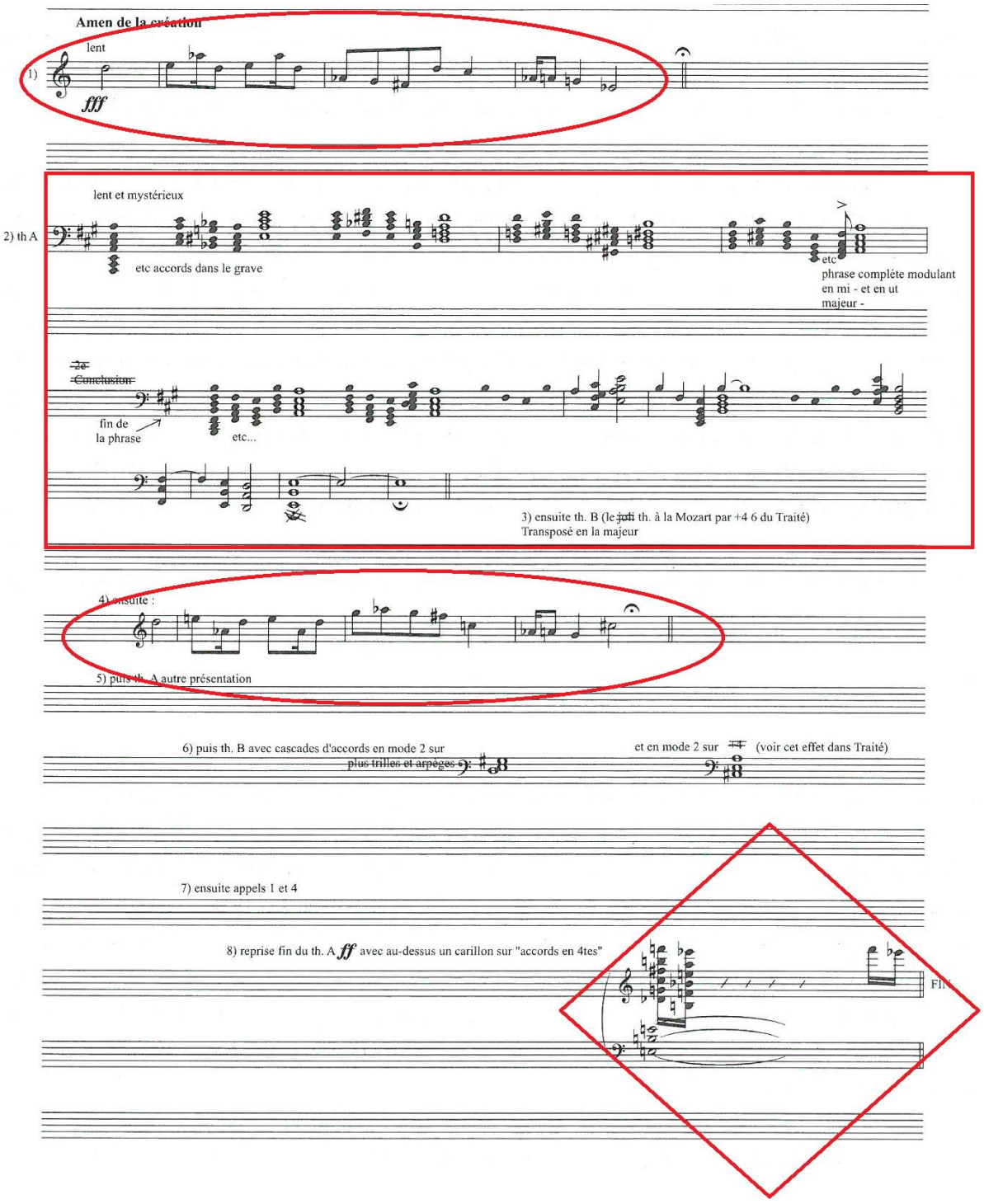
If we regard the second piano part in the first movement, ‘Amen de la Création’, for example, as human, because this part is expressive, exhibiting a dynamism derived from tonality, whereby the chords manifest different weights in their linear progression, we can identify the non-expressive piano 1 as ‘inhuman’: its combination of a pre-existent rhythmic formula with tension-free chords almost makes it resemble a kind of ‘machine’. Via a theological reading, Siglind Bruhn also identifies piano 1 in the first movement as non-human. She recognises ‘a spiritual aspect’ of the construction: the palindromes (non-retrogradable rhythms) imply that ‘time is non-linear’, since it goes backwards in the retrogradation of the rhythm, or as Messiaen indicates, ‘the primitive text rising again towards the past’ (Messiaen 1994a: 43), suggesting ‘a metaphor for eternity’ (Bruhn 2007: 82). In the fourth movement, ‘Amen du Désir’, when the double rhythmic pedals appear from bar 97 in piano 1, Bruhn identifies ‘the first piano’s role … as the voice of God’ (Bruhn 2007: 123). She recognises that in ‘Amen du Désir’, ‘the passionate theme’ – which first appears from bar 11 (analysed in the section ‘Messiaen’s Anachronism’ above) – or ‘the motif of “the soul’s passionate rapture”’, is combined with ‘the rhythms of eternity’ from bar 100, which ‘presuppose[s] an active relationship between the human soul and God’ (Bruhn 2007: 123). Although the human/God combination in her reading of the music seems to resemble our reading of the two types of material, human and inhuman (or machine) in *Visions*, the manner in which she comes to conclude that the first piano part is non-human on these two occasions is rather different to our approach. For Bruhn, piano 1 contains non-retrogradable rhythms, which implies eternity, and therefore it is ‘God-like’, but for us, piano 1 in these two cases is inhuman because it is not expressive and unassimilable for the subject. Bruhn does not seem to focus on whether the construction involves dynamic and tonal tensions which can be articulated by the self or the subject, instead, for her the fact that piano 1 is ‘inhuman’ or ‘the voice of God’ depends on the symbolic aspect of the non-retrogradable rhythm, which implies eternity. Furthermore, in contrast to us, she does not identify the second piano part in the first movement as ‘human’. For Bruhn, the Creation Theme in the first movement – which can be assimilated by the subject and which, for us, is ‘human’ – does not develop ‘in the perspective of ambitious

humans', but 'in the divine perspective' (Bruhn 2007: 82). We will not develop our discussion further here to explain why the Creation Theme in the first movement is 'divine', and not human, because, as mentioned in the Introduction, our main task is not deciphering the religious meaning of the music. Thus we will continue to use the opposition human/machine to refer to the contrasting materials.

By means of analysis, deduced from Adorno's dialectical method, a kind of irreconcilability between the two materials can be demonstrated, given that the human part can be assimilated by the subject and the inhuman part cannot. This irreconcilability causes problems in performance: one part excludes accelerations and decelerations, and needs to be played like 'a motor [that] never feels sorry for itself' (Jankélévitch 2003: 45), whereas in the other part, the performer can reveal the neumic or the gestural element by using *rubato*, such that the two kinds of material cannot be made uniform in performance. By analysing the materials, we seem to uncover, as Adorno demonstrates, what an adequate performance requires: 'the formulation of the work as a problem' and 'the recognition of the irreconcilable demands' which arise 'from the relation of the content [*Gehalt*] of the work to its appearance' (Adorno 1997: 106).

In the section 'A Performer's Quest' at the beginning of the thesis, we observed a kind of incoherence between 'the human and machine' in performance, when they are superimposed. Via analysis, we have furthered our understanding of the incompatibility of the two materials. Messiaen's sketch of the initial form of 'Amen de la Création' seems to explain the unrelatedness of the two piano parts (Example 2.8). The sketch shows that the material (marked in diamond) assigned to the first piano only appears at the very end of the sketch. It can be deduced that Messiaen did not originally intend to integrate the two piano, for the first piano part, as Balmer, Lacôte and Murray write, 'as exogenous material' (*comme un matériau exogène*), was 'added very late in the course of the composition process' (*ajouté fort tardivement dans le cours du processus de composition*) (Balmer, Lacôte and Murray 2017: 89).

Example 2.8: Messiaen's sketch for *Visions de l'Amen* (Balmer 2013: 75)



Totality of Grace

This alienated combination seems to resemble Jankélévitch's philosophy of music. Gallope indicates that if 'the sheer variety of ideas' in a kind of 'speculative multiplicity' of music – that is 'singular in its construction' but 'full of odd and improbable juxtapositions' – is 'a bit

disorientating', 'this is precisely an effect that makes sense within the purview of Jankélévitch's ontology' (Gallope 2017: 190). Unlike Adorno, by avoiding listening to the inconsistent becoming of music through the lens of a systematic and historical frame, Jankélévitch focuses upon the temporal uniqueness of the musical work. Instead of disapproving of the employment of certain materials, for Jankélévitch, no specific material or technique guarantees musicality:

> One can make the more general point that nothing is musical per se, neither a ninth, nor a dominant chord, nor a plagal cadence, not a modal scale – but anything can become musical, given the correct circumstances. Everything depends on the moment, the context, the occasion, and a thousand conditions that can transform an acoustic novelty into spiritual insincerity or pedantry, or make brilliant discovery out of a banal little chord. (Jankélévitch 2003: 104–5)

Jankélévitch is aware that 'a banal little chord' may wear out. However, as Gallope recognises, the 'thousand conditions' of the totality of a work can make 'ordinary harmonic materials potentially ethical' (Gallope 2017: 190). For Abbate, Jankélévitch acknowledges 'music's precious humanity' by renouncing that 'musical works trace historical facts' and 'emphasizing an engagement with music as tantamount to an engagement with the phenomenal world and its inhabitants' (Abbate 2004: 530). While Messiaen's superimposition might prompt Adorno to recognise a contradiction between different materials, it seems more suited to Jankélévitch's theory of Charm, which is well summarised by Gallope: 'vague atmospheres, vibes, and strange feelings from banal materials and a lack of syntactic specificity', so that the Jankélévitchian path to genuine musical experience is not a determined negation against a certain social and historical background, but a 'compositional atmospherics infused with a singular totality of grace' (Gallope 2017: 190). This 'tonality of grace' is certainly revealed in Messiaen's superimposition: not only might the traditional harmony employed in piano 2 be worn out, but also the combination of the materials embraces 'the sheer variety of ideas' which can be 'a bit disorientating'.

Apart from the fact that, as mentioned earlier, piano 1's material was added very late in the compositional process, which seems to confirm the unrelatedness of piano 1 and 2's materials in a vertical sense, the initial form of *Visions* presented in Example 2.8 also shows the unrelatedness of the materials in a horizontal sense. The sections in the sketch are separated by double bars. The succession of the sections does not suggest thematic development and

the sections are not connected by a thematic logic; instead they are merely a succession of events. As Balmer rightly puts it, 'here, form is a succession of moments, and these moments are not derived or developed from the compositional material. Their succession is paratactical and carried out without resorting to any sort of transitional material' (Balmer 2013: 74). Although in the final version Messiaen deleted the sections circled in Example 2.8 and kept the section boxed (and the material for piano 1 enclosed in a diamond) , which suggests that, as Balmer writes, 'Creation is no longer a series of events, but rather a path, a *becoming*', the initial form of 'Amen de la Création' in Messiaen's sketches tells us 'a great deal about his methods and manner of writing music' and 'allows us to see the essence of Messiaen's ideas on formal construction' (Balmer 2013: 83, 82):

> In this earliest trace of the movement's genesis, one that Messiaen abandoned and that is consequently unaffected and untouched by further compositional efforts, it is quite clear that Messiaen initially conceived the movement as a series of juxtaposed sections. (Balmer 2013: 82)

In other words, the omitted materials do not have any thematic and structural significance, such that they can be deleted without affecting the material: the chorale is kept for the final version, in which the rhythm and pitches of the manuscript source (Example 2.8) are almost unchanged in the second piano part.

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The superimposition in the first movement reveals the unrelatedness and irreconcilability of the different materials and the juxtaposition in the sketches resembles Jankélévitch's idea of ethical composition, which, as Gallope recognises, may be 'full of odd and improbable juxtapositions' (Gallope 2017: 190) that do not form a structural coherence. But do these features pinpoint Messiaen's compositional method? In the next chapter, we will analyse a section of the second movement, 'Amen des étoiles, de la planète à l'anneau', in detail in order to better comprehend Messiaen's compositional manner. Do the superimposed materials fail to relate to each other, as in the first movement? Are the sections are merely juxtaposed as a succession of events, paratactic in form, as in the sketch for the first movement? If the materials and sections are connected, how are they connected?

Apart from musical analysis, we will draw attention to several recordings of *Visions*, including Messiaen's own. We will not be answering the question of what performers should do, but rather investigating the philosophical implications reflected in the recordings. The philosophical views manifested above certainly engender a number of possibilities for performance, and the superimposition of two contrasting materials also prompts us to consider how they can be combined in performance. Should we adopt Adorno's goal of presenting the neumic while staying in space? Should we reduce the perception of the spatialised writing and rely on the inconsistency of *durée*, such that we allow innumerable possibilities in performance? In order to achieve the uniformity or ensemble of the two pianos, or to put it simply, in order to play together, should the expressiveness of piano 2 be brought out in performance and piano 1 be made to follow? Or should piano 1's mechanical and inhuman quality be emphasised, such that piano 2 as 'expressive *music* … is being bullied' (Jankélévitch 2003: 41). Finally, can it be assumed that ensemble is an essential element in the performance of *Visions*, or should the inherent quality of each part instead be revealed?
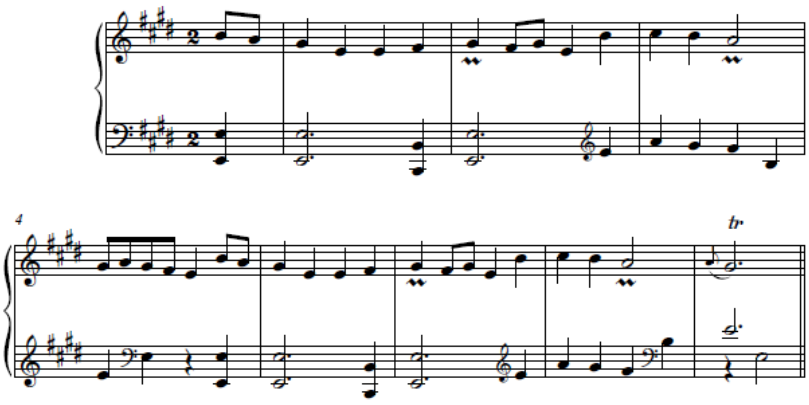
CHAPTER 3: ANALYSIS OF THE MUSIC AND RECORDINGS

This chapter is also in three parts. In the first part we will analyse in detail the richest part of the second movement of *Visions* in terms of the vertical diversity of the materials as an example of Messiaen's superimposition. In the second part, the two recordings by Messiaen and Loriod will be analysed with respect to this particular section, and a section from the first movement will also be discussed. Apart from the recordings by Messiaen and Loriod, other recordings, as well as other passages of *Visions*, will be the topic of the third part. While reflecting on the recordings, our philosophical discussion will be further developed through the investigation of Bergsonian *durée* and Adorno's dialectics.

Part 1 – Dissecting the Parts: An Implicit Connection

The section, 'Moins vif', from bar 107 in the second movement, 'Amen des étoiles, de la planète à l'anneau', consists of four distinct materials evenly assigned to the four hands of the two pianists; each hand maintains one kind of material persistently throughout the section until bar 140. Apart from the right-hand part of piano 2, all three parts consist of the five-note motif derived from Rameau. Yves Balmer, Thomas Lacôte, and Christopher Brent Murray note that, 'the melodic material of "Amen des étoiles, de la planète à l'anneau" … include reworking Rameau's melody within the third mode of limited transposition, rhythmic transformations, motivic recomposition, and a tempo change' (Balmer, Lacôte and Murray 2016: 704). Example 3.1 is the passage from Rameau's 'Rigaudon', quoted from the article 'Messiaen the Borrower: Recomposing Debussy through the Deforming Prism'.

Example 3.1: Rameau keyboard *Suite in E*, second 'Rigaudon', bars 1–8



The right-hand part of piano 1, beginning from the second half of bar 107, is an ostinato which can be subdivided into two parts: a rapid statement of the five-note motif and a song of blackbirds (Messiaen 1996: 238). The rhythmic pedal, discussed earlier, also beginning from the second half of bar 107, is in the left-hand part of piano 1. In piano 2, the right hand, beginning from 105, two bars before the 'Moins vif', plays sequences of parallel chords in different modes. The left hand of piano 2 plays variations on the five-note motif of the second movement. As mentioned, the three parts (the right hand and left hand of piano 1 and the left hand of piano 2) share the material of five-note motif, but they all have their own characteristics. Apart from the fact that the three parts have very different rhythms and periodicities, different pitches are employed in the three parts. Although both hands of piano 1 start with the motif on B, the left-hand part transposes it down a semitone at every repetition. As Goehr puts it, 'he [Messiaen] did not, like most other composers of our time,

feel any desire to construct them into organic wholes' (Goehr 1998: 54). For example, the top two parts, played by piano 1, are constructed independently. These two parts, as ostinatos repeating persistently throughout the section, not only have their own rhythmic and harmonic identities, but also each of their repetitions vary in length. The ostinato in the top part lasts six bars before it repeats, whereas the rhythmic pedal in the left-hand part lasts six and a half bars. The chordal succession in different modes of limited transposition in the right-hand part of piano 2 is formed by the rotation of chords and it repeats the pattern of five quaver chords exactly, with either ascending or descending motion.

Here we can identify that the three fixed rhythmic patterns, free from tonality, have their own periodicities. Messiaen found this compositional technique in Stravinsky and not only utilised this superimposition of different rhythmic patterns in his own composition, but also passed it on to his students. As Boulez indicates, 'Stravinsky also utilized the system of superimposed rhythmic pedals … he gives each of them an independent rhythmic period. The linkings of these several superimpositions will not be reproduced at the same intervals, but so as to obtain a varied disposition. There you have the chief lesson that Messiaen has helped us to learn from Stravinsky' (Van den Toorn 1983: 216). The various dispositions in their repetitions can no longer be evaluated in terms of tonal harmony, and yet, just as Van den Toorn describes the superimpositions of different rhythms in Stravinsky, the vertical coincidences 'cannot be said to occur "at random"'; instead, the combination of different materials connects 'all coordinates to a new and different interplay' (Van den Toorn 1983: 236–7).

The variation of the motif in the bass part, played by piano 2, is unique in not being constructed as a fixed pattern, which allows it to communicate a human quality and, for Adorno, enables it to 'speak'. This part in piano 2 also has a clear sense of development. It begins with a variation of the five-note motif in bar 107, which is also employed from bar 49, and then from bar 112 this is varied by placing the notes of the motif in different registers. A rhythmic variation of the motif can be found from the second half of bar 114, where the notes become syncopated. The left-hand part in piano 2 becomes more intense with the succession of semiquavers from the second half of bar 119.

The five-note motif begins in E at the beginning of the movement and in the passage from bar 49. In the section from bar 107 it goes towards the dominant B. The emphasis on the dominant B in this section (bars 107–46) also functions as a tonal preparation for the return of

the tonic E from bar 147. Unlike the second piano part in the first and fourth movements, there is no clear harmonic progression operating in the bottom part in this section, but the five-note motif (G, F sharp, F natural, D and B) in bar 107, arranged in the dominant key, has a tonal significance for the movement as a whole. Not only is the tonal significance of the dominant B clarified by the rhythm, which is to say that a coherence between pitch and rhythm can be recognised in this section, but also the non-exact repetition of pitches contributes to the 'human' character. For example, in bar 107, the motif starts with three quavers and a semiquaver, and the dominant B is emphasised by a longer value. The first four notes with shorter values create a sense of direction towards the B, which has more tonal significance, and the semiquaver D disturbs the pace set by the first three quavers, which causes a premature arrival of the dominant. The motif becomes syncopated from bar 114, and the rhythmic uncertainty engendered by the off-beat structure is resolved by the dominant B in bar 115, which is on the beat. The motif is lengthened by three extra pitches,[43] which reinforces the arrival of the dominant B in bar 116. Thus, we notice that the pitches are not separated from the rhythm, which is designed to confirm the tonality and enhance the musical direction.

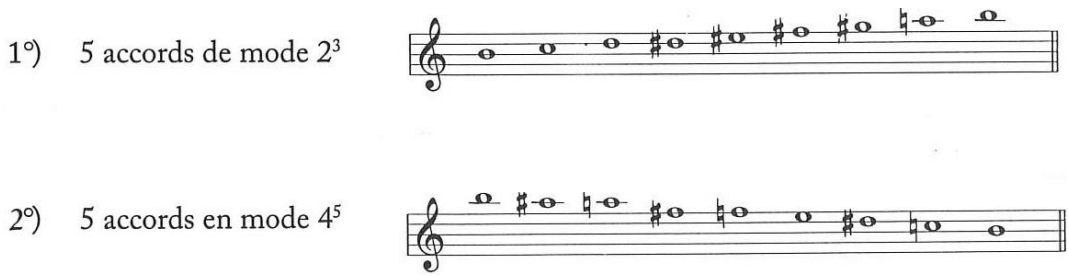
In the first, fourth, and final movements, the rhythm, melody and harmony in piano 2 all coordinate with the given time signatures throughout. In this section from bar 107 in 'Amen des étoiles, de la planète à l'anneau', we cannot say that the motif in the bottom part strictly adheres to the given 2/4 metre, but it does preserve the trace of a metrical pulse, within which it also shows its resistance to the regular rhythmic flow. For example, the steady quavers confirm the metrical beats from bar 107 but then, from the second half of bar 114, the theme is varied by consecutive syncopations, which seem to emphasise the theme by playing against metrical pulse. In bar 123, the leap from the quaver G to the more emphasised crotchet F sharp is also a sign that this motif operates within the metrical pulse. The emphasis of the dominant B, and the resistance to the metrical pulse all contribute to the realisation of what Adorno calls the neumic element in performance.

Despite that fact that the rotation of chords in the right-hand part of piano 2 proceeds according to its own periodicity, this part has an implicit harmonic relationship with the bass part. Example 3.2 illustrates its periodicity from bar 105 to bar 111. Messiaen describes the

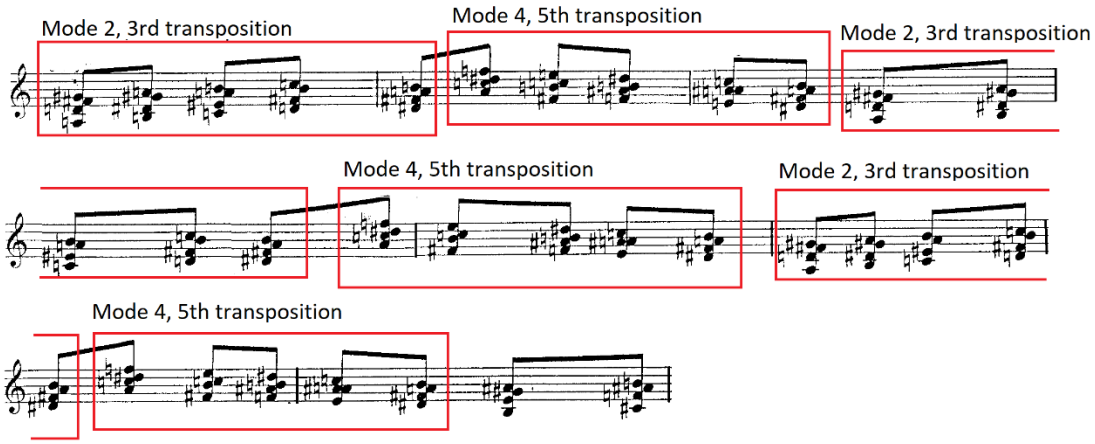
[43] The three pitches are: B, F (in quavers in the second half of bar 115) and D (as a semiquaver at the beginning of bar 116).

chords as a ‘succession of modal chords in wave movement [succession d’accords modaux en mouvement de vagues]’ (Messiaen 1996: 239). In *Traité*, Messiaen clearly indicates the modes utilised in the parallel chord series: it begins in mode 2, third transposition, two bars before the motif in the left-hand part starts; the second group from the second quaver in bar 108 is in mode 4, fifth transposition (Messiaen 1996: 239–40). In *Traité*, Messiaen also indicates the scale of the mode used in each group of five chords (Example 3.2). The first six groups of five chords alternate between mode 2, third transposition and mode 4, fifth transposition from bar 105 to the first two quaver beats of bar 112 (Example 3.3).

Example 3.2: The scale of mode 2, third transposition for the first group of five chords (from bar 105) and the scale of mode 4, fifth transposition for the second group of five chords (Messiaen 1996: 239)



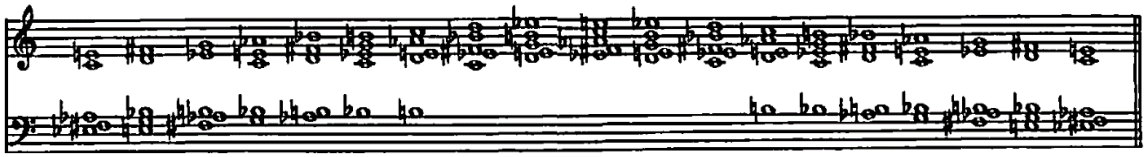
Example 3.3: Messiaen *Visions de l’Amen*, ‘Amen des étoiles, de la planète à l’anneau’, the illustration of the periodicity of right-hand part, piano 2, bars 105–12



This construction in the right hand of piano 2 is also called a ‘parallel succession of chords’ (Messiaen 1944: 61). In *Technique* Messiaen gives an example of a parallel succession of

chords in mode 3, first transposition (Example 3.4), and in the example, ‘each voice realizes the entire mode starting on a different degree’ (Messiaen 1944: 61).

Example 3.4: Messiaen’s example of a parallel succession of chords in mode 3, first transposition (Messiaen 1944: II 52)



In each group of parallel succession of five chords (Example 3.3), if we separate the four voices of each chord and observe each voice horizontally, each voice moves up or down according to the scale of the mode. For example, each voice in the first box of Example 3.3 can be associated with the first scale in Example 3.2, and this parallel succession of chords incorporates all the notes of the mode.

Although the parallel succession of chords does not progress according to tonal function, Messiaen selects certain modes that include the dominant 7th chord on B to imply the dominant of E. The third transposition of mode 2 includes the dominant 7th chord on B which is the last chord in the first group. The dominant 7th chord also appears in the second group of chords in mode 4, fifth transposition. We see that Messiaen alternates these two modes from bar 105 to 112, implying the dominant B, and yet other chords in the groups do not relate to the tonality, which creates tonal ambiguity. The modes in these parallel series are not employed in strict service to a harmonic progression, but are instead designed to create ‘a certain effect of tonal ubiquity’ (Messiaen 1944: 63). Schoenberg would call this a functionless and aimless succession, ‘neither expressing an unmistakable tonality nor requiring a definite continuation’ (Schoenberg 1954: 1). In this case, as Robert Sherlaw Johnson writes, ‘harmony is decorative rather than functional … [and] the result is a harmony in which part-writing has no real function, a harmony that is totally vertical rather than horizontal’ (Johnson 2008: 13).

Messiaen took much from Debussy: ‘from the late 1930s through the 1950s he openly affirmed that Debussy was an important creative source for his music’ (Balmer, Lacôte and Murray 2016: 716). In both composers, we can find a stasis, in which the music focuses on the flux of colours instead of tonal progression. One of Messiaen’s students, Philip Corner, regards the notion of focusing on colours and sonorities of harmony at the expense of tonal

functions as one of 'the shortcomings' (*lacunes*) of the French analytical system (Boivin 1995: 195), which is also reflected in Debussy's and Messiaen's compositions. The way in which the parallel succession of chords is constructed without a trace of tonal functions is confirmed by the manner in which Messiaen analyses Debussy's music, as Corner recalls:

> I remember a certain succession in Debussy where a C major chord is followed by a B major chord and then another triad. Messiaen just said, 'perfect chord, perfect chord, perfect chord.' I asked him if the interest was not precisely the harmonic movement [rather than the structure of the chords], and he replied: 'if you like …'. He always replied that way when one of us made such a remark. There was a long silence, then, in his quiet voice, Messiaen replied: 'yes ... perhaps …'.[44] (Boivin 1995: 195)

Adorno recognises this feature in Debussy, in words that may also help us to understand Messiaen's parallel series:

> Listening must re-educate itself in order to hear Debussy correctly, not as a process of damming up and release but as a juxtaposition of colors and flashes, as in a painting. The succession merely displays what, in terms of its own meaning, is simultaneous in the way of an eye that wanders over a canvas. Technically this is achieved by what Kurt Westphal called 'functionless' harmony. Instead of carrying through degrees of tension within the key or through modulation, fundamentally static and temporally exchangeable harmonic complexes displace each other. The harmonic play of forces is replaced by their alternation. (Adorno 2006: 138–9)

If the neumic element is realised through the tension created by the tonal and metrical force, the right-hand part – free from tonality and metre, moving in equally divided quavers according to its own periodicity – is also a type of construction that can be considered, for Adorno, as uninterpretable. This part is tension-free in itself, and yet the variation of the modes indirectly supports the musical development. The recurring dominant 7^{th} on B contained in the parallel series not only implies the dominant of E, but also has an implicit relationship with the 'human' part (left-hand, piano 2). For example, in bars 127–31, where
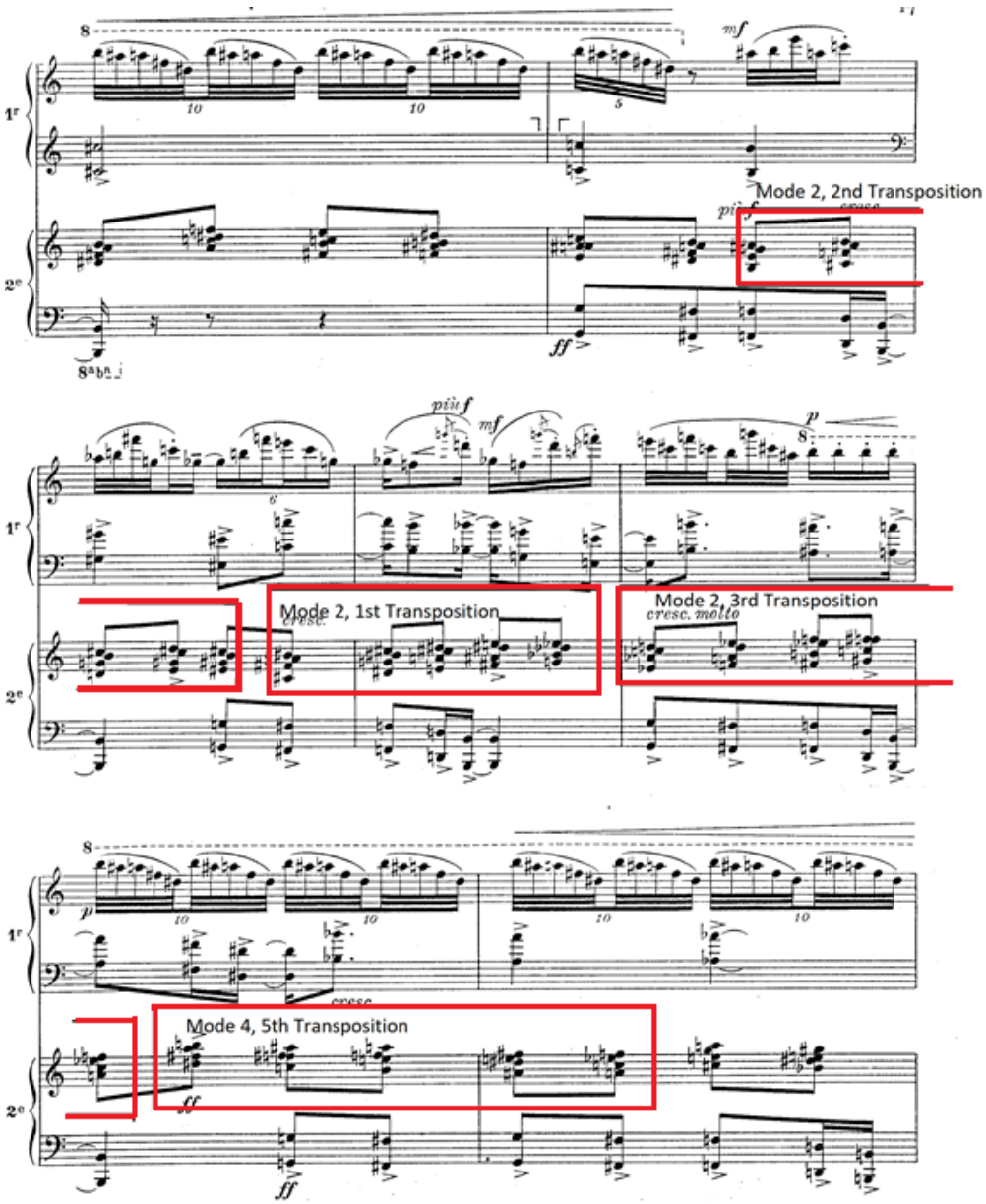
[44] Original French: 'Je me souviens d'une certaine succession dans Debussy où un accord de do majeur est suivi d'un accord de mi b majeur, puis d'une autre triade. Messiaen disait seulement: «Accord parfait, accord parfait, accord parfait. » Je lui demandai si l'intérêt ne venait justement pas du mouvement harmonique [plutôt que de la structure des accords], et il me répondit: «Si vous voulez …» Il répondait toujours ainsi lorsque l'un d'entre nous faisait une remarque de ce genre. Il y avait un long silence, puis, de sa petite voix, Messiaen répondait: «Oui … peut-être …»'

the left hand of piano 2 repeats the motif, the parallel chord series starts in ascending motion from the third beat of the bar in mode 2, second transposition. In the next two groups, the series is transposed twice and each time the chords are a whole tone higher than the chords in the previous group (Example 3.5), such that the parallel chord series creates a sense of direction in ascending motion, even though the parallel chord series does not progress tonally.

Messiaen's dynamic markings also confirm the development: he marks *cresc.* at the beginning of each group.[45] Both hands arrive at *ff* in bar 131 where the dominant 7th on B returns and, on this chord, Messiaen marks an accent. In performance, while this section passes through different modes depicting various sound colours according to its own periodicity, the right hand of piano 2 is certainly able to participate in this development towards the dominant of bar 131, which is explicitly initiated at bar 127 by the left hand's repetition of the B-oriented motif, and be integrated as part of the musical expression. By way of the tonal implication and its support to the left-hand part, the tension-free parallel series becomes expressive or, alternately, the inhuman construction becomes humanised. Therefore, unlike the rhythmic pedal in the left hand of piano 1, 'the passive element which does not change', the two parts of the second piano, according to Robert Sherlaw Johnson, 'form the active, expanding elements' (Johnson 2008: 66).

[45]Messiaen marks *cresc. molto* for the group that starts from bar 130.

Example 3.5: Messiaen *Visions de l'Amen*, 'Amen des étoiles, de la planète à l'anneau', bars 126–32



In the top part of piano 1, the dominant B is emphasised by the rapid figuration of the five-note motif which starts from B. The rhythmic pedal in the left-hand part of piano 1 starts from B in bar 107 and ends with B in bar 139. Therefore, we see that, although the four parts are not constructed as an organic whole in terms of rhythm, harmony and texture, they are all subtly connected by implying the dominant. According to Goehr, Messiaen pays no attention to the relationship between different parameters in a 'matrix structure'. Goehr states:

> In the discussion of music he felt no urge to try to combine the different parameters by means of which music – his own and other people's – existed. Here was harmony,

> here formal counterpoint, here durations. They all coexisted, in Cage's telling formula, as if different objects in the same room. But they did not necessarily have anything to do with each other, or, if they had, it was not a fact of any particular interest or value. (Goehr 1998: 54–5)

This account of Messiaen's analysis seems remote from the composer's own musical practice, which demonstrates a concern to integrate these 'different objects'. Certainly, the simple fact that every part in this section emphasises B, implying the dominant, is not sufficient to unify them all. The parts still retain their own characteristics and proceed according to their own periodicities and each part cannot be defined or understood by way of another. Nevertheless, the fact that the dominant concealed in each part is a preparation of the resolution in bar 147, where the 'theme of the dance of the planets' (*thème de la danse des planets*) (Messiaen 1996: 234), introduced at the beginning of the movement, returns in E, means that the dominant B is able to implicitly hold them all together. It remains true that at a local level with isolated events, the dominant emphasis does not have much significance, and yet the cumulative effect on the listener of the resounding B in each part, when heard in light of the subsequent return of the theme in E, creates a profound sense of musical cohesion. In short, the connection among the 'different objects in the same room' may not have 'any particular interest or value' in a local sense, yet the manner in which the implied dominant communicates to the listener reveals Messiaen's structural motivation, at least in this case.

Apart from Goehr's observation, other students who studied with Messiaen at the Paris Conservatoire also acknowledge Messiaen's static view of music. Harry Halbreich recalls that Messiaen 'did not really have a sense of form. His analysis was great when it came to illuminating a [specific] place. But the global form, it was not so interesting to him, nor is it what emerges from his own music, which is more made of juxtapositions than conceived according to an organic development' (Boivin 1995: 191).[46] Jean Boivin also notices this 'shortcoming' in Messiaen's analysis:

> In general, Messiaen tends to favour the musical moment at the expense of the overall architecture. This shortcoming … is particularly noticeable when the latter analyses his own works. He identifies in passing the modes, rhythms, colours, birdsongs and

[46] Original French: '… il [Messiaen] n'avait pas tellement le sens de la forme. Son analyse était géniale lorsqu'il s'agissait d'éclairer un endroit [précis]. Mais la forme globale, ça ne l'intéressait pas tellement, et ce n'est pas non plus ce qui ressort de sa propre musique, qui est plutôt faite de juxtapositions que conçue selon un développement organique.'

> the various technical processes employed, but generally confines himself, at the formal level, to identifying the different sections without seeking, other than by pointing out the various recapitulations, to put them in relation to the whole.[47] (Boivin 1995: 191)

In the previous chapter, we observed Messiaen's superimposition of unrelated events in the first movement. In Messiaen's sketch for 'Amen de la Création', we recognised that for this composer, as Balmer puts it, 'form is a succession of moments' and 'their succession is paratactical' (Balmer 2013: 74). Halbreich and Boivin's observations on Messiaen's analysis certainly correspond to one of Messiaen's manners of composition, revealed in the sketch, which involves juxtaposing unrelated or isolated events. Nevertheless, the second movement of *Visions* makes manifest something different. In the first movement (the published version), the double rhythmic pedals and the Creation Theme do not relate to each other, which seems to confirm Goehr's account, whereas in the section from bar 107 in the second movement, the superimposed materials are clearly related: each group of five descending demisemiquavers starts from B in the right hand of piano 1; the rhythmic pedal in the left hand of piano 1 starts from B from bar 107^2 and ends on B in bar 139; the modes chosen for the parallel succession of chords in the right hand of piano 2 include the dominant seventh chord on B; in the left hand of piano 2, B is emphasised a number of times in the variations of the five-note motif. When we see that 'theme of the dance of the planets' returns from bar 147 in E minor after a long section emphasising B, the remark – that 'form is a succession of moments' and 'their succession is paratactical' (Balmer 2013: 74) – seems no longer valid. The section from bar 107 and the following section are not juxtaposed as isolated events, but have a structural connection such that the tension created in the dominant section from bar 107 is resolved in the tonic section from bar 147. Therefore, in the second movement, in contrast to the first, not only are the superimposed materials related, in the 'Moins vif', but this section is also structurally connected to the next, and what holds them together, the superimposed materials vertically and the two sections horizontally, is tonality. It is the dominant/tonic relationship, embodied in tonality, which makes these two sections structurally coherent. In Messiaen's analysis of the fifth movement, 'Amen des Anges, des Saints, du chant des oiseaux', Balmer,

[47] Original French: 'D'une manière générale, Messiaen tends à privilégier l'instant musical au détriment de l'architecture d'ensemble. Cette lacune … se remarque notamment lorsque ce dernier analyse ses propres ceuvres. Il identifie au passage les modes, les rythmes, les couleurs, les chants d'oiseaux ainsi que les différents procédés techniques utilisés, mais se borne généralement, sur le plan formel, à identifier les différentes sections sans chercher, autrement qu'en signalant les reprises variées, à mettre cellesci en en relation avec l'ensemble.'

Lacôte and Murray recognise Messiaen's preference for discussing his music in terms of tonality, and further that a view of music in terms of tonality is also involved throughout Messiaen's compositional process, which is certainly confirmed by the way the sections from bars 107 and 147 are structurally connected. In a 'summary of the form' (*résumé de la forme*) of the fifth movement (Messiaen 1996: 256), Balmer, Lacôte and Murray note:

> Messiaen makes no mention of the specific elements of his harmonic language – modes of transpositions or specific chords – which nevertheless coat the score. In Messiaen's mind, the tonal analysis thus seems to encompass or look down upon all the other characteristics of his language. The latter do not seem to possess any formal function: Messiaen prefers to present his form by means of tonal vocabulary, rather than to specify that such a period is in mode 3^2 or another phrase is built on contracted resonance chords. This tonal analysis moreover constitutes not an *a posteriori* analysis: the study of the sketches for *Visions de l'Amen* shows that Messiaen bases all the stages of the composition on tonal thought.[48] (Balmer, Lacôte and Murray 2017: 530)

Despite the fact that several students at the Paris Conservatoire recognised the lack of awareness of the overall structure in Messiaen's analysis, Messiaen certainly paid attention to global form in his analysis of the second movement, the funeral march, from Beethoven's Third Symphony. According to Roger Calmel, Messiaen devoted four sessions at the Conservatoire to the funeral march from the *Eroica*: 'Messiaen showed us by examples that the climactic point, the most pathetic, always occurs on the subdominant. He explained that the work was ultimately a great plagal cadence, ranging from the first degree to the fourth and returning to the first' (Boivin 1995: 192).[49] Instead of merely focusing on specific places or moments in music without considering them as a whole, Messiaen had the ability to see a work 'from above', as Messiaen told his students, 'as from an airplane' (*à vue d'avion*)

[48] Original French in Balmer, Lacôte and Murray (2017): 'Messiaen ne fait donc aucune mention des éléments spécifiques de son langage harmonique – modes à transpositions ou accords spécifiques – qui émaillent pourtant cette partition. Dans l'esprit de Messiaen, l'analyse tonale paraît donc englober ou surplomber l'ensemble des autres caractéristiques de son langage. Ces dernières ne semblent de fait pas posséder de fonction formelle: Messiaen préfère presenter sa forme au moyen du vocabulaire tonal, plutôt que de préciser que telle période est en mode 3^2 ou telle autre phrase est construite sur les accords à résonance contractée. Cette analyse tonale ne constitue du reste pas une analyse *a posteriori*: l'étude des esquisses des *Visions de l'Amen* montre que Messiaen articule toutes les étapes de la composition à une pensée tonale.'

[49] Original French: 'Messiaen nous démontrait par des exemples que le point culminant, le plus pathétique, survient toujours à la sous-dominante. Il expliquait que l'oeuvre n'était finalement qu'une grande cadence plagale, qui va du premier degré au quatrième pour revenir au premier.'

(Boivin 1995: 192). The structural connection recognised in Beethoven can be identified in ‘Amen des étoiles, de la planète à l’anneau’, in which the tonal relationship between the sections can also be perceived ‘from above’.

Part 2 – Reflections on Recordings by Loriod and Messiaen

Messiaen and Loriod recorded *Visions* twice, once in 1949, released on 78 rpm discs, and again in 1962, first released by Vega as three LPs (Dingle 2014: 47). We will firstly reflect on the section in the second movement, analysed above, as it appears in the recordings. The use of *rubato* in piano 2, played by Messiaen, is evident in both recordings, which means that, from an Adornian perspective, the 'human' part is interpreted by Messiaen. So we need to ask ourselves: does his interpretation have a dialectical relationship with the spatialised score, or does Messiaen reduce the perception of space, and 'feel' the music, presenting an unforeseeable *durée*?

Messiaen's Freedom

Similarities can be found in both recordings in terms of tempo *rubato*. For example, in the bass part of bar 109, Messiaen cuts the quaver short such that the rhythm at bar 109^2 sounds like two semiquavers followed by a quaver which is tied to the minim in the next bar. Messiaen does the same at bars 115–6, where he shortens the F in bar 115 and plays the D in bar 116 a semiquaver beat early. The quick leaps on the keyboard undoubtedly show the virtuosity of his playing and, more importantly, this deviation from the score shows that he no longer strictly counts the beats as points in *temps espace*. In the previous chapter, we suggested that *rubato* can be understood through both Adornian dialectics and Bergsonian *durée*: *rubato* engendered in the former manner can be regarded as 'momentary flashes' against the spatialised score, while *rubato* or deviation in Bergsonian terms reveals the fundamental self enduring in a duration which cannot be determined. If we want to know whether Messiaen's *rubato* is achieved as Adorno would suggest, we must first attempt to identify the neumic element by reading the score.

For Adorno, the neumic or subjective element is not contingent on the interpreter but is already embodied in the score. Let us take the passage at bars 112–17 in the left hand of piano 2 as an example. The five notes are spread over different registers of the piano from bar 112 in the first variation (bars $112–13^1$), where the first four notes of the motif move in steady quavers and the dominant B is confirmed by a crotchet. In the second variation, from bar 113^2, instead of equally dividing a minim into four quavers as in the first variation, the second note of the motif is emphasised by being lengthened to a crotchet, and the following

two notes are shortened to semiquavers. If the first variation from bar 112 unfolds at a rather steady pace, the alteration of the rhythm in the second variation from bar 113^2 renders the motif unsettled. For Adorno, as we have mentioned previously, the score does not merely present inert symbols, but contains sedimented forces and it is the task of interpretation to reveal these relations and tensions in performance. Messiaen's markings also guide us to the realisation that the neumic element can help us bring out such tensions in performance. A dot is indicated on the G, which is a stronger beat, and a tenuto mark is indicated on the F sharp, which is a weaker beat. Just as, with respect to harmony, Adorno encourages performers to 'bring dissonance to light' because 'overused tonality requires no further affirmation', so too should rhythmic syncopation be emphasised (Adorno 2006a: 66). Messiaen's markings confirm this resistance to the regular flow of rhythm. The performer can certainly, as a possibility of interpretation, lift up from the G and land on the F sharp with a slight delay to emphasise this 'rhythmic dissonance'.

Instead of confirming the dominant B with a longer value, the motif ends with a semiquaver at bar 114^2, and goes straight to the third variation with syncopations. After the consecutive syncopations from bar 114^2 to bar 115^2, as a result of which the rhythm becomes more intensified, the two on-the-beat quavers in the second half of bar 115 not only confirm the regular beat but also release the tension created by the syncopations. As a possible interpretation, the performer could play the off-the-beat quavers against the regular beats, and yet taking too much time on each syncopated quaver should be avoided because a sluggish tempo will ruin the rhythmic tension and weaken the sense of direction towards the on-the-beat quavers at bar 115^2, where the two quavers must be sustained and emphasised as affirmations of the main beats. The potential ways of interpreting the bottom part described above are derived from Adorno's theory of performance: with the awareness of regular beats and tonal forces, we realise – within the spatialised score – the tensions and dynamics, through which interpretation is determined.

Now we should turn our attention to Messiaen's recordings. In the earlier recording (1949), the steady quavers are unsettled in bar 112, where Messiaen shortens the last quaver. The F sharp is emphasised with a slight delay in bar 113, and Messiaen also cuts the crotchet (F sharp) short before the two semiquavers in bar 114. A clear *accelerando* can be heard in the consecutive syncopations of bars 114–15. Messiaen does not confirm the two quavers on the main beats in bar 115, instead, he reduces the value of the last F to a semiquaver and,

consequently, the semiquaver in bar 116 arrives early and the dominant B sounds as if it is played on the main beat. The liberty that Messiaen takes does not seem to demonstrate that *rubato* produces a 'flash' against the regular beats. In other words, the sense of space – which gives rise to the equally divided beats – is vague in Messiaen's playing. But, for Adorno, it is critical that this spatial sense is retained. As Adorno notes, 'one must feel one's way through … the basic beats – the other lives only in relation to these' (Adorno 2006a: 81). The constant change of tempo in the recording does not present a dialectical relationship between the subject and the spatialised score, but rather, it resembles more the contingency of *durée* reflected in inner states. This contingency is especially shown by Messiaen's performance from the end of bar 115 to bar 116, and also in the passage with the same rhythm and pitches from the second half of bar 109, in which the perception of beats as points in space is not merely reduced, but removed, and the rhythm on the page is replaced by a new rhythm. The descending motif at bars 114–16 certainly manifests a sense of musical direction; Adorno would encourage the performer to retain the steady beats as barriers against the urgent impulse to move toward the dominant. Messiaen – who speeds up in the syncopations and rushes through the two quavers – seems to abandon the spatial confines, such that he 'feels' the urgency, which is perhaps what a Bergsonian artist should do.

Messiaen retains this kind of spontaneity in the later recording (1962). Compared to the first recording, the later one, to a certain extent, shows more freedom. The freedom is not only reflected in the changes of tempo, but also in terms of articulation and pedalling. In bar 112, Messiaen uses pedal to connect the four quavers in the earlier recording, whereas in the later one he lifts the pedal after the third quaver and plays the last two quavers staccato; and the dynamic suddenly drops to approximately *mp* in the last two quavers. Another obvious difference to the first recording occurs in bar 121; in the first recording, Messiaen plays the two quavers at a relatively steady pace, but in the later one, he suddenly increases the tempo in the two quavers and his touch, without pedal, is much lighter. Therefore, we can see that, by adding, reducing and even occasionally removing the perception of equally divided beats represented in space, Messiaen does not actually do in performance what he instructs in the notation.

Messiaen's 'Confused Recollections'

In the section on memory in the previous chapter, we observed that, according to Bergson, we should be brave enough to show, through a process of expansion, our 'darkened images' or 'confused recollections' of a piece of music in performance (Bergson 1991: 85), instead of merely following what has been saved in motor memory: the mechanical and repeatable actions provoked by the spatialised notation. Each note or marking provokes an 'appropriate' movement; a dot, for example, provokes a lift on the key, and a tenuto provokes us to hold the key. Through the process of learning the piece, our motor memory encapsulates a series of bodily movements based on the notes and markings which can be repeated. It is enough to repeat these movements in performance if making music was a mere means of self-preservation; as Bergson states, 'a living being which did nothing but live would need no more than this' (Bergson 1991: 84). Nevertheless, the performer, as an artist, encouraged by Bergson, should not adhere to habitual movements, gained through the learning process, for they must not be afraid to dream and to let 'the mathematical estimate give place to a confused instinct' (Bergson 1910: 126). We should not let the 'confused recollections', 'unrelated to the present circumstances', fade away into 'an immense zone of obscurity' (Bergson 1991: 85). Although in this dreaming condition we will commit errors, as far as the notes and markings on the score are concerned, it will enable us to perceive genuine experience and present the colourful *durée*.

In both of Messiaen's recordings, we can sense that he seems to strive for this 'dreaming condition' by giving up on measuring the beats and on repeating the appropriate or 'correct' movements, such that he offers us the opportunity to perceive his 'confused recollections' of the notes in the score. Just as Bergson encourages us to dream without being confined by mathematical calculations, Messiaen also seems to 'dream' in his performance. Interestingly he even entrusted his students in his class with his own experience of dreams. As Françoise Gervais recalls: '"when we are at the point of waking," he [Messiaen] said, "it looks like things are happening that we understand, without being able to explain them. It is like that in this music"' (*«Lorsque nous sortons du sommeil, » disait-il, «on dirait qu'il se passe des choses que nous comprenons, mais sans pouvoir les expliquer. C'est ainsi dans telle musique. »*) (Boivin 1995: 187). If Messiaen *explains* the way in which he views his music as a 'thing', as mentioned in the Introduction, and accordingly numerates the rhythmic values in space, his recordings of *Visions* with Loriod, which fulfill Bergson's idea of dreaming by presenting

music in duration and bringing out ‘confused recollections’, precisely reveals what he does not, or cannot, *explain*. The way in which Messiaen ‘dreams’ in his performance seems to coincide with the way in which he wanted to convince the students to trust their dreams.

Jankélévitch indicates that ‘we live music, as we “live” time, as a fertile experience’ (Jankélévitch 2003: 95), such that ‘a brilliant musician can in fact be an innovator without strictly speaking being an inventor’ who has ‘the rapacious need for novelty’ (Jankélévitch 2003: 108). Just as Jankélévitch focuses upon the ‘unique experiences of each work’ without ‘a consistently systematic metaphysical hermeneutic frame’ (Gallope 2017: 190), Messiaen’s performance seems, as Abbate encourages, to embrace ‘the drastic’, which ‘flows from … experiences and not from verbally mediated reasoning’ (Abbate 2004: 510).

Adorno, similarly to Bergson, does not allow the performer to follow the habitual movements provoked by the score, and he encourages the performer to appropriate the music ‘through the subject’, ‘not letting it be-in-itself’, which ‘always means, in a certain sense: exaggerating the music’ (Adorno 2006a: 77). However, this is not achieved by replacing motor memory with undeterminable *durée*, but instead by a dialectical process. As Adorno states, ‘the subject gains all the more understanding of the object by adding to it’, ‘but this adding occurs within the text, not as something independent from it’ (Adorno 2006a: 65). The delay in bar 123 – heard in Messiaen’s later recording, as a means to emphasise the F sharp and to reinforce the rhythmic tension – could be a justifiable interpretation for Adorno, because the score already reveals such tension, and yet the freedom in Messiaen’s playing, permitted by ‘a confused instinct’ that capriciously alters tempi, articulations, dynamics and even rhythms, might not be valid for Adorno.

The tempo in the earlier recording is relatively steady towards the end of the section we are discussing, whereas in the later recording, Messiaen’s use of *rubato* becomes more striking. The motif repeats from bar 127 with the same rhythm, as written in the score, and yet the recording demonstrates that, not only can a clear *accelerando* for both pianos be identified, but also that Messiaen plays the same rhythm differently each time between bar 127 and bar 131. In this second recording, Messiaen prolongs the first two quavers in bar 127 and then, from the third quaver, the tempo suddenly becomes quicker. In the next statement, from the second half of bar 128, Messiaen changes the rhythm in bar 129: the three octaves F, D and B are played as triplets. In addition to speeding up throughout the end of this section, Messiaen also changes the rhythm in the second half of bar 130, in which the F is played as a

semiquaver, the D consequently comes a semiquaver beat earlier, and the dominant B is almost played on the last quaver beat. Although it is written as the same notes and rhythm in the score, we may say, with Bergson, that with 'the fleeting duration of our ego', the feeling is never the same toward the object, but is, instead, 'in a perpetual state of becoming' (Bergson 1910: 130). In the recording, Messiaen does not perceive the same passage as an object in space but seems to express his ever-changing sensations as he engages with the same object, and this tendency to reduce or even remove the perception of the spatialised score and the sense of regular beats as spatial points is rather clear in Messiaen's playing. A Bergsonian leap, from beats in *temps espace* to unmeasurable and ever-changing *durée* is therefore recognised in Messiaen's playing. Adorno would certainly allow an interpretation that involves variations in tempo; as he writes, 'in a good interpretation of a highly organized piece, one will barely find any two crotchets that are chronometrically identical'; however, the variations (of two crotchets) cannot be arbitrarily free, but they must 'palpably relate to a *latent*, identical beat' (Adorno 2006a: 76). For Adorno, the total neglect of the equally divided beats, shown in the most extreme examples in Messiaen's playing, should certainly be avoided.

Loriod the Follower

In the previous chapter, we identified the irreconcilability between the 'human' part that can be interpreted and the rhythmic pedal, without tonality and metrical structure, which is uninterpretable. The liberty that Messiaen takes could certainly cause problems for ensemble between the bottom part and the mechanical and uninterpretable part that 'ignore[s] human lassitude' (Jankélévitch 2003: 45). In Loriod's playing, a clear tendency can be identified, especially in the later recording, in which she carefully follows Messiaen's tempo changes, instead of maintaining the mechanical quality of the rhythmic pedal. In other words, Loriod seems to minimise the problem of the irreconcilability between the two materials, such that a kind of 'togetherness' or uniformity in tempo is more or less achieved through her lack of strict adherence to the score, or, the ensemble is compromised through her attentiveness to Messiaen's tempo changes. In both recordings, Loriod follows Messiaen's *accelerando* from bar 114. However, from the end of bar 115 to bar 116, there is a critical difference between the two recordings. In the earlier recording, Loriod does not seem prepared for the sudden alteration of rhythm in Messiaen's part from the last quaver F to the B in bar 116, in which

the dominant B in piano 2 comes a semiquaver beat early, so that the F in the rhythmic pedal (piano 1) is not together with the B in piano 2.

Overall, in this section of the earlier recording, Loriod is aware of Messiaen's tempo changes, to which she reacts by following piano 2 to a certain degree, but Loriod's effort to maintain a steady tempo is quite clear. Loriod follows Messiaen's changes more faithfully in their later recording; that is to say, from the first to the second recording, a tendency to integrate her part with Messiaen's *rubato* can be recognised in Loriod's playing. In the same place in the second recording, from the end of bar 115, as Messiaen cuts the quaver F and arrives early on the B in the next bar, Loriod also shortens the value (F sharp) in the rhythmic pedal in order to place the F natural in bar 116 together with the B in piano 2. The uniformity of tempo is achieved, but the rhythm in piano 1 is wrong. The three-semiquaver value of the F sharp becomes two semiquavers in the recording. The numeration of the first four values in the Hindu rhythm becomes 4-4-4-2-2 instead of 4-4-4-2-3. In bar 121, Messiaen's capricious *accelerando*, which can be regarded as a 'Bergsonian moment', is also carefully followed by Loriod, which undoubtedly causes the inaccuracy of the values in the rhythmic pedal. The most obvious example of this can be found when Messiaen initiates a long range *accelerando* from bar 127, which is tightly traced by Loriod, until the *Poco riten.* at the end of bar 138. One can speculate that the increased responsiveness to Messiaen's tempo changes on Loriod's part might have caused Messiaen to embrace more liberty in the second recording than in the first.

We can further confirm Loriod's tendency to integrate her part with Messiaen's *rubato* in their performance of the first movement. In the first recording, while Loriod maintains the tempo, Messiaen pushes forward from bar 27, which means that the semiquaver chord formed by G sharp, C sharp and G – which is supposed to be played a semiquaver beat after the A major chord in piano 2 at the start of bar 28 – comes a quaver beat after the A major chord is played. From bar 29, Messiaen's speeding-up is so great that the two are not together until Loriod attempts to catch up from the third crotchet beat. Furthermore, as a result of Loriod not following Messiaen's *accelerando*, the third quaver chord in the top part of bar 34 is almost a quaver beat behind the B minor chord in piano 2. Therefore, we cannot say that Loriod is rigorous in keeping to a steady tempo, because she still tends to adapt to Messiaen's tempo to a certain extent, and yet, her adaptation seems rather passive and she does not fully engage with all of Messiaen's tempo fluctuations in the early recording. In the second

recording, on the other hand, Loriod becomes much more attentive to piano 2. This is especially shown from bar 29, where Messiaen, instead of adopting an *accelerando* throughout the phrase, as in the first recording, employs a different kind of *rubato*: he keeps a steady tempo until the B minor chord (the last chord of the bar), and then stretches each chord further than the previous one in bar 30. All these nuances are captured by Loriod, and in bar 30 she accents the chord in the left hand, formed by B, F and B flat, which seems, together with Messiaen, to emphasise the dominant E in piano 2. The most striking passage in the second recording is at bars 34–5 when Loriod slows down for Messiaen's *ritardando,* and in bar 35 waits for Messiaen on the second quaver in order to play the third quaver together with the second crotchet in piano 2. Here Loriod, by following Messiaen, deviates from Messiaen's own indication: '*le dernier groupe* [the last group from bar 34], *très ralenti*' written only for piano 2 (Messiaen 1943: 4).

After 1950, 'Messiaen had a great desire to hear contemporary music abroad', as Loriod recalls, and 'in order to finance these trips', they played *Visions* in many countries (Hill 1995: 296). Messiaen also mentions that he had joined Loriod, 'almost three hundred times', in playing *Visions* (Messiaen 1994: 203). Therefore, compared to the 1949 recording, in which Loriod seems less prepared and responsive to Messiaen's *rubato*, the capacity to thoroughly follow Messiaen's fluctuations in the 1962 recording reflects Loriod's better awareness of what Messiaen wanted from the experience of playing the piece together.

As the score shows, Messiaen is more concerned with the integrity of each piano part, rather than their ensemble in performance. From bar 25 in the first movement, Messiaen allows the second piano to take *tempo rubato,* but, as he states in the footnote to the published score, 'all that changes nothing in the movement of the first piano' (tout cela ne change rien au mouvement du 1er piano) (Messiaen 1943: 4). In the later recording, Loriod ends up rather 'disobedient' with regard to score indications, as a result of submitting to Messiaen's tempo in performance. Hill and Simeone also recognise that the construction of different materials 'creates problems of ensemble, since piano 1 is in precise rhythmic patterns while piano 2 needs rhetorical elbow room, particularly towards the climax where the theme enlarges into grandly broken chords' (Hill and Simeone 2005: 124). Instead of maintaining her own symbolic or spatial representation of the regular beats in order to produce the 'precise rhythmic patterns', she follows the beats produced by Messiaen, which, from a Bergsonian perspective, constitute the idea of duration. She perceives Messiaen's beats one after another

without perceiving *temps espace* in order to measure the rhythmic values, which resemble the perception, described by Bergson, 'when I follow with my eyes on the dial of a clock' (Bergson 1910: 107–8). If we want to reproduce the equally divided oscillations of a clock in consciousness, we need to perceive them as points in *temps espace* in order to evenly separate them and measure their intervals, but by following the oscillations of a clock 'outside of me, in space, there is never more than a single position of the hand and the pendulum' (Bergson 1910: 108). In this case, we do not set the preceding and present oscillation side by side, by which we measure the interval between them, such that in our consciousness, 'there will no longer be anything but the heterogeneous duration of the ego' and 'a process of organization or interpenetration of conscious states … without moments external to one another, without relation to number' (Bergson 1910: 108). Moments when Loriod follows Messiaen reveal that the notion of space no longer operates in Loriod's consciousness with beats as points successively set in juxtaposition, instead, she perceives Messiaen's beats, one after another, or permeating one another. Thus, with Loriod following piano 2 and reducing the perception of space, their performance seems to attempt to achieve the 'Bergsonian goal' that tends to 'root out the mirages of spatialization that are scattered throughout musical aesthetics' (Jankélévitch 2003: 90).

Despite letting Loriod follow him, Messiaen later showed more awareness of the irreconcilability of the construction in the first movement, 'Amen de la Création', and allowed more possibilities of not playing together, which could help each piano retain their own identity. As Hill and Simeone reveal:

> Messiaen seems to have changed his mind on the best way to play this passage. In the Messiaens' 1962 recording the ensemble, though still essentially together, is clearly under strain, and the broken chords sound rushed. Later, Messiaen recommended to George Benjamin and Peter Hill that the pianos should proceed independently, simply reconnecting with each other at the start of each phrase. (Hill and Simeone 2005: 124)

For Messiaen, it seems ultimately more important to present the different materials' own characteristics than to achieve their unity in performance. Messiaen's advice, unlike his recordings with Loriod, seems to recognise, as Adorno suggests, 'the irreconcilable demands' that reside in the work: 'since the work is antinomic, a fully adequate performance is actually not possible, for every performance necessarily represses a contrary element' (Adorno 1997: 106). If piano 1 follows piano 2, the mechanical quality inherent in the rhythmic pedal will be

lost, and vice versa, the expressive human quality will be diminished, which is to say, uniformity cannot be achieved without one of the parts losing their distinctive quality. As with Messiaen's suggestion to George Benjamin and Peter Hill, Adorno's is concerned to reveal a work's antagonisms: 'the highest criterion of performance is if, without repression, it makes itself the arena of those conflicts that have been emphatic in the tour de force' (Adorno 1997: 106). To return to Goehr, this time more affirmatively, Messiaen shows no desire here to bring different materials into an organic whole, and in this performance situation, is more interested in their inherent qualities. Therefore, for piano 2, the performer is encouraged to speak and to be expressive through their use of *rubato*, whilst, for piano 1, the performer is led to keep themselves more or less in 'a state of spatialising', rather than follow the tempo of piano 2. If their first recording partly manifests the irreconcilability, the second recording ignores this inherent problem in the composition. Instead of merely celebrating Messiaen and Loriod's breakthrough from *temps espace* to *temps durée*, or from inert symbols to a kind of utopian experience, we need to reflect further on this kind of one-sided decision for performance, especially in the later recording.

The Best Works are Imperfect

In the second recording, the lack of spatial impression in Messiaen's part, and the fact that Loriod gives up perceiving the rhythmic patterns in *temps espace* in favour of following Messiaen, might present the pursuit of utopian experience from a Bergsonian perspective, and yet, for Adorno, the recording's interpretative one-sidedness would fail to show the problem of the work. As Adorno states, 'in truth, the best works of art are by no means the most perfect ones, but rather those whose imperfection bears the most profound witness to their fundamental contradictions' (Adorno 2006a: 211). Adorno gives the example of Schubert's works, which are 'essentially non-integrally organised in their structure, [and] did not demand an integral, but rather a fragmentary interpretation' (Adorno 2006a: 212). The fragmentary or 'the discontinuous' in music must remain 'sketched and unfulfilled' in performance (Adorno 2006a: 80). Just as in Schubert's music, which displays 'the very structure of the whole as a fragmentary one, the totality as something that is not total' and which has a 'contextual dissolution' of parts that somehow needs to remain 'contingent and rhapsodic' (Adorno 2006a: 212), so we should be encouraged to recognise the 'unrelatedness' of the constructions in *Visions*, in which the fundamental difference between

the rigidity of the rhythmic pedal and the expressiveness of the human part creates conflicts in tempo. Once again, Adorno holds the dialectical view that 'interpretation bases itself on the logic of the work, and the more intensely it focuses upon it, the more it uncovers at the same time the shadows of its fallibility' (Adorno 2006a: 72). Through the analysis of the different materials in the previous chapters, we have become increasingly aware of the differences and contradictions between the parts; therefore, in their reproduction, these materials need not be integrated and, on the Adornian view, we should aim to problematise their relationships.

So it is a possibility for performance that the first pianist should maintain the mechanical quality of the rhythmic pedal, which might affect the expression of the human part, such that the second pianist will be, to a certain degree, constrained in their tempo fluctuations. If, hypothetically, Loriod had kept to a steady tempo at the end of the section from bar 127 in the second movement, would Messiaen still have sped up as much as he does in the second recording? If he had remained insistent about such a significant *accelerando,* he would instead have had to wait for much longer than a crotchet and a quaver rest in bar 140. That is to say, Messiaen would most likely have reconsidered his long-range tempo fluctuations if Loriod had not faithfully followed him, and therefore, by paying attention to the 'machine', the fundamental self enduring in duration that is reflected in his playing would have been interrupted or interfered with by the mechanical rigidity. This might have prevented the pursuit of Bergsonian *durée* for both performers, but it is a 'healthy' way to experience the problem of the work from Adorno's perspective: the first pianist presents the unassimilable machine, whilst the second pianist shows how their expression is constantly frustrated by the machine. But if Messiaen and Loriod celebrate the 'Bergsonian victory', what do other pianists tend to convey in their recordings?

Part 3 – Since Loriod and Messiaen: Reflections on Recordings by Loriod/Messiaen and Others

This short section will provide a general discussion of the other recordings, particularly with regards to tempi and with further brief discussions of articulation and touch in the recordings, before we begin to analyse three selected recordings in detail.[50] *Visions* has been recorded many times since the Labèque sisters made the first recording not to feature the original performers in 1969. Compared to the other recordings, Messiaen and Loriod's interpretation can be regarded as the freest, not only in terms of tempi, but also in terms of the variety of articulation.

Most performances are rather respectful towards the spatialization of the score: especially the Elisabeth Vatn/Steffen Horn recording, where, even in the second theme from bar 11 in the fourth movement, marked *très libre* at the beginning of the section and with many tempo fluctuations, Horn's tempo remains particularly stable. The whole performance seems well disciplined with refined tone, but the players are too cautious to commit themselves to any *rubato*.

In the Klaus-Georg Pohl/Ute Gareis recording, some freedom of tempo in Gareis's part can be identified during the 'painful cry' of the third movement from bar 29, but the tempo becomes more rigid in the reprise of the theme from bar 75 when it is superimposed upon a rhythmic pedal and, consequently, the human expression seems rather restricted. A unique rendition of piano 1 from bar 45 in the fifth movement is offered by Pohl, whose birdsongs are softer and more lyrical than other pianists'.

Similar to the Pohl/Gareis recording, the birdsong in the Didenko/Parshina recording is also softer and slower than in the other recordings. Also, a clear *accelerando* is heard in the chromatic theme depicting Jesus's agony in the third movement – not only from bar 29, but also from bar 75 when the theme is superimposed upon an 'inhuman' rhythmic pedal – and this intensifies the painful cry, and reveals that the human expression supersedes the 'machine', as it does in Messiaen's recordings.

At the start of the 'extremely passionate' second theme in the fourth movement, the music seems under-played by Parshina, with a distinct weakness of sound and a much slower tempo

[50] See Appendix: The List of Recordings of Visions

than the score indicates, until the repeated chords from bar 59, at which point her playing becomes much more dynamic. Therefore, by contrasting the climax with the preceding section, Parshina offers a more effective culmination to the theme.

Unlike Parshina's slow tempo and moderate dynamics, De Leeuw, also a composer, presents the most passionate second theme of the fourth movement with rather consistent power and force. The first movement in the Bon/De Leeuw recording is much slower than indicated, demonstrating, compared to all the others, the most timeless 'Creation', lasting more than seven minutes.

Like Messiaen and Loriod, Argerich and Rabinovitch speed up in the first movement, but the *accelerando* is so gradual that it progresses almost without being noticed. A prominent feature in their recording is Argerich's virtuosity, especially in the rapid chords from bar 71 in the last movement. The lack of pedal used by Argerich endows the chords with clarity, and the tempo decision, much faster than indicated, allows Argerich to show off her amazing facility, not only with brilliant chords, but also with her mesmerising running sextuplets in the coda from bar 95. However, the dryness of the chords from bar 71 in the final movement disregards what the music intends to convey, as Messiaen puts it: 'precious stones of the *Apocalypse* which ring out' and 'the light of Life' (Messiaen 1943: Author's Note).

The energy conveyed in the last movement in the most recent recording made by the Naughtons also provides real excitement and a sense of 'arrival'. Argerich and Rabinovitch start with a fast tempo and ignore the tempo change from bar 71, whereas the Naughtons distinguish the different tempi, which makes the 'resurrection' of the theme more effective. The Naughtons seem best at the fast passages with driving momentum and dynamic contrasts, such as the second movement and the middle section of the fifth movement from bar 45 with birdsongs, but, while Christina's virtuosic playing (piano 1) can be compared to Argerich's, the slow passages lack lyricism from Michelle (piano 2). In contrast, Rabinovitch's playing in slow passages, such as in the third movement from bar 17 and fifth movement from bar 12, conveys an extraordinary singing quality with various subtle nuances. Although the Naughtons maintain a relatively steady tempo in the first movement, Michelle constantly employs local fluctuations by varying the tempi of the broken chords from bar 25, which is to say that, instead of leaping from the confine of the steady beats, like Messiaen, she shows that freedom is restricted by them.

The Raat/Austbø recording can be considered as the most geometrical: they pay the most respect to Messiaen's text of all the recordings. All the markings are faithfully realised in the recording, and they only employ *tempo rubato* when it is marked.

Some interesting interpretations can be found in the Kims' recording. In the first movement, the slowness of each group of the broken chords, which take a quaver beat, affects their phrasing of the main chords. In the third movement, the extremely short semiquavers in bars 3–4 and in the passages marked *non legato* are capable of drawing the listener's attention, but their articulation appears unsuitable and compromises the seriousness of the music, as it depicts 'the curse of the Father on the sin of the world which Jesus represents in this moment' (Messiaen 1943: Author's Note; Schloesser 2014: 340).

Apart from both recordings by Loriod and Messiaen, this thesis will include detailed discussion of another three: Hill/Frith, the Labèques and Ogdon/Lucas. As the first to record the work after Messiaen and Loriod, the Labèques, abandoning the kind of freedom observed in Messiaen's playing, are much stricter in terms of tempo. It is also intriguing that Messiaen, as artistic director for the recording, could allow an interpretation that entails a different performance philosophy to his own. The recording by the Labèques is described by Jean Wentworth as 'far inferior to the Ogdon and Lucas disc' (Wentworth 1973: 323). Wentworth compliments Ogdon/Lucas's 'sheer theatrical energy' and suggests that 'the incredible technical difficulties of the piece pose no problem' (Wentworth 1973: 327). Wentworth also criticises a few details in the recording, such as tempo decisions and dynamic balance (at the beginning of the fourth movement), which fail to present the character of the music appropriately. The review does not discuss how the contrasting materials, 'human' and 'machine', embodied in the work, are presented in performance. We will argue that in terms of presenting the problem caused by the superimposition of the irreconcilables, the Ogdon/Lucas recording is no 'better' than the Labèques. If musical performance aims to recover 'spiritual experience' obscured in daily life, both recordings, especially the Ogdon/Lucas, provide neither the 'Bergsonian courage' to pursue *durée*, nor the 'Adornian struggle' to see a momentary 'flash'. Therefore, the Ogdon/Lucas recording is employed in the dissertation as a representative of the interpretative failure to reconcile the irreconcilables. If the Loriod/Messiaen recording represents the Bergsonian position in performance, Adornian dialectics are best identified in the interpretation of Hill and Frith. In the first

movement, the problem of the work is revealed in the Hill/Frith recording, and the 'machine' is thoroughly revealed by Hill throughout.

A number of passages in *Visions* will be discussed in the rest of thesis. In this chapter, we will continue to focus mainly on the sections that include the superimposition of distinct materials. In addition to the performance analysis of the first movement and the section from bar 107 in the second movement, the section from bar 75 in the third movement and the section from bar 172 in the fifth movement, where 'human' and 'machine' are assigned to a single pianist, will serve as examples. By observing the interpretations of different pianists, we will see how they deal with the problem of the amphibious construction. Philosophical reflections will continue, such that the recordings will be perceived through the lens of Bergsonian duration and Adornian dialectics.

Freedom in *Temps espace*

The Hill/Frith recording, in which Hill plays the first piano part and Frith plays the second, is rather faithful to the score, that is to say, the mensural element. In the section from bar 107 in the second movement, for example, they keep a steady tempo, which enables Hill to execute the rhythmic pedal with precision. Although Frith does not employ *rubato* to present the gestural and subjective elements embodied in the bass part, musical sense or musicality is brought out by dynamic variations and different kinds of touch. In other words, Frith does not challenge the rigidity of the machine, such that 'expressive *music* … is being bullied' (Jankélévitch 2003: 41), yet the spatialised score is resisted, not by changing the tempo, but through other musical nuances and pianistic techniques. For example, even though Messiaen marks *ff* for the passage from the second half of bar 118, Frith starts the descending semiquavers almost at *mp* from bar 119[2]. This dynamic retreat gives room for a *crescendo*, which grants the phrase a direction. We can observe that Frith gradually adds more weight through the phrase: the beginning might be played with wrist only but more strength from the arm is added towards the end of the phrase. Frith's different touches are most discernible in relation to the two notes, G and F sharp, at the end of bar 108 to the beginning of bar 109, in bar 113, and in bar 123. In these places, Frith seems to use a kind of 'spring' strength of the wrist on the G and to employ the resistance of the keyboard in order to quickly lift from the keys; this touch renders the octave (G) rather short and abrupt, which contrasts to the F sharp

played with a great deal of weight from the arm. The contrast between the two octaves in the recording is not so much about different lengths, the G marked *staccato* which needs to be short and the F sharp marked *tenuto* which needs to be sustained; instead we hear different tone colours rendered by the strength or weight provided by different parts of the body. Despite the fact that both pianos operate within the confines of the points in *temps espace* in terms of tempo, we can still perceive rhythmic tension and musical direction. In the section discussed above, Frith's playing does not 'flash' against the equally divided beats, but the subjective element is realised within the beats as spatial points.

In the passage that begins with the left-hand leaps at bar 118 and the descending semiquaver octaves at bar 119^2, Frith does not keep at the dynamic level of *ff* as marked, but rather begins the semiquaver octaves at approximately *mp* and gradually becomes louder. Although the music is marked *ff* at 118^2, Frith's dynamic retreat at bar 119^2 and *crescendo* through the descending semiquaver octaves endow the passage with direction. Frith maintains the Adornian idea of 'imitation' by gaining more understanding of the work and therefore 'adding' to it (Adorno 2006a: 65). That is to say, by adding *more* to what is marked in the score, the tension and musical sense are revealed in Frith's playing. The passage does not directly settle on the dominant B, which is only confirmed at bar 124, but is instead delayed by the octave D in bar 121. In bar 122, D is emphasised three times, each of which is preceded by grace-note like hemidemisemiquavers. In the recording, the significant power of Frith's left hand from bar 123 not only stresses the delayed arrival of the dominant B, but also the strength in the two octaves in bar 123 generated by the large leaps speaks a kind of pianistic 'language'. There are three different intervals among the four octaves from the end of bar 123 to bar 124: a minor second from F sharp to F natural, a minor sixth from F natural to D and a minor thirteenth from D to B. The interval becomes larger and larger between F sharp and B, but the value between them remains the same. That is to say, the performer must move the left hand more and more quickly in order to play the four octaves in time. As the movement of the hand becomes quicker, it will consequently generate more strength in the larger leaps. In addition to the much higher volume of the two octaves in bar 124, there is also a sense of 'attack' in the two octaves in terms of tone quality in Frith's playing. Frith allows the dynamic differences between the small interval and the large intervals which generate more strength. This is Adorno's idea of 'speaking the instrument's language', categories such as 'tone, attack etc.' (Adorno 2006a: 55). Messiaen indicates in *Technique* a way of developing a theme by changing registers: 'the low notes of the theme pass to the

extreme treble, the treble to the extremely low, in abrupt leaps … Augmentation and change of register are going to communicate to this theme a crushing power' (Messiaen 1944: 36). In this passage from bar 123, the 'crushing power' is not only presented by the quick shifts of different registers but is also rendered by the pianistic language. Unlike Messiaen, Frith adheres to the regular beats and does not arbitrarily add to what is in the score, but the small changes he makes nevertheless indicate that 'the most rigorous interpretation still contains an element of freedom' which exceeds what is noted in the score (Adorno 2006a: 55). Adorno argues that, if the 'independent aspect of vocal or instrumental language' is present in performance, it will show 'the element of truth in virtuosity', which 'is precisely the work's *objectivity*' (Adorno 2006a: 55–6). The increasing strength and power and accumulating sense of 'attack' in the tone quality, that results from the leaps of the four octaves, allows Frith's virtuosity to enter into the dynamics contained in the work.

Adorno's Notion of Objectivity

It might be useful here to clarify Adorno's notion of objectivity. For Adorno, the objective element does not mean 'the non-controversial aspect of things, their unquestioned impression, the façade made up of classified data, that is the subjective', for objectivity involves the subject that 'breaches that façade, engages the specific experience of a matter, casts off all ready-made judgements and substitutes relatedness to the object for the majority consensus' (Earle 2015: 98). Therefore, in order to present the objectivity of music, 'the experiencing subject is not merely passive': we attempt to recover a genuine experience by involving the subject, since the realisation or determination of the objectivity of music needs to be 'articulated by the subject' (Earle 2015: 98). Just as for Bergson, our conscious states – perceived in a homogeneous space or, for example, expressed in words – lose their colours and become lifeless and impersonal (Bergson 1910: 133, 136), so for Adorno, music played purely mensurally without the intervention of the subject is '*meaningless*', 'incorrect, unmusical' (Adorno 2006a: 95). Adorno states that 'objectivity is not left over after the subject is subtracted' (Adorno 1983: 144), and the one who performs music merely by focusing on the spatial aspect, the spatialised notes and markings, for example, and claims to bring out the objective aspect of music 'is every bit as one-sided as the "subjectivist" caricature presented by self-proclaimed "objectivists"' (Berry 2008: 101, 100). Just as musicological writing 'remains subjective' when it 'takes objectivity to equate with success

in classification', 'inasmuch as it is involved in the business of fitting objects into schemas rather than attending to their particularity' (Earle 2015: 99), playing dogmatically in accordance with the score simply treats the notes as points in *temps espace*, such that the experience of *durée* remains hidden and obscured.

The bass part in the second movement from bar 107, for example, requires not merely 'fitting objects into schemas', but activating the subject to present the rhythmic and harmonic tension, or the 'particularity', of the music in performance. But what about the mechanical part which excludes the subjective element? In brief, its objectivity is realised through nothing other than 'fitting objects into schemas'. If playing 'a Beethoven quartet' exclusively 'according to the notes on the page would be senseless' for Adorno (Adorno 2006a: 248), playing a mechanical part in Messiaen by strictly adhering to the equally divided beats and without adding any subjective nuances would nevertheless be correct from an Adornian view, even if Adorno expresses a dislike of such inexpressive and inarticulate music. In contrast to Loriod, Hill's unyielding tempo and consistent dynamic level in the rhythmic pedal certainly give an objective realisation of this inhuman construction.

The 'Flash', the Non-subsumable

Let us continue with the Hill/Frith recording. In the second piano, from the end of bar 123 to bar 124, Messiaen indicates the same accent marking for the four octaves. Yet the almost thrust-like strength in Frith's playing of the two octaves in bar 124 indicates virtuosity and allows the pianistic language to speak. Adorno would perhaps see the sudden power of the two octaves, a product of the large leaps, as part of the work's objectivity. This instrumental language presented through large leaps also appears in bars 109, 114 and 116.

If the second piano's 'human' character in this section of the second movement only emerges through different volumes and tone colours, in the first movement, Frith reveals an attempt to convey the expressiveness of the chorale by resisting the spatially arranged beats. Frith keeps a steady tempo with Hill (who plays piano 1) until bar 25 from which point onwards each chord in piano 2 is preceded by three ascending broken chords that endow each main chord with the increased resonance of the lower registers of the keyboard. Loriod and Messiaen's tempo gradually becomes faster throughout the whole movement, especially from bar 25,

whereas in the Hill/Frith recording, no long-range *accelerando* can be identified. However, from bar 25 we can observe tempo fluctuations in every phrase of the second piano part.

Frith stretches the last group of broken chords in bar 25 in order to emphasise the A major chord in bar 26. In bar 27, each broken chord in the last group is slightly more stretched than the last group of chords in bar 25, and Frith also seems to deliberately delay the A major chord in bar 28 to mark its tonal significance. A similar approach is employed to emphasise the last chord of the phrase in bars 30 and 31. In bar 33, Frith slows down in the last group of broken chords in order to emphasise the highest chord with an accent marking (dominant with added fourth) in bar 34, then he compensates for the delay of the dominant by starting the group of B minor broken chords early. According to David Rowland, this 'give-and-take' *rubato* used 'within the framework of a strict bar-length' was also a quality of Chopin's piano playing (Rowland 1994: 211, 213). It should be noted that Hill remains rather 'dismissive' and does not respond to all of Frith's local tempo fluctuations.

The stretching of the A major broken chords at the end of bar 27 causes the A major chord in Frith's part at bar 28 to be played together with the second semiquaver chord (G sharp, C sharp and G) in piano 1. Similarly, the dominant chord (with added fourth) and last B minor triad in bars 30 and 31 are approximately a semiquaver behind Hill's part because of Frith's *rubato*. In bar 34, the dominant chord in piano 2 is not together with first beat of piano 1, as a result of the slowing down of the broken chords in the previous bar, but Frith soon catches up with Hill's third quaver beat by starting the B minor broken chords early. The expressive quality of Frith's part and the mechanical rigidity of Hill's seem to manifest the problem of the work: the irreconcilability of the two distinct materials. There are divergences in tempo between Loriod and Messiaen in their first recording, but as we have seen, a clear tendency can be observed in which Loriod tends to reconcile her part to Messiaen's tempo fluctuations. In the Hill/Frith recording, Hill's unshakeable tempo confronts the *rubato* of Frith's part and shows no sign of compromise, which is to say that the machine 'cast[s] out all weakness and ignore[s] human lassitude' (Jankélévitch 2003: 45); Frith, though restrained, still expresses the elasticity of the human part within the given confines. This combination in the recording does not achieve uniformity, and yet it reveals what Adorno claims, that 'musical interpretation is essentially always critique' (Adorno 2006a: 55). Hill and Frith in no way attempt to create a 'peaceful union' by following each other but are instead determined to reveal the irreconcilability of the human and the machine. In an Adornian sense, their

interpretation ‘retrieves the music by uncovering it in its fallibility’ (Adorno 2006a: 80). As mentioned, local fluctuations can be heard in Michelle Naughton’s part (piano 2) in this section. The difference to the Hill/Frith recording is that Christina Naughton responds to the *rubato* in piano 2 and seems afraid not to play together on the main beats with Michelle; alternatively, by loosening the rigidity of the ‘machine’, they refrain from ‘criticising’ the work. The Adornian paradox, ‘success in failure, failure in success’, recognised by Anthony Gritten (Gritten 2014: 91), seems to be present in these recordings. Hill and Frith succeed in uncovering the problem, but fail to reconcile the materials; the Naughtons fail to bring out each part’s objectivity, but succeed in uniting the materials.

If Hill realises the objectivity of the double rhythmic pedal by maintaining the steady tempo, Frith uncovers the harmonic tension and the sense of phrasing contained in the work by means of *rubato*. For example, the stretching of the A major broken chords in bar 25 and the delay of the chord in bar 26 not only emphasise the tonic, but also convey the sense of a complete phrase. Instead of attempting to reduce the notion of space by diminishing the sense of metric regularity, as reflected in Messiaen’s playing, the subjective or neumic element in Frith’s playing seems to only appear in ‘flashes’, or, as Barbara R. Barry calls it, ‘serendipity’, as the counterpart of logic in the creative process (Barry 2009: 85). This is Adorno’s idea of a ‘momentary flash’ in a dialectical process that we discussed in the Introduction. Foster writes of ‘the dependence of the concept on the nonconceptual that it is the goal of negative dialectic to bring to the surface’ (Foster 2007: 134). In other words, as the active subject articulates the symbols in the spatialised writing, we experience a momentary flash which cannot be subsumed under a concept, and which is beyond the spatialised symbols. The fact that Frith largely maintains a steady tempo whilst still introducing expressive *rubato* at the key moments, as a means to bring out the harmonic tension and emphasise the end of phrases, shows ‘the momentary suspension’ of the regular beats in such a way that the classificatory concept or idea of space ‘reach[es] the limit’ of its ‘capacity to express what is before them’ (Foster 2007: 134). Frith’s playing certainly communicates the insufficiency of the beats as spatial points, such that the subjective element breaks through and endows the work with musical sense. But for Adorno, we should never give up the potential to ‘play espressivo’; ‘*espressivo* … flares up, … only to disappear again’ (Adorno 2006a: 77). Frith’s *rubato*, which flashes in between the steadily played chords, conveys an Adornian dialectical interpretation.

Therefore, restrained by the notion of space, piano 2 is still able to engage spontaneously with the notation through the use of *rubato*. However, *rubato* is not employed in the section of the second movement from bar 107, but various dynamic levels and touches used there still endow the human part with a kind of 'restricted spontaneity'. Derived from Adorno's notion of interpretation, Earle recognises the imperative of spontaneity in performance. As he indicates:

> Objectivity in performance requires subjective intervention. What is notated (the 'mensural' level) has to become articulated, which is to say, meaningful, or 'gestural' (this is the 'neumic' level), by way of the player's spontaneity. But spontaneity is not enough. The analytical activity which must precede adequate performance needs to be guided by awareness of the unnotated context of interpretation (the level of the 'tone-lingual'). (Earle 2015: 99)

This is to say, spontaneity or the performer's freedom needs to be justified by analysis of the work. For Adorno, spontaneity 'does not invent but rather breaks through the surface; the envisaging of a hidden musical sense' (Adorno 2006a: 96). Frith's spontaneity – reflected in his *rubato,* different dynamics and touches – seems to be justified and serves as means to reveal harmonic tensions and a sense of phrasing. In other words, Frith's spontaneity is not a one-sided subjectivity, but, as Adorno puts it, 'the irruption of objectivity into subjective consciousness' (Adorno 1997: 245). Messiaen's playing also conveys spontaneity, but this spontaneity does not often transpire as result of a dialectical process; instead Messiaen's spontaneity 'invents'. This kind of undialectical spontaneity especially shows itself in the change of tempo in the first movement, which occurs without referring to the previous tempo, and in the capricious changes of rhythms and articulations in the second movement from bar 107. Compared to Frith's interpretation, Messiaen's subjective element not only flashes, but also deviates. If Frith's interpretation, constantly referring to the regular beats and the spatialised score, can be reasonably categorised as Adornian, Messiaen's can be regarded as an attempt to reveal Bergson's idea of a 'free act' that springs from the whole consciousness.

Bergsonian Artistic Freedom

Having recognised Adornian 'momentary flashes' in a genuine experience of the performer, it is worth turning once more to the Bergsonian freedom reflected in Messiaen's undialectical

approach, and to observe the contrast between Adorno and Bergson. Bergson indicates that 'it is the whole soul … which gives rise to the free decision: and the act will be so much the freer the more the dynamic series with which it is connected tends to be the fundamental self' (Bergson 1910: 167). 'I am a conscious automaton' (Bergson 1910: 168) when I merely follow the score with habitual bodily movements, or when I represent the equally divided beats in space. In performance, when '*something* … revolt[s] against' the regular beats or the score, for Bergson, 'it is the deep-seated self rushing up to the surface' (Bergson 1910: 169). When this deep self acts in performance, we do not need to justify its validity by returning to the material, as Adorno wished; instead, Bergson maintains that to decide without any reason can be the best reason (Bergson 1910: 170).

For Adorno, spontaneity or freedom needs to be guided by the analysis of the score, whereas, for Bergson, the artistic goal is to manifest the 'dynamic progress' in consciousness, in which the self and its motives, like real living beings, are in a constant state of becoming, free from any symbolic or spatial confines (Bergson 1910: 183). For Bergson, the aim of artists is to present the dynamic self in their works: 'we are free when our acts spring from our whole personality, when they express it, when they have that indefinable resemblance to it which one sometimes finds between the artist and his work' (Bergson 1910: 172). And it is in duration that we can perceive our 'whole personality'; as Bergson states, 'as a free force' (Bergson 1910: 216), 'the self … is subject to duration' which remains outside numerical calculations (Bergson 1910: 215, 194). Just as Bergson only mentions music to demonstrate *durée*, for Jankélévitch music itself is not in the score and the charm is 'as alive as Bergson's *durée*', to which 'all music is subject' (Gallope 2017: 182, 186). Therefore, for Bergsonian philosophers, in the process of music-making, it is the self we pay attention to, not the dialectical relationship between the self and the object of the score, the perception of which needs to be reduced or, ideally, removed.

Bergson gives the example of a bold novelist who tears aside 'the cleverly woven curtain of our conventional ego' which is governed by practical purpose and the idea of space, and shows us 'under this appearance of logic a fundamental absurdity, under this juxtaposition of simple states an infinite permeation of a thousand different impressions which have already ceased to exist the instant they are named'; by reading his work, 'we commend him for having known us better than we knew ourselves' (Bergson 1910: 133). Although these feelings are spread out in homogeneous time by words, which offer a 'shadow' of the

fundamental self, ‘he has arranged this shadow in such a way as to make us suspect the extraordinary and illogical nature of the object which projects it; he has made us reflect by giving outward expression to something of that contradiction, that interpenetration, which is the very essence of the elements expressed’ (Bergson 1910: 133–4). Having observed the absurdity and illogicality, we are encouraged to ‘put aside for an instant the veil which we interposed between our consciousness and ourselves’; the author ‘has brought us back into our own presence’ (Bergson 1910: 134). Despite its absurdity, illogicality, and lack of clarity, Bergson encourages us to trust the free act that springs from the ‘infinite permeation’ of consciousness. As he writes, ‘the self, infallible when it affirms its immediate experiences, feels itself free and says so’ (Bergson 1910: 183). The act engendered by the self ‘agrees with the whole of our most intimate feelings, thoughts and aspirations, with that particular conception of life which is the equivalent of all our past experience, in a word, with our personal idea of happiness and of honour’ (Bergson 1910: 170).

Adorno sees a connection between the self and space, and ‘effectively forces language [as a spatial property] to work against its inherent spatialization’ (Foster 2007: 137). Bergson, on the other hand, does not see ‘life’ in space and maintains that ‘there is no common measure between mind and language’ (Bergson 1910: 164–5). Actions determined by any reason, for Bergson, are insignificant and superficial (Bergson 1910: 170) because our reason, which is ‘equipped with the idea of space and the power of creating symbols, draws these multiple elements out of the whole, it does not follow that they were contained in it’ (Bergson 1910: 163). Within the whole of the self, the inner states do not occupy space and do not care to express themselves by means of symbols; they permeate and melt into one another (Bergson 1910: 163). Thus, without the possibility of identifying tensions and dynamics within notation, the spatialised score – the determining force which can render a performance insignificant and lifeless – does not direct our interpretation; instead, the only way for the performer, as an artist, to endow music with life is through *durée* and the fundamental self.

In the climax-like section from bar 25 in the first movement, Messiaen reveals more passion in this section with a faster tempo; and in the section from bar 107 in the second movement, Messiaen’s improvisatory fluctuations, articulations, and unreasonable alterations of the rhythms often suggest a freedom invented by the subjective will rather than derived from the score. All of this evidences Messiaen’s attempt to diminish the perception of spatial beats and the spatialised score in general, in order to minimise the possibility of presenting the music

with ‘lifeless and insignificant actions’ guided by ‘superficial ideas and reasons’. Just as the rhythmic cells, as rhythmic characters despite their numerical definition, ‘can increase or decrease, seemingly at will and without overall direction’ (Healey 2004: 13), Messiaen’s performance, instead of deriving the neumic element from the spatial, presents a ‘free act’; ‘the outward manifestation’ of ‘the whole of the self’ (Bergson 1910: 165–6).

In addition to following the human part in terms of tempo, Loriod, intriguingly, initiates an *accelerando* in the first movement. In the second recording, Loriod speeds up in the triplets of bar 24, which anticipates the excitement prior to the climactic passage in piano 2 with broken chords from bar 25. It seems that Loriod not only follows the human expressivity in Messiaen’s part, but that, in her hands, the machine also has a vital force. Therefore, the freedom and the attempt to reduce the perception of space in their recording is no less revealed by piano 1 than it is by Messiaen’s own part. Conversely, Hill provides a benchmark for the second pianist to prevent themselves from ‘forgetting’ the performance’s metrical regularity. So, in the Hill/Frith recording, the momentary flashes of piano 2 are heard not only against the regular beats in Frith’s own part, but also in relation to the rigidity presented in Hill’s.

Abbate: Drastic Performance

Abbate, who argues against overly technical analysis and rational deliberation, also encourages us to pay attention to the drastic state engendered by ‘real music, music-as-performed’ (Abbate 2004: 532). If Bergson denounces reasoning or rationality, which operates in space, because it keeps us from genuine experience, Abbate thinks not only that analysis of music’s formal features, the gnostic, is uninteresting, but also that a great proportion of the formal features are inaudible in performance (Abbate 2004: 513). As Craig Ayrey puts it, for Abbate, ‘the “drastic” dominates the “gnostic”, action and the performance displace the supremacy of thought and contemplation’ (Ayrey 2006: 352). Abbate goes as far as to approvingly cite Fred Maus’s assertion that ‘technical music analysis, whose relevance to performance has been recommended in many music-theoretical writings, in fact seems useless for the purpose of performing something well’ (Abbate 2004: 512). Abbate gives the example of her own experience of a performance, in which ‘thoughts about what music signifies or about its formal features’ did not cross her mind, noting that, even if she forced

herself to perceive them, such thoughts are 'only to be dismissed as ludicrous' (Abbate 2004: 511). After the performance, she concluded that the configurations of musical works, as conceived in technical terms, are 'almost impossible and generally uninteresting' as elements to be perceived 'as long as real music is present', because 'one is caught up in its temporal wake and its physical demands or effects' (Abbate 2004: 511). Instead of perceiving the work's formal features, some words and thoughts connected to the performance did, as a kind of drastic knowledge, flow into Abbate's consciousness during performance; words such as '*doing this really fast is fun* or *here comes a big jump*' (Abbate 2004: 511). For Abbate, 'the gnostic moment', when the performer perceives the work's formal features, 'can become both absurd and instantaneous, going by in a flash' and, therefore, the ingrained habit of deciphering a work by some analytical method becomes 'alien and perhaps useless' (Abbate 2004: 512–13). While Adorno's performance theory relies on formal features and analytical results, from which the sensual element, appearing in a flash, cannot be detached, Abbate claims that various feelings and emotions can be invoked in performance, in which the performer and listener can feel 'devastating, physically brutal, mysterious, erotic, moving, boring, pleasing, enervating, or uncomfortable, generally embarrassing, subjective, and resistant to the gnostic' (Abbate 2004: 513–4).

Abbate's claim certainly needs to be questioned. If we adopt Bergson's philosophy, it is undoubtedly a possibility to embrace the immediacy of music by 'turning towards events' (Abbate 2004: 509), such that we gain access to the experience of *durée* or the richness of experience without the intervention of space, in which we perceive the formal features. As Abbate writes, 'the state engendered by real music, the drastic state, is unintellectual and common, familiar in performers and music lovers and annoying nonmusicologists, and it has value' (Abbate 2004: 534). It indeed has value as long as we listen to and perform music from a Bergsonian perspective, but it should be suggested here that perceiving technical features and revealing analytical results are not impossible in performance and they have value too. Metrical beats, for example, as a formal feature of music, can be perceived in *temps espace* in performance, as we have discussed in the previous chapter, and this formal feature is maintained rather thoroughly in the mechanical rhythm of the Hill/Frith recording. In addition to the accurately executed 'machine' in Hill's part, the 'human' part is justified by the analytical results of the harmony and rhythm in Frith's part.

For Abbate, 'formalism's search for tonal patterns, is comfortable with the metaphysical and abstract and uninterested in the delivery systems that bring music into ephemeral phenomenal being' (Abbate 2004: 513), but she seems to ignore the fact that the 'search for tonal patterns' can be an essential step to observe tensions and dynamics in music, and the 'ephemeral phenomenal being' can be guided by and reveal the result of the formal search. In other words, from an Adornian view, the search for tonal patterns should not be merely abstract and the 'ephemeral phenomenal being' should not remain 'wild' (Abbate 2004: 508); we can be interested in both. In line with other Bergsonian philosophers, Abbate holds fast to a vitalism that is unable to recognise the expressive element in the formal features, or rational aspects, of music. While Hill and Frith maintain the formal features, Messiaen certainly opts for a more 'drastic state'. For example, instead of showing an awareness of the formal rhythmic construction from bar 115^2 to bar 116 in the second movement he seems directed by his drastic knowledge, which might indeed be informing him that '*playing the leaps really fast is fun*'.

The Failed Attempts

In the Labèque sisters' recording (1970) of the second movement from bar 107, beside the fact that they maintain a particularly steadfast tempo, the voicing in the first movement brings the listener's attention to the rhythmic pedal, which dynamically overrides the other materials, such that the rhythmic pedal and its unequal values are clearly audible in this texturally complex construction. Messiaen, as the artistic director, did not seem to leave any trace of his own interpretation in the recording. Marielle, who plays piano 2, does convey a sense of freedom at the beginning of the second movement. For example, she prolongs slightly the two Es in bars 2–3 and 12–13 to emphasise the tonic; in bar 27 she stretches the last two semiquavers to highlight the dominant B in bar 28. In the section from bar 107, the freedom in the left-hand part of piano 2 disappears; the human part seems to be restricted by the overriding machine. To a certain extent, the dynamic emphasis on the rhythmic pedal and the adherence to the spatial points in the Labèque sisters' performance provide an opportunity for the listener to numerate the rhythmic values.

In the first movement, there is hardly any sign of tempo fluctuation in Marielle's playing from bar 25, and even the speed of the broken chords that proceed each main chord is almost

identical in each group. In a word, Marielle does not employ *rubato* in order to bring out the harmonic tension and phrasing in the music. Katia (piano 1) does not present the rigidity of the double rhythmic pedals, which, as discussed before, is the objectivity of the mechanical construction. In the section from bar 25 to the end, she seems to struggle to match the beats produced by piano 2. In bar 26, Katia cuts the third chord in the left hand, formed by a D flat, G and C, a semiquaver short, which is a very trivial alteration, but it shows that she is not determined to produce each value with the precise length. In bar 27, the semiquaver chord in the left hand, formed by a B, F and B flat, arrives early, and consequently she has to prolong this chord slightly longer than a semiquaver in order to play the last chord together with the dominant chord in piano 2. Further imprecise rhythms in Katia's part can also be found in the subsequent bars.

In this section, without the neumic element in piano 2, and the rigidity in piano 1, the Labèque sisters' recording presents neither conflicts between the two pianos, as revealed in the Hill/Frith recording, nor the 'human victory' shown in the Loriod/Messiaen recording. What they seem to attempt to achieve in this section is a 'togetherness' between the two pianos. The inability to bring out either the music's subjectivity or its objectivity might be considered that which renders the performance a failure. If Hill and Frith's performance serves as a critique of the 'imperfect' composition, since it is determined to present each piano's individual objectivity with momentary divergences in tempo, the Labèques' complete reconciliation of the distinct materials only succeeds by failing to realise the contrasting objectivity of each part. This failure can also be detected in the Ogdon/Lucas recording.

In the section from bar 25 in the first movement, Ogdon (piano 1) seems unable to respond to Lucas's pace, and at the same time he tries to follow each main beat of piano 2. This is most evident in bars 31 and 33, in which the quavers on the main beat are always shorter than the following quavers. This is because the off-beat quavers always arrive early, as a result of which Ogdon has to prolong the off-beat quavers to play together with Lucas's main beats. From the last crotchet in bar 34 to bar 36, Messiaen indicates *très ralenti* only for the second piano and emphasises that this should not change the speed of piano 1 (Messiaen 1943: 4). Perhaps the indication, written in the footnote, is not obvious enough, for the *ritardando* of piano 2 is carefully followed by Ogdon.

The 'failure' of both recordings seems to be derived from treating piano 1 not as a construction that has its own mechanical quality, but as a kind of accompaniment. Christine

Logan and Rodney L. Smith also recognise the imperative that 'Piano 1 in *Visions de l'Amen* should avoid becoming assimilated or merged with Piano 2's "tout ce qui reclame emotion et puissance", but rather, in providing vital surrounding resonance, it should maintain a strong and purposeful presence' (Logan and Smith 2010: 176). Also, both recordings seem to be afraid to make manifest the irreconcilability of the different materials, the main problem of the work. The tendency to reconcile resembles the recordings by Loriod and Messiaen, especially the later one. The difference is that Messiaen attempts to bring Loriod with him in pursuit of Bergsonian duration, whereas Marielle Labèque and Lucas remain in space.

In the section from bar 107 in the second movement, not only does Lucas maintain almost the same touch in the left-hand part, but also the dynamics do not bring out the rhythmic and harmonic tension. For example, every dominant B – which has tonal significance in this section, and which is emphasised by Messiaen and Frith – is quieter than other notes of the five-note motif. In bar 109, instead of using the 'crushing power' on the B generated by the big leap, the B is played with very little strength. In addition to refusing to emphasise the dominant, it shows that Lucas refuses the instrumental language objectively embodied in the music. In the first piano part, the rapid figurations of a repeating five-note motif cannot escape our attention. Even where it is marked *p*, Ogdon plays them rather loudly, and every note is very clear, which seems rather 'notey' and heavy, or even clumsy. This heaviness is also heard in the birdsong, such that we cannot grasp a sense of phrasing in his playing. Therefore, we can observe that Ogdon and Lucas, from an Adornian perspective, do not adequately present the musical sense in their performance, and their playing is certainly far from Bergsonian freedom.

The Irreconcilability between the Two Hands of One Pianist

The problem of irreconcilability becomes rather thorny in the passages of the third and fifth movements where distinct materials are played by one pianist. In the third movement, 'Amen de l'agonie de Jésus', from bar 75, marked *douloureux, en pleurant* (painful, crying), the right hand of piano 2 plays the chromatic melody in octaves portraying the suffering of Jesus, and the left hand plays the same rhythmic pedal employed in the second movement with different pitches. Arthur Honegger described the right-hand melody in his review of the premiere of *Visions* as an 'anguished theme of extraordinary expressive intensity that turns at

great length on the same three notes (C#, D, Eb)' (Balmer, Lacôte and Murray 2016: 735). However, as Messiaen indicates, the melody, as 'the tears of Jesus in his agony (*les larmes de Jésus dans son Agonie*), is on four notes: E Flat, D, D flat, C (*mi bémol, ré, ré bémol, do*)' (Messiaen 1996: 246). Apart from the number of notes, Honegger also seems to ignore the order of the notes in the melody. Interestingly, Siglind Bruhn also misreads the number of pitches in the theme. She writes that, 'the basic element is here a chromatic motif built from THREE different pitches' (Bruhn 2007: 98). The chromatic melody descends in a swirling motion and only Eb, D and C# are emphasised by the marking of accents through each descent, except that in bar 93 Messiaen marks an accent on the last semiquaver C, emphasising the end of the 'cry'. Perhaps these listeners concentrated on the aural effect, since the three accented notes are more perceivable, and for Bruhn, extracting the number three from the musical content is more convenient to grant the music a religious connotation.

The chromatic feature endows the theme with uncertainty and dissonance, and the expressiveness of such uncertainty and dissonance is intensified in the swirling motion, such that the dissonant effect is constantly reinforced by winding through the four notes chromatically. This melody gives a rather strong impression of a C minor tonality, especially given that C each time returns to E flat. We observed that in the second movement, the resounding dominant B in the section from bar 107 is fully realised when the music returns to the tonic E from bar 147. Like the second movement, the impression of C minor in the section from bar 75 is contrasted to the next section from bar 95, the final section of the movement, when the Creation Theme returns in C major mixed with mode 2, first transposition. Messiaen asks in *Traité*, 'why the Creation [Theme]? Because the sufferings of Christ give grace and create a new man. There was a second creation from the suffering of Christ, the new Adam' (Messiaen 1996: 248). Therefore, the C minor impression of the chromatic melody that depicts 'the painful cry' of Jesus might be a prelude to the light of the C major music that depicts the birth of the new Adam. The anguished melody is accompanied by the harmonic formula in piano 1, which is borrowed from Debussy's *Pelléas et Mélisande* (Messiaen 1996: 246), and the slurred and chromatic voice leading reinforces the agony of Christ (Example 3.6).

Example 3.6: The harmony borrowed from Debussy's *Pelléas et Mélisande* (Messiaen 1996: 246)



The rhythmic pedal in the third movement starts from bar 64, where it is played by piano 1 before being taken over by piano 2 at the end of bar 74 prior to the beginning of the chromatic melody. There are two chords and one note in the rhythmic pedal, and they repeat as an ostinato persistently within each statement. The rhythmic pedal has a similar mechanism to the one in the second movement, except that it always starts with the same chord in every repetition. For example, instead of starting the rhythmic pedal with the bottom A at the end of bar 70 according the previous periodicity, the second rhythmic pedal begins with the same chord as the beginning of the first one in bar 64. This slight change does not alter its mechanical quality.

Messiaen uses *rubato* in this section in both recordings, and in the second, in addition to tempo fluctuations, he also varies articulations by shortening certain notes. From bar 83, Messiaen starts to accelerate, which is rather effective considering the emotional aspect of the music, inasmuch as the weeping of Jesus becomes more and more acute towards the end of the section, yet simultaneously Messiaen sacrifices the essential feature of the rhythmic pedal in the left hand, which can only be revealed by following the points in space. In other words, the pained expression of the music is captured by Messiaen's unsettled pace, but the quality of the machine in the left-hand part is consequently lost. It should be mentioned that the rhythmic structure in the right-hand part is already unsettling, with irregular values that result from both augmentation and diminution of the rhythmic cells, akin to *personnages rythmiques*, and Messiaen's *rubato* renders the music more unpredictable, even to the listener who knows the score.

Both in the score and in *Traité*, Messiaen offers a performance indication for the rhythmic pedal, 'sonorité de gong', for which the pianist needs to 'strike' the piano, similar to *pizzicato* (Messiaen 1943: 29; Messiaen 1996: 248). Despite the way that the rhythmic pedal almost becomes the accompaniment to the chromatic theme, Messiaen gives adequate dynamic emphasis to the left-hand part, particularly to the bottom A marked *sff* and accented. The musical construction entails that the accents, operating within the mechanism of the rhythmic

pedal, interfere with the chromatic theme, which results in a musical image wherein the weeping of Jesus portrayed by the right-hand part is constantly shocked by the sound of the 'gong'. Over these 'shocks', the weeping subject has no control. In other words, the chromatic theme, as a human voice, receives the shock that 'cannot be integrated into the self'. Here, the relationship between human and machine again resonates with Adorno's description of Stravinsky's music, which reflects early twentieth-century society: 'the overwhelmingly heightened disproportion in late industrialism between the body of the individual and the things and forces of technical civilization' (Adorno 2006: 117). Charles W. Hughes indicated at the time that 'the musician cannot evade the infiltration of the machine, even in his own art', and as a result, 'the composer and the performer have functions which may be fairly compared to those of the inventor and pattern-maker in industry' (Hughes 1946: 34). The mechanism of the rhythmic pedal with predetermined values and pitches, once set in motion, certainly resembles 'the implacable and persistent movement of tireless arms and wheels of steel', which in turn, ignores 'the emotional impact of the machine on the lives of the workers' (Hughes 1946: 33, 32). Nevertheless, the shock is somehow diminished in Messiaen's performance. By retaining the emotional force engendered by the painful melody, the left-hand part loses its rigidity, and therefore the performance, instead of showing the 'disproportion', somehow offers the idea that the technical forces are dominated by human emotion.

In the recordings by Hill and Frith, Ogdon and Lucas and the Labèque sisters, the rhythmic pedal from bar 75 in the third movement is clearly perceived and that the human quality observed in Messiaen's performance is reduced. It is by following or counting the points firmly set in spatial time that Frith, Lucas and Marielle Labèque can achieve the mechanical quality in the left-hand part. As if reflecting the domination of individuals by the technical civilisation of late industrial societies, they seem compelled to adapt their 'bodies' to technical forces. Thus, we can recognise a correlation between the concept of space perceived in performance and the machine of the rhythmic pedal which reflects the mechanisation of society. This is to say that, by perceiving the points in space, we can better conform ourselves to what a technically dominated society requires. As Bergson writes, 'an inner life with well distinguished moments and with clearly characterized states will answer better the requirements of social life' (Bergson 1910: 139). Indeed, the rhythm can be more accurately presented in accordance with the points in space, but this kind of perception disengages us from the emotional aspect of music, as embodied in the chromatic theme depicting Jesus's

agony. Bergson indicates that, 'a superficial psychology' operating in space may be content 'without thereby falling into error, on condition, however, that it restricts itself to the study of what has taken place and leaves out what is going on' (Bergson 1910: 139). Errors are committed in terms of the accuracy of rhythmic pattern by Messiaen's *accelerando*, but he might reveal 'what is going on' in the depth of his consciousness, in which the increasing passion renders the painful cry more and more intensely.

In the section from bar 75 of the third movement, 'Amen de l'agonie de Jésus', unlike Messiaen, who clearly accelerates from bar 87, Frith and Marielle Labèque keep a steady tempo. Although Frith and Marielle Labèque do not accelerate in the semiquavers to exaggerate the intensity of the cry, they vary dynamics to bring out nuances of the chromaticism. In the Labèques' recording, the low A (the lowest note on the piano) in piano 2, is more emphasised than the others, such that the performance gives an impression that the machine constantly overwhelms the human with unassimilable shocks. Lucas, in contrast, plays these semiquavers as plain metronomic beats without any dynamic nuances. In this section, Messiaen presents distress with his unsettled speed; Frith and Marielle Labèque tend to express the musical sentiment within the confines of a certain tempo and the regular beats; Lucas merely plays the notes without considering their dynamic shading and tone quality, which renders the performance thoroughly mechanical.

In the section from bar 172 in the fifth movement, 'Amen des anges, des saints, du chant des oiseaux', the human/machine construction is also played by the second pianist alone. The right hand, which plays a variation of the Creation Theme, has the possibility of bringing out the neumic element by the use of *rubato*, whereas the mechanical quality of the left hand can be achieved by retaining a steady tempo. As a possibility, this differentiation between the expressive part and mechanical part can be achieved by non-synchronised *rubato*, in order to present their individual qualities. This technique is associated with Chopin's *rubato*, which requires that 'the accompanying part should keep strict time while the melody anticipates or lags behind, the beat, causing non-synchronisation between the two parts' (Rowland 1994: 199).

In our previous examples of the first, second and third movements, apart from the 'give-and-take' *rubato*, the use of long-range tempo changes is also found in Messiaen's playing. The most extreme example of his long-range tempo changes is in Messiaen's 1962 recording of the first movement with Loriod, in which Messiaen accelerates almost throughout the

movement and the speed in the passages from bar 25 is much faster than at the beginning. It is possible to have local fluctuations in the human part when the mechanical part 'keeps strict time', yet performance of a long-range acceleration in the human part, as played by Messiaen, is impossible without altering the tempo of the machine. Non-synchronised *rubato* can be identified in the Hill/Frith recording in the first movement between the two pianos by way of Frith's 'momentary flashes' and Hill's steady tempo, but in the section from bar 75 in the third movement, in which the two distinct materials are assigned to Frith alone, they are performed with a uniform tempo. Although Messiaen's advice to George Benjamin and Peter Hill – that 'the pianos should proceed independently, simply reconnecting with each other at the start of each phrase' (Hill and Simeone 2005: 124) – already implies the technique of non-synchronised *rubato*, he does not comply with his recommendation in passages in which two materials are assigned to two pianists, nor in passages in which two materials are played by himself. As Jankélévitch advises, 'don't read what they profess, but listen to what they do' (Jankélévitch 2003: 81). What Messiaen told Benjamin and Hill undoubtedly shows his recognition of the objectivity of each construction but, in his performance, he is 'completely absorbed in a naive state of being, taken up by the deep, blind toil of Doing' (Jankélévitch 2003: 81), such that the rational idea and the perception of space are all diminished in favour of the manifestation of Bergsonian freedom.

Messiaen's 'synchronised *rubato*' – which is to say, instead of keeping strict time in the mechanical part and playing *rubato* in the expressive part, both parts simultaneously fluctuate – is shown in the fifth movement. From bar 172, piano 1 plays arpeggios formed by augmented fourths and perfect fourths. The right hand of piano 2 plays a variation of the Creation Theme. The rhythmic canon, being pre-existent and superimposed in the left-hand part of piano 2, shares its mechanical character with the rhythmic pedal employed in the other movements. In the rhythmic canon, the initial rhythm, the dux (a chord made up of an augmented fourth and a perfect fourth) begins after a semiquaver rest in bar 172 and is imitated by a minor sixth dyad which is played a semiquaver beat behind the dux. Two non-retrogradable rhythms are employed in the rhythmic canon from bar 172 to bar 175, before they repeat from the second half of bar 175.[51] In the right-hand part of piano 2, A major tonality in the second piano is combined with the second mode. The recurring tonic chord confirms the tonality, but the foreign chords formed by the notes of the mode 'accentuate the

[51] In the score, Messiaen indicates the rhythmic pedal with brackets (Messiaen 1943: 68–9).

unsettledness' (Messiaen 1944: 64). Messiaen explains in *Technique* that, 'by the frequent return of the tonic of the chosen key or by the use of the dominant seventh chord in that key, we mix the mode with the major tonality' (Messiaen 1944: 64). As in the first movement, the right-hand part of piano 2 preserves tonality and metre, through which, from an Adornian perspective, the music speaks and is interpretable.

At bar 172, we can see clearly the markings assigned to the different parts. Messiaen marks the top part (piano 1) *pp* and the right-hand part of piano 2 *mf. Expressif et tendre*, which is indicated for the middle part, further confirms the human quality of the Creation Theme. Messiaen also emphasises the top voice of the chord and dyad in the rhythmic canon by indicating different dynamic markings. As indicated in the footnote, the rhythmic canon needs to produce the same effect as the rhythmic pedal in the third movement, the 'sonorité de gong'. Apart from the fact that the distinctions in terms of compositional materials among the three parts are rather clear, the markings instruct the performers to bring out the differences in performance. In the second half of bar 175, Messiaen specifically indicates a *crescendo* for the Creation Theme. Moreover, he suggests the dynamic direction of the theme by marking *più f* starting at the A major triad in bar 176, and *f* for, enharmonically, the E flat major triad in bar 177, before the *dim.* indicated at the end of bar. The markings in the right-hand part of piano 2 reveal the part's direction and development from bar 175[2] to bar 177, whereas the other two outer parts, as indicated, need to retain the same dynamics. This dynamic wave in the right-hand part of piano 2 not only confirms the expressiveness of the theme, but also distinguishes itself from the rhythmic canon, which is mechanical and static.

In his 1962 recording with Loriod, Messiaen does not seem to take any notice of the 'precise rhythmic pattern'. For example, in the third quaver beat of the rhythmic canon in bar 174, the two layers together (which consist of three strikes) in left hand sound like a triplet, and unprecise rhythms in Messiaen's performance are also heard at the end of bar 175 and between bars 176 and 177. It is futile to list all the 'errors', but the purpose of pointing out the deviations from the rhythmic structure is to confirm that in his performance Messiaen does not present the part's objectivity by merely counting the points in space, but 'feels it', and plays it according to Bergson's 'confused recollections'. Messiaen also ignores his own detailed markings. Instead of distinguishing the different dynamic levels between the two hands, the rhythmic canon joins in the dynamic wave with the Creation Theme; the rhythmic canon sounds like an accompaniment, which is 'integrated' as part of the human expression.

The recording resembles Abbate's notion of 'real music, the event itself, in encouraging or demanding the drastic', which 'damps down the gnostic' (Abbate 2004: 532). Messiaen also uses *rubato* in the first recording, but due to the poor quality of the recording, the pace of the left-hand rhythms can hardly be discerned.

It is also crucial to realise that Messiaen's dynamic changes and tempo fluctuations, driven by a kind of vital energy, communicate a sense of respiration embodied in the music. For example, Messiaen pushes forward at the end of bar 175 through the hairpin marked in the right-hand part towards the A major chord in bar 176, emphasising the tonality, and he accentuates the rhythmic canon in the left hand to support this *crescendo*; the pace becomes relaxed through the descending chords in bar 176, and the rhythmic canon simultaneously decreases in volume. Rather than 'arbitrary' alterations to the score, Messiaen's right hand seems to convey musical sense in terms of a phrasing that includes the elements of 'attacking, continuing, dying away, resuming once more, *Abgesang*' (Adorno 2006a: 110). Nonetheless, the rhythmic canon in Messiaen's performance is no longer 'correct', but merely a rhythmically irregular and harmonically distant accompaniment of the Creation Theme.

Similar to Messiaen, Marielle Labèque also plays the rhythmic canon as part of the *crescendo*. The difference is that she allows no rhythmic fluctuations, which is to say that in order to maintain the precise rhythm, her perception of the beats remains in space. The difference of dynamic levels between the two parts is well judged in Frith's performance, in which he manages to bring out the dynamic nuance in the Creation Theme, while keeping the rhythmic canon at a sustained volume. Frith's performance still conveys a spatial impression of the regular beats, given his rhythmic precision, but the music is endowed with a sense of direction and respiration through his use of different touches and a variety of tone colours. If Messiaen lets the drastic state dampen the gnostic, Frith never gives up the formal construction, which is to say, the gnostic aspect of the music.

'A Human Victory'

It is clear that in Messiaen's recordings with Loriod, the expressive 'human' part is always emphasised and the mechanical quality of the 'machine' is often dismissed. This section will demonstrate that not only does the tendency to give prominence to the expressiveness of the 'human' or to integrate the 'machine' into the 'human' show in Messiaen's recordings, but

also in the music itself, namely the composition. If the tendency to tame the 'machine' by the 'human' part in this section, as well as in the first movement, is rather forceful, Messiaen deliberately asks the 'machine' to reconcile with the expressive fluctuations of the 'human' part in the reprise of the second theme in the fourth movement, 'Amen du Désir'. From bar 97, piano 1 plays double rhythmic pedals employed in the first movement, which are formed by non-retrogradable rhythms and the alternation of two tritone dyads in each hand. Piano 2 comes in from bar 100. Messiaen encourages the expressiveness of piano 2 by indicating *très libre, très passionné* and, at the bottom of the page in the score, indicates that piano 1 must follow the fluctuations of the movement of piano 2 (Messiaen 1943: 40). If Messiaen shows his preference in the first movement for preserving irreconcilability, both in the score and in his advice to George Benjamin and Peter Hill, in the fourth movement he wants the distinct materials to be reconciled. Therefore, between the first and fourth movements, we recognise a clear tendency away from presenting the antagonism between the 'human and machine' toward a kind of reconciliation in which the 'machine' is absorbed by the 'human', a process of the 'humanisation' of the 'machine'.

This tendency to 'humanise' the 'machine' is not only shown by the integration of the tempo according to the 'human' part, as indicated in the score, but the process of 'humanisation' is also conveyed in the musical construction of *Visions* as a whole. In the analysis of the second movement at the beginning of this chapter, we identified that the successive non-human modal chords in the right-hand part of piano 2 implicitly contribute to the direction of the five-note motif or the human part from bar 127, and in the last movement, piano 1 joins piano 2 in A major at bar 67 before the 'resurrection' of the Creation Theme. The similar integration of piano 1 also appears in the reprise of the second theme of the fourth movement when the double rhythmic pedals stop from bar 130. In this case, although both hands of piano 1 preserve the tritone dyads, which are tonally unrelated to piano 2, the gesture of piano 1 supports the musical development of piano 2. From bar 138, the periodicity of the ascending sequence in piano 1 is matched by the two-bar phrase of piano 2, and each group of ascending semiquaver dyads (one bar per group) in the left hand of piano 1 is played a minor sixth higher, which contributes to the development of the ascending sequence in piano 2. Not only does the first piano's virtuosic filigree elaborate piano 2's musical direction with uniform dynamics and tempo fluctuations, marked by Messiaen, especially from bar 143, but piano 1's harmony, like the passage from bar 67 in the last movement, also becomes uniform with piano 2 in F major in bars 150–1, preceded by the big *crescendo* from bar 146 with

piano 2's repeated chords and piano 1's ascending octaves from C to C, which is the fifth of the F major chord. Thus we see that piano 1 gradually integrates with piano 2, from playing double rhythmic pedals that are totally unrelated to piano 2, to moving – gesturally, rhythmically and dynamically (not harmonically) – in accordance with piano 2 from bar 138, and to integrating the demisemiquavers septuplets with the triplets in piano 2 in the same key of F major in bars 150–1.

We can recognise that the 'human' element of the music gradually becomes more expressive through the process whereby the 'machine' becomes part of the 'human'. In other words, it is not so much a unification of the 'human' and 'machine', as a revelation that one part, namely the 'human', is on a journey of increased prominence and power, while the 'machine', on the other hand, is involved in a process of 'disappearing' rather than of being united with the 'human'. At the beginning of the superimposition of the two parts in 'Amen du Désir', from bar 100, the 'machine' in piano 1 is totally alien to the 'passionate theme' of piano 2 in terms of harmony and rhythm. The dynamics are also separate between the two parts. For example, instead of contributing to the expressiveness of the 'passionate theme', the *ff* marked at the end of bar 103 for the 'machine' is heard as an unexpected shock to the human expression of piano 2. Then, if we observe the passage from bar 148, piano 1 no longer plays the mechanical rhythmic pedal but, as a kind of accompaniment, contributes to the expressive gesture of piano 2 and adds more resonance to the climax of the movement. If, in his recordings of the fifth movement of *Visions* from bar 172, Messiaen tames the machine by playing *rubato* in both parts, in line with the expressiveness of the Creation Theme, here in the fourth movement, 'Amen du Désir', he stresses the 'human' part by gradually excluding the 'machine'. Thus, it might be more cogent to say that the music presents a unification of the two pianos, rather than a unification of the 'human' and the 'machine'. Compared to the first statement of the 'passionate theme' from bar 11, the expressiveness of the theme in the reprise from bar 100 seems elevated by the inclusion of piano 1. This is achieved not only by the increased resonance created by the two pianos, since the elevated expressiveness or more potent expression of the 'human' is also derived from the resolution of the conflict or antagonism initiated at the beginning of the section by the two pianos.

The unification between the two pianos is fully accomplished at the end of the last movement. In bar 91, while piano 2 continues the Theme of Creation, the right hand of piano 1 plays a fragment of the rhythmic pedal employed from the beginning, and the left hand

alternates between three tritone dyads played in semiquavers.[52] In the next bar, piano 1 joins piano 2's A major tonality by rolling the E, the fifth of the A major chord, from the bottom to the top of the piano. The two-bar pattern, from a fragment of the atonal rhythmic pedal to the rolling fifth, is repeated once more in bars 93–4 in piano 1.[53] We sense a rather intense conflict in piano 1, and a certain struggle towards the 'human realm' in this juxtaposition between the unyielding 'machine' and the 'humane' rolling E which has the tendency to unify with piano 2. Then, the 'machine' vanishes and piano 1 is finally 'subdued' by the human part in the coda from bar 95, in which, not only are the running sextuplets tonally united with piano 2 in A major, mixed with mode 2, first transposition, but also the first notes of each group reinforce the Creation Theme played simultaneously with piano 2. From bar 97, both pianos switch to mode 2, third transposition, which allows the harmony to include a D major chord, the subdominant. The modal change here seems to reveal the aim to further confirm tonal certainty. The passage from the last beat of bar 104 to bar 108 is the only place where piano 1 is harmonically alien to piano 2 in the coda. In this passage, piano 2 moves purely in an A major tonality without any modal function: Messiaen calls this passage of the second piano 'Mode of sol of plain-chant transposed (dominant of la [A])' (Messiaen 1996: 271). Indeed, the dominant E major chord is emphasised six times in this short passage, whereas the wave-like semiquavers in piano 1, recalling the song of the blackbird in the fifth movement (Messiaen 1996: 274), are atonal and not in any mode. The two pianos harmonically reunite from bar 109. Although piano 1, unlike piano 2, is not in A major, the rapid broken chords in bars 109–10, 112, 114–16, and running semiquavers in bar 111, 113, 117–19 are played together with piano 2 in mode 2, first transposition, which colours the final march of the Creation Theme. Finally, both pianos arrive at A major from bar 120 to the end of the piece.

If the antagonism in the first movement introduces the problem of the irreconcilability between the 'human' and 'machine', we can see at the end of *Visions* that Messiaen seems quite eager to solve the problem, and to overcome 'the overwhelmingly heightened disproportion' (Adorno 2006: 117). The solution is not a compromise of any other sorts but 'a human victory', such that Messiaen seems to present a kind of urgency to reduce the unassimilable 'machine' to something that can be assimilated, or to let the part that, from an

[52] The fragment of the rhythmic pedal used here consists of seven values, from the fourth to the tenth, of the most often employed rhythmic pedal in *Visions* formed by Hindu rhythms.
[53] This fragment of the rhythmic pedal in bar 93 consists of six values, from the eleventh to the sixteenth, of the rhythmic pedal.

Adornian perspective, has expression and can 'speak' conquer the part that is mute. In fact, in the recordings by Loriod and Messiaen, the overwhelming power of the expressive 'human' part and, by contrast, the tame and subdued 'machine' of the previous movements already foretell the final scene of the story. This 'human triumph', identified in the composition, might imply what both 'Consummation', the title of the movement, and 'Paradise', the description of the last movement indicated in the 'Author's Note', mean to Messiaen (Messiaen 1943: Author's Note).

As Long as They are 'Shocked'

If Messiaen insists on the validity of non-retrogradable rhythms, which can only be recognised by counting and spatialization, why does he allow or even force Loriod to produce 'incorrect' values in the first movement? Why, instead of playing the non-retrogradable rhythm in the fifth movement according to the spatial points, does he deviate from the score and follow the expressiveness of the 'human' part with *rubato*? Based on the number of monometrical units (demisemiquavers), the values in the non-retrogradable rhythm in the fifth movement, from the second half of bar 175 to the beginning of bar 177, are numerated as: 3, 5, 8, 5, 3. In Messiaen's performance, the deviation from strict counting consequently removes the very definition of the rhythm. It can be said that the non-retrogradable rhythms are non-retrogradable in Messiaen's score but not in his performance. Messiaen's performance prevents a musician – who has been trained to spatialise each rhythmic value in performance through 'patience and study' – from recognising 'the primitive text rising again towards the past' in a retrograde movement (Messiaen 1994a: 43).[54] The following quote from a conversation between Messiaen and Claude Samuel is rather illuminating.

> C. S. And how should listeners grasp this elaborate rhythm? Should they be responsive to it upon hearing it, or discern it by reading it?
>
> O.M. They'll be responsive to it the day their ears are accustomed to it. It's not essential for listeners to be able to detect precisely all the rhythmic procedures of the music they hear, just as they don't need to figure out all the chords of classical music. That's reserved for harmony professors and professional composers. The moment that

[54] Baggech 1998: 55.

> they receive a shock, realize it's beautiful, that the music touches them, the goal is achieved! (Messiaen 1994: 83)

Messiaen admits the difficulty of comprehending, for example, non-retrogradability in a non-retrogradable rhythm, and while he expected professional composers to identify the forms of the rhythms, as Goehr observed in his class, for most listeners, so long as they are shocked, 'the goal is achieved'. This recognition of incomprehensibility seems to suggest that, regardless of the use of non-retrogradable rhythms or Hindu rhythms in a rhythmic pedal, and their implications, for a large number of listeners they serve a similar purpose, which is to sound unequal divisions in contrast to equal divisions. If the listener is not obliged to identify each value and recognise the numbers or quantity in order to appreciate the rhythm or the music in general, the numerical and the spatial aspects of the Hindu and non-retrogradable rhythms are only symbolic. In this case, Messiaen's rhythms become nothing more than that which Taylor describes, when he says that 'Messiaen's rhythmic irregularities may be perceived qua irregularity by the listener', so that the rhythms are perceived 'in a qualitative sense as a general feeling of metric irregularity (heard against the cultural expectations drawn from previous metrically regular music)' (Taylor 2010: 266).

The idea that the goal of the rhythm is merely to 'shock' the listener with its irregularity seems to contradict Messiaen's spatial perceptions indicated in *Traité* and the way in which he taught his students. And Messiaen's performance, which does not reproduce the values accurately, seems quietly to admit that rhythmic appreciation does not depend on recognition of the non-retrogradability through numeration. What Goehr could not understand when he was in Messiaen's class and 'can only understand now with some difficulty is that Messiaen was primarily concerned with the phenomenon of sound as it exists, but not in how it might come to be what it is'; in other words, Messiaen was concerned with the 'actual sound' of his music, more than the way it seems 'to have been written down' (Grünzweig 2012: 9). Messiaen's performance shows that he ignores the numerical aspect of his advanced rhythms that most listeners cannot comprehend, which seems to demonstrate the unimportance of the spatial definition of his rhythm in temporal becoming.

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We have examined the recordings via philosophical positions derived from Bergson and Adorno. We have noted how Loriod and Messiaen 'solve' the problem of the irreconcilability of the works' materials with 'human passion' and how Hill and Frith instead present the problem and only reveal freedom momentarily. Messiaen, from his perspective on Bergson's philosophy, indicates a spatial perception of rhythm in *Traité,* teaches students to numerate rhythmic values, and assigns numerical definition to his advanced rhythm. It is fascinating, then, that Messiaen, still nourished by Bergson's thought, courageously reveals freedom in the recordings and puts aside the mechanical quality needed to bring out the numerical aspect of the rhythms. In the final chapter, the analysis of Messiaen's performance aesthetics will help us to understand his performance decisions in *Visions* and the contradiction between his utterance and his performance.

CHAPTER 4: THE MESSIAENS' PIANISM AND AESTHETICS OF PERFORMANCE

The final chapter will be divided into three parts. The first part will begin with Loriod's connection to modern music institutions such as Le Domaine Musical and the *Darmstädter Ferienkurse*, in which modern performance aesthetics are embodied. Derived from the Bergsonian writer T. E. Hulme's notions of the 'vital' and the 'geometrical' in art, two kinds of performance styles will be identified. The 'geometrical' not only characterises modern performance aesthetics, but also relates to modern musical styles. Therefore, the emergence of modern performance practice will be discussed in relation to modernist musical composition, especially that of Messiaen. The 'geometrical' style of performance, which comes to permeate the performance of music composed also prior to the twentieth century, will then be critiqued. Nicolas Cook associates a hyper-modern performance style, as presented in Loriod's recording of the Webern Piano Variations, to the French *jeu perlé* style. Thus, it is necessary to trace the origin of the *jeu perlé* style of playing and see how it resembles modern or 'geometrical' performance practice. The relationship or, more correctly, the coincidence between modern performance aesthetics and the *jeu perlé* style will be discussed in the context of Ravel's post-war composition *Le Tombeau de Couperin* and Marguerite Long's performance of the piece. Loriod's pianism will be further explored by observing her recordings of other works, before we discuss Messiaen as pianist. In addition to identifying the influence on Messiaen's piano writing, we will investigate Messiaen's pianism in relation to the French traditions. The second part of the chapter will attempt to identify Messiaen's performance aesthetics. As we shall see, via the philosophical analysis conducted here, the contradiction already recognised in Messiaen – between the tendency to numerate, to spatialise and to control, and the fact that he gives up the notion of *temps espace* in performance – may in fact be justified. The final part of the chapter will discuss my own experience of playing *Visions de l'Amen* and will elucidate how the research carried out in writing of this dissertation informed my preparation and concert performance of the piece.

Part 1 – The Two Pianists

Modern Performance Aesthetics and Loriod's Pianism

In the autumn of 1954, Le Domaine Musical, a concert society established by Boulez, presented its first concert, which attracted most of the young composers in Paris. The concert society offered programmes not only of new works, but also of some twentieth-century classics; from that moment on, as Jean Boivin puts it, Parisians began to experience 'the irreversibility of the changes' (*l'irréversibilité des changements*) that had occurred in French music (Boivin 1995: 369). Messiaen attended the Domaine concerts and his presence added 'some credit to the nascent organisation' (*quelque crédit à l'entreprise naissante*) (Boivin 1995: 369). As a pioneer of the development of new music in the twentieth century, Messiaen emerged from World War II, in Christopher Dingle's words, 'as a kind of godfather' to the radical young composers, such as Boulez and Karlheinz Stockhausen (Dingle 2014: 33). Dingle points out that Messiaen taught the young composers and opened compositional doors for 'this new avant-garde' in the two decades after World War II (Dingle 2014: 33).

With the appearance of Le Domaine Musical, 'a purist, text-based approach to new works found strong advocates', as Boulez puts it, who 'valued the objectivity of the realization, the exact rhythms, no *rubato*, etc' (Dingle 2014: 33). It is not so much that this 'text-based approach' emerged on its own, but rather that the new works 'obeyed the objective, modernist aesthetics' (Dingle 2014: 33). Before the end of the war, in the early 1940s, Messiaen had already started to create materials, the performance of which excluded human latitude and subjective interpretation. Messiaen's advanced rhythmic procedures, such as the rhythmic pedal, undoubtedly manifest a modernist aesthetic. In a word, the 'purist, text-based approach' corresponds to the construction of Messiaen's rhythmic pedals, which are uninterpretable and cannot be assimilated by the subject. As a regular Domaine performer, Loriod certainly knew this performance method rather well, and she was also clear about the differing approach required for Messiaen's rhythms, as indicated in her conversation with Peter Hill:

> PH: In your opinion what errors are most frequently made in performing Messiaen's music?
>
> YL: That is difficult to answer because all the aspects of the music are so important. I would say that complete fidelity to Messiaen's text is vital. And I would especially

> emphasize the importance of rhythm, which is perhaps the aspect of Messiaen's music that is most difficult for the performer. (Hill 1995: 287)

Interestingly, in Loriod's 1962 recording of *Visions* with Messiaen, we see a greater fidelity on Loriod's part towards Messiaen's performance aesthetics than she shows towards his text. Not only was Loriod a regular Domaine Musical pianist who tended to conform to the modernist approach with 'complete fidelity', but her playing also represents, as Nicholas Cook recognises, 'the paradigm of Darmstadt pianism' (Cook 2017: 185). The *Darmstädter Ferienkurse* was an annual summer school for new music which was initiated in 1946 and which, as Cook indicates, 'became the principal anvil on which postwar musical modernism was forged' (Cook 2017: 163). If the Domaine Musical played an important part in the development of new music from the 1950s to the 1970s in France, Darmstadt was the centre of new music in Germany, including lectures on modern music and premières of new works. Through Messiaen, Loriod performed regularly at the *Ferienkurse* (Cook 2017: 184). Similar to the Domaine Musical, Darmstadt developed a kind of performative 'literalism', referred to by Cook as 'the avant-garde "Darmstadt" practice' (Cook 2017: 183). In his essay on the performance of Webern's Piano Variations, Op. 27, Cook observes that Loriod 'intensifies the effect of literalism [of Darmstadt pianism]' with 'her no-nonsense tempos' and 'disengaged pointillism'; and 'the clipped articulation, lack of pedal and aggressively dry recording acoustic' leads Peter Hill to describe the recording as 'completely unemotional and even rebarbative … really fearsome and forbidding' (Cook 2017: 184–5). Dingle also notices that dry acoustics in the Domaine recordings exaggerated the performance philosophy of excluding the subjective or human element (Dingle 2014: 33). These studies show that the ethos associated with the performance of new music and the performance aesthetics identified in Loriod's playing differ, fascinatingly, from the 'Romantic performance philosophy' under which 'Messiaen the performer operated' (Dingle 2014: 42).

The Vital and the Geometrical

In order to situate Loriod's style of playing, as well as Messiaen's, in a historical context, we need to discuss modern performance aesthetics in relation to the performance aesthetics of Le Domaine Musical and the *Darmstädter Ferienkurse*. This text-based and unemotional performance style was not confined to this French concert society and German summer

school; indeed it was widely practiced in the twentieth century. In Richard Taruskin's well-known essay 'The Pastness of the Present and the Presence of the Past', he distinguishes two kinds of performance aesthetics, using terms borrowed from T. E. Hulme: one 'vital' and the other 'geometrical' (Taruskin 1995: 140). The vitalist performance practice represents the 'progressively weakening survival of an earlier style, inherited from the nineteenth century' (Taruskin 1995: 140), namely the Romantic performance style, whereas geometrical performance practice, espoused by leading modern music institutions such as Le Domaine Musical and the *Darmstädter Ferienkurse*, is manifested by 'text-centered, hence literalistic' performance ideologies (Taruskin 1995: 167; Mathew 2011: 58).

It is worth tracing the origin of the ideas of the vital and the geometrical before we explain how they relate to performance. Hulme was heavily influenced by Bergson and was also the translator of one of Bergson's books, *Introduction à la Métaphysique* (*Introduction to Metaphysics*). The Bergsonian notion of *élan vital* (vital impetus) is clearly conveyed in Hulme's *Speculations: Essays on Humanism and the Philosophy of Art*. Just as, for Bergson, 'the continuity of our inner life' or 'the very principle of life in general' is realised by 'the inner working of the vital impetus' or turning intuition inward (Bergson 1935: 214), so for Hulme, a beautiful work of art is appreciated through 'our own pleasure in activity, and our own vitality' (Hulme 1924: 85). Once inner vitality is activated, music may 'sound the way moods feel' (Taruskin 1995: 109). Taruskin refers to Roger Sessions at this point to elucidate how the idea of the vital is reflected in our experience of music. What music conveys to us, as Sessions puts it, 'is the nature of our existence, as embodied in the movement that constitutes our innermost life: those inner gestures that lie behind not only our emotions, but our every impulse and action, which are in turn set in motion by these, and which in turn determine the ultimate character of life itself' (Sessions 1971: 45). The vital quality, as Taruskin recognises, is well reflected in Romantic performance practice, which is 'more richly endowed than any other kind with crescendos and diminuendos, accelerandos and ritardandos, not to mention tempo rubato and a highly variegated timbral palette' (Taruskin 1995: 109). As discussed in the last chapter, Messiaen's performance of *Visions* with Loriod certainly conveys 'the inner working of the vital impetus', such that his performance manifests 'the inner gestures' which are initiated by the fundamental self enduring in the constantly changing *durée* and are not confined by the symbols in the score.

If the vitalistic aesthetic of art is to cherish the 'feeling of liking for, and pleasure in, the forms and movement to be found in nature' (Hulme 1924: 85), and 'human nature above all' (Taruskin 1995: 108), the geometrical aesthetic of art 'results in a desire to create a certain abstract geometrical shape, which, being durable and permanent, shall be a refuge from the flux and impermanence of outside nature' (Hulme 1924: 86). What the latter leads to is 'rigid lines and dead crystalline forms, for pure geometrical regularity gives a certain pleasure to men troubled by the obscurity of outside appearance. The geometrical line is something absolutely distinct from the messiness, the confusion, and the accidental details of existing things' (Hulme 1924: 87). Messiaen's mechanically constructed rhythms, which consist of fixed orders and values, undoubtedly resemble the geometrical quality described by Hulme. Taruskin identifies the geometrical quality not only in modern art, such as that of Picasso, but also in 'twentieth-century performance practice' which 'forces attention away from the music's iconicity – that is, its capacity for analogizing human behaviour and feeling – and on to the reiterative rhythmic patterns, wherein resides music's closest analogy with geometry' (Taruskin 1995: 111–12). This geometrical quality found in twentieth-century performance practice demonstrates 'the rage against flux and impermanence …, [the] refuge in fixity and necessity, … [and the] fear of melting into air' (Taruskin 1995: 114). The 'text-centered, hence literalistic' attitude, 'impersonal, hence unfriendly to spontaneity', which is presented in modern performance practice, also infiltrates Darmstadt pianism, which advocates a kind of 'literalism', whereby one is merely to play as written or, as Nicholas Mathew puts it, to 'depress key for the duration indicated' (Taruskin 1995:167; Mathew 2011: 65, 60). The geometrical and impersonal style of performance manifested in Darmstadt pianism almost creates 'the sound of a pianist pretending not to be there' (Mathew 2011: 60).
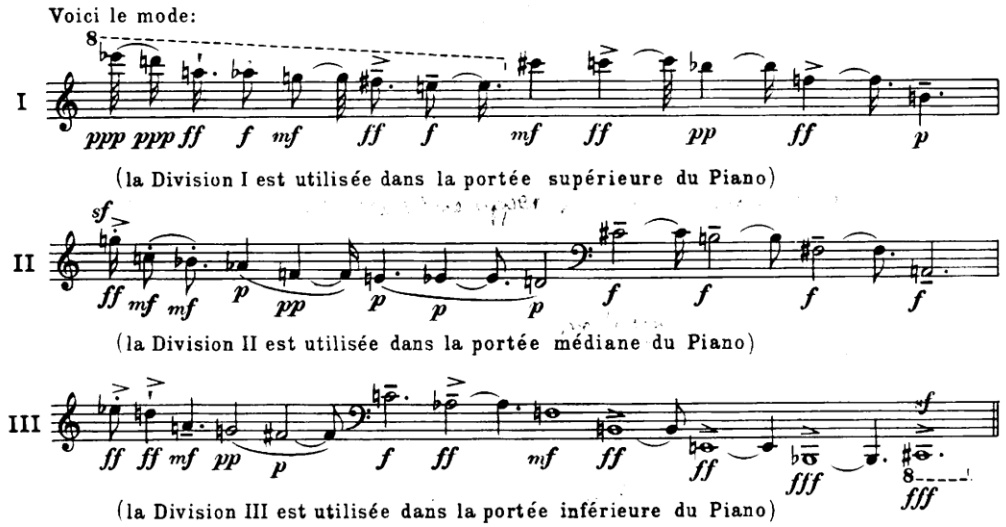
Such geometrical, and even self-denying, performance practice, which permeates modern aesthetics, shows again the problem of the 'domination of nature' in modernity mentioned in the Introduction (Adorno 2006b: 13). Strictly adhering to the mensural aspect of music, such as the pitches, the lengths of each note and the various markings, is the product of being dominated and subdued by rationality, such that anything unstable and capricious has to be stifled. This domination of nature, human nature above all, arises in answer, as Adorno writes, to 'a longing arising out of the primordial age of the bourgeoisie: to seize all that sounds in a regulatory grasp and dissolve the magic of music in human reason'(Adorno 2006: 52–3). That is to say, 'the repressive element of the domination of nature … turns against subjective autonomy and freedom' (Adorno 2006: 53). Apart from the fact that human reason

suffocating human nature is our inevitable fate under capitalism, or so Adorno would argue, Taruskin also offers an explanation for the way in which this impersonal aspect of our culture is reflected in music. The convulsion of the First World War, Taruskin recognises, 'truly ended the nineteenth century and posed a hitherto inconceivable threat to all security and stability', and therefore 'refuge in order and precision, hostility to subjectivity, to the vagaries of personality, to whatever passes and decays … were the inevitable reactions of all who were committed to the preservation of the high culture' (Taruskin 1995: 103–4). In response to the threat caused by the disasters of human history, 'high modernism has become … more intransigent, objectivist, elitist, and fearful of individual freedom of expression' (Taruskin 1995: 104).
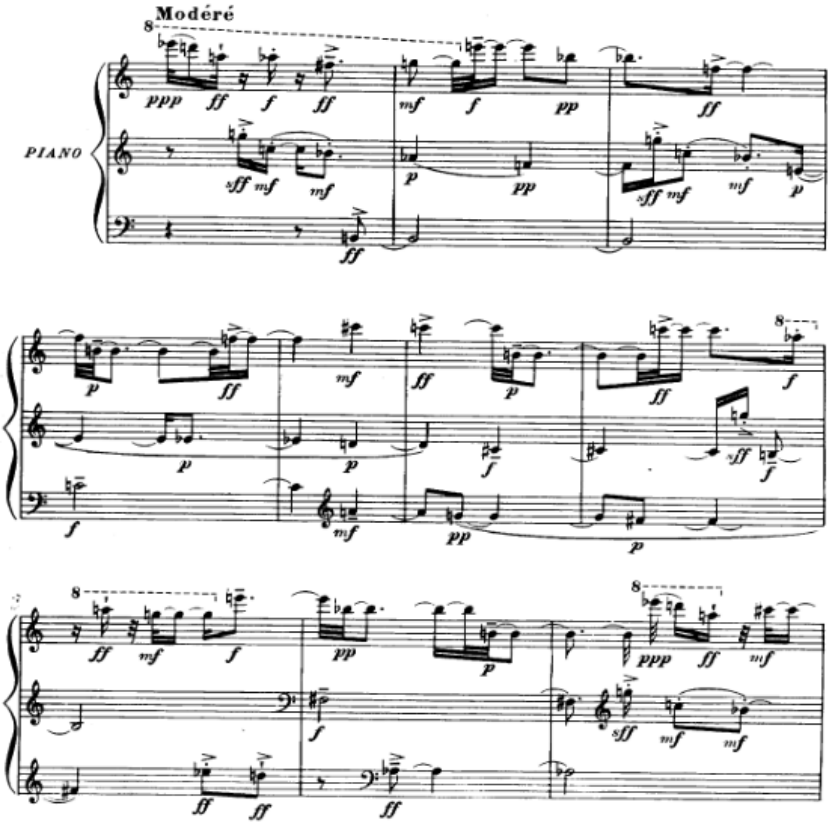
As mentioned earlier, the transition from the vital to the geometrical in terms of performance style accompanied the changes in terms of compositional style in the twentieth century. In Messiaen's advanced rhythmic procedures, even before the discussion of how to perform them, we already find that, as Hulme puts it in respect of modern art, 'the lines are clean, the curves [are] all geometrical, and the colour … [is] gradated absolutely mechanically' in the rhythms, the form of which 'can be described as stiff and lifeless' (Hulme 1924: 97, 85). Messiaen's solo piano piece *Mode de valeurs et d'intensités* – which, as the earliest of *Quatre Études de rythme*, was 'conceived (and perhaps sketched) at Darmstadt' in 1949 and 'finished some time in September' of that year (Hill and Simeone 2005: 180; Hill and Simeone 2007: 11; Hill 2007: 80) – is also an example of music that seems to exclude any vital quality (Example 4.1a).

As he began to compose *Mode de valeurs et d'intensités* in the summer of 1949 in Darmstadt, Messiaen also taught there for the first time and, interestingly, gave a performance of *Visions de l'Amen* with Loriod (Hill and Simeone 2007: 11). The première of *Mode de valeurs et d'intensités* was not given at Darmstadt, as we might have expected, but in Tunis in November 1950 by Messiaen himself (Hill 2007: 81). Given that the piece is dated 'Darmstadt 1949' on the title page, *Mode de valeurs et d'intensités*, in a sense, came home when Messiaen played it, together with other three pieces of the *Quatre Études*, at the opening concert of Darmstadt summer school in 1953 (Hill and Simeone 2007: 11).

Example 4.1: Three groups or series of notes employed in Messiaen *Mode de valeurs et d'intensités*



Example 4.1a: Messiaen *Mode de valeurs et d'intensités*, bars 1–10



Mode de valeurs et d'intensités is based on three groups or series of notes, of which each group consists of all twelve notes of the chromatic scale (Example 4.1). 'The most important

feature', so Robert Sherlaw Johnson writes, 'is the fact that the characteristics of each note – its duration, dynamic and attack – are fixed for the whole piece' (Johnson 2008: 106). Unlike in the classical Schoenbergian school of twelve-tone serialism, each note in *Mode* is defined by its fixed position on the keyboard, its duration, dynamic and articulation, not by its position in relation to other notes of the series. If the order of notes is fixed by each given tone-row in traditional serialism, the order of each note in *Mode* is free in relation to other notes of the series or group (Johnson 2008: 106). For example, the first four notes of the first series are employed at the top part in bar 1 and instead of following the order of the first series, the music skips the fifth note of the first series and proceeds to the sixth note of the first series at the end of the first bar (Example 4.1a). The fifth note of the first series is then employed at the top part at the beginning of the second bar. The parameters, such as duration, dynamic and articulation, are free in traditional serialism, whereas the parameters of each note in *Mode* are fixed (Johnson 2008: 106–7). For example, in the middle part, the G in bar 1 is a semiquaver, marked by an accent, a *sff* and a *staccato* dot; the parameters of the note G remain exactly the same when the note G returns in bar 3 (Example 4.1a). This applies to every note throughout the music. This unprecedent way of composing inspired numerous young composers, including Boulez and Karlheinz Stockhausen. Boulez used the first twelve-note series from *Mode de valeurs et d'intensités* as his pitch-series in *Structures I* for two pianos (1952) (Johnson 2008: 192). Stockhausen listened to the recording of *Mode* 'over and over again' in 1951 and was bowled over by the new sonorous world created by the piece (Johnson 2008: 194). Stockhausen claimed that Messiaen found 'the essence of the new language' (*l'essence du nouveau langage*) in *Mode de valeurs et d'intensités* and he joined Messiaen's classes at the Paris Conservatoire the next year, in 1952 (Boivin 1995: 360; Johnson 2008: 194).

In the third issue of *Die Reihe* – a contemporary music journal series edited by Herbert Eimert and Stockhausen and published between 1955 and 1962 – Eimert comments that in *Mode de valeurs et d'intensités*, 'notes do not function, they exist', which does not mean that 'in music, … psychology and physics are entirely separate'; it is the 'communication between our perception and the details of the object perceived' that can be gained from the acoustic process (Eimert 1959: 4). Indeed, each note merely exists, and its existence will always remain the same in every recurrence. By juxtaposing the notes, each of which maintains its fixed parameters, throughout the piece, the music seems indifferent to its temporal becoming. For Bergson, the reason why we think the same object always remains the same is that we

think of 'its objective cause situated in space' (Bergson 1910: 106), but if we look into ourselves, we will experience the perpetual change of our conscious states. As the duration, dynamic and articulation of each note are fixed, each note is treated as an object situated in space without any sense of temporal becoming. In short, Messiaen here is treating music in space. Adorno also criticises the kind of music – indifferent to succession or the idea of temporal becoming – that pursues 'the spatialization of time in a merely fictitious manner' and treats 'time without consideration, as if it were space, with all the inconsistencies that characterize the magician's act' (Adorno 1995: 67).

The fixed parameters of each note in *Mode* leave no room for the performer. The textual exactness of its notation does not seem to give the pianist any freedom to activate the vital force which can enable the inner gestures to be communicated. Instead, the indications require the pianist merely to respond to the score for every strike on the keyboard. We can sense the vanishing of the pianist, who largely plays the role of 'a function of the notation', 'a mechanical, if athletic, follower of orders' or 'an organic tape-player' (Mathew 2011: 53). In addition to the strict instructions for each note that hinder personal freedom, the absence of harmonic tension and of the upbeat/downbeat tendency, embodied in the tradition, prevent the music from being assimilated by the subject. *Mode de valeurs et d'intensités* recalls Mathew's comment on Stockhausen's *Klavierstücke V* – in which textual exactness reaches 'its farthest possible limits' – that 'an implicit recognition of pianistic habit or performance convention is hard to come across here … [and] habits are to be effaced by instructions' (Mathew 2011: 53). Indeed, no human gestures and inherent tension or dynamic created by tonality and metrical pulse – via the awareness of which the pianist can sense how to emphasise certain notes or chords – can be recognised in *Mode de valeurs et d'intensités*, such that the pianist can do nothing but follow the score. Adorno suggests that this kind of composition shows the composer's 'rejection of established musical categories as conventional' and that the way of 'making use of the notes becomes tinged with something anti-traditional' (Adorno 1992: 285). As Mathew indicates, performers 'have long been expected to play music partly according to shared understandings of musical meaning and gesture', conveyed through conventional elements such as tonality and metre, and the shared understandings are 'never wholly the composer's own' (Mathew 2011: 56). The composition – which tends to eradicate conventions – does not resonate with the pianist's inner vitality, and instead embodies 'the tendency to abstraction' (Hulme 1924: 85). Mathew writes that,

‘the demise of gesture thus denies performers this role; their only remaining task is to follow orders’ (Mathew 2011: 56).

Through this investigation of modernist performance, we can now better situate Loriod as pianist in the development of performance aesthetics. In addition to the ‘no-nonsense tempos’, ‘disengaged pointillism’ and ‘clipped articulation’ in the recording of Webern that demonstrate ‘the paradigm of Darmstadt pianism’ (Cook 2017: 184–5), Loriod’s playing in the recording of *Mode de valeurs et d’intensités* is ‘notable for its brilliance and clarity, the tempo steady, the rhythms immaculate’ (Hill 2007: 82), which seems to manifest the spatial quality of the music as well as the modernist geometrical performance style. Just as Messiaen’s rhythmic pedals, from an Adornian point of view, are uninterpretable and therefore should be played by adhering to the score, merely following the orders of *Mode de valeurs et d’intensités*, which is unassimilable given ‘the demise of gesture’, must also be the correct course of action. As in Messiaen’s recordings of *Visions* with Loriod, in which he attempts to ‘humanise’ the ‘machine’, in his recording of *Mode de valeurs et d’intensités*, as Hill puts it, the ‘overriding interest is in the music’s “psychology”, as he pummels each musical event into a gesture, using all the rhythmic freedom for which his playing is noted’ (Hill 2007: 82–3). If the tendency to replace ‘the vital’ by ‘the geometrical’ in twentieth-century composing and performing styles can be observed, we can certainly recognise that the geometrical quality in Messiaen’s compositions follows such a tendency, but his performance seems to be resistant to this modernist trend. If, from an Adornian perspective, geometrical music requires a geometrical performance, Messiaen rejects the objectivity of the music and renders the music with his own vitality. Hill recognises the sense of drama in Messiaen’s playing despite the abstract quality of the composition: ‘even at its most abstract the music seems strongly characterful’; in other words, although the ‘music is viewed as essentially static, yet his [Messiaen’s] playing shows that this is not at all how he saw it’ (Hill 2007: 83).

If Messiaen tends to ‘vitalise the geometrical’ in his performance, there is a tendency in the twentieth century, contrary to Messiaen’s approach, to apply geometrical performance practice to earlier music, such as that of Bach and Beethoven. Such geometrical performing practice is well described by Robert Fink as ‘a self-consciously objective stylistic ideology based on metronomic, unyielding tempos and a horror of expressive rubato’ (Fink 1999: 308). This kind of performance style is achieved by adhering ‘strictly to the score, and most

especially to its carefully notated tempos' such that the 'temporal rigidity' gives the impression of Bergson's notion of clock time, perceived in space (Fink 1999: 308). Most crucially and ambiguously, as Fink puts, 'once schooled in this style by assiduous practice in contemporary music, the conscientious executor would naturally apply this scientific, impersonal, objective performance technique to earlier music as well' (Fink 1999: 308). If it is justifiable to play *Mode de valeurs et d'intensités* by adhering to the score, it seems dubious to avoid any *rubato* – which can be employed to reveal dynamics and tensions in music – in a performance of, for example, Beethoven. The fact that practitioners apply the geometrical performance style to earlier music is what incites indignation of scholars such as Taruskin and Adorno. Taruskin notes that the recording of the 'Eroica' Symphony by the conductor Christopher Hogwood (1986) features an 'uncomplicated, rhythmical' performance method which lacks variety of nuance and tempo modification (Taruskin 1995: 93). Taruskin similarly identifies the inflexible tempo in recordings of Bach's Brandenburg Concerto No. 5 by Trevor Pinnock (1982) and Hogwood (1985), the 'geometrical renditions' of which seem to focus on 'the reiterative rhythmic patterns, wherein resides music's closest analogy with geometry' (Taruskin 1995: 112). If merely focusing 'the reiterative rhythmic patterns is correct in the performance of *Mode de valeurs et d'intensités*, because the music is, in a way, nothing but patterns, playing 'a Beethoven quartet' exclusively 'according to the notes on the page would be senseless' for Adorno (Adorno 2006a: 248). Adorno acknowledges that for the 'purists', the dynamics and tensions inherent in a work 'should be left to the work itself, which need only be performed ascetically in order to speak', and yet, 'the attempt to do justice to Bach's objective content' – which contains the mimetic and subjective elements and requires to be subjectively articulated – 'by directing this effort towards abolishing the subject is self-defeating' (Adorno 1983: 144). A purist rendition of Messiaen's rhythmic pedals is justifiable, because such a rendition is a manifestation of the essence, which is tension-free. However, the essence or the meaning of Bach's music can be 'achieved only through subjective labour and reflection', and conversely, 'an interpretation which does not bother about the music's meaning on the assumption that it will reveal itself of its own accord will inevitably be false' (Adorno 1983: 144).

In the recordings of Webern' Piano Variations and Messiaen's *Mode de valeurs et d'intensités*, Loriod is certainly 'schooled in this [geometrical] style … in contemporary music' and seems to represent the purist method in order to let the works speak for themselves. Nevertheless, do the features – such as playing 'the exact rhythms, no *rubato*',

‘literalism’ and ‘pointillism’, associated with Domaine Musical and Darmstadt pianism – sum up Loriod’s performance style and aesthetics? If they do, it is surprising that Loriod was willing to surrender exactitude in playing the ‘objective’ construction in *Visions*, and even sometimes, as noted above in the analysis of the later recording, contribute to the expressiveness of piano 2. Cook is justified in saying that ‘the light, dry touch of her performance … draws on the *jeu perlé* style associated with the Paris Conservatoire’, in which ‘she studied with one of its leading exponents, Isidor Philipp’ (Cook 2017: 185). Philipp’s technical approach, recalled by his student Jacqueline Blancard, in terms of ‘rhythmic exactitude’ and very clean and clear articulation, surely resembles Cook’s observation of Loriod’s playing; Philipp also told his students, as recalled by another of his students, Nikita Magaloff, ‘to study every nuance that the composer wanted, to respect it, and to play simply, directly, and in tempo’, from which we can see that, unlike ‘the freer approach of Cortot’, Philipp’s approach also resembled modernist performance aesthetics (Timbrell 1992: 58–9).

Jeu perlé *Style and Modernist Performance Aesthetics*

It is worth tracing the origin of the *jeu perlé* style of piano playing before we can identify its connection with modernist performance aesthetics. For around 250 years, from Michel de Saint-Lambert (1702) to Marguerite Long, French teaching of keyboard playing style had been ‘preoccupied with “pure” finger technique to a greater extent than pedagogues of any other country’ (Timbrell 1992: 15). The first important professor of piano at the Paris Conservatoire was Louis Adam, whose piano method, written in 1798, was designed to teach students to play the piano with ‘finger pressure only’, avoiding the weight from the arm, and aiming to achieve ‘independence of curved fingers’, ‘precision, and lightness’ without creating unevenness, especially from the thumb; Adam’s piano method was passed on to his student Friedrich Kalkbrenner, who emphasised the prevailing style of piano playing in France, ‘known as *jeu perlé*’, maintained by pianists from Saint-Saëns to Long: ‘rapid, clean, even passagework in which each note is bright and perfectly formed, like each pearl on a necklace’ (Timbrell 1992: 15–16). After Kalkbrenner, the French pianistic tradition subsequently passed on to Antoine Marmontel and Louis Diémer, who ‘firmly established the notion of fast, super-articulated playing; light transparent sounds produced with minimal wrist and arm motion’ (Timbrell 1992: 81). Saint-Saëns, in line with Diémer, who read

Kalkbrenner's *Guides-Mains* as a student, advocated playing that maintains 'clarity, elegance and sobriety of expression' and cultivated a technique that 'we can take as the epitome of the *jeu perlé* style' (Timbrell 1992: 34, 33, 25).

Apart from Isidor Philipp, whose teaching concentrated on finger technique and who 'wanted everything to be clean' (Timbrell 1992: 59), Marguerite Long was also a significant figure among the successors of the *jeu perlé* style. Long passed on the finger technique 'basically from the knuckle and wrist' in her teaching. Her own playing was likewise 'extremely precise and clean', such that in a passage of fast semiquavers, for example, the series of 'equally-sounded notes reminds us of uniformly shaped pearls on a string' (Timbrell 1992: 72).

Taruskin suggests, as mentioned earlier, that the 'hostility to subjectivity' and the fear of individual freedom of expression were inevitable reactions to the 'threat to all security and stability' caused by the disastrous war in the early twentieth century (Taruskin 1995: 104). This kind of resistance to displaying personal emotions is strikingly illustrated in changing French attitudes towards death. Jillian Rogers notes that 'the "hysterical mourning" [in funerals] of the nineteenth century disappeared at some point in the twentieth century' and the ways in which 'mourning was depicted and expressed, as well as the ways in which people affectively responded to mourning, changed specifically during World War I' (Rogers 2014: Online). In wartime France, explicit sorrow became disdained and even repugnant at funerals, such that people were compelled to be 'discreet' and to 'avoid emotion' (Rogers 2014: Online). Marguerite Long was herself harshly criticised by Jean Roger-Ducasse for too openly expressing her grief at the loss of her husband Joseph de Marliave, who died in the war in 1914 (Rogers 2014: Online). Ravel, as Long's and her husband's friend, not only sympathised with her great loss, but also had to cope with his own grief. The social environment, in which 'the open expression of grief engendered the contempt, disdain, and shame of others', compelled Ravel and Long to feel the sense of pudeur and to adopt a kind of resistant mourning, which is manifested in both Ravel's compositions and Long's playing (Rogers 2014: Online).

Jankélévitch recognises a contradiction expressed in Ravel's *Le Tombeau de Couperin*, in which 'five serene, smiling dances' are dedicated to 'five friends killed in the war' (Jankélévitch 2003: 47). For Jankélévitch, music has the power to reveal 'the meaning of meaning in concealing it, and vice versa renders this meaning volatile and fugitive in the very act by which it reveals it' (Jankélévitch 2003: 46). In *Le Tombeau de Couperin*, Ravel seems

like an ‘unfeeling person’ or a ‘secretly passionate ironist’ who ‘loves to appear hard’ and ‘is [nonetheless] simply *pretending*’ (Jankélévitch 2003: 47). Just as Ravel, in order to adapt to the social change in wartime France, hides ‘vehement emotions’ and contradicts ‘the human heart’s most natural tendencies’ in *Le Tombeau de Couperin* (Jankélévitch 2003: 46–7), Long, who was chosen by the composer to give the first performance, affirms that the character of music dedicated to the dead does not ‘have to be that one offers them a constant lament’ (Long 1973: 93, 94). Long also seems convinced that the cheerfulness conveyed in *Le Tombeau* is appropriate in paying tribute to the people killed in the war. As she writes, ‘if ever a composer should one day wish to honour my memory, let it be with a *toccata* or a *perpetuum mobile*’ (Long 1973: 94). In this sense, *Le Tombeau* can be regarded as the music through which Ravel’s and Long’s shared resistant mourning can be expressed.

In addition to the absence of the sense of explicit sorrow in the music, the performance of *Le Tombeau* requires the performer to resist expressive fluctuations. The rare, or rarer, indications for tempo modification in *Le Tombeau* mark a clear departure from Ravel’s pre-war compositions such as *Jeux d’eau* (1902), *Sonatine* (1903–5) and *Gaspard de la nuit* (1908), in which markings such as *très expressif* and other tempo fluctuations are indicated by the composer. This change prompts Rogers to conclude that ‘Ravel replaces the rubatic with the robotic … and almost never permitting her [Long] the opportunity to fluctuate in tempo’ (Rogers 2014: Online). Long also acknowledged the imperative of the music’s mechanical quality, which needs to be conveyed in performance. As she writes, ‘the three interludes [in ‘Forlane’], like ritornelli, must keep the same rigorous tempo – in Ravel’s words they must be “metronomic”’; for the ‘Toccata’, which was dedicated to the memory of Long’s husband, ‘all the notes’ ought to be played ‘clearly and precisely in a movement which … must not slacken pace in the slightest degree right to the final octave’ (Long 1973: 95, 97).

According to Rogers, Ravel’s *Le Tombeau* not only ‘provided Long a public opportunity to perform her grief in a way that would have circumvented the condemnation that was often the response to more personal expressions of grief in World War I-era France’, but also, the music permitted Long to engage in the *jeu perlé* style of piano playing in which she excelled and ‘preferred after the death of her husband’ (Rogers 2014: Online). By devoting her time to the *jeu perlé* style of playing, which placed emphasis ‘on notes of equal duration and quality’, and ‘an excessively clear and pointed style of articulation achieved through highly regular

finger motions', she could be distracted from the 'social world rendered unstable and fractured by war and the grief that she was experiencing' (Rogers 2014: Online). In other words, the music gave Long an opportunity to practice the *jeu perlé* style as a refuge of stability in an unstable world.
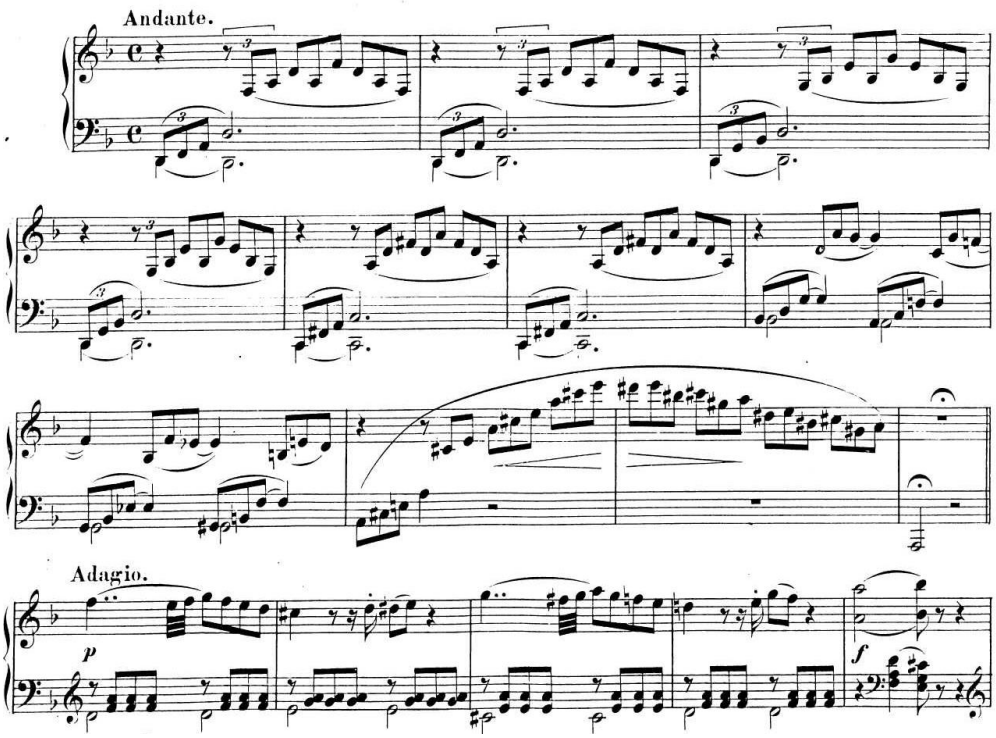
The shift reflected in Ravel's music, from embracing expressive qualities achieved by tempo fluctuations to presenting impersonal and mechanical qualities, echoes the change in art, recognised by Taruskin, from the nineteenth-century vitalist to the twentieth-century geometrical. This change seems to have a considerable impact on one of 'the most influential [performing] musicians in France', Long (Timbrell 1992: 43). Prior to the twentieth century, the traditional *jeu perlé* style, described above, already embodied the features such as clarity and precision which resemble modernist performance aesthetics. In the twentieth century, the particular aesthetic current of neoclassism – which emphasised the impersonal qualities of music and a reserved attitude towards it, anticipated by Ravel's *Le Tombeau* and its requirements for performance – also revived the ideals of the *jeu perlé* style to a certain extent. Taruskin rightly associates the 'sewing-machine style' with Stravinsky's 'neoclassical' compositions for piano such as the *Sonata* (1924) and *Serenade* (1925), in which the 'rigidly mechanical metrical structures' (Taruskin 1995: 116–17) resemble the incessant semiquavers in the 'Toccata' of Ravel's *Le Tombeau*. The aptness of the ideals of *jeu perlé* style, such as evenness, clarity and sobriety of expression (Timbrell 1992: 16, 33, 25), to the performance of Stravinsky's 'sewing-machine style' *Sonata* and *Serenade*, as well as Ravel's *Le Tombeau*, is evident. As the leading figure of the *jeu perlé* style in the early twentieth-century France, Long's suggestions – such as that the 'Forlane' in *Le Tombeau* must be played in 'metronomic' style and that in the 'Toccata', 'all the notes' must be played clearly and precisely (Long 1973: 95, 97) – not only confirm the inheritance of the French pianistic tradition, but also hails the zeitgeist of the twentieth-century neoclassical movement. In addition to the fact that the *jeu perlé* style coincides with the neoclassic 'sewing-machine style', the connection between the hyper modern Darmstadt pianism reflected in Loriod's recording of Webern Piano Variations and the *jeu perlé* style, pointed out by Cook (Cook 2017: 185), is not without justification, because modernist performance ideals in a certain sense coincide with the *jeu perlé* style. 'Emotional restraint', espoused by Isidor Philipp, and 'clarity' and 'moderation', which describe Long's playing (Timbrell 1992: 38, 44), seem to cohere with the modernist performance practice manifested in the purist approach of Le Domain Musical performance aesthetics and in the 'literalism' of Darmstadt pianism.

Loriod the 'All Rounder'

Although Philipp's ideals for performance were 'velocity, sobriety of expression and the *jeu perlé* style', which influenced Loriod, she also studied with Lazare Lévy, whose technique was the opposite of 'pearled' style, as described by Monique Haas, and who, 'like Cortot, … used more arm and back for strength' (Timbrell 1992: 61, 96, 93). Loriod herself also notes that Lévy concentrated on using the weight extended from the arm and back 'without hardness or stiffness' (Timbrell 1992: 95–6). In addition, Loriod had lessons from Marcel Ciampi, who was praised by reviewers for his 'broad, free style and subtle approach' to 'big romantic works' (Timbrell 1992: 111). 'Singing lines, resonant bass notes, and big, rich sound at the climactic moments … a wide dynamic range', which characterise Ciampi's performances (Timbrell 1992: 111), seem apt terms to describe Messiaen's playing, rather than the 'pointillism' associated with Loriod, as identified in Cook's study. Nicholas Angelich, who studied with Loriod, recalled that Loriod 'talked about arm weight for a bigger sound … and the need for a singing, expressive sound' (Timbrell 1999: 169). The point is that influences on Loriod were not confined to Philipp's views on piano playing. Thus, we argue that Loriod's pianism does not belong solely to a 'Darmstadt pianism' that is dry and literal, and that it similarly cannot be reduced to the Domaine Musical's typical practice of excluding *rubato*.

A selection of Mozart's music on a vinyl record by Loriod made in 1959 includes the Fantasy in D, K. 397 (Dingle 2013: 327), in which the arpeggios at the beginning already reveal freedom (Example 4.2): she prolongs the bass D in the first four bars, and in bars 2, 3 and 4 she emphasises the bass D with a slight delay; the use of *rubato* as a means to emphasise also appears in other bars in the opening section. In the *Adagio* section from bar 12, instead of connecting the melodic line with *legato* in bar 12 and bar 14, Loriod uses pedal in the first two beats of the bar and lifts the pedal from the third beat of the bar, from which she plays *legato* in the two quavers on the third beat and plays *non-legato* in the last two quavers. This kind of change of pedalling and articulation conveys a sense of respiration or breathing, which resmembles Messiaen's capricious and pedalling.
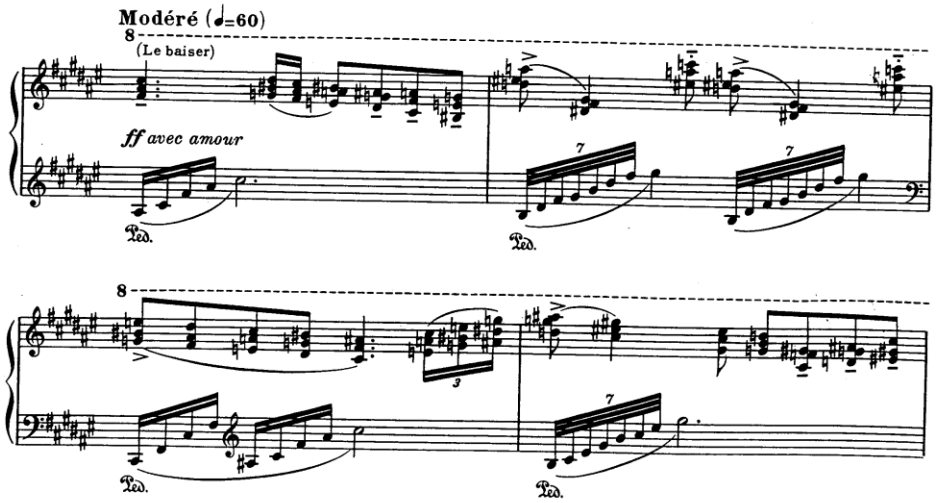
Example 4.2: Mozart *Fantasy in D*, K. 397, bars 1–16



In her recordings of Mozart's early piano concertos (1962) with the Orchestre du Domaine Musical under the baton of Boulez, despite the fine clarity in the fast running passages, it is not the case that the subjective element is overshadowed by 'literalism' and 'pointillism'; rather, the variety of touches and nuances and the warmth of the singing lines, especially in the second movements, are prominent features of her playing. The need to 'listen critically to every sound we make' and 'to get a deep, rich, warm tone' (Timbrell 1992: 114), stressed by Ciampi, is certainly reflected in Loriod's playing.
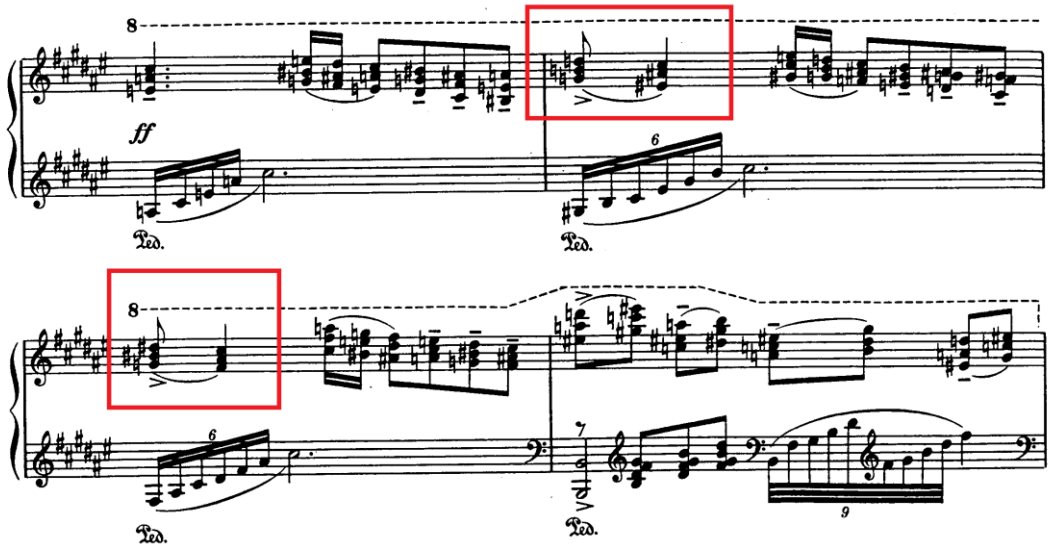
Loriod's first recording of *Vingt Regards* was made in 1956 and released as three LPs, and she then recorded the work in Église Notre-Dame du Liban in Paris in 1973 (Dingle 2013: 326, 330, 331). Both were recorded in the presence of Messiaen. (There is also a live radio recording from 1985.) In Example 4.3 from 'Le baiser de l'Enfant-Jésus', Messiaen notates *avec amour* (with love). The expressiveness of this section is presented with tempo fluctuations in Loriod's 1956 and 1973 recordings. Not only does the rich sound of the chords suggest the influence of Ciampi, but also Loriod recognises the expressiveness of the music and uses *rubato* to bring out the dynamics contained in the music. In the example, Loriod stretches each chord in the first bar, and in the second bar she pushes the slurred appoggiaturas forward.

Example 4.3: Messiaen *Vingt Regards sur l'enfant-Jésus*, No. 15, 'Le baiser de l'Enfant-Jésus', bars 95–8



It can also be noticed that Loriod plays this section with more freedom in the 1973 recording since, when the theme of *le baiser* (the kiss) returns in the later passage, each first chord of the slurs is prolonged (Example 4.4).

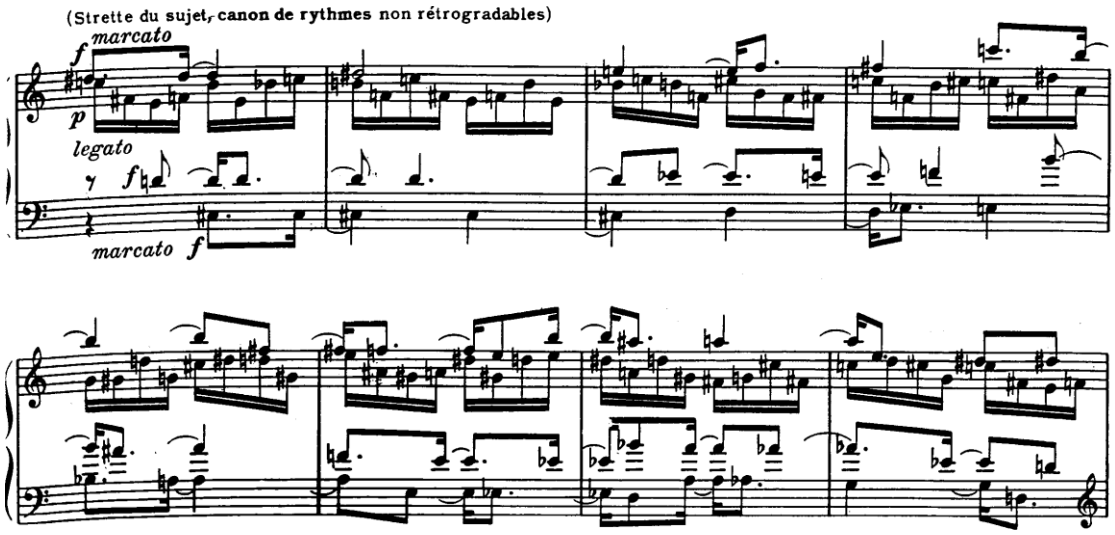
Example 4.4: Messiaen *Vingt Regards sur l'enfant-Jésus*, No. 15, 'Le baiser de l'Enfant-Jésus', bars 103–6



Although Loriod presents a performance aesthetic in this section that differs from the approach associated with the Domaine Musical, there are moments in the recordings of *Vingt Regards* that suggest a modernist performance philosophy. Loriod maintains an extremely strict tempo in both recordings throughout the three-layered rhythmic canon constructed by

non-retrogradable rhythms in ‘Par Lui tout a été fait’ (Example 4.5), which undoubtedly shows her fidelity to Messiaen’s advanced rhythmic structures. In 1973, when the second recording of *Vingt Regards* was made and Loriod no longer played at Darmstadt or Domaine concerts, she still kept to a strict and unyielding tempo in the mechanical constructions.

Example 4.5: Messiaen *Vingt Regards sur l’enfant-Jésus*, No. 6, ‘Par Lui tout a été fait’, bars 13–20



The evidence presented above shows that Loriod’s pianism is not confined to the influence of a certain teacher, or to a particular style: either to modernist aesthetics that relate to the Domaine Musical and Darmstadt, or to ‘the Romantic performance philosophy’. How she plays depends on the construction of the music, such that she shows delicacy and lyricism in Mozart, expresses with *rubato* ‘Le baiser’ and presents with exactitude Messiaen’s ‘inhuman’ constructions. One of Loriod’s students, Pierre Réach, commented that ‘Loriod has an extraordinary intellect, a big, refined technique, and a respect for the text and the style of every work’ (Timbrell 1999: 168). In other words, to put it in an Adornian vein, she engages with the music subjectively when the music says something tonally or metrically, but she is geometrical when the music is uninterpretable.

Although the recording of *Mode de valeurs et d’intensités* by Loriod, as Hill comments, is ‘notable for its brilliance and clarity, the tempo steady, the rhythms immaculate’, it lacks ‘the air of fantasy’, compared to Messiaen’s recording of the same piece (Hill 2007: 82, 89). However, Loriod could be said to maintain the dialectical method, advocated by Adorno, in order to reveal the objectivity of the construction, which is abstract and ‘inhuman’ and in

which ‘notes do not function, they exist’ (Eimert 1959: 4). From a Bergonsonian perspective, ‘the air of fantasy’ in Messiaen’s rendition of the piece – which, as Hill confirms, is ‘the chief merit’ and makes ‘the motifs flickering in the upper register seem to dance’ (Hill 2007: 89) – arises from Messiaen’s own vitality, which endows the abstract composition with life. However, as mentioned before, the demise of convention led to the demise of gesture (Mathew 2011: 56), and therefore, Loriod, by contrast, does not force her own inner gestures onto the music, instead she truthfully reveals what the work contains by following the idea of *temps espace*.

In the case of the recordings of *Visions*, Loriod could sacrifice the accuracy of the mechanical rhythm in order to integrate with Messiaen’s expressiveness and tempo changes. In *Visions*, almost nothing is interpretable in the first piano part, from Adorno’s perspective, because most of it is atonal and ‘ametrical’. There are sections written in A major in piano 1, for example at the end of the last movement, when it joins together with the tonality of piano 2, but piano 1 is mainly constructed through decorative or resonant effects. Although we can scarcely identify the tempo fluctuations specifically initiated by Loriod in *Visions*, the diversity of her pianism can be clearly recognised. The velvet-like pianissimo in the first movement and the powerful chords in the other movements, especially in the last movement, unquestionably show her wide dynamic range. The counterpoint of the two singing blackbirds from bar 77 and from bar 113 in the fifth movement (Messiaen 1996: 261), is illuminated by Loriod’s pointillism. The drier acoustic and restricted use of pedal in the later recording, made during the active years of the Domaine Musical and Darmstadt, certainly confirm Dingle’s observations about the recording facility and Cook’s statement on Loriod’s ‘Darmstadt pianism’. While birdsongs are executed in the *jeu perlé* style exemplified by Long, who concentrated on the technique of fingers ‘from knuckle and wrist’ (Timbrell 1992: 71–2), the weighty sound in the *forte* and *fortissimo* passages at the climax of the last movement is produced by the strength from the arm and the back.

Messiaen the Pianist

Messiaen wrote ‘a great deal for the piano’, as the composer himself confirms, ‘and not only for solo piano – the piano is present in the majority of my works’ (Messiaen 1994: 113). Although the sheer amount of piano music shows Messiaen’s special love for the instrument,

we should not deny the influence of Loriod, whose talent motivated the composer to devote much of his output to the piano. Hill and Simeone point out how Messiaen was dazzled by Loriod's playing (Hill and Simeone 2005: 123), and Dingle indicates that, after listening to Loriod's playing in 1941, 'the composer was clearly bowled over by the extraordinary talents of this young pianist' (Dingle 2007: 76).

Prior to listening to Loriod's playing, 'all of his [Messiaen's] substantial instrumental works had been for the organ', except for his first published work, the *Préludes* (1929) (Dingle 2007: 76). Messiaen began learning the organ in 1927, when he was 'developing an ardent, passionate [religious] faith' (Dingle 2007: 12). At the time, Messiaen would have visited the big churches in Paris and heard the playing of renowned organists, such as Louis Vierne, Charles-Marie Widor and Macel Dupré, who were 'not just highly talented musicians, but also men of faith', which would have certainly inspired Messiaen to express his religious beliefs through the organ (Dingle 2007: 12). The influence of organist-composers such as Charles Tournemire, not to speak of J. S. Bach, on Messiaen was immense, 'not so much in terms of technique, but in the more fundamental realm of the purpose of composition' (Dingle 2007: 12). After having only two years' experience as a church musician deputizing for Charles Quef, the organist at the Église de la Sainte-Trinité, Messiaen was appointed in 1931, 'at the age of 22', as the titular organist by the same church (Dingle 2007: 40–2; Johnson 2008: 10). Between 1932 and 1939, Messiaen published four major works for organ: *Apparition de l'église éternelle* (1932), *L'Ascension* (1933–34), originally written for orchestra and later arranged for solo organ with an added movement, *La Nativité du Seigneur* (1935) and *Les Corps Glorieux* (1939). These works, with later substantial organ works by Messiaen, as Dingle puts it, would make the most 'important contribution to ensuring that the organ repertoire retained its relevance throughout the twentieth century' (Dingle 2007: 12). No major piano work was published until *Visions de l'Amen*, composed in 1943 and dedicated to Loriod. It seems rather clear that the appearance of Loriod changed Messiaen's compositional output, reflected in Messiaen's interest in the piano. The following year, Messiaen composed *Vingt Regards sur l'enfant-Jésus* for Loriod, a work lasting more than two hours. There are also a number of works by Messiaen, which are not dedicated to Loriod, but which include a piano solo part written for her. Another large piano solo work dedicated to Loriod is *Catalogue d'oiseaux* (1956–8); thirteen pieces that last around three hours. In brief, as Dingle puts, 'without Loriod, Messiaen's output would have been radically different' (Dingle 2007: 77).

When Messiaen was asked about himself being a pianist, he replied:

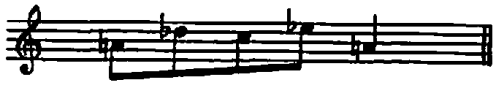
> Yes, I'm a pianist, but I never studied the piano very assiduously, nor did I win a piano prize at the conservatory; I worked at the piano partly on my own … As a pianist … I'll never have the transcendent virtuosity and the absolutely amazing technical facility of Yvonne Loriod. (Messiaen 1994: 113)

Despite this modesty with regard to his pianistic capability, Messiaen was initially accepted by the Paris Conservatoire as a pianist at the tender age of ten; at the time, Messiaen had already played Debussy's *Estampes* and numerous works by Bach and Beethoven; he also had contemporary pieces in his repertoire as difficult as Ravel's *Gaspard de la nuit*. His piano teacher at the conservatoire, Georges Falkenberg, encouraged Messiaen to have a career as a concert pianist, but Messiaen insisted on devoting his life to being a composer; as he said, 'I am studying this instrument because one needs to know how to play, but I am not a performer, I am a composer' (Dingle 2014: 30).

For Messiaen, playing the piano was a means to compose from a pianist's point of view, and he appreciated works which are valuable for their pianistic aspect. Messiaen expresses love for Chopin, Debussy and Ravel, not only as 'colourists', but as 'composer-pianists'. In addition to his life-long love for Debussy, Messiaen admired 'certain pages of Ravel's *Gaspard*', and he recognised 'the most extraordinary passage work, fingerings, and combinations' discovered by Chopin (Messiaen 1994: 114). Messiaen asserts that 'after them [Chopin, Debussy and Ravel], I see no "good" piano music'; there are perhaps some very beautiful pages', or a few innovations in passagework by Bartók and Prokofiev, for example, 'but they have no particular pianistic importance' (Messiaen 1994: 115). Messiaen did not focus only on the compositional aspect of piano music, for the pianistic aspect contributed to his evaluation of a piano work. Although Messiaen might not have appreciated other composers' piano writing as much as Chopin's, he did show interest in the piano writing of composers as diverse as Franz Liszt, Modest Mussorgsky and André Jolivet. The climax in the fourth movement of *Visions de l'Amen*, 'Amen du Désir', certainly resembles Liszt's piano writing, something that will be discussed shortly. Dingle points out that passages in Messiaen's third Prélude 'Le Nombre léger' 'are redolent of "The Limoges Market" from [Mussorgsky's] *Pictures at an Exhibition*' (Dingle 2007: 23). It is also worth mentioning that in the third movement *Visions de l'Amen*, 'Amen de l'agonie de Jésus', the melody from bar 17 (and from 63) in the right hand of piano 2 is not only a variation of the Theme of Creation

(Example 4.6), but also, according to Robert Sherlaw Johnson, ‘a parody’ of the melodic fragment at the beginning of Mussorgsky’s *Boris Godunov* (Example 4.7). As one of Messiaen’s ‘beloved melodic contours’, a number of melodies in Messiaen’s work are constructed ‘in the shadow of the five notes’(Messiaen1944: 31), which, as Johnson indicates, are ‘always transformed into his [Messiaen’s] own characteristic modality and style’ (Johnson 2008: 20). In this case in *Visions*, the Mussorgsky melody is transformed into mode 2, first transposition.

Example 4.6: The melody of the right-hand part of piano 2 in Messiaen *Visions de l’Amen*, ‘Amen de l’agonie de Jésus’, bars 17–18



Example 4.7: Melodic fragment at the beginning of Mussorgsky’s *Boris Godunov*
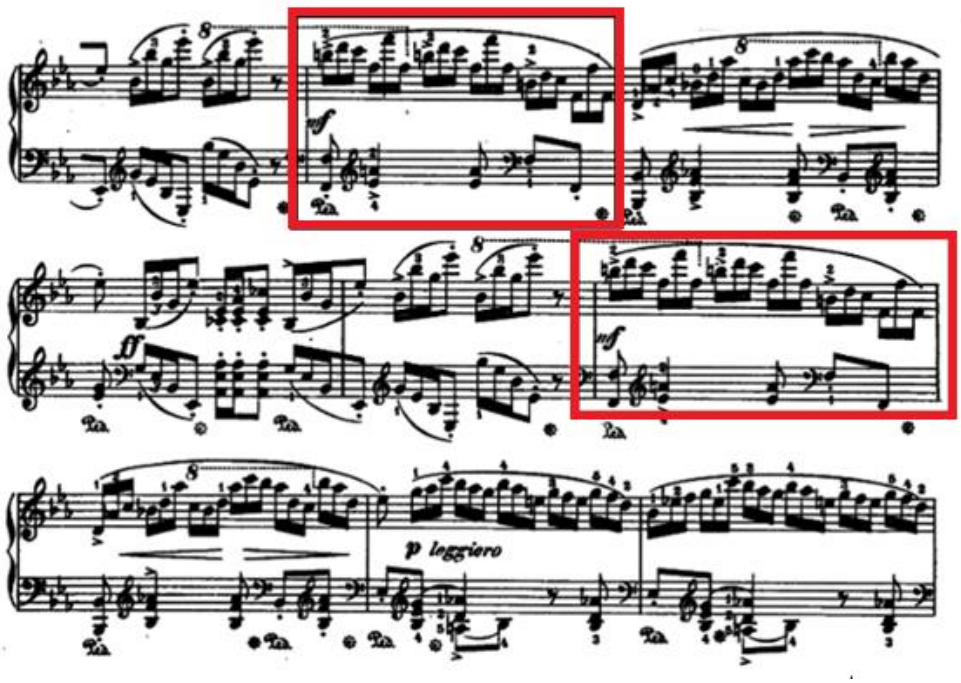


Jolivet, who came to be much eclipsed by Messiaen, also influenced Messiaen in terms of piano writing. Messiaen once openly declared to Jolivet that ‘you’re [already] writing the kind of music that I’d like to write’ (Mawer 2008: 149). In Jolivet’s piano piece *Mana* (1935), Messiaen identifies, as indicated in *Technique de mon langage musical*, the way of developing a theme or melody by changing registers (Messiaen 1944: 36). In Chapter 3, we have already observed that the five-note motif in the left-hand part of piano 2 from bar 107 in the second movement, ‘Amen des étoiles, de la planète à l’anneau’, develops not only by changing the rhythm of each repetition of the five-note motif but also by changing registers within each repetition, whereby the low notes of the motif pass to the extreme treble, the treble to the extremely low, in abrupt leaps, which grants the motif ‘a crushing power’ (Messiaen 1944: 36).

Dingle relates that, as a child, Messiaen did not request any toys but instead opera vocal scores, and ‘within little more than three years [after becoming a student at the conservatoire], his repertoire included Mozart’s *Don Giovanni* and *Die Zauberflöte*, Berlioz’s *La Damnation de Faust*, Wagner’s *Die Walküre* and *Siegfried*, and Gluck’s *Alceste* and

Orphée' (Dingle 2014: 30). Besides the pianistic language found by Messiaen in other composers' music, the instrument was an inseparable part of Messiaen's experience and understanding of music in general. It can almost go without saying that the piano was also involved in Messiaen's own compositional process, including works not composed for the piano. Loriod comments that Messiaen worked at the piano and the table, placed side by side; while 'all harmonies were devised at the piano, the rhythms were worked out at the table' (Dingle 2013a: 14). On the basis of these comments, Dingle observes that 'the piano was the preferred compositional tool for harmonic work', adding that 'the vast majority of Messiaen's chords, no matter how complex, sit very comfortably under two hands' (Dingle 2013a: 14). This is evident throughout *Visions*: all the tonal chords and modal chords seem to be suited to the hands. Though, it needs to be noted that several places require big stretches that might not be possible for small hands without spreading the notes. For example, in the second movement, a chord stretching a minor tenth is found in the right-hand part of piano 1 in bar 90, and then the second chord of the same part in bar 91 stretches a major tenth, which is difficult even for big hands. In both recordings by Loriod and Messiaen, Loriod is capable of playing the chords with big stretches without spreading in bar 90 and bar 91. Apart from the chords in *Visions* that fit well in the pianist's hands, the running passages are also composed in a pianistic manner. In the fifth movement, from bar 68, every group of septuplets in the right-hand part of piano 2 not only fits the hand, but also engages with every finger of the hand.[55] The shape of the passage is rather similar to the passage in the coda of Chopin's *Grande Polonaise Brillante*, Op. 22 (see the boxes in Example 4.8).

[55] Messiaen marks the fingering in the score.

Example 4.8: Chopin *Grande Polonaise Brillante*, Op. 22, bars 222–30
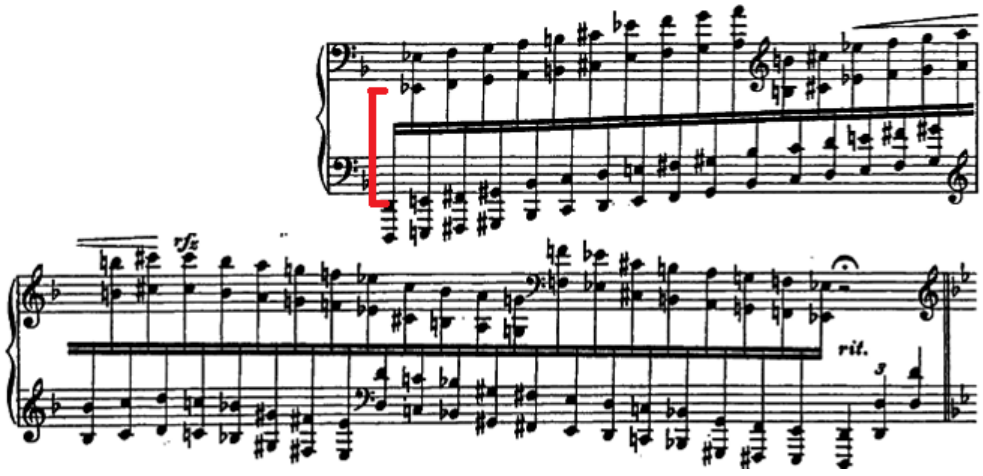


In the final movement, every group of the running sextuplets in piano 1 in the coda section from bar 95 keeps each hand of the performer in one position before changing position for the next group. It is evident that the whole coda of *Visions* in piano 1, which clearly traces Chopin's pianism, resembles the running sextuplets in the coda of the *Polonaise*, Op. 22. This kind of Chopinesque ending, complete with the running semiquavers also employed at the close of *Visions*, can also be observed in Chopin's Fourth Ballade, and especially in the First Piano Concerto.

In *Visions*, not only does Messiaen recall the pianistic aspect of Chopin's music, but his piano writing also resembles Liszt's style, especially in the fourth movement, in which the second theme seems to be a recollection of Lisztian pianism. Although the outward expression of romantic gestures in Messiaen's music remains, as Julian Anderson recognises, 'the most demonstratively, even embarrassingly expressive in history' (Anderson 2013: 266), Messiaen insisted that 'I'm not ashamed of being a romantic', because 'the romantics' were aware of 'the beauties of nature' and 'the glory of divinity'; 'they were grandiose, and many of our contemporaries would be better off if they "romanticized" themselves' (Messiaen 1994: 120). In the previous discussion, we observed Messiaen's anachronism in the construction of the second piano part; the pianistic language in the fourth movement also explicitly reveals Lisztian virtuosity. Caroline Rae finds that the second theme of the fourth movement is 'as

grandiose as the most impassioned and declamatory statements of Liszt in his B Minor Sonata or *Après une lecture du Dante*' (Rae 2013: 251). In the climax from bar 59, both hands play repeated chords, and from bar 61, the left hand leaps three octaves; the resonance of the piano endowed by most of the registers of the piano and the 'highly physical gesture with large leaps' – which is 'dramatic visually' – are 'common throughout Liszt's virtuoso piano music' (Rae 2013: 251).

Rae recognises the Lisztian figuration in piano 1 at bars 148–9 and 154–155 in the fourth movement: 'rapidly ascending hand-alternations in octaves' (Rae 2013: 251). As Kenneth Hamilton indicates, the pattern of hand-alternations in octaves that creates a drum-like effect was invented by Liszt himself, and appears in many of his compositions (Hamilton 2008: 231). The chromatic scale in 'Mazeppa' (Example 4.9), from *Études d'exécution transcendante*, is played by the two hands alternating in octaves. Throughout the ascending and descending chromatic scale, the right hand is positioned an octave higher than the left hand; the chromatic scale therefore alternates between the higher and lower octaves, but the thumbs of the two hands share the same register, such that the chromatic scale moves between the two thumbs within the same register.

Example 4.9: Liszt *Études d'exécution transcendante*, No. 4, 'Mazeppa', bars 61–2

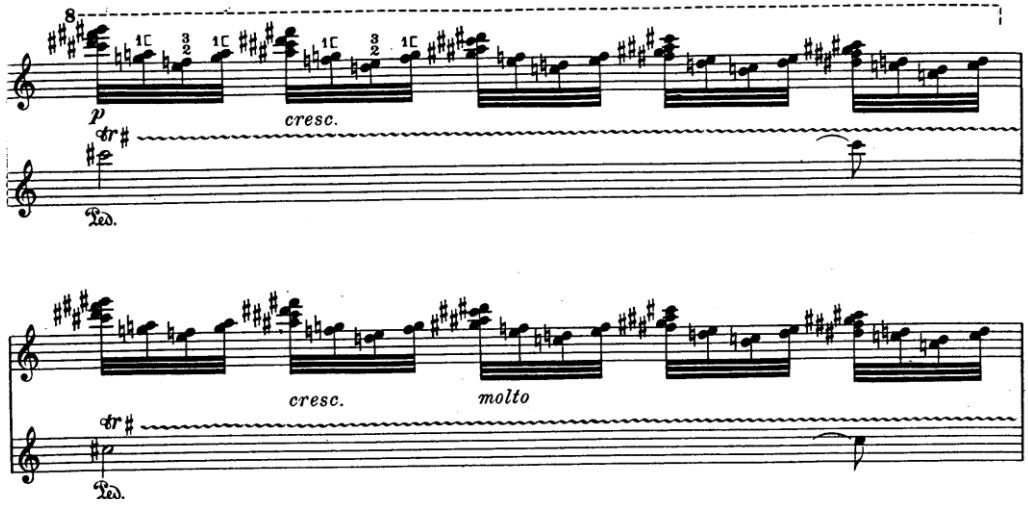


The pattern in piano 1 from bar 148 in the fourth movement, 'Amen du Désir', is a little different to the Lisztian figuration. Instead of playing a chromatic scale between the two alternating hands, each hand retains either white or black keys throughout the two bars. For example, in bar 148 the right hand plays the white keys and the left plays the black, both in an ascending motion. The right hand reaches A and the left reaches C sharp, before the same pattern repeats in a higher octave. The pattern reappears from bar 154, where, unlike in the

previous appearance, the right hand plays the black keys and the left plays the white. This pattern in *Visions* creates an effect of rolling octaves similar to Liszt's invention, but it is no longer chromatic. Moreover, the hand alternations require a different pianistic approach. When the pianist plays the Lisztian figuration of chromatic octaves, they need to swap positions from F and C. The thumb that plays the white keys moves under the thumb that plays the black keys, and vice versa; therefore, the hand playing the white keys retains the lower position, and the hand playing the black keys retains the higher position. If the left hand starts from C playing the white keys, for example, and the right hand plays the black keys, then from F the right starts to play the white keys and the left plays the black keys; as a result, the positions of the hands or the thumbs need to be swapped between the two hands accordingly. However, in Messiaen's pattern, there is no need for the pianist to swap positions between the two hands, because each hand retains either the black or white keys throughout the passage of ascending octaves.
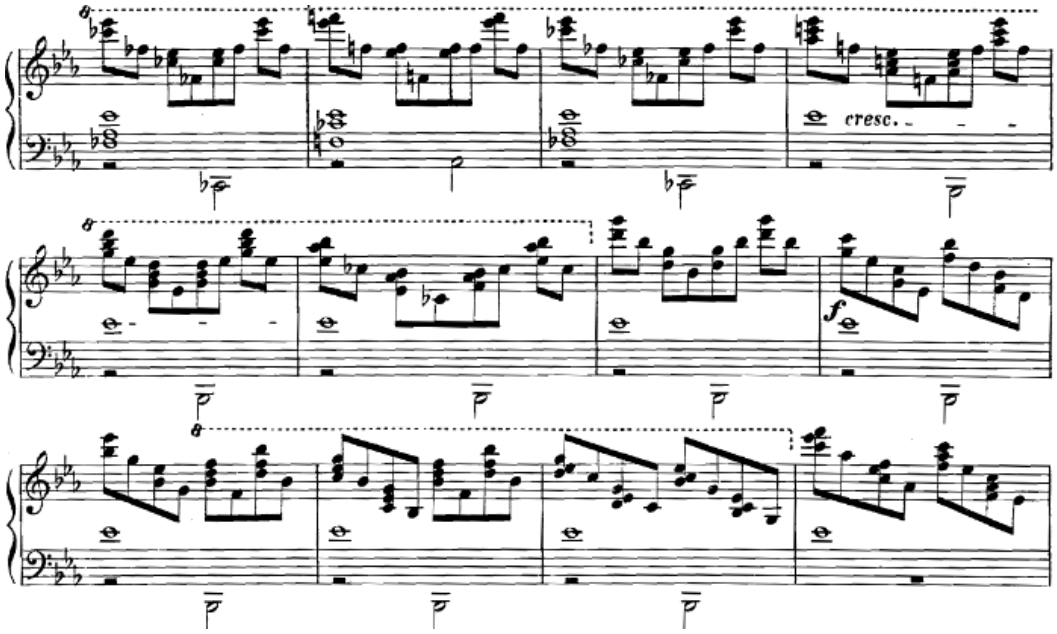
In the conversation with Samuel, Messiaen mentions a number of pianistic innovations in his works. For example, in *Vingt regards*, the passage, which consists of 'both hands violently playing arpeggios' in contrary motion, is rarely found in piano works, but often 'used by harpists in loud passages' (Messiaen 1994: 115). Messiaen also mentions another innovation of passagework which can be found in *Vingt regards*: using fingers to turn, either to the right or left, around the thumb used as a pivot, which can be found at the end of 'Regard de l'esprit de joie' (Example 4.10) (Messiaen 1994: 115–16).

Example 4.10: Messiaen *Vingt Regards sur l'enfant-Jésus*, 'Regard de l'esprit de joie', bars 223–4



This piano technique is in fact not Messiaen's innovation. It can be found in the last movement of Mussorgsky's *Pictures at an Exhibition* (1874) (Example 4.11), in which the technique of 'turning other fingers around the thumb' is required.

Example 4.11: Modest Mussorgsky *Pictures at an Exhibition*, 'The Great Gate of Kiev', bars 90–101



According to Messiaen himself, in order to reproduce the timbre of birdsongs in *Catalogue d'oiseaux*, he was forced to 'invent new chords, sonorities, combinations of sounds and sound complexes that result in a piano that doesn't sound "harmonically" like other pianos' (Messiaen 1994: 116). Apart from the innovations made in *Catalogue*, Messiaen claims that he 'was one of the first to make simultaneous use of the extreme treble and extreme bass registers of the keyboard' (Messiaen 1994: 116). This kind of employment of the keyboard is evident throughout *Visions de l'Amen*. In 'Amen de la Création', the first piano plays the double rhythmic pedals at the very top of the piano while the choral in the second piano begins from the lowest register of the piano. The three-part rhythmic canon in piano 1 from bar 160 in the fifth movement, 'Amen des Anges, des Saints, du chant des oiseaux', occupies 'the extreme treble and extreme bass registers'. From the beginning of the last movement 'Amen de la Consommation', piano 1 has to stretch both arms to reach the two extreme registers to play the double rhythmic pedals.

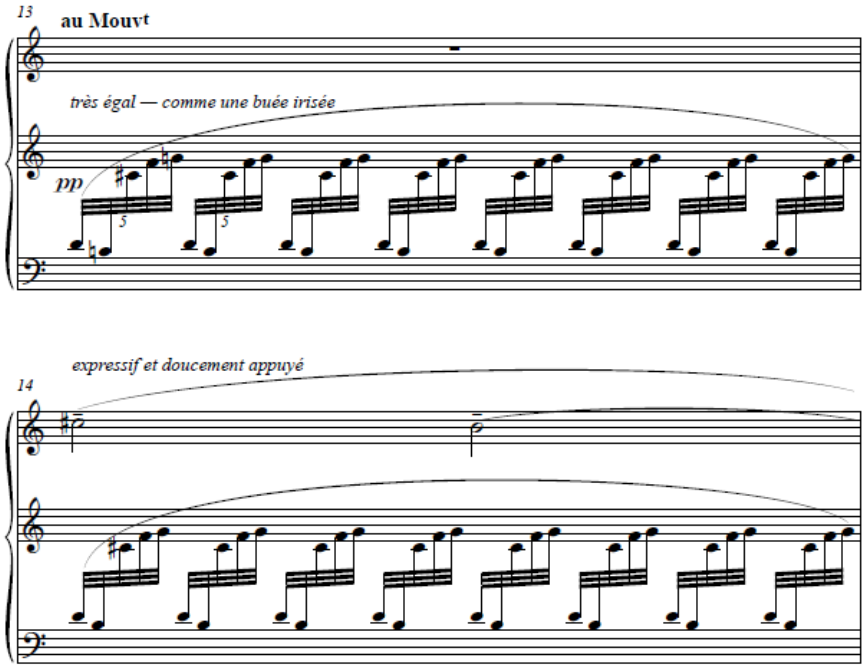
Pianistic Language

Visions is certainly composed with a knowledge of the instrument and we can identify a pianistic tension derived from this knowledge. Messiaen communicates the pianistic language with his fingering markings.

> Peter Hill: In the scores of the works for piano, are the fingerings also by Messiaen?
>
> Yvonne Loriod: Entirely by Messiaen. (Hill 1995: 292)
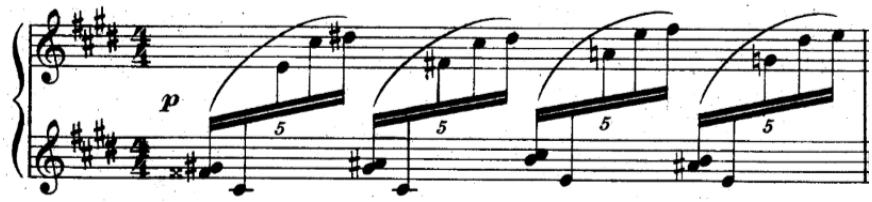
For example, in bar 149 of the fifth movement, 'Amen des Anges, des Saints, du chant des oiseaux', piano 1 alternates between the two hands, playing the figuration formed by decuplets, which, as Messiaen indicates in *Traité*, resembles Debussy's piano writing (Messiaen 1996: 263). Balmer, Lacôte and Murray identify that this figuration is borrowed from Debussy's 'Cloches à travers les feuilles' from *Images*, book 2 (Balmer, Lacôte and Murray 2016: 740) (Example 4.12).

Example 4.12: Debussy *Images*, book 2, 'Cloches à travers les feuilles', bars 13–14

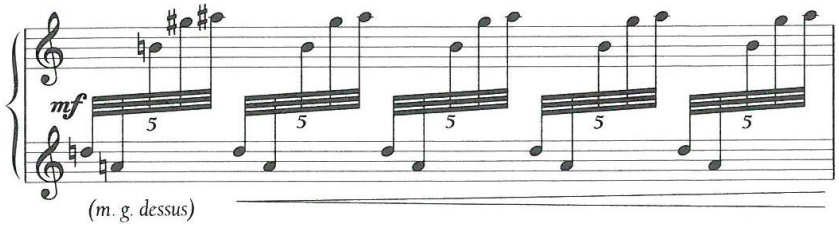


Messiaen first employed this Debussian figuration in the third *Prélude*, 'Le nombre léger' (Example 4.13). Balmer, Lacôte and Murray identify that Messiaen also used this figuration in the third movement of the organ version of *L'Ascension*, 'Transports de joie d'une âme devant la gloire du Christ qui est la sienne'; after *Visions*, this Debussian figuration is found again in *Cantéyodjayâ* (Example 4.14) (Balmer, Lacôte and Murray 2017: 146–8).

Example 4.13: Messiaen *Prélude*, ‘Le nombre léger’, bar 13



Example 4.14: Messiaen *Cantéyodjayâ*, bar 194

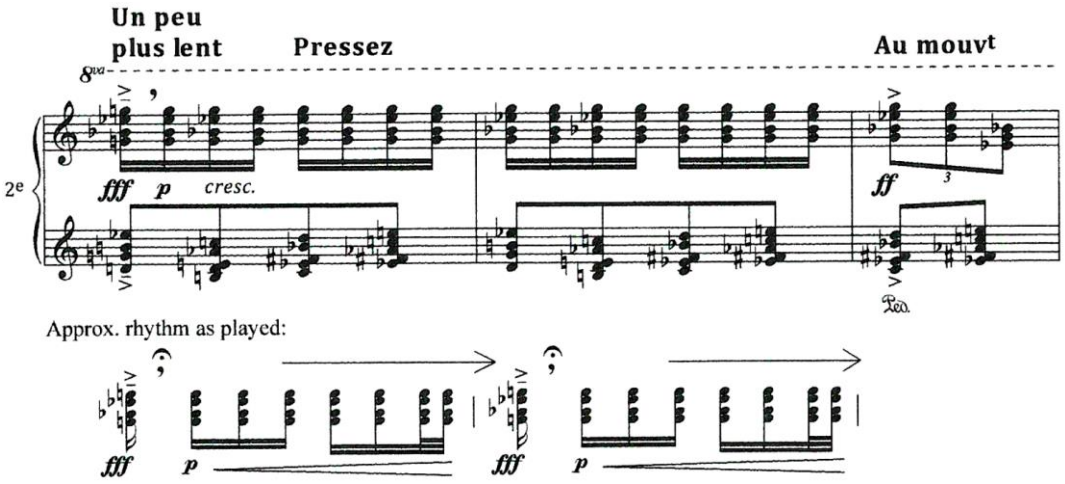


In the case of the fifth movement, ‘Amen des Anges, des Saints, du chant des oiseaux’, of *Visions,* each group of quintuplets in Debussy’s ‘Cloches à travers les feuilles’ is almost identical to the first half of each group in Messiaen’s decuplet figuration, except for the F natural and G natural. Messiaen refers to these ‘ripped chords’, as ‘formulas of accompaniment’ of the melody in piano 2 (Messiaen 1944: 54) and clarifies that each group of decuplets forms a dominant ninth chord with added sixth in A major (Messiaen 1996: 263). As Balmer, Lacôte and Murray nicely put it, ‘in this case Messiaen passes Debussy’s pitches through the filter of a dominant ninth chord with an added sixth in A major, the principal key area of the movement’ (Balmer, Lacôte and Murray 2016: 742). Messiaen marks 2 for the D and 2 for the E in piano 1’s left hand. It would have been a logical possibility to play the D with the middle finger and the B with the fifth finger, and to play the E and D in the second half of the decuplets as marked, such that the pianist could keep the left hand in the same position. The fingering marked by Messiaen compels the pianist to move the hand to play the E with the same finger (2) that plays the D, the first note of each group of decuplets; the left hand therefore generates more power by the extra movement, which creates an emphasis on the E. Thus, the dominant E is emphasised, not with explicitly marked accents, but through a pianistic language engendered by Messiaen’s fingering. Contrary to the fingering marked for the left hand that creates greater movement, Messiaen marks 1 for the C sharp and 2 for the F sharp in the right hand, which encourages the performer to keep the same hand position and to avoid any extra movement. Messiaen also indicates fingering for accentuation at the end of the second movement, already marked *fff*

with accents for the last five notes in both piano parts; by using the same finger (3), the movement of the hands certainly creates more power, which contributes to the powerful ending.

In Messiaen's performance, pianistic language also communicates through interpretative difficulties. Messiaen, for example, marks a comma after the first semiquaver chord in bar 71 in the fourth movement and yet, in both recordings, he not only pauses at the marking in bar 71, but also adds a pause in bar 72 after the first semiquaver. This shows that Messiaen's freedom cannot be confined by the score, and the addition of this slight pause in the recordings speaks to a pianistic language sedimented in the work. Dingle also recognises the divergence between the two recordings and the score; as he indicates, 'Messiaen certainly does not play a sequence of even sixteenth notes with his right hand', 'though no notation or description adequately encapsulates the slight pause' heard in both recordings (Dingle 2014: 43). Dingle gives the passage from bar 71 to 72 with an illustration of Messiaen's performance:

Example 4.15: Messiaen *Visions de l'Amen*, 'Amen du Désir', bars 71–2, and Dingle's illustration of Messiaen's interpretation
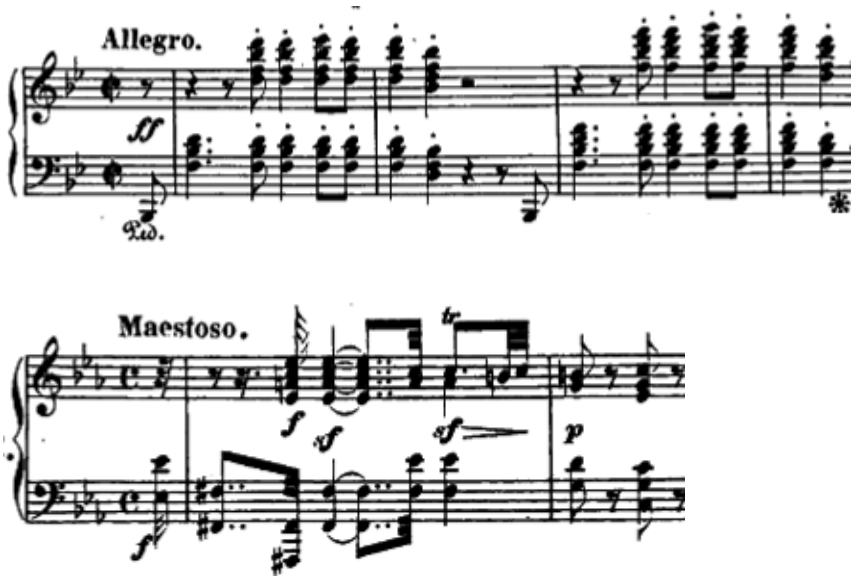


The left-hand part might explain why Messiaen includes the extra pause in bar 72. While the right hand repeats the E flat major triad in semiquavers, the left hand plays the quaver chords in mode 3, first transposition. Between the first chord and the second chord in the left-hand part, not only is there a small leap, but also the number of notes increases from the four notes in the first chord to five notes in the second. Apart from the difficulty of placing each finger on the right note, the top and bottom notes stretch a ninth. And Dingle's illustration of the

right-hand part in Messiaen's recordings shows the pause that we can hear between the first and the second chord in bars 71 and 72 of the left-hand part. The pause might be perceived as a kind of pianistic language, in which Messiaen needs time to leap and place the more difficult chord. The difficulty can, of course, be overcome; both Marielle Labèque and Frith, for example, play this passage as written with a continuous *crescendo* and *accelerando*. It may not be the case that Messiaen was simply unable to perform as written, but that he instead allowed the pianistic difficulty to speak in performance for musical effect. The tempo fluctuations and the erratic dynamics, almost like convulsive spasms, seem to communicate the musical expression of extreme passion, as Messiaen puts it: 'soul is pulled by a terrible love which expresses itself in a bodily manner' (Messiaen 1943: Author's Note).

The beginnings of the Sonatas Op. 106 and Op. 111 by Beethoven also entail a kind of instrumental language characterised by its pianistic difficulty (Example 4.16). It is certainly possible to play the first left-hand B flat major chord in bar 2 with right hand in Op. 106, and to play the first E flat octave with right hand in Op. 111, which may lead to accuracy and comfort. However, as Lora Deahl and Brenda Wristen suggest, 'by eliminating the element of risk, the psychological, physical and visual drama of the opening gestures', as part of the pianistic language, 'will be lost or diminished' (Deahl and Wristen 2017: 96). We might go even further, like Messiaen, and take a fraction of time between the leaps in order to let the difficulty speak.

Example 4.16: Beethoven *Piano Sonata*, Op. 106, No. 29, bars 1–5, and Beethoven *Piano Sonata*, Op. 111, No. 29, bars 1–3



This pianistic language is conveyed most subtly in the writing from bar 29 in the third movement, 'Amen de l'agonie de Jésus'. The instrumental language in the previous examples can all be perceived by the listener, yet the pianistic implication in the next section might only be perceived by the pianist themselves. Both right-hand and left-hand parts are in the same register, and the Debussian formula in the left hand moves in between the right-hand octaves throughout the section. Therefore, the section must be played with one hand on top of the other. If the pianist places the right hand above the left, the left hand, which seems a constant obstacle, will obstruct the movement of the right hand, and at the same time the movement of the left hand is also restricted by being hemmed in by the right-hand playing the octaves; consequently, the wrist of the right hand must somehow be held slightly upwards in order to give room for the left hand to move underneath. There is a possibility for the pianist to place the left hand above, but it will create even greater obstructions because the left-hand fingers will need to be virtually inserted in between the fingers of the right hand. With the given physical restriction of the two hands, therefore, a kind of repression is felt by the pianist. The expression '*douloureux, en pleurant*' (painful and weeping), marked by Messiaen, is not only conveyed through the music's dissonance in the chromatic voice leading formula of the left hand, as taken from Debussy's *Pelléas et Mélisande* (Messiaen 1996: 246), and the chromaticism in the right hand, but the performer themselves is also inwardly compelled to feel the discomfort in this section, which has the potential to come across in performance. However, whilst the pianist feels stifled by the playing at bars 29-43, later the difficulty evaporates as the theme is arranged with the hands over two octaves apart from bar 75. Paradoxically, though the technical unfreedom of the original 'painful cry' has been lost, the discomfort of the theme can now be more 'comfortably' expressed with hands apart.

The Piano, the Orchestra

Although modest about his facility as a pianist, Messiaen nevertheless admits the merit of his piano playing. As he tells Samuel:
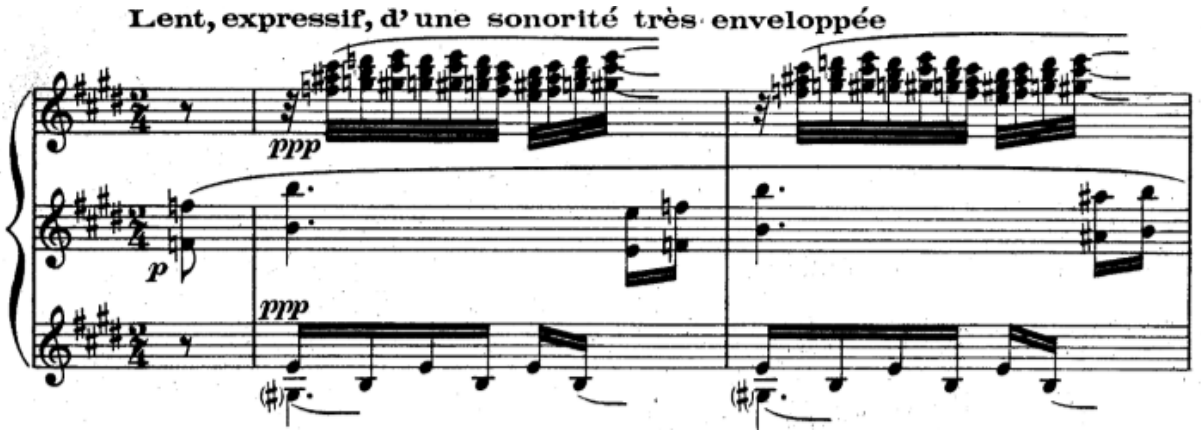
> But I'm a decent pianist all the same, and I sight read easily. What characterizes me is, perhaps, that I play the piano as though I were conducting an orchestra, which is to say by turning the piano into a mock orchestra with a large palette of timbres and

> accents. For me this is a natural reaction, doubtless because I played a lot of orchestral transcriptions when I was a child, notably the famous operas of which we were just speaking and which certainly influenced my way of playing the piano. (Messiaen 1994: 113–4)

A conductor hears different timbres of various instruments and Messiaen, therefore appropriately, tends to imitate the orchestra by creating different timbres on the piano; it seems that, while he played the piano, a kind of orchestration was at the forefront of his mind. This can be achieved by balancing or voicing a texture with different dynamics. According to Messiaen's students at the Paris Conservatoire, Messiaen could reduce the orchestral score of *Pelléas et Mélisande* at the piano and, as Maurice Le Roux recalls, Messiaen '"sang all the tunes, all the roles" and played the entire score on the piano, "representing the orchestra well"' (*en «chantait tous les airs, tous les rôles» et jouait la partition entière au piano, «en représentant bien l'orchestre»*) (Boivin 1995: 38).

An 'orchestration' of the piano can be identified in his scores, and indeed is already shown in Messiaen's first published work. In his first *Prélude*, Messiaen marks different dynamics for the three parts (Example 4.17). By emphasising the middle part, we might be able to imagine the violin section sounding out from within and the woodwinds flowing above, as the violas and cellos quietly maintain the E major harmony.

Example 4.17: Messiaen *Préludes pour piano*, No.1, 'La colombe', bars 1–3

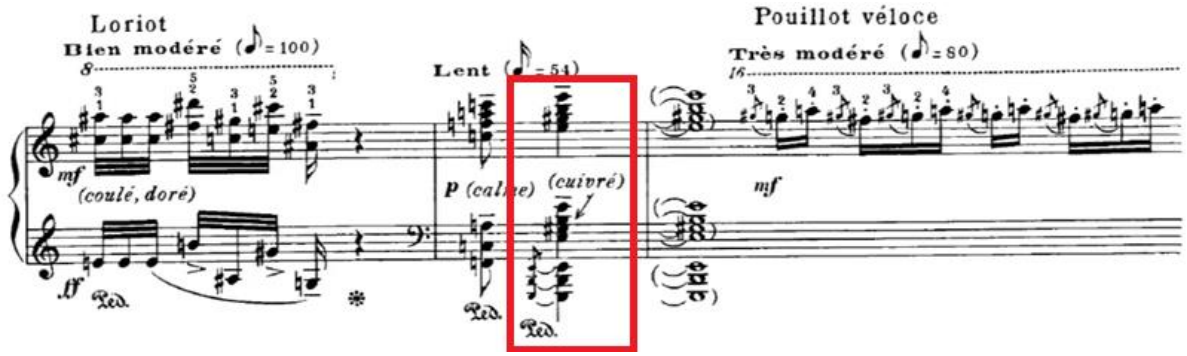


This approach to imitating the orchestra by marking different dynamics in different layers is also employed by Albéniz, who, Messiaen says, 'played a great role in my knowledge of the piano' (Messiaen 1994: 114). Rae observes that the 'careful delineation of separate strands of musical material with individual dynamic markings' can also be found in Albéniz's *Iberia*

(Rae 2013: 249), in which Messiaen's fingers were immersed. Like Albéniz, 'Messiaen often assigns principal melodic lines to a lower, or inside, part', practices which are 'indicative of orchestral thinking' (Rae 2013: 249–50).

Orchestral thinking is also revealed in the way Messiaen balances or voices chords. In the central part of 'Le loriot' from the *Catalogue* (Example 4.18), in order to achieve the brassy sound (*cuivré*, marked in the score) in the majestic E major harmony, Messiaen asked Hill to slightly emphasise the major third (G sharp) in the left hand, 'so that the chord glows from within', 'like trombones' (Hill 1995: 275).

Example 4.18: Messiaen *Catalogue d'oiseaux*, 'Le loriot', bars 103–5



While the renowned Russian pedagogue Heinrich Neuhaus maintained that 'a good pianist has a special sense – a feeling which is born in the ear and is transmitted to the hand – the "fifth-finger" sense' (Neuhaus 1993: 130), 'Messiaen detested the gratuitous bringing-out of the top note, which he regarded as a persistent vice of pianists' (Hill 1995: 275). By emphasising the different parts of a chord, Messiaen is able to explore the possibilities of colour in a chord and to bring out the different instruments, like a conductor.

Indicating dynamics separately in order to 'orchestrate' the piano parts is rather consistent in *Visions*. In the above analysis of the recordings, we can recognise the separation of dynamic markings in the fifth movement from bar 172. The section from bar 87 in the fourth movement is also carefully orchestrated by Messiaen. Although the first piano part has only one dynamic marking, Messiaen separate the timbres of the three parts in piano 1 with different articulation markings. In bar 87, Messiaen marks *tenuto* for the long dominant seventh chord at the bottom. He puts dots on the descending dyads with a line over them, which requires the performer to physically separate the dyads while retaining a sense of the phrase, for the pedal will also connect them. And Messiaen's indication '*très doux, mais*

chanté' requires that the top part be played very softly and cantabile. Such specifications certainly show Messiaen's attempt to turn the piano into 'a mock orchestra with a large palette of timbres' (Messiaen 1994: 113).

In the second piano part, apart from separating the texture with different articulation markings, separate dynamics are indicated, and the markings in the right-hand part of piano 2 show Messiaen's concern not to habitually bring out the top voice. Messiaen was not the first pianist to want to avoid merely emphasising top notes. According to Marguerite Long, Debussy once remarked, 'the fifth finger of virtuosi, what a pest it is!' (Long 1972: 13). Debussy meant, as Long explains, that 'too often one hammers the melody without attaching sufficient importance to the whole harmony' (Long 1972: 13). If Neuhaus asks the pianist to train the singing fifth finger, Messiaen seems to urge us to sing with the thumb. From bar 71 in the last movement, Messiaen marks *ff* in the bottom voice while the other voices of piano 2 must stay at an *mf* dynamic. Therefore, through this differentiation, we might achieve the effect that, while piano 1 plays chordal clusters in the upper registers of the piano, the trombone perhaps 'glows' from the bottom. Although piano 1 is marked *ff*, each key in the middle register of the piano has longer strings than that of the upper registers, so that the bottom voice of piano 2 with *ff* can create more resonance to pierce through the texture.

In addition to achieving an orchestral effect by the creative use of different registers of the piano and various articulations and dynamics noted in the score, Messiaen's awareness of bringing out different orchestral colours as performer is revealed in his discussion of Albéniz's *Iberia*:

> Albéniz requires an orchestral interpretation from the performer. Sometimes it will be flowing sonorities, in a *legato* phrase, imitating oboes and clarinets (for example in 'El Albaicín'); elsewhere, heavy sonorities, evoking those of trombones (in 'Almería'); snare drums (in 'Triana') or even a distant guitar accompaniment (in 'Jerez' and in 'Fête-dieu à Seville'). In 'Triana', some staccati should sound in his opinion like triple strings of cellos.[56] (Boivin 1995: 276)

[56] Original French: 'Albéniz exige de l'interprète un jeu orchestral. Tantôt ce seront des sonorités coulées, dans un phrasé lié, imitant les hautbois et les clarinettes (par exemple dans *El Albaïcin*); ailleurs, des sonorités, lourées, évoquant celles des trombones (dans *Almeria*); des batteries de caisse claire (dans *Triana*) ou encore un accompagnement de guitare lointaine (dans *Jerez* et dans *La Fête-Dieu à Séville*). Dans *Triana*, certains staccati devraient sonner à son avis comme des triples cordes de violoncelles.'

In the analysis class on *Prélude à l'après-midi d'un faune*, not only did Messiaen elucidate the music's instrumentation, harmony and rhythm 'in crazy detail' (*avec un détail fou*), but also, according to Alain Louvier, 'Messiaen had the ability … to play the piece on the piano in such a way that one could hear the flute and oboes, a chord of oboes and clarinets, dovetailed and not, the flute' (Boivin 1995: 281).[57] Just as he described the orchestration of Albéniz's piano music, Messiaen also demonstrated an imaginative interpretation with different timbres and colours at the piano in his classes. As Harry Halbreich recalls:

> I don't think Messiaen was a virtuoso pianist, but he was a real musician. He had an exceptional sense of colour in his touch. I have never heard again some of Debussy's great *Préludes* – I am thinking of 'Brouillard', 'Feuilles mortes', 'La Terrasse des audiences au clair de lune' – played with such beauty, such a wealth of colours. Really, he coloured the piano, the colours of timbres came out... I'm very sorry that it was not captured by a recording, it was unique.[58] (Boivin 1995: 278)

It is a shame that we can no longer hear Messiaen's playing of Debussy's piano music, but the orchestral interpretation and various colours are well captured in Messiaen's recorded performance of *Visions*. For example, we already noted that Messiaen (piano 2) suddenly changes the dynamics and articulation at bar 112 of the second movement, 'Amen des étoiles, de la planète à l'anneau'; the markings in bar 112 stay the same as the markings for the previous five-note motif from bar 107, where Messiaen indicates *ff* and an accent on each quaver octave, yet the motif in bar 112 sounds shorter and lighter in Messiaen's second recording, as if the motif were played by the brass from bar 107, and the variation of the motif from bar 112 is suddenly replaced by the bassoon bounding through different octaves. The bassoon cannot reach the bottom G and F sharp, but we can sense Messiaen's search for orchestral colours in performance. Furthermore, at the beginning of the fourth movement, 'Amen du Désir', in the second recording, Messiaen, instead of maintaining the indicated chordal balancing, gives up emphasising the thumb of the right hand in the second bar; if the right-hand part in the first bar is presented by the woodwinds with the oboe singing the

[57] 'Messiaen avait la faculté de se mettre au piano, et de jouer au piano cette pièce de telle façon qu'on entendait la flûte et les hautbois, l'accord des hautbois et des clarinettes croisés, pas croisés, la flute.'
[58] Original French: 'Je ne pense pas que Messiaen ait été un pianiste virtuose, mais c'était un vrai musicien. Il avait un toucher, un sens de la couleur exceptionnels. Je n'ai plus jamais entendu certains des grands *Préludes* de Debussy – je pense à *Brouillard*, à *Feuilles mortes*, à *La Terrasse des audiences au clair de lune* – joués avec une pareille beauté, une pareille richesse de couleurs. Vraiment, il colorait le piano, les couleurs de timbres resortaient… Je regrette beaucoup que cela n'ait pas été capté par un enregistrement, c'était unique.'

bottom voice, Messiaen removes the virtual oboe in the second bar and keeps only the flutes and clarinets.

French Pianism and Messiaen's Pianism

We have discussed the *jeu perlé* style of playing as one of the most significant elements embodied in the French pianistic tradition. Chopin's pianism, which seems to differ from the finger-based technique, is another constitutive element in the development of French pianism. Dingle suggests that the influence of Chopin – Messiaen's 'favourite composer for the piano', not only in terms of composing, but also in terms of performance style – is often overlooked (Dingle 2014: 46). Rae suggests that various materials in Messiaen's *Préludes* reflect the compositional manner of Chopin, and she also finds a link between Chopin and Messiaen in pianistic genealogy. Messiaen first entered Paris Conservatoire as a pianist and studied with Georges Falkenberg, who was taught by Chopin's student, Georges Mathias. As 'the longest of all Chopin's known pupils', Mathias studied with Chopin for 'a period of between five and seven years', and he was 'largely responsible for embedding Chopin's music and pedagogical philosophies into the French pianistic tradition' (Rae 2013: 241).

Chopin's method advocated the involvement of 'the hand, wrist, forearm and upper arm', which was not emphasised by 'too many subsequent pedagogues in France' (Timbrell 1992: 23). Charles Timbrell indicates that, even though a number of foreign pianists performed in France around the middle of the nineteenth century and some of them, like Chopin, settled there, the French style of piano playing – building on the style of Camille Saint-Saëns, who focused on the technique of the fingers and demonstrated the ideals of 'clarity, elegance, and sobriety of expression' – 'developed without much outside influence', (Timbrell 1992: 25). If Timbrell tends to observe the disparity between Chopin's pianism and the French style of playing, Roy Howat emphasises the connection between Chopin's pianism and French pianism. Before coming to Paris, Chopin formed his piano style in Poland from 'a blend of Italian *bel canto* and the pianism of an Irishman based in Russia (John Field)'; this 'rich mix', reflected in Chopin's music and teaching, 'realigned much French pianism from its older, more finger-based habits' (Howat 2009: 63).

The *jeu perlé* style – which is embodied in the French pianistic tradition for more than 200 years, and which requires 'the utmost equality of touch and unforced tone that is controlled

entirely by the fingers'(Timbrell 1992: 16) – seems to differ from the playing of Chopin, who suggested that pianists need 'no less to use the rest *of the hand*, the wrist, the forearm and the upper arm' (Eigeldinger 1986: 40–1). In order to ensure the clarity of each note, the *jeu perlé* style involves 'high fingers', 'raised for attack', (Timbrell 1992: 114, 82), whereas Chopin recommended that 'the fingers should fall freely' and 'sink, immerse themselves in the depths of the piano', 'running over the keys without the slightest effort' (Eigeldinger 1986: 30–1). While the *jeu perlé* style maintains the evenness of passagework, Chopin, as Jim Samson indicates, 'exploit[ed] rather than conceal[ed] a hierarchy of finger strengths, cutting against the grain of contemporary practice' (Samson 1996: 104). Chopin recognised that 'for a long time we have been acting against nature by training our fingers to be all equally powerful', and for him, each finger had its own 'particular charm' which should not be destroyed but on the contrary developed; as Chopin saw it, there were 'as many different sounds as there are fingers' (Eigeldinger 1986: 32–3).

Despite the difference to the traditional *jeu perlé* style, Chopin's pianism was widely embraced by the French musicians. Fauré, Debussy and Ravel were 'all fairly direct recipients of "Chopin tradition"' (Howat 2009: 63). Debussy was one of those French musicians, as Timbrell indicates, who departed from 'the dry, highly articulated style of many of his French contemporaries' (Timbrell 2003: 259). Not only was Debussy 'never tired' of Chopin's music (Long 1972: 12), but it seems also that Debussy adopted Chopin's pianism. As Timbrell notes, 'it is likely that his [Debussy's] tone-sensible approach was fostered by his early teacher Mme Mauté de Fleurville, who clamied to have studied with Chopin' (Timbrell 2003: 259). Just as Chopin advocated that one should sink and immerse the fingers in the depth of the piano, Debussy played with a continuous pressure of hand and 'total adherence to the keyboard' (Long 1972: 22). If the traditional *jeu perlé* style is conveyed through 'rapid, clean, even passagework in which each note is bright and perfectly formed' (Timbrell 1992: 16), the crucial element in Chopinesque pianism, adopted by Debussy, is 'suppleness' and 'caress' of touch 'without any hardness of attack' (Long 1972: 19). Howat also confirms that the kind of 'body language' reflected in Debussy's music shows the Chopinesque elements: 'suppleness, free movement, hand weight and close key contact' (Howat 2009: 72).

The kind of body language that resembles Chopinesque pianism, which involves suppleness and caressing, is not difficult to find in Messiaen's *Visions*. The Debussian figuration in piano

1, discussed before from bar 149 in ‘Amen des Anges, des Saints, du chant des oiseaux’, is certainly required to be played, as Debussy played the piano, ‘in half-tint’, ‘floating over the keys’ with ‘gentleness’ (Long 1972: 19). In the reprise of the first theme from bar 87 in ‘Amen du Désir’, the first piano is marked *trés doux, mais chanté*, music which needs to be caressed or stroked rather than attacked. Debussy also adopted the Chopinesque piano technique of letting the hand ‘fall freely’ such as to ‘sink, immerse’ into the depth of the keyboard in chordal playing. Debussy advocated, so Timbrell indicates, ‘bringing out different notes in large chords’ and ‘achieving a caressing touch by dropping and sliding the hand with outstretched fingers’ (Timbrell 2003: 263). This Chopinesque piano playing, inherited by Debussy, is not only reflected in *Visions*, but also demonstrated in Messiaen’s recordings. At the beginning of ‘Amen du Désir’, the second piano part is marked *chanté, expressif et tendre*. A Chopinesque pianism is undoubtedly apt here to convey, as Messiaen writes in his ‘Author’s Note’, the ‘longing of a deep tenderness’, ‘the calm perfume of Paradise’ (Messiaen 1943: Author’s Note). By marking *mf* for the bass note of each right-hand chord in the first bar, Messiaen does what Debussy advocates, as mentioned above: avoiding merely bringing out the top notes. In Messiaen’s second recording of *Visions* with Loriod, not only does his chordal playing convey the sense of gentleness and suppleness that Chopin taught, but also Messiaen deviates from the score by bringing out different voices in the second bar of the fourth movement, instead of emphasising the bass notes of the right-hand chords, something which will be discussed in detail later. As at the beginning of the fourth movement, ‘“caressing”, even “massaging” of the keys’ can be adopted as an approach by both pianos in the coda of the fourth movement, from bar 176, to depict ‘the harmonious silence of Heaven’ (Howat 2009: 312; Messiaen 1943: Author’s Note).

Chopin’s pedalling was also embraced by Debussy. Like Chopin, as Long writes, ‘he [Debussy] considered the art of pedal as a “sort of breathing”’ (Long 1972: 19). According to Debussy, Chopin advised using the pedal ‘as a kind of *respiration*’, which should not be held on (Howat 2009: 282). Debussy’s advice on pedalling, ‘never to hold it on’, derived from Chopin (Howat 2009: 282), and seems to be adopted by Messiaen, whose playing certainly presents a kind of ‘respiration’ by means of different kinds of pedalling. In his second recording of *Visions* with Loriod, Messiaen ‘never holds the pedal on’ from bar 107 in ‘Amen des étoiles, de la planète à l’anneau’, in which not only is the recurring five-note motif in the left-hand part of piano 2 orchestrated to imitate different instruments, as discussed above, but also a kind of ‘respiration’ is conveyed through Chopinesque pedalling. Messiaen’s

avoidance of holding the pedal on is presented in a number of places in his second recording, such as in the passiontate theme of 'Amen du Désir' and in the section from bar 45 in the fifth movement, 'Amen des Anges, des Saints, du chant des oiseaux'. It should be mentioned that although Messiaen already indicates the 'respiration' in bars 45–6 of the fifth movement by marking ❀ (release mark), he tends to lift the pedal, or to breathe, more often than marked, which renders this passage more eventful. How Messiaen employs the pedal in this passage will be discussed in detail later. As noted above, we can also identify a kind of 'respiration' by the use of pedal in Loriod's recording of Mozart's Fantasy in D, K. 397, in which, instead of using the pedal to connect the melody, she lifts the pedal after the first two beats in bar 12 and bar 14, plays the two quavers on the third beat *legato* and the last two quavers *non-legato*.

As an important successor of the *jeu perlé* style of piano playing, Louis Diémer's recording of Mendelssohn's 'Spinnerlied' demonstrates the pinnacle of the *jeu perlé* style with acute evenness and clarity, suitable to this music. Yet Diémer's finger-centric style, without weight from the arm and shoulder, seems inadequate when it comes to grander gestures in performance. His recording of his own *Grande Valse de Concert* shows a lack of strength. As Timbrell puts it, 'the tone is dry' and 'scale passages are light' (Timbrell 1992: 35), which reminds us of Loriod's recording of the Webern Variations. In the recordings of *Visions*, there is not much pure finger technique to be observed in Messiaen's playing, since the second piano part does not require much playing of this kind. In Messiaen's recordings, the power of the chordal playing, especially in the fourth movement, seems to be generated, not merely by the hand, but by the weight from the arm or even the upper body. If Diémer's recording of *Grande Valse de Concert* does not involve a big range of dynamics, since it does not vary the sound through the use of weight from different parts of the body, Messiaen seems constantly to switch the usage of the weight between the hand, the wrist and the arm. This is best shown in his second recording of *Visions* in the left-hand part of piano 2 from bar 107 in the second movement, in which Messiaen renders the variations of the motif rather eventfully with different touches, such that the lightness of some passages is perhaps conveyed by playing with the strength of the wrist and the heaviness of some passages is presented by using the weight from the arm. In the opening of the second movement, though powerful accents are engendered by the weight of the wrist, the forearm and the upper arm, there remain many examples of both unequal touch and inexact timing in Messiaen's recordings; in a word, 'even passagework' is rarely heard in his playing.

Even in passages with running semiquavers, Messiaen's performance shows that the ideals of French pianism, such as clarity and evenness, are not the foremost concern for him; instead, his playing reveals an interpretative inequality of the fingers, which can be a pianistic virtue for Chopin. A *jeu perlé* pianist might play the second piano part from bar 142 in the fifth movement with clarity, 'each note' being 'bright and perfectly formed', but in Messiaen's first recording, partly due to the quality of the recording, we can hear the accents on the main beats and sense the passion towards the end of the section, but we certainly cannot hear every note as 'each pearl on a necklace'. It seems that Messiaen uses the weight from the arm as his fingers 'sink, immerse themselves in the depths of the piano', as advocated by Chopin (Eigeldinger 1986: 31), and glides through the notes without raising fingers to actively strike each key. The sound quality becomes better in the second recording, but the unevenness and lack of clarity still can be identified.

The lack of precision and clarity in Messiaen's playing seems to set him apart from French pianism. Debussy emphasise the idea of 'minute precision' in performance, as Long recalls, 'four semiquavers mean 4 ♪' (Long 1972: 13). It may be due to a lack of practice, and yet in a number of places – in which, as identified before in the analysis of the recordings, Messiaen capriciously changes the tempo and even changes the rhythm – the passagework is not too difficult to be played accurately. Although Chopin wanted to exploit the charm of different fingers, which seems different to French pianism, he nonetheless maintains the sobriety of expression espoused by the French pianistic tradition, and disliked the excessive use of *rubato* that 'degenerated into exaggeration or affectation' (Eigeldinger 1986: 50). As Howat confirms, both Chopin and the French composers, such as Debussy, Ravel and Poulenc, 'unanimously regarded sloppy rhythm or abuse of rubato as anathema' (Howat 2009: 211). In French pianism, as well as in Chopinesque pianism, it is a 'delicate *rubato*' that is difficult for the performer to obtain (Long 1972: 25). In Messiaen's recordings, the tempo fluctuation found in number of places cannot be seen as 'delicate'. The 'delicate *rubato*', suggested by Chopin and Debussy, is 'confined by a rigorous precision', and it does not mean 'alteration of line or measure, but of nuance or *élan*' (Long 1972: 25). Fauré, in line with Chopin and the French pianistic tradition, once said that 'one wants nuance, but no change of beat' (Long 1973: 50), the notion of which is certainly what Messiaen does not fulfil in his recordings of *Visions*.

We can identify an Adornian approach to performance in Chopin's pianism. Chopin's pupil Carl Mikuli, 'on the basis of his personal reminiscences' recalled that 'Chopin's rubato possessed an unshakeable emotional logic. It always justified itself by a strengthening or weakening of the melodic line, by harmonic details, by the figurative structure' (Eigeldinger 1986: 50). This reflects Adorno's notion of interpretation that involves *rubato* to reveal the dynamic contained in the work. In the previous chapter, we mentioned the kind of *rubato* associated with Chopin, which requires that 'the accompanying part should keep strict time while the melody anticipates or lags behind, the beat, causing non-synchronisation between the two parts' (Rowland 1994: 199). For Chopin, 'the left hand is the conductor of the orchestra', which 'ought to keep perfect time', while 'the right indulges its fancy' (Eigeldinger 1986: 51); therefore, Chopinesque *rubato*, as Jean Kleczyński puts it – his work on the interpretation of Chopin's music was endorsed by many of Chopin's pupils and friends – can only be regarded as 'demi-rubato' (Eigeldinger 1986: 51). It is through this 'demi-rubato' that Chopin aligned himself with the French tradition, maintaining the idea of moderate expression in performance. The notion of the right-hand playing *rubato* against the left hand which keeps strict time resembles Adorno's idea of *rubato* in that any fluctuation must be aware of the underlying basic tempo. Just as for Adorno, every variation of a beat must 'palpably relate to a *latent*, identical beat' (Adorno 2006a: 76), for Chopin, the freedom in the expressive melody must be 'watched' by the 'strict' left hand. 'Look at these trees!' as Liszt poetically describes, 'the wind plays in the leaves, stirs up life among them, the tree remains the same, that is *Chopinesque rubato*' (Eigeldinger 1986: 51).

Lisztian *rubato*, on the other hand, consists of 'variations of tempo and expression within a free declamation', which is entirely different from Chopin's much more reserved 'give-and-take' *rubato* (Eigeldinger 1986: 122), and which seems similar to Messiaen's *rubato*. Carl von Lachmund, Liszt's student, describes Liszt's *rubato* as, compared to Chopin, 'more a sudden, light suspension of the rhythm on this or that significant note' (Eigeldinger 1986: 122). Like Chopin, Liszt suggests that 'time and rhythm must be adapted to and identified with the melody, the harmony, the accent and the poetry' (Rowland 1994: 207); in other words, tempo fluctuation needs to be justified by the details of the work. However, it is also important to recognise that, for Liszt, *rubato*, which 'he struggled to find a means of notating …, may be left to the taste and momentary feeling of gifted players' (Rowland 1994: 207). This type of *rubato* based on the 'momentary feeling' certainly resembles Bergsonian or vitalist performance aesthetics. Therefore, in terms of tempo fluctuation, Liszt, as Timbrell

confirms, the vitalist view often conveys 'interpretative "excesses"' opposed to French pianism as well as Chopin's pianism (Timbrell 1992: 25). This difference seems also apt to identify the difference between French pianistic tradition and Messiaen's performance style. Not only was Liszt's influence on Messiaen's compositions an important one, as Rae indicates, 'stimulating certain pianistic textures as well as highly orchestral approach to the instrument' (Rae 2013: 236), but also Messiaen seems to share a similar method of *rubato* in his performance, in which, as in Liszt's performance, 'a sudden, light suspension of the rhythm on this or that significant note' can often be heard.
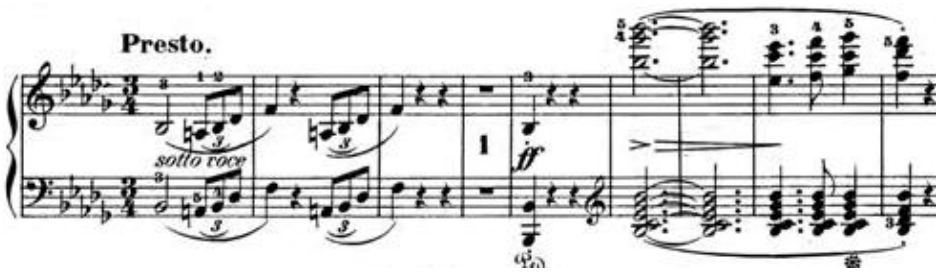
Chopinesque pianism, which includes playing with weight from the arm, seems to become more influential at the start of the twentieth century, when it is manifested in Alfred Cortot's playing. Cortot was one of 'the most influential musicians in France from about 1910 to 1950' and started teaching at the Conservatoire around the beginning of the twentieth century (Timbrell 1992: 43, 45). Cortot studied with Diémer and Émile Decombes, one of Chopin's pupils (Timbrell 1992: 45). As Timbrell recognises, 'his variety of touch', through the greater use of arm weight, and his 'unique combination of eloquence and elegance have often been compared with Chopin's own style of playing' (Timbrell 1992: 45). According to Cortot's student Magda Tagliaferro, he 'didn't care for the technique of his teacher, Diémer' (Timbrell 1992: 81). But, in fact, Diémer's interpretation of Chopin's Nocturne, Op. 27, No. 2 inherits Chopinesque pianism and is, as Timbrell observes, 'rather free and nicely inflected' (Timbrell 1992: 35), and his delicate touch, subtle nuances and variety of tone colours are reflected in Cortot's recording of the Chopin Nocturnes. On the other hand, as mentioned earlier, the sound in Diémer's recording of his own *Grande Valse de Concert* does achieve a large range of dynamics and, without the weight from the arm and shoulder, shows a lack of strength.

Although Cortot, as Chopin advocated, uses more weight, he takes evenness of touch as one of 'the essential principle[s] of technique' (Cortot 1928: 9), which differs from Chopin's idea of the 'particular charm' of each finger. Cortot's recording of the Chopin *Etudes* Op. 10 and Op. 25 certainly presents, especially in the faster *études*, a velocity and evenness of touch, which seems to be a fine demonstration of the *jeu perlé* style. As Cortot's student Vlado Perlemuter observes: 'he [Cortot] could play wonderfully articulated and sparkling Saint-Saëns as well as anyone' (Timbrell 1992: 82). Messiaen, on the other hand, retains the interpretative inequality of the fingers which Chopin advocated, as is evident in his recordings of *Visions*, which combine, as Hill describes it, 'a touch of the grotesque, adding

staccatos and limping hesitations' (Hill 2007: 83). In brief, Cortot, in line with the French tradition, develops the equality of fingers in his technique, whereas Messiaen maintains the individual charm of each finger; both Cortot and Messiaen inherited Chopin's idea of using weight from the body, which not only enables them to explore a larger range of dynamics and different tone colours, but also allows them to involve textural variations on a larger scale, compared to the *jeu perlé* pianists, such as Long, who 'felt almost duty-bound to uphold French musical traditions and the ideals of clarity, grace, moderation, and elegance' (Timbrell 1992: 44).
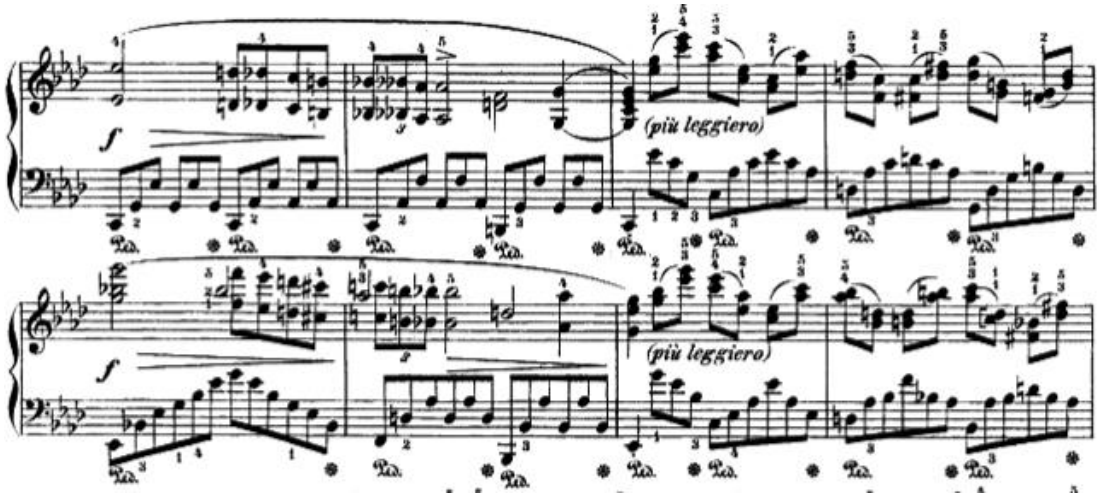
In Long's recording of Chopin's *Scherzo No. 2 in B-flat minor*, Op. 31, we must admit the impressiveness and brilliance of her playing, especially in the fast passages, but her touch seems to be constrained by the limited involvement of weight from the body, which undermines the dynamic contrasts required by the music. In her recording of Chopin's *Fantaisie in F minor*, Op. 49, despite the fact that the recording has been criticised for its 'shallowed-keyed playing' and emotional restraint (Timbrell 1992: 45), the contrast between different characters is clear and she shows a fairly wide dynamic range, including a powerful climax towards the end of the piece. However, her performance seems to lack the breadth of Cortot's, which demonstrates a greater range of dynamic possibilities and different nuances. In Long's recordings of the Scherzo and Fantasy, we identify contrasts between the different sections, but within each section, her touch is rather unified, whereas in Cortot's performance, he not only presents more dramatic contrasts at a structural level, but he also constantly shows the diversity of characters at a local level. For example, in the 1952 recording of the Chopin Scherzo, he plays the triplets in the first bar at approximately *mf* and suddenly drops the dynamic to *pp* for the triplets in the second bar, before the B flat, heard as a shock, is played with a marked *ff*.

Example 4.19: Chopin *Scherzo No. 2 in B-flat minor*, Op. 31, bars 1–9



Between the first two bars at beginning of the fourth movement in the second recording of *Visions,* Messiaen's dynamic and textural contrast, which goes beyond the confines of the score, can certainly be compared to Cortot's attempt to bring out the different colours. As Cortot often told his students, 'never do the same thing twice', which demanded that performers constantly deploy 'a different color, a different sound, a different character' (Timbrell 1992: 85). This dynamic and textural contrast can also be found in Cortot's 1952 recording of the Chopin Fantasy: the descending octaves in the right hand are played with plenty of weight and pedal in bars 93–4, and in bars 95–6, Cortot suddenly lifts the pedal and the slurred quavers in the right hand become rather light (Example 4.20).

Example 4.20: Chopin *Fantaisie in F minor*, Op. 49, bars 93–100
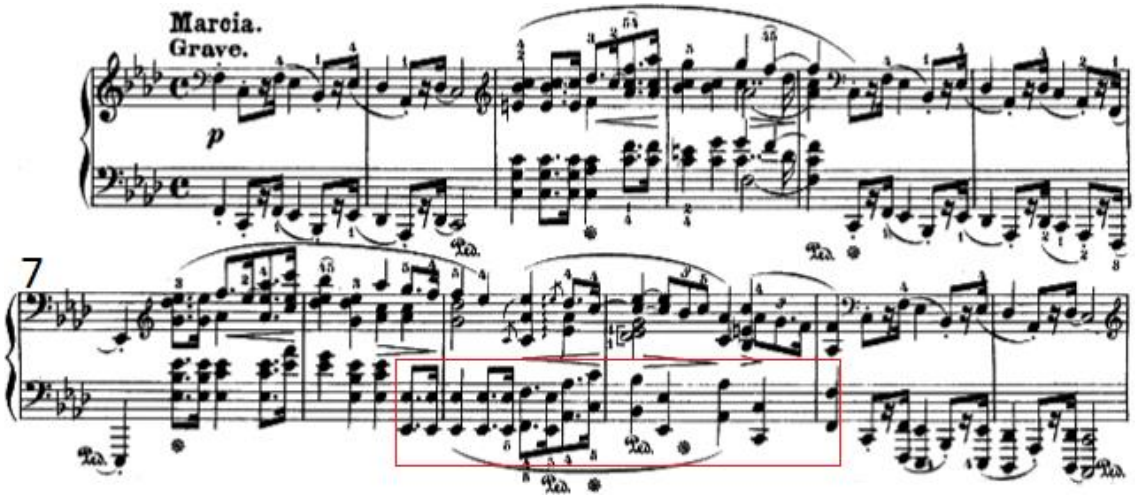


Cortot presents different colours between the two passages not only through different touches, but also through pedalling. Apart from the fact that the use of arm and shoulder weight is generally avoided by pianists who adhere to the ideals of French pianism, there is no particular emphasis on the use of pedal in the orthodox French style of playing. As one of Cortot's students, Eric Heidsieck, says, 'very clean finger work has always been at the heart of the French school, and only sparse use was made of the pedal' (Timbrell 1992: 85). While

Philipp maintains '"careful" pedaling' (Timbrell 1992: 67), and Long, focusing 'more on varied finger weight' (Timbrell 1992: 44), thinks 'the pedal is for hiding problems' (Timbrell 1992: 75), for Cortot, 'the pedal is the third hand' (Timbrell 1992: 84). The pedal, for Cortot, does not merely serve to increase resonance or to connect notes, but it is seen as a tool to differentiate colours in performance. Apart from the combination of different touches and pedalling from bar 107 in the second movement in the second recording of *Visions*, Messiaen's spontaneous pedalling in the section from bar 45 of the fifth movement endows the second piano part with more colours, which will be discussed in detail later. In the second recording, Messiaen, instead of simply retaining the resonance, does not use much pedal in the deceptive cadences of the fourth movement at bars 23–5 and 38–40, which contrasts with the previous passage's liberal use of pedal. Like Cortot, who has 'the need for textural contrasts' (Timbrell 1992: 81), Messiaen also strives after various nuances and shapes in performance by engaging the different parts of the body: weight from the arm and shoulder, as well as the foot.
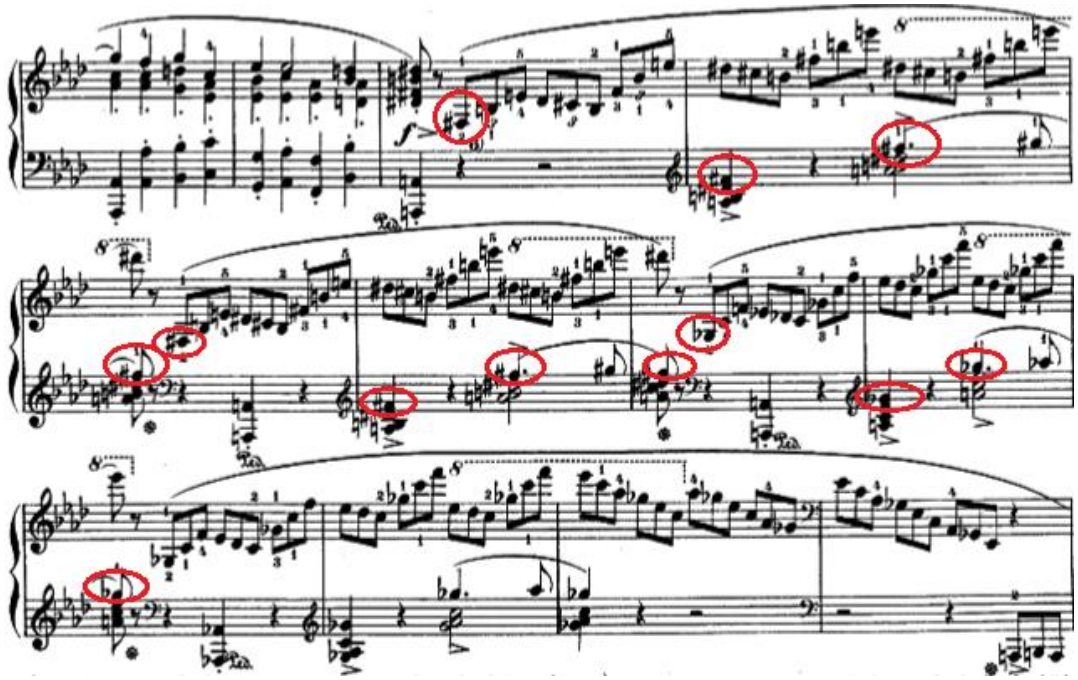
The most notable similarity between Cortot and Messiaen is the orchestral thinking in their playing. Earlier we observed Messiaen's orchestral thinking in his compositional process as well as his performance. Cortot taught his students 'to be in the habit of thinking of the piano as a "little orchestra"', and he often asked for 'flutes here … cellos there … horns here' (Timbrell 1992: 86, 85). As for Messiaen, piano music should be orchestrated for Cortot; and this kind of orchestral thinking enables him, like Messiaen, to be aware of the differentiation of voices and to explore the different timbres that the piano can offer. At the beginning of Chopin's Fantasy, at the end of bar 8, Cortot does not maintain the top voice, instead he brings out the left-hand melody, which gives the impression of cellos singing through the texture in the bottom voice (Example 4.21).

Example 4.21: Chopin *Fantaisie in F minor*, Op. 49, bars 1–12



Another example in the Fantasy also shows Cortot's orchestration of the music. In the passage after the first climax, Cortot picks out the repeated F sharp (G flat) and forcefully emphasises it, as if the brass section were piercing through the running triplets (Example 4.22).

Example 4.22: Chopin *Fantaisie in F minor*, Op. 49, bars 141–52



This kind of 'orchestration' is heavily criticised by Adorno as a 'complete distortion through bringing something out' (Adorno 2006a: 141). For Adorno, Cortot is either to be criticised for bringing out 'in an exaggerated, over-conspicuous fashion elements that one hears anyway',

as heard at the beginning of the Fantasy, or for emphasising something, like the F sharps and G flats in the passage in Example 4.15, as 'the primary aspect … in the most external sense' (Adorno 2006a: 140–1). While both Cortot and Messiaen orchestrate the piano, this latter kind of exaggerated orchestration can hardly be heard in Messiaen.

Just as playing the piano reduction of vocal scores endowed Messiaen's piano playing with orchestral awareness, being a vocal coach and assistant conductor in Bayreuth may also have contributed to Cortot's orchestral thinking. By transcending the restrictions of the French school, both Cortot and Messiaen were able to make use of the pedal and weight from the upper body, in order to enrich the palette of timbres and create a veritable orchestra. Instead of maintaining the sobriety of expression that renders a performance elegant and moderate, Cortot and Messiaen seem to dramatize their playing, which makes a performance, as Timbrell describes Cortot's recording of Schumann's *Kreisleriana*, 'consistently interesting' (Timbrell 1992: 49).

Part 2 – Messiaen's Performance Aesthetics

From Counting to Feeling

At this point, we will start to identify Messiaen's performance aesthetics. Not only does Messiaen reveal freedom in his own recording, but he also encouraged other performers to play his music with freedom. As a piano student of Messiaen's, Peter Hill recalls that, 'I was constantly impressed by the latitude of tempo which (despite his very definite metronome markings) Messiaen would allow. He urged me always to phrase with flexibility, to allow the music to breathe' (Hill 1995: 278). The question is how we should apply freedom in performance. The paragraph written at the end of the preface to *Quatuor pour la fin du temps* sums up Messiaen's performance aesthetics.

> Read, first of all, the 'Commentary' and the 'Brief Theory' above. But do not become preoccupied with this in the performance: it will suffice to play the music, the notes, and the exact values, and to faithfully follow the dynamics indicated. In the non-metred movements such as 'Dance of Fury, for the Seven Trumpets', you can, to help yourselves, mentally count the sixteenth notes, but only at the beginning of your work: this process may encumber the public performance; you should, therefore, mentally retain the feeling of the rhythmic values, no more. Do not be afraid to exaggerate the dynamics, the accelerandos, the ritardandos, everything that renders an interpretation lively and sensitive … Sustain implacably the two extremely slow movements, 'Praise to the Eternity of Jesus', and 'Praise' to his 'Immortality'. (Rischin 2003: 39)

From counting to feeling: this paragraph seems precisely to describe how the Bergsonian leap is applied to performance. To say that one should 'retain the feeling of the rhythmic values, no more' is to say that in performance we should no longer count or perceive the music in space. As Bergson advocates, 'we must have the will to dream' (Bergson 1991: 83) and, therefore, we should not be afraid to let the fundamental self – underneath habitual memory – emerge. The performance must be allowed to go against the points counted in space, and the potential dynamics, accelerandos and ritardandos that remain unnotated should be permitted to break out from the spatial confines of the score. Messiaen seems to suggest here that 'a lively and sensitive interpretation' is rendered by subjective feelings, not by the work or the score, as demanded by an Adornian dialectical process.

On another occasion Messiaen similarly expressed the view that he 'disliked precision that sounded mechanical' (Chadwick and Hill 2018: 190). So, whilst the rhythms in his music are exact rhythms, which demand to be played exactly, once one can perform them exactly, 'one is then in no way prevented from making an "interpretation" which embraces freedom, love, passion, emotion and all such things' (Rößler 1986: 133). For Messiaen, the performer should not merely play the rhythms exactingly, 'as if he were made of wood' (Rößler 1986: 133). We need the notion of space or habitual memory in the learning process in order to know the music, since we must be able to follow the score and play the correct rhythms, but strict adherence to the score will render the performance lifeless. Adorno also recognises 'the habituality of each player that is acquired, and indeed necessary' because 'one cannot start from scratch with every work' (Adorno 2006a: 131). Instead, through the 'labour' of straightforward fidelity to the score, 'the playing mechanism' of the habituality of the performer will become 'independent to such a degree that it becomes estranged from the requirements of the composition' (Adorno 2006a: 131). Therefore, the solution lies in the need for habituality to be 'broken once more, negated, sublated by the specific insights arising from each work' (Adorno 2006a: 131). Messiaen's solution, akin to that of a Bergsonian philosopher, is to interpret music with 'freedom, love, passion, emotion and all such things'. From an Adornian point of view, Messiaen here does not give much emphasis to the requirements of the work and its objectivity. Messiaen's view seems to present a dichotomy between the score, mere obedience to which would render music lifeless and impersonal, and the subject, who solves the problem by feeling the music. It is in the transition from adhering to the score to interpreting music, that Adorno and Messiaen offer different advice. Messiaen's capricious tempo changes and articulations, discussed earlier, sometimes fail to find justification in the score, because his performances are not fundamentally attempting to reveal dynamics and tensions inherent in the work, but are instead trying to spring, we may say, to the Bergsonian self, enduring in *durée*, free from spatialised writing.

The mechanical part in *Visions* consists of 'exact rhythms', which Adorno would consider 'uninterpretable', and which require a straightforward metrical regularity because they lack a 'human touch' and, therefore, appear unassimilable to the subject. Nevertheless, for Messiaen, we should not be prevented from interpreting them. Instead of paying attention to the construction's mechanical quality, he focuses on the way in which the subject may fill the music with freedom, love, passion and emotion, in a manner that resembles Bergson's switch

away from counting the oscillations of a clock to instead feeling them. Just as Jankélévitch argued that anything can become musical, for Messiaen, anything can be interpreted. We observed that in sections where the two contrasting materials are assigned to piano 2, Messiaen brings 'the confused recollections' of the rhythmic pedal to the surface (in bar 174 of the fifth movement, for example) and assimilates, quite forcefully, the inhuman construction into the expression of the human part through tempo fluctuations. Thus, by reducing or attempting to remove the notion of space, both the human and inhuman parts, for Messiaen, can be felt.

Apart from the notable aforementioned deviations from the score in Messiaen's playing, the passage from bar 52 in the second movement, in which piano 2 plays 'the dance of planets', also manifests Bergsonian performance aesthetics in both recordings. The unstable tempo identified in Messiaen's playing portrays the dance in the second movement as, following Paul Valéry, 'the symbol of Life itself' (Schloesser 2014: 326). At the beginning of a section in *Traité* that Messiaen devotes to dance, he argues that 'all natural periodicities are irregular … Let us leave aside the [marching] 'without cadence' of soldiers, frighteningly anti-natural! Free walking – the true walking – is never composed of two groups of footsteps with absolutely identical durations' (Schloesser 2014: 325). In bar 53, although there are equal notated divisions in piano 2 alternating between the right and left hand, the unsteady pace in Messiaen's playing renders the impression of 'natural steps' in a dance. Furthermore, in bars 55 and 63, it almost seems that Messiaen misreads the score in the recordings, rushing the semiquavers such that the last semiquaver sounds like one of the grace notes before the F# in the following bar. The clear deviations demonstrate the feeling of duration that Bergson describes: 'the mathematical estimate gives place to a confused instinct' (Bergson 1910: 126). This evidence reveals that in Messiaen's aesthetics of performance, the score is not the most important element, but rather anything 'that renders an interpretation lively and sensitive'.

In the last sentence of the paragraph from the preface to *Quatuor pour la fin du temps* quoted above, Messiaen suggests that performers should 'sustain implacably the two extremely slow movements', 'Louange à l'Éternité de Jésus', which is 'a homage to Jesus as the eternal Word of God', and 'Louange à l'Immortalité de Jésus', which is 'addressed to Jesus as Man, risen to immortality' (Johnson 2008: 64). It might seem superfluous to give suggestions as to the tempi of the two movements, considering that Messiaen already provides metronome

markings for both and performers can, therefore, achieve the slow tempi by simply adhering to the markings on the score. But, in addition to grasping the feeling of the rhythmic values, Messiaen is concerned that the tempo of each movement needs to be felt. For Messiaen, the goal is not to retain the measurement of the tempi, but to *feel* the slowness, *feel* the music that prolongs, *feel* the timelessness and 'immortality'.

Messiaen demonstrates this 'felt slowness' in his second recording of *Visions*. The movement that best conveys the sense of timelessness is the first, in which Messiaen marks that a quaver equals 50. The tempo at the beginning of the recording is certainly slower than the indicated metronome marking. The length between the first two A major chords in piano 2 is almost three seconds, which means that the tempo is a quaver = 42, much slower than indicated. Such a slow tempo is instantly challenged by Loriod, who rushes to the second chord in the right hand, and thereafter they adapt to a faster tempo. Though Messiaen chooses a tempo at the beginning based on his feeling, he initiates a continuous *accelerando* throughout the movement: the tempo reaches approximately a quaver = 90 towards the end. In the 'Author's Note', Messiaen writes that, 'the whole piece is a crescendo. It begins in absolute pianissimo, in the mystery of the primitive nebula which already in potency contains light, all the bells which tremble in this light – light and, as a consequence, Life' (Schloesser 2014: 298). The urge towards the light felt by Messiaen endows the performance with the vital energy of life that transcends the confines of the markings in the score. Messiaen's deviation from the metronome marking resonates with Beethoven's view that, 'this [the metronome marking] applies only to the first bar, for feeling has its own tempo, which cannot be expressed by a number' (Kuerti 2013: v). In fact, even to apply the marking in the first bar is to measure in the first bar, whereby the performer needs to conceive of a homogeneous medium wherein they focus on the points that represent the beats placed in spatial time in order to accord with the metronome marking. For Messiaen, therefore, the metronome marking does not even apply to the first bar, because he has already demonstrated an attempt to leap away from a notion of space from the outset of the performance, in order to connect the music with his fundamental self. In a recent book, Hill recalls that he was surprised that Messiaen 'made almost no comment or criticism of my choices of tempo'; which is understandable, given that 'for Messiaen rhythm and tempo were to be felt, not measured metronomically' (Chadwick and Hill 2018: 192).

Jankélévitchian Renunciation

Finally, let us consider the kind of renunciation of the notion of space reflected in Messiaen's performance aesthetics. It is obvious that the score of *Visions* is strewn with detailed markings, which seem to set parameters on performance. As Messiaen realised early in his professional life, this was necessary in order to 'ensure the best possible performance of his music' (Hill and Simeone 2005: 2). Hill and Simeone stress how 'composition and performance were inseparable, even the drafts of his later piano works carry precise details of fingering and pedalling' (Hill and Simeone 2005: 2–3). Messiaen's detailed markings show the 'tendency towards unambiguity in modern notation', such that the performer has 'little or no personal choice, and 'he is forced to follow the very strict direction of the composer' (Adorno 2006a: 9). Hill also notes the prevailing tendency of Western musical culture in the twentieth century to 'specify every shade of nuance', such that composers reveal their anxiety to control the performance of their music; in the process, suggesting that 'the score is the music' (Hill 2002: 131–2). However, regardless of how detailed the marking is, as Adorno indicates (following Frederick Dorian), a musical text is 'necessarily fragmentary, incomplete, *in need* of interpretation to the point of ultimate convergence', because 'there are certain intangibles that cannot be expressed by our method of writing music – vital musical elements incapable of being fixed by the marks and symbols of notation' (Adorno 2006a: 3, 8).

From a Bergsonian perspective, the notes and markings in the score are points or positions in homogenous space, which can merely be regarded as 'snapshots of the indivisible movement' and are not interchangeable with the movement of music itself (Bergson 1935: 233). Music itself, as a process, not an object, 'occupies duration and … has no reality except for a conscious spectator, eludes space'; for Bergson, 'a phrase in a melody' is 'qualitative, a gradual organization of our successive sensations, [and] a unity' (Bergson 1910: 110–11). Bergson indicates that 'the interval which separates two points is infinitely divisible, and if motion consisted of parts like those of the interval itself, the interval would never be crossed' (Bergson 1910: 112–13). If we consider the notes and markings in the score that signify the movement of music, no matter how detailed the markings are, they will never express the music itself enduring in motion or duration. In other words, the score contains 'successive positions or the *results*' of music, 'not the duration' (Bergson 1910: 196). Therefore, the composer can add a near infinite number of markings without adequately telling the

performer how the music sounds, which 'ought to be a warning that we cannot make movement out of immobilities, nor time out of space' (Bergson 1910: 115). Bergson states:

> Just as nothing will be found homogeneous in duration except a symbolical medium with no duration at all, namely space, in which simultaneities are set out in line, in the same way no homogeneous element will be found in motion except that which least belongs to it, the traversed space, which is motionless. (Bergson 1910: 115)

Thus Bergson would suggest that, for the performer, in order to know a piece of music, the only way is to live through it, or 'through the intervals' between the notes (Bergson 1910: 117), since the process of experiencing is a matter of feeling, which has 'no precise result except its having been felt' (Bergson 1910: 196–7). By living through the intervals, or by 'doing', the 'consciousness would have an indefinable … qualitative impression' of the music, and the quality or intensity of the music 'would not make itself felt outside consciousness' (Bergson 1910: 116). Bergson would perhaps recognise that the qualitative process of playing the music does not resemble the score, which is 'the illusory form' of music in duration or 'a symbolical representation of duration', since the written notes signify simultaneities as 'the connecting link between space and duration' (Bergson 1910: 110). For Bergson, describing the experience of a moment of duration with language, which can 'fix only the objective and impersonal aspect' of different feelings or emotions (Bergson 1910: 164), is similar to filling an interval between two positions with points:

> We estimate the talent of a novelist by the power with which he lifts out of the common domain, to which language had thus brought them down, feelings and ideas to which he strives to restore, by adding detail to detail, their original and living individuality. But just as we can go on inserting points between two positions of a moving body without ever filling up the space traversed, in the same way, by the mere fact that we associate states with states and that these states are set side by side instead of permeating one another, we fail to translate completely what our soul experiences. (Bergson 1910: 164)

Messiaen seems to present a contrast to Bergson, who does not encourage us to measure or describe an experience. His detailed markings, including articulations, tempi and other indications, resemble the idea of 'inserting points between two positions of a moving body'.

Messiaen tells Samuel:

> I'm a very meticulous man, and I note with great care on my manuscripts the tempos I desire, the dynamics, the bowing when it involves strings, articulation for the winds, fingerings for keyboard instruments. I demand simply that my indications be respected; but I'm always appreciative of the artists who play my music. (Dingle 2014: 34)

In addition to arresting music and solidifying performance with meticulous notation, Messiaen tirelessly speaks about his own music and music in general. We have discussed some of his writings on time, rhythm and musical perception. Dingle notes that the seven *Tomes* of Messiaen's *Traité* consist of 3289 pages, and 'they occupy 9 inches (23 centimetres) of shelf space' (Dingle 2013a: 11). There are more than thirty pages of analysis of *Visions*, and two pages of 'The Author's Note' in the printed score describe the movements of the work. The way in which Messiaen unhesitantly speaks about music does not fit with Bergson's idea that we should simply 'feel it', but it does coincide with Jankélévitch's aporetic approach to music. Jankélévitch writes:

> The Charm does not provide us with the solution to a problem but is much more a state of infinite aporia that produces a fruitful perplexity; and in this, is more ineffable than untellable. (Jankélévitch 2003: 96)

In the introduction, we mentioned that Adorno finds Bergson's conception of *durée* problematic, because the nonconceptual cannot be expressed without a concept. In other words, genuine experience is destroyed by our habit of measuring and dividing in space and yet the idea of the nonconceptual, the changing, colourful and inexplicable *durée*, cannot be constructed without a concept or the notion of space; for Adorno, simply opposing the nonconceptual to conceptual cognition will not 'break open the concept' but, instead, can only 'repeat the rigid oppositions' between conceptual cognition and 'another form of knowing' (Foster 2007: 127), which must remain unknown. Gallope observes that 'Jankélévitch dwelled far longer on a problem Bergson left unsolved, namely a paradox … of the ineffable' that 'inhabits any experience of *durée*'s real curvature' (Gallope 2017: 173). Jankélévitch regards musical ineffability as 'the mystery transmitted to us by music [which] is not death's sterilizing inexplicability but the fertile inexplicability of life, freedom, or love' (Jankélévitch 2003: 72). Instead of letting musical experience remain 'quiet' and simply feeling the constant becoming of the inexpressible, Jankélévitch concludes that music is 'ineffable, being explicable into infinity' (Jankélévitch 2003: 73):

> There will be things to be said (or sung) about the ineffable until the end of time. Who can possibly say, Now, everything is said? No. No one, ever, will be done with this Charm, which interminable words and innumerable musics will not exhaust, where there is so much to do, to contemplate, to say – so much to say, and in short, and again and again, of which there is everything to say. (Jankélévitch 2003: 72)

In Jankélévitch's philosophy, Gallope recognises a dialectical oscillation of music between freedom and 'reifying inclination', which 'keeps us in an infinite game of "hide and seek" between the infinity of time and the reifying order of symbolic grids' (Gallope 2017: 179). Contrary to Bergson, Jankélévitch encourages us to speak about music through an asymptotic approach, acknowledging that language or spatialization will never reach the very essence of music. In other words, for Jankélévitch, with the idea of 'je-ne-sais-quoi' (Jankélévitch 2003: 73) we can be 'talkative and hyperactive' and we should realise that 'language and concepts cannot exhaust music's inconsistency', which remains in 'a perpetual state of incommensurability' (Gallope 2017: 179).
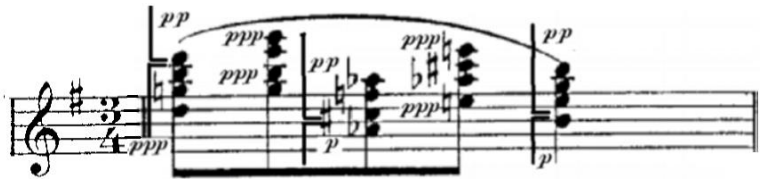
When music is playing, we should give up 'speaking' and the tendency to measure and spatialise, and submit to the 'musical Charm' in making. Jankélévitch indicates that 'musical reality is always somewhere else', and music in itself is an unknowable something: 'the mystery of artistic creation' which can be spoken about 'before or after' (Jankélévitch 2003: 102–3). Although, unlike Bergson, Jankélévitch is positive about our capacity to talk about music, his idea that music is perceived as a process converges with Bergson's notion of duration, which can only be comprehended through intuition. For Jankélévitch, who 'shared his teacher's fascination with the powers of intuition', in order to receive the 'Charm' of music, we need to overcome quantitative measurement and the habit of spatialization and, instead, through intuition, practice 'an ethical fidelity to the vitality of musical experience itself' (Gallope 2017: 172). As Bergson asserts, 'we do not *think* real time. But we *live* it, because life transcends intellect' (Bergson 1998: 46), which is similar to Jankélévitch's remark that 'music, as a temporal phenomenon, in general refuses spatialization' and 'we live music, as we "live" time, as a fertile experience, with the ontic participation of our entire being' (Jankélévitch 2003: 103, 95).

Messiaen manifests the transition from counting to feeling in performance; from the 'loquacious' approach, and the tendency to spatialise and reify, to the abandonment of the notion of space, and the embrace of the colourful *durée*. Messiaen sets out by assigning

numerical definitions to his rhythms, treating his music as 'a thing', as mentioned in the introduction, and tending to arrest musical motion with detailed markings. And yet, 'caught in the poetic momentum' and the immediacy of 'succession as experienced live' (Jankélévitch 2003: 119, 17), Messiaen ultimately seems unrestricted by the spatialised score, and chooses among 'innumerable possibilities of interpretation' and an 'infinitude of qualitative nuances', in order to give life to the musical work (Jankélévitch 2003: 74, 63). By rejecting a 'historicism' that assigns a spatial logic to modern musical development (Gallope 2017: 202), Jankélévitch would perhaps have reacted positively to Messiaen's inhuman constructions, the kind that Adorno denounces. Similarly, by refusing spatialization and relying on subjective feelings, Jankélévitch can accept more possibilities of interpretation in performance.

Apart from earlier examples, we observed in other places in *Visions* how Messiaen deviates from the score and reveals the inconsistency of musical becoming when he is 'caught in the poetic momentum'. At the beginning of the fourth movement, Messiaen asks for the bass note of each right-hand chord to be emphasised with the dynamic *mf*, differing from the *p* marked for the other three notes of the chord. In the first recording, Messiaen follows this voicing in the first four bars before the dynamics change in bar 5. In the second recording, Messiaen begins the movement by balancing the chords as marked on the score, clearly bringing out the thumb on each chord, but at the first chord of the second bar (Example 4.23) the balancing suddenly becomes less clear and at the same time the general dynamic drops. If there was any slight emphasis on the top note of the first chord in bar 2, Messiaen abandons this balancing completely for the second chord and yet one can still appreciate the delicacy of his chordal playing. The balance switches to the bottom of the chord on the third quaver, before he again removes any definite balancing in the next chord. The fifth and last chord of the bar finishes the phrase with a slight emphasis on the bass note.

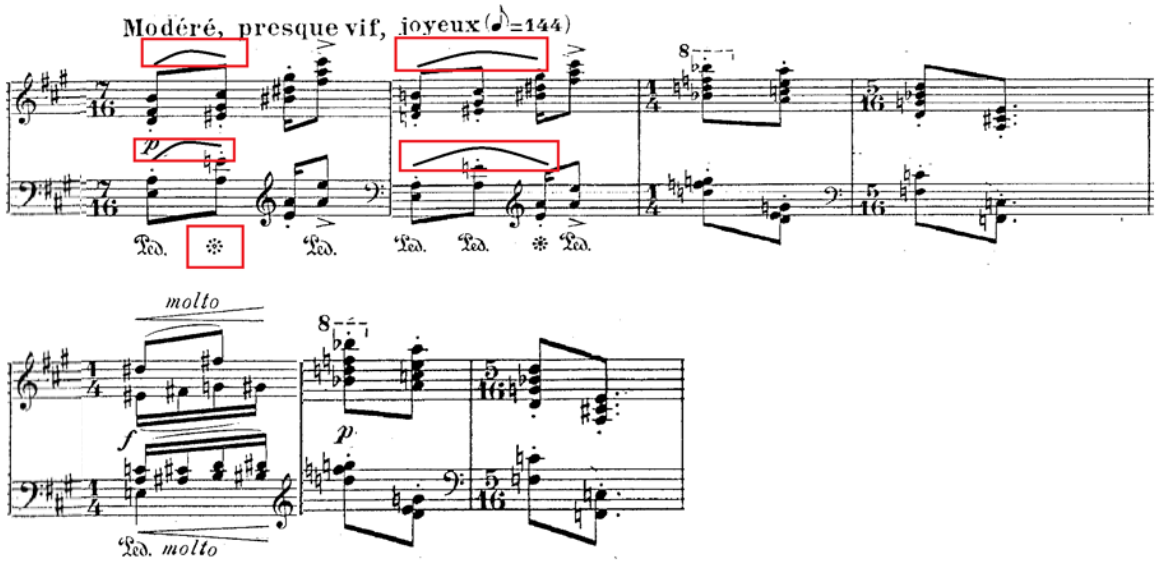
Example 4.23: Messiaen *Visions de l'Amen*, 'Amen du Désir' (right-hand part), bar 2, Messiaen's voicing



The detailed indications show the 'reifying inclination' in Messiaen's compositional process, whereby he is treating his music as 'a thing', and yet in the performance, he admits that this reifying inclination does not confine musical becoming, and he seems to present a state of mind, engendered by the music, 'that is ambivalent and always indefinable' (Jankélévitch 2003: 74). An example in the fifth movement also shows that Messiaen allows an 'infinitude of qualitative nuances' to emerge, free from the markings in the score. From bar 45, the first piano plays birdsong by a nightingale and a blackbird, whilst the second piano plays a Greek rhythm () and a Hindu rhythm () (Messiaen 1996: 260). Messiaen marks a slur and a staccato for each group of chords in piano 2; this combination of slur and dots requires *portato,* which is 'a gentle articulation usually shown by staccato dots under slurs' (Howat 2009: 284). According to Neal Peres da Costa, with *portato*, 'notes must be gently detached and they must sound for nearly their full length so that there is a very slight break between them' (Costa 2012: 70). Messiaen also carefully indicates pedalling for piano 2. According to the score, the first two quaver chords need to be pedalled and the semiquaver chord needs to be played without pedal. In order to achieve the articulation of *portato,* legato or syncopated pedalling should perhaps be avoided between the first two quaver chords, because the performer needs to lift the pedal before the second quaver to leave 'a very slight break'. Playing the third chord without pedal will render the semiquaver rather short, especially considering that the performer needs to leave the keys early for the jump between the last two chords in bar 45, which seems to contradict the idea of *portato*, because the semiquaver might not sound for its 'full length'. However, musically speaking, this lift of the pedal gives the phrase an appropriate breath before last chord, which is accented.
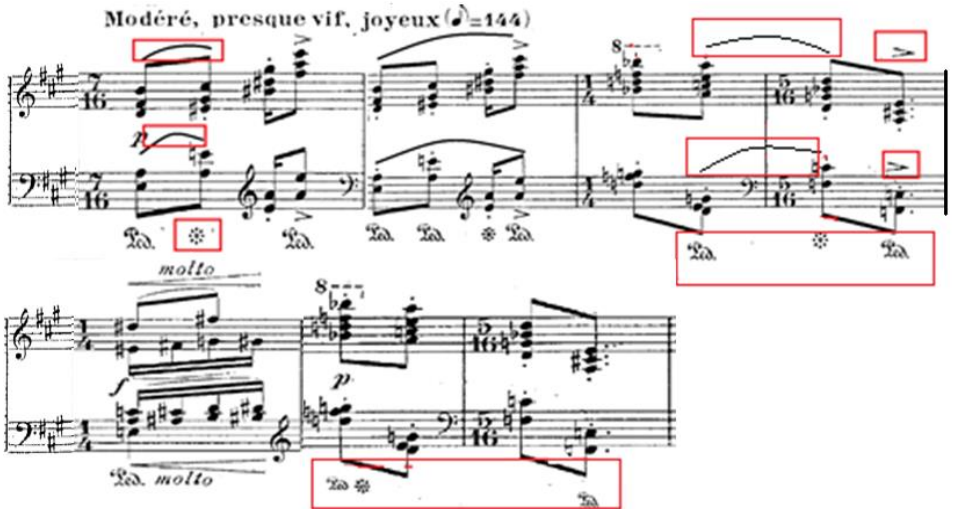
Marielle Labèque demonstrates a consistency in the reading of the score in this passage, and the *portato* articulation is well conveyed, especially in bars 47 and 48. But in both of Messiaen's recordings, the articulation and pedal markings seem to be largely ignored, and we can also identify differences between his two recordings. In the first recording (Example 4.24), Messiaen starts the section from bar 45 with the pedal and suddenly lifts it at the strike of the second quaver chord, as if the first two chords were slurred and there was a release sign marked under the second quaver; then, in bar 46 he seems to ignore the articulation of *portato* when he connects the first three chords with pedal. In bars 47 and 48, Messiaen seems to abandon all the indications for articulation and pedalling by playing the chords very short without any pedal.

Example 4.24: Messiaen *Visions de l'Amen*, 'Amen des Anges, des Saints, du chant des oiseaux' (piano 2), bars 45–51, Messiaen's interpretation in the 1949 recording



In the second recording (Example 4.25), Messiaen adopts a similar articulation and pedalling to the first recording at bar 45. Despite inserting an unexpected *accelerando*, Messiaen otherwise follows the indications in bar 46, with the articulation of *portato* between the first two chords and a lift of the pedal on the third chord, which is the only place in the example that Messiaen adheres to the markings. Messiaen then makes the first quaver in bar 47 rather short, without pedal, and he slurs the second chord in bar 47 to the first in bar 48.

Example 4.25: Messiaen *Visions de l'Amen*, 'Amen des Anges, des Saints, du chant des oiseaux' (piano 2), bars 45–51, Messiaen's interpretation in the 1962 recording



In addition to presenting textural variations of the kind found in Cortot's playing, Messiaen reveals an imaginative interpretation by embracing a liberal attitude towards the score and, at the same time, the dance-like character – achieved by inserting additional breaks between and within phrases – is retained in his recording, with its spontaneous gestures. In the recordings, Messiaen seems to leave the markings behind as he pursues musical flexibility, and the differences between the two recordings demonstrate the innumerable potential nuances he could pursue. The transition from carefully marking the score to transcending the markings in performance mirrors the Jankélévitchian leap from validating the 'reifying order of symbolic grids' (Gallope 2017: 179) to 'destroying metaphors one by one' (Jankélévitch 2003: 118). For Jankélévitch, musical playing that occurs in duration excludes any metaphorical meaning, or anything, such as notes, markings, words or symbols, that represents music.

In the piano 2 solo section at bars 34–86 in the fourth movement, apart from the *très libre*, marked at the beginning of the section, Messiaen includes more than thirty indications for tempo fluctuations, such as *Pressez, a Tempo* and *Un peu plus lent*, etc. This means that on average, Messiaen marks one tempo change in less than every two bars. Why does Messiaen mark so many tempo changes even though he already asks the performer to be free at the beginning of the section? The words that describe the movement of music reveal Messiaen's aporetic approach to musical inconsistency, which is the 'speculative practice' that Gallope observes in Jankélévitch's philosophy, 'the quoddity of music's temporal inconsistency' (Gallope 2017: 178). Gallope recognises a similar manner in Jankélévitch's speculative approache to music, commenting that musical inconsistency can only be 'asymptotically approximated by words and concepts' (Gallope 2017: 178, 167). In a word, we need to remain modest about our ability to present musical duration. Just as music's inconsistency and the infinity of time cannot be exhausted by concepts and language, detailed indications do not arrest musical movement. Messiaen's recordings certainly show that musical duration, reflected in the Bergsonian 'whole soul', is not confined by the words indicating tempo fluctuations. In both of Messiaen's recordings, the sense of pulse is often lost because of his freedom of tempo. In the first recording, for example, in bar 11, the first beat is almost twice as long as the second; Messiaen then starts an *accelerando* from bar 19, one bar before the *Pressez* is marked; and, even though Messiaen marks *a Tempo* in bar 22, he keeps the faster tempo of the previous bar, and rushes throughout the cadence. Therefore, apart from adding tempo changes in addition to the markings in the score, Messiaen's performance sometimes contradicts the marked fluctuations.

Messiaen's performance resembles the performing style of the 'vitalist' conductor Wilhelm Furtwängler, whose style of conducting is characterised by Taruskin as follows: 'his tempos are eternally in flux, accelerating and decelerating in great waves' (Cook 1995: 106). Both Messiaen and Furtwängler seem to reveal the renunciation of space in performance, wherein the essence is not found laboriously in following the dictates of the spatialised score. Indeed, as Furtwängler writes, performance is a 'process of re-creation', and the performer should 're-experience and re-live the music each time anew' (Cook 1995: 106). Although Furtwängler, as Adorno comments, 'represents the truth in comparison to the North German school of time-beating' according to 'the schematic beat-divisions', the 'mistakes, lack of clarity, imprecision and wilfulness' in Furtwängler's performance veer off into 'untruth', which does not make the former any truer (Adorno 2006a: 214). The untruth of Furtwängler's performance style seems to be reflected in Messiaen's performance. Messiaen, for the sake of expressiveness, is not concerned with the unity of tempo, and he sometimes changes rhythms and tempi seemingly at will. For Adorno, performance needs to be justified by analysis, by means of which true interpretation can be presented through a dialectical unfolding, and yet Messiaen seems to present the Bergsonian 'truth', which is 'the inconsistency of musical reality' (Jankélévitch 2003: 99).

For Adorno, 'pure immediacy' or the perception of *temps durée*, which Bergson derived from aesthetic experience, does not suffice for aesthetic experience and therefore, 'in the face of beauty', analytical reflection should reconstitute 'the *temps durée* through its antithesis' (Adorno 1997: 69). Adorno argues that the spontaneous and intuitive aspects of the experience of art are important, but they are necessarily mediated, as Max Paddison rightly puts it, 'by degrees of concentration, reflection, and even analysis', which are 'the opposite of spontaneity and intuition' (Paddison 2014: 248). Just as Bergson maintains that dialectics will not lead us into the beyond, 'technical analysis' for Jankélévitch is 'a means of not sympathizing, not being touched by the Charm' and 'a means of refusing to abandon oneself spontaneously to grace, which is the request the musical Charm is making' (Jankélévitch 2003: 102). Messiaen tirelessly talks about music, technique, and numerous other things, which, for Jankélévitch, is not musical reality; they are things 'according to music, or in music, or musically, with "music" made into the adverb' (Jankélévitch 2003: 101). In the face of music, Jankélévitch proposes as an ideal that our minds should be 'drawn towards some intimation of the almost-nothing of music' (Jankélévitch 2003: 119). As Bergson states, 'we can analyse a thing, but not a process'; 'if we persist in analysing it, we unconsciously

transform the process into a thing and duration into extensity', by which we break up 'concrete time … set out its moments in homogeneous space' and 'we see spontaneity settle down into inertia and freedom into necessity' (Bergson 1910: 219–20). By way of analysis, the notion of space is inevitable in Adornian musical experience. For example, in order dialectically to negate the equally divided beats, we need the idea of space to measure them; we also need the notion of space to identify a chord in a phrase by measuring its importance and comparing it with what comes before and after.

Since counting will encumber performance, for Messiaen, we should only 'retain the feeling', which should lead us to perceive the 'non-thingness' of *durée* and the musical 'Charm'. The numerical and spatial meaning of the advanced rhythms and the many score indications, such as metronome markings, articulation markings, pedal markings, and tempo changes, are often altered or even ignored in Messiaen's recordings. This does not necessarily mean that such spatial content is superfluous, but rather that the journey from spatialised musical thinking to the feeling of music in duration demands a kind of Jankélévitchian renunciation. As Jankélévitch indicates, 'musical reality is situated neither in literature, nor in ideology, nor technique, nor biographical anecdotes', but it is in 'all these things, at least a little, and more, in a thousand other things that one cannot enumerate' (Jankélévitch 2003: 118); and eventually we should admit that all these things will not grasp or exhaust 'the divine instant' of music (Jankélévitch 2003: 103). In a word, if we cannot experience musical reality through infinite aporias, we should immerse ourselves in the inconsistent flux of musical temporality itself. In contrast to Adorno's insistence that 'culinary listening and playing, 'easy listening', and any passive attitude' can only be overcome by the 'one who does not simply feel music, but also thinks it can feel it properly' (Adorno 2006a: 97), Jankélévitch maintains:

> We must acknowledge that for this purpose simple listening, or performing per se, is far more effective than the most striking intellectual insights. Listening to music creates a state of grace in the blink of an eye, where long pages of poetic metaphors would not suffice. As irrationalist as this conclusion may seem, we need to accede to it. … From the outset, listening transgresses the limits of intellectual speculation, poetic as the latter might be. Since, when words are no longer worth saying, what can one do, except sing? (Jankélévitch 2003: 119)

This passage can perhaps be taken as guidance for a Bergsonian ethic of musical perception, as reflected in Messiaen's performance. Just as Bergsonian freedom cannot be justified by

reason, there is no need to rationalise the creative musical becoming for Jankélévitch. Once we realise musical inconsistency, and let the experience of performance run 'wild', we might find that, as Abbate states, 'a performance does not conceal a cryptic truth to be laid bare' and that 'accepting its mortality, refusing to look away, may nevertheless be some form of wisdom' (Abbate 2004: 508, 536). Thus, 'self-defeating' though it may appear, it makes sense to ask whether, in order to understand Messiaen's performance aesthetics, the present dissertation should be read as a preparation for renouncing the words it contains, which are 'no longer worth saying', and for committing ourselves to the inexhaustible *durée* in the moment of performance.

Part 3 – My Own Experience of *Visions de l'Amen*

This part will focus on my own performance of *Visions de l'Amen*. I will show how my research informed my performance, as first pianist, by giving details of my working process. As I learnt the first piano part, I encountered numerous difficulties, but also anticipated others. Apart from the technically difficult passages such as piano 1's rapid chords from bar 71 in the last movement, 'Amen de la Consommation', there were many places where, it was clear that ensemble was not going to be easy to be achieved. The most prominent feature in my own working process was trying to be aware of the second piano part while playing the first piano part. In other words, I did not, or was clear that I should not, merely practice my own part without knowing what the second pianist would be playing, especially from bar 100 in the fourth movement, 'Amen du Désir', where I would have to follow the tempo fluctuations of piano 2. In this respect, the difference of the materials, discussed in earlier in the thesis, between the two piano parts, also engendered more difficulties in the preparation. That is to say, while I was playing my part, I needed to be aware simultaneously of the material in piano 2 which is quite 'alien-sounding' with respect to the material of piano 1. The following discussion will include the detail of the procedure in my practice in terms of dealing with difficulties and solving problems. In the rehearsal with Benjamin Frith a week before the concert, apart from playing through the piece, we focused on the passages in which ensemble is hard to be achieved. Therefore, I will also reflect on how I interacted with his playing in terms of tempi in the rehearsal a week before the concert, before I mention a few important decisions made with Frith in the rehearsal on the day of the concert. Finally, I will recall how the concert went. There were certain moments in the concert which I considered as successful. I will also point out some aspects which could have been improved. In addition to giving details of my experience of the piece and presenting how my playing was informed by my research, I will attempt to demonsatret the validity of the results of the thesis by showing how my performance was enhanced and my experience of playing the piano was enriched by philosophical considerations.

Practicing while Imagining a Second Pianist

I. Amen de la Création

The first movement is not technically difficult for the first piano because the tempo required is extremely slow and each hand merely repeats three chords throughout the movement. But the rhythm is relatively more challenging. Not only does each hand consist of a series of complex rhythmic values, but also the rhythmic difference between the two hands constantly creates different vertical combinations, which compels the first pianist to maintain concentration. Also, even though the rhythmic pedal in the right hand, for example, repeats from bar 14, the order of the chords is no longer the same: the rhythmic pedal starts with the chord formed by G sharp, C sharp and G, but the second appearance of the same rhythmic pedal starts with the chord formed by F sharp, B and F.

As explored earlier in the thesis, the performer does not count each value as conceived by the composer, but follows the regular beat. In this case, I counted in quavers (not in crotchets), given that the tempo is as slow as ♪ = 50. However, this way of counting had some disadvantages. Apart from a number of syncopations, which could be quite complicated in some places, such as in bars 12–13, counting in quavers made the triplets and quintuplets in bars 11–12 and bars 24–5 a little tricky to play. In other words, it was difficult to count two quavers while playing three triplets and to count two quavers while playing five quintuplets.

As Messiaen writes in his 'Author's Note', 'the whole movement is a crescendo' (*Tout le morceau est un crescendo*) (Messiaen 1943: Author's Note). It begins almost from nothing, marked *pppp* for piano 1 and *ppp* for piano 2, and through a continuous *crescendo*, reaches *fff* at the end of the movement. From a pianistic perspective, a Chopinesque or Debussian manner of caressing the keys, mentioned earlier, seems very apt to the beginning of the movement. For Debussy, when we play quiet chords, the fingers should be in contact with the keys 'as if the keys were being attracted to your fingertips and rose to your hand as to a magnet' (Dumesnil 1932: 9). Following Debussy's instruction, I kept my fingers in contact with the keys and kept the hand movement as small as possible. At the start of the working process, I found the chords at the beginning very difficult to control and to ensure the chords at the minimal dynamic level. As the music becomes louder, I gradually employ more weight from the arm and body.

As explored above, there is no inherent dynamic, which can be articulated by the subject, in the first piano part of the first movement. Indeed, I was not able to trace the gestural or neumic element in the first piano part – which, from an Adornian perspective, is uninterpretable – so that I merely followed what is written on the page, or in a Bergsonian sense, I only perceived the notes as symbols and measured their values in *temps espace*. Although, as Messiaen writes, 'the whole movement is a crescendo', the music of piano 1 does not suggest any dynamic accumulation. It is not the inherent tension in the music that the pianist can articulate, but only the different dynamic markings. If piano 2's *crescendo* is conveyed in the music by the chorale gradually ascending from the bottom of the piano and triumphing in the repeating cadences from bar 25, piano 1 maintains its rigid patterns and harmonic monotony, in which no sense of *crescendo* can be identified.

I knew that I was not going to have many opportunities to rehearse with Frith, so I needed to find a way to practice as if the second pianist was present. In other words, while I was playing the first piano part, I needed to be aware simultaneously of what the second pianist was playing. Therefore, instead of merely focusing on my own part, I decided to sing the melodic line of piano 2 in order to familiarise myself with the kind of mentality which involves paying attention to the other part of the ensemble. This method of singing the melodic line of piano 2 while playing my own part was implemented throughout *Visions* and was also the most difficult part of the working process.

Earlier in the thesis, we recognised the unrelatedness between the two piano parts in the first movement. This unrelatedness was indeed acknowledged in the working process, in which I found myself singing something completely alien and constantly in conflict to what I played. Apart from the regular beat, to which the two parts are connected, there is no rhythmic, melodic and gestural coherence between the second piano part that I sang and the first piano part that I played. The irreconcilability, identified in the thesis, was not only reflected in the two distinct materials, but also felt by the myself, as the first pianist, when I paid attention to piano 2. As mentioned before, there is no sign of *crescendo* reflected in the monotony of the first piano part, but by singing the melodic line of piano 2 and imagining its gradual accumulation, I could make sense of the *crescendo* instructed by detailed dynamic markings in my own part, piano 1.

II. Amen des étoiles, de la planète à l'anneau

For piano 1, there is no gradual build-up in terms of technical difficulty from the first movement to the second. If each hand merely repeats three chords in a very slow tempo in 'Amen de la Création', in the second movement, the first pianist joins in after 48 bars of solo by piano 2 and is required to confront one of the most challenging aspects of piano playing in *Visions*: rapid chords. The rapid chords in piano 1, similar to the double rhythmic pedals in 'Amen de la Création', are also constructed without regard for metre and tonality in the passages (at bars 49–52, 58–62 and 69–79), in which the right hand repeats seven chords in mode 3, third transposition, and the left hand repeats five chords in mode 2, first transposition. As the twin result of each hand playing a different number of chords and the rhythmic difference between the two hands, the first pianist, as in the double rhythmic pedals of the first movement, always encounters different vertical combinations between the two hands.

It is not too difficult to imagine the second piano part, or to sing the melodic line of the piano 2 while playing the first piano part in 'Amen de la Création', because the steady chorale of piano 2 adheres to the regular beat throughout the movement. In the passages of the second movement where the first pianist plays rapid chords, however, the rhythm in the second piano part is much more complicated than the steady chorale in the first movement. For example, from bar 60^2 to bar 61^1, it was certainly challenging for me, as the first pianist, to play the rapid chords and at the same time pay attention to the syncopations in piano 2. In this passage, in order to feel the syncopations of piano 2, I emphasised the chords on the main beats of each bar – that is to say, the first semiquaver beat and the fifth semiquaver beat in bar 60 and the first and fifth semiquaver beats in bar 61 – in the practice sessions, which helped me to sing out the rhythm of the second piano part, but which was not appropriate from an Adornian point of view, for piano 1 in this passage should maintain its own inherent quality, that is to say, its objectivity, free from metre. Therefore, a problem could be identified in the working process, namely that of paying attention to the second piano part, which is metrical, while playing the first piano part, which is free from metre. It was also a difficult task for me to play the first piano and not to be affected by the metrical force of piano 2.

The problem was also experienced in the section 'Moins vif' from bar 107, analysed in the third chapter of the thesis. In this section, I decided to sing out the variations of the five-note motif in left-hand part of piano 2 in the working process as this part is more prominent in the

texture. As mentioned in the third chapter, the left-hand part in piano 2 not only embodies the metrical quality, but also creates a sense of development through the variations of the five-note motif. Given that the first piano part is not rhythmically and gesturally related to the left-hand part of piano 2, I needed to work on maintaining the inherent quality of piano 1 while paying attention to the left-hand part of piano 2. In addition, I needed to separate two hands of the first piano part, each of which has its own rhythmic structure and periodicity. In the left-hand part of piano 1, the rhythmic pedal is required to keep the same *forte* dynamic and each octave should be accented as marked. In the right hand of piano 1, Messiaen marks a hair pin through the rapid figurations from bar 108 to bar 109^1 and the birdsong from bar 109^2 to bar 113^1 is required to be nuanced, since phrase markings, different dynamic markings and different articulation markings are indicated in the score. In this section, 'Moins vif', apart from imagining and singing out the variations of the five-note motif in piano 2, which might affect the maintenance of the objectivity of piano 1, it was also challenging for me to bring out the dynamic nuances in the right hand of piano 1 while maintaining the rigidity of the rhythmic pedal in the left hand. Just as the superimposed materials in the four parts do not form an organic whole, observed above in the analysis of this music, I recognised these different materials as being 'inorganic', when I attempted to present the quality of each part in the temporal unfolding.

When the theme, played by piano 2, returns from bar 147, the first pianist, instead of playing isolated materials, harmonises and embellishes the theme with various chords. Even though I experienced certain difficulties in terms of chordal playing, especially in the passage with fast chords from bar 193 to bar 195, I sensed a kind of relief in this section from bar 147 to the end of movement because, unlike in the previous section, I could find the coherence between my part and piano 2 and, instead of paying attention to something unrelated to my part, I could respond to the gestures and dynamics of piano 2's theme. For example, each of the three crotchets in piano 2 from bar 148 to bar 149^1 is embellished by three offbeat semiquaver chords in piano 1 and the *crescendo* in bar 155 is achieved by both pianos.

III. Amen de l'agonie de Jésus

The third movement has the most difficult passages for ensemble. From bar 13 to bar 16, not only do the two pianos proceed with the same rhythm, but also the tempo fluctuations,

indicated in the score, need to be achieved together by both pianos. As a result of the rhythmic unison between the two pianos, it would sound very obvious even if the two pianos were only slightly not together. Although it was not realistic to practice ensemble on my own, I tried to get to know my part as well as possible in order to be able to adapt to Frith's tempo fluctuations in the rehearsal. In bars 96 and 98, the chordal unison is also difficult to achieve. As the tempo here is extremely slow, the two pianists must watch very carefully in order to place each chord precisely at the same time.

In the section at bars 17–28, as indicated by Messiaen in ***Traité***, the first piano plays a melodic pedal, harmonised by chords formed by diminished fifth, perfect fifth, augmented fourth and perfect fourth, and chords such as the sixth chord and 6-4 (Messiaen 1996: 245). I employed the method of singing the melody of piano 2 while playing the melodic pedal in piano 1 to practice this section, in which I also identified a kind of incoherence between the melodic pedal that I was playing and the melody in the second piano part. For example, at the end of bar 17, the melody in piano 1 reaches the highest note of the melodic pedal, E, which is harmonised by a diminished fifth and a perfect fifth and which is also accented, whereas the second piano reaches the highest point of the melody a quaver beat later at the accented semiquaver E flat in the next bar. In short, through a closer look, we can see that the nuances of the melodic pedal in piano 1 are not cynchronised with those of the melody in piano 2.

In the reprise from bar 63, a rhythmic pedal, which consists of two chords and a single note, is added to the melodic pedal in piano 1. In addition to playing the melodic pedal by one hand, I needed to be attentive to the 'independence' of the rhythmic pedal in the left hand. Every appearance of the single note, the bottom A of the piano, is accented and marked *poco sf*, imitating the 'sonority of gong' (Messiaen 1943: 29). In this section from bar 63, by singing the melody of piano 2 and playing the melodic pedal and rhythmic pedal, I was again confronted by three different parts, each of which has its own character. In the practice sessions, I attempted to bring out the nuances of the melodic pedal in the right hand of piano 1 and at the same time to maintain the two chords in the left hand at a *piano* dynamic. Earlier in the thesis, we observed that the accented bottom A, operating within the mechanism of the rhythmic pedal, presents itself as a shock, over which the subject has no control. Therefore, in the practice sessions, I was very determined to emphasise the bottom A as required not only to contrast with the two chords marked *p* in the rhythmic pedal, but also to shock both the melodic pedal played by the right hand of piano 1 and the lyrical melody in piano 2.

In the section at bars 75–94, the second pianist plays the theme of 'Jesus's painful cry' in the right hand and a rhythmic pedal in the left hand and the first pianist plays the Debussian figuration borrowed from *Pelléas et Mélisande*. In contrast to the mechanical rhythmic pedal, a human quality can be identified in the Debussian harmonic formula, in which the chromatic voice leading reinforces the painful cry of Jesus, such that a kind of expressive unity is achieved between the two pianos. I practiced by singing the 'painful melody' while playing the first piano part and attempting to respond to the nuances in second piano part.

IV. Amen du Désir

This movement particularly requires the first pianist to listen to and pay attention to the second piano, which possesses all the principal themes. For example, in the reprise of the second theme, the 'passionate theme', the first piano needs to follow the tempo fluctuations of piano 2.

In the section from bar 87, the first piano mainly adds harmonic colours to the theme of piano 2. The descending demisemiquavers of the right hand from the highest register of the piano, were a very good opportunity for me to experiment with different touches which can produce the sound indicated in the score, *très doux, mais chanté*. In the left hand, it is important to slightly emphasise the long chord of each bar and to keep the descending dyads as quiet as possible. The kind of delicacy of piano 1 required in this section certainly reflects the Chopinesque and Debussian pianism which involves playing 'in half-tint … without any hardness of attack' (Long 1972: 19). In addition to practicing the kind of 'gentleness' of Chopinesque pianism, I strove to achieve different levels of *piano* as indicated in the score, and therefore the soft pedal was necessary in the passages marked *ppp* or *pp*. Inspired by Messiaen's orchestral thinking, I also attempted to orchestrate the first piano part by imagining different instruments. For instance, I tried to imitate the soft lyricism of the violin in the right hand and the natural breathing quality of sound of woodwind in the left hand.

From bar 97, although the double rhythmic pedals in piano 1 have a mechanical quality and maintain their own periodicities, which do not relate to the 'passionate theme' of piano 2 in terms of harmony and rhythm, the first pianist is required to follow the fluctuations of the second piano, as indicated in the footnote of the score (Messiaen 1943: 40). However, given that the rhythm of piano 1, operating within its own mechanism, does not contribute to the

gesture and expressiveness of piano 2, the two parts do not form a unity in performance, even though the first pianist must follow the second piano. The dynamics marked for piano 1 even disturb the human expression of piano 2. Each rhythmic pedal consists of different rhythmic cells, indicated by small brackets and different letters such as a, b, c, etc. Also, each rhythmic cell is always associated with one dynamic marking. For example, cell a is always marked *mf*, cell b is always marked *ff*, cell c is always marked *pp*, etc.[59] Every appearance of each rhythmic cell maintains the same dynamic marking. Therefore, piano 1 follows the tempo of piano 2, and yet, the dynamic nuances presented in piano 2 are not followed by piano 1, such that the dynamic divergence between the two pianos will be evident in performance, and every appearance of rhythmic cell b in piano 2, marked *ff*, will shock the 'human'.

In the practice sessions, I carefully worked out the complicated rhythm and followed the dynamic markings. From a Bergsonian perspective, instead of counting the beats in space, the first piano follows the second piano, which constitutes the idea of duration. As mentioned in the discussion of the recordings by Loriod and Messiaen, by following the second piano, the first pianist (Loriod) does not set the regular beats side by side in space and does not measure the intervals between them, such that in our consciousness, 'there will no longer be anything but the heterogeneous duration of the ego' and 'a process of organization or interpenetration of conscious states … without moments external to one another, without relation to number' (Bergson 1910: 108). It was certainly impossible for me to experience *dureé* by following the second pianist without the presence of the second pianist.

From an Adornian point of view, the double rhythmic pedals, which contain no harmonic tension and metrical force, cannot be assimilated by the subject, and thus are uninterpretable, such that I could only play the first piano part according to *temps espace*. Yet, during the working process, I tried to sing out the melodic line of the passionate theme in piano 2. Again, I found myself singing something unrelated to what I played. The divergence between the expressive nuance of piano 2 and the different dynamics in the first piano part compelled me to feel the irreconcilability or antagonism here even more than in the other movements. For example, in bar 103, the first pianist is required to play the last semiquaver beat of the bar at *ff* while the second piano is merely at the end of a phrase, holding the E flat major chord. The first piano here will certainly disturb of theme of in piano 2. In bars 109–10, while the expressive appoggiatura and the ascending chords in piano 2 render the passage rather

[59] There is one exception in bars 119^{2}–121^{1}, in which the rhythmic cell a is marked *f*.

passionate, the right hand of piano 1 from bar 109[2] merely plays the dyads in *pp*, showing no sign of contributing to the passionate expression of piano 2.

As discussed above in the section of Chapter 3, 'A Human Victory', the double rhythmic pedals disappear from bar 130[2] and the first piano gradually unites with piano 2. Although the first piano part coheres dynamically and gesturally with the second piano, there are certain passages which I found difficult. For example, from bar 144 to bar 147, it was very hard at the start of my working process to count and sing out the ascending triplets in piano 2 while playing the demisemiquavers in the first piano part. In the Lisztian figuration in bars 148–9 and bars 154–5, it was difficult to play the sextuplets in piano 1 against the quadruplets in piano 2 which I attempted to count and sing out.

In the passage from bar 166 to bar 171, as the rhythm of the chords in the second piano part becomes more and more sparse, I decided to grant more freedom to the birdsong in piano 1 by playing *rubato*, which was later consented to by Frith in the rehearsal.

In the final section of the movement, Messiaen marks dots on the sextuplets in piano 1 and also marks a phrase line over each group of sextuplets, apart from bars 179–81, in which a phrase line is marked for each bar. This seemingly contradictory notation suggests the articulation of *portato*, normally shown, as Roy Howat notes, 'by staccato dots under slurs' (Howat 2009: 284). In addition to the dots and phrase lines marked for the sextuplets, pedalling is required in this section, as indicated in the score. This articulation resembles the articulation required at the beginning of Debussy's *Prélude* 'Les collines d'Anacapri' in bars 1–2 and bars 5–6, in which the slur is marked over the dots and pedal is required to let it vibrate (Debussy marks *quittez, en laissant vibrer*). Therefore, in this section, I complied with the instruction in the score by playing a gentle *staccato*, which allows 'aeration to avoid being mere legato', and by employing the pedal to 'avoid sounding staccato' (Howat 2009: 285).

V. Amen des Anges, des Saints, du chant des oiseaux

We observed that there are several difficult passages for ensemble in the third movement, 'Amen de l'agonie de Jésus'. The beginning of the fifth movement is not technically difficult, but it is again rather challenging for ensemble. As it is a melodic unison in different octaves

between the two pianos, it will sound obvious if the two pianos are even slightly not together. Compared to the passages in the third movement, at bars 13–16, for example, no tempo fluctuation is required at the beginning of the fifth movement until *Rall. molto* is marked for both pianos in bar 13.

In the passage from bar 24, I also practiced by playing the first piano part and singing the Theme of Creation in the left hand of piano 2. Although the non-retrogradable rhythms in piano 1 are not related to the Theme of Creation in piano 2, this combination of playing and singing was not as difficult to achieve as, for example, in the 'Moins vif' section from bar 107 in 'Amen des étoiles, de la planète à l'anneau' and the reprise of the 'passionate theme' from bar 100 in 'Amen du Désir', in both of which cases not only is the rhythm of piano 1 unrelated to the second piano, but also the materials in piano 1 alienate themselves from piano 2 by their independent dynamics, nuances and gestures. In this passage of the fifth movement from bar 24, by contrast, the first piano merely repeats a dyad in the right hand and a note in the left hand, both of which are preceded by three grace notes, throughout the Creation Theme played by piano 2 in bars 24–30. Furthermore, the first piano in this passage is simply required to keep the same *pp* dynamic, creating a resonant effect at the high register of piano.

From bar 45, rhythmic and gestural coherence between the two pianos is evident. That is to say, in the working process, I paid attention to the part in the second piano's music that corresponded to what I was playing in terms of rhythm, nuance and gesture. In bars 45–6, both pianos play the accent simultaneously. In bar 47, the two *staccato* semiquavers in piano 1 are played together with the first quaver in piano 2 and the two slurred semiquavers, preceded by a grace note, in piano 1 correspond to the second quaver in piano 2. In bar 48, the three slurred semiquavers in piano 1 also parallel the dotted quaver in the second piano. In other words, not only could I feel the pulse or the beat in congruence with how the musical material was conceived – unlike in the rhythmic pedals, the conception of which does not relate to what the pianist counts, the regular beat, in performance – but also, the pulse or the beat that I counted or felt corresponded to the second piano part. In the first three quaver beats of bar 67, piano 1's alternation of two chords corresponds to the alternation of two pitches in the right hand of piano 2, and the change of chords on the last quaver beat is also accompanied by the change in piano 1. In addition to the fact that a *crescendo* is required in both pianos, each slur of piano 1 corresponds to each group of piano 2's septuplets in bar 69.

If the two pianos share the rhythmic pulse and correspond to each other in terms of dynamic at bars 45–76, the counterpoint of the birdsongs becomes more rhythmically complex and seems to have its own rhythmic autonomy from bar 77. For example, every note of the birdsong in the right hand of piano 1 is syncopated in bars 77–8. The birdsong in the left hand of piano 1, however, seems rhythmically coherent with the second piano: the demisemiquavers of piano 1 in bar 77 correspond to the quaver in piano 2 and the semiquaver triplets of piano 1 in the next bar also correspond to the quaver in piano 2. In the previous passage from bar 72 to bar 75 – in which the second piano part includes, as mentioned above, the same Greek rhythms as in bars 77–89 – I could count in semiquavers, which are also maintained by piano 1. In the counterpoint of the birdsongs from bar 77, it was still possible to count in semiquavers, or to feel the semiquaver beat, but in the practice sessions, I found it rather difficult to count in semiquavers all the way through the counterpoint of the birdsongs when I played the semiquaver triplets in bars 78, 80, 82, 87 and 88. In other words, counting two semiquavers while playing three semiquaver triplets in these places was too difficult. As a result, I decided to count mainly in quavers and to switch to counting in semiquavers when necessary. I counted in quavers when the second piano plays steady quavers and counted in semiquavers when the rhythm in piano 2 is irregular, so what I counted corresponded to the rhythm of piano 2 and I could avoid counting two semiquavers while playing three semiquaver triplets. For example, in bars 77–8, I started by counting in quavers, and then switched to counting semiquavers when the second piano plays the dotted quaver in bar 78; in bar 79, I counted in quavers until the fifth semiquaver beat, from which point I started to count in semiquavers as the second piano becomes irregular by way of the added semiquaver on the fifth semiquaver beat. Through this way of counting, not only could I better grasp the rhythmic pulse of the second piano, but also, instead of merely counting the semiquaver beat throughout the counterpoint of the birdsongs, I could better comprehend the shape of the birdsongs by mostly counting the longer value, the quaver, instead of counting incessantly in semiquavers which might disturb the feeling of the singing line. In the similar passage in which piano 1 plays the counterpoint of the birdsongs and piano 2 plays the Greek rhythms from bar 113 to bar 126, I also employed the same manner of counting.

In addition to the complexity of the rhythm and the difficulty of the counting, the technical challenge in this passage cannot be denied. For example, from the fifth semiquaver beat in bar 79 of piano 1, it was undoubtedly difficult to fit two semiquavers – the first of which is preceded by a grace note and the second of which is preceded by two grace notes – and four

hemidemisemiquavers into three semiquaver beats at a tempo as fast as ♪ = 144. At the start of the working process, I could play with the articulations marked at a quite slow tempo, but once I attempted to play at a fast speed, it could easily sound like a group of fast notes without any articulation and nuance. Therefore, the challenging aspect of bar 79 in piano 1 for me not only lay in the fact that I needed to switch from counting in quavers at the beginning of the bar to counting in semiquavers from the fifth semiquaver beat, but also in the way that the speed required engendered a tremendous difficulty with respect to making every note audible and achieving the articulations and phrasing from the fifth semiquaver beat. When it went well, it certainly resembled the song of a blackbird with swift nuances, clarity, and crispness. There are also other places in the counterpoint of birdsong where the technique of playing a short burst of notes is required, such as in bars 84, 116 and 121. As demonstrated in the recording by Loriod and Messiaen, Loriod's *jeu perlé* style of piano playing is rather suitable here. In my practice sessions on the counterpoint of birdsong, I attempted to emulate the *jeu perlé* technique, which requires clarity with highly active fingers and without much weight from the arm, such that the qualities of the blackbird's song – clarity, swift and light – can be imitated.

In the Debussian figurations in piano 1 in bar 149, I attempted to adopt Chopinesque and Debussian pianism by gently caressing the keys with a kind of 'suppleness' (Long 1972: 19). Marguerite Long recognised in Debussy's playing a kind of continuous pressure and 'total adherence to the keyboard' (Long 1972: 23), which seems apt to be employed in these fast figurations from bar 149 to bar 155 to create the gentle effect, which flows as a harmonic background to the main melody in the second piano. In bar 149, I could certainly employ this Debussian continuous pressure and 'total adherence' in the right hand of piano 1, because the fingering indicated in the score allowed me to keep the right hand in the same position. The left hand, however, as I employed Messiaen's fingering, could not follow the idea of 'total adherence to the keyboard'. Messiaen asks the performer to use the second finger for the D, the first note of each group of the decuplets, and the same finger for the E, the sixth note of each group of the decuplets. This fingering, as discussed earlier in this chapter, implies a slight accent, engendered by the movement of the hand, on the E. Therefore, in this passage from bar 149 to bar 155, I adopted the Debussian touch for the Debussian figurations as much as I could and at the same time allowed slight accents created by the fingering indicated by Messiaen.

In the reprise of the Theme of Creation from bar 160, I confronted the same problem of playing the 'inhuman' rhythmic construction in piano 1, the three-layer rhythmic canon, against the 'human' theme played by the second piano. In addition to dealing with the complexity of the rhythm and playing something alien to piano 2's melody, which I attempted to sing in the practice sessions, I found the quick jumps required in the left hand of piano 1 rather difficult. For example, in bar 160, a quick jump is needed in the left hand of piano 1 between the first chord of the bottom layer on the second quaver beat and the second chord, or the second value, of the middle layer. Not only does the quick jump between the two layers of the rhythmic canon create difficulty, but also the dynamics required in the different voices in the second chord of the middle layer are quite hard to achieve after the quick jump.

VI. Amen du Jugement

This movement is the only movement of *Visions*, which does not employ the technique of rhythmic pedal. Nor could I find the construction of 'human' versus 'machine' in this movement: the coherence between the two pianos is evident throughout.

Not only is this movement the shortest in *Visions*, but also it is rather repetitive. For example, the four-bar passage at the beginning, at bars 1–4 is repeated almost exactly at bars 5–8. The material in piano at bars 1–3 is repeated at bars 5–7. Apart from the slight difference of the chords in bar 8, the dynamic markings, the articulation markings, the rhythm and the register of each chord in bar 8 are the same as in bar 4. Then, bars 1–7 are replicated in bars 9–15. Therefore, I decided to adopt various interpretations in the repetitions of the materials without distorting the musical character. This idea is inspired by the Bergsonian notion of duration: we should not merely observe the notes and markings as symbols in space, which do not change, but instead experience the change by 'carefully look[ing] into ourselves' (Bergson 1910: 130). For example, in bars 2^4–3, in which the right hand of piano 1 plays ascending chromatic dyads in major sevenths and diminished octaves and the left hand plays a descending chromatic scale, I attempted to vary each repetition in bars 6^4–7 and in bars 10^4–11 by 'organising' the *crescendo*. On the first appearance of the chromatic figuration in bars 2^4–3, I did not play too much of a *crescendo* on the two semiquavers in bar 2 and the first semiquaver in bar 3, until at the second semiquaver in bar 3, I dramatically increased the

dynamic towards the *fff* in bar 4. In bars 6^4–7, I started the *crescendo* slightly earlier and in bars 10^4–11, I started to get louder even earlier. Through this way of varying the *crescendo* of the same material in piano 1, the chromatic scales in both hands seemed to give the impression that the music was becoming gradually more intensified and the horror of Judgement gradually more potent.

In bars 14^4–15, the chromatic figuration in piano 1 does not lead to the three chords at the top of the piano, instead, the music retreats from bar 16 by repeating the chromatic figuration, which is extended by five semiquavers before the three chords crash in *fff* from bar 18^2 to bar 19. I did not start the passage too quietly and moderately increased the dynamic in bars 14^4–15. As a contrast, I dropped the dynamic level dramatically from bar 16 in order to give room for the extended version of the chromatic figuration. I also applied a similar method to other materials which are repeated in this movement. For example, in bars 21^4–2, the left hand of piano 1 plays ascending chords in mode 2, second transposition, and the right hand plays slurred octaves, which is repeated in bars 29^4–30.

If I attempted to apply or experiment with different types of touches and pianisms in different passages of the previous movements, such as the Debussian way of 'caressing', Chopinesque gentleness and weight, Lisztian virtuosity and the clear finger work of the *jeu perlé* style, in 'Amen du Jugement', I recognised an unprecedent kind of pianism reflected and seemingly required in this movement. In bar 1, Messiaen marks *strident* (shrill) for piano 1 and *presque martelé* (almost hammered) for piano 2; in bar 4, in which the two pianos play three chords in a very high register of the piano, Messiaen indicate *puissant, inflexible* (powerful, unyielding) for both pianos; in bar 47, Messiaen marks *encore plus strident* (even more shrill). These signs seem to mark a quite clear departure from the pianism in which the ideals, such as suppleness, lightness and lyricism, are maintained. Stephen Schloesser notes that the movement is indeed 'horrific' and Messiaen undoubtedly depicts the horror of Judgement 'by striking terror into listeners' (Schlosser 2014: 431–2). Therefore, in certain passages, I employed a kind of playing that is almost violent, in order to convey the horrifying vision of Judgement. For example, in bar 4, in which the three high chords are followed by the extreme low chord, preceded by a grace chord, imitating, according to Messiaen, 'a bass drum "flam"' (Messiaen 1996: 266), I not only used more weight to play these 'powerful, unyielding' chords, but I also tried to create a kind of percussive sound by exerting strength from a distance and using this strength almost to crash down on the keyboard. This kind of touch

was damaging for both my hands and the piano, but the harsh sound created by such violence might be suitable for the music. I also employed the same way of playing in bar 23, in which three low chords are followed by an extremely high chord, preceded by a grace chord, imitating 'a terrible "flam" on high cymbal' (Messiaen 1996: 266).

VII. Amen de la Consommation

The previous movement takes listeners to experience the terror of Judgement, whereas the finale brings us to Paradise with immense joy. In this movement, the 'human' and 'machine' construction is again employed. From the beginning of the movement, the second piano plays the Theme of Creation, or, as Messiaen describes, 'a long chorale of glory' (*un long choral de gloire*) (Messiaen 1943: Author's Note), which is 'clothed in upper and lower resonances simultaneously on the first piano' (Johnson 2008: 66). The double rhythmic pedals of piano 1, depict, according to Messiaen, 'all the rainbows, the precious stones, the twirls of colours of the heavenly Jerusalem, in an incessant chime of chords' (*tous les arcs-en-ciel, les pierres précieuses, les tournoiements de couleurs de la Jérusalem céleste, en un incessant carillon d'accords*) (Messiaen 1996: 272). Unlike in the first movement, in which two different rhythmic pedals are superimposed in the first piano part, the two rhythmic pedals assigned to the two hands of piano 1 in the final movement are rhythmically the same and proceed as a rhythmic canon. In the last movement, the right hand of piano 1 plays three chords employed in the right hand of first piano part in 'Amen de la Création' and the left hand plays the three dyads also used in the left hand of piano 1 in 'Amen du Désir' from bar 97.

In the working process, I also attempted to sing the Creation Theme while playing the double rhythmic pedals. As in the first movement, 'Amen de la Création', the rhythm and melody in the second piano part are rather steady and simple. So I found it easier, compared to the aforementioned passages in which the rhythm of piano 2 is complicated, to play the complex rhythm of my own part and to sing the melody in piano 2 without paying too much attention to, or to put it simply, without looking at the other part in the score. Although the pitches in both hands of piano 1 are transposed several times and the imitative relation of the rhythmic

canon becomes tighter and tighter,[60] the mechanical and musically static quality cannot be denied.

At the beginning of the working process, I mainly focused on the rhythm of the first piano part, but as I became familiar with this rhythm, I started to sing the melody of the second piano part. As mentioned, the 'machine' is merely to be played as written by following the 'orders', and the more I became able to play it and to follow the 'orders', the less I was 'attached' to it. That is to say, apart from the technical difficulty, there was no mimetic element or musical interest in the 'machine' for me to dwell on. Therefore, during the late phase of my working process, I was more inclined to focus on the second piano part, which embodies dynamics, development and progression, and which could take me on a kind of journey. While I sang the melody of the second piano part, I was playing the alienated material, which does not contribute the Creation Theme as an accompaniment, and which has almost no connection (apart from the metrical beat) to the Theme. As a result, I was divided by the two spheres in the temporal unfolding: one part of me merely played what is written in piano 1 and the way I played the complex rhythms, without any tendency to integratation, became mere mechanical responses to the 'orders', which did not seem to include the 'self'; while another part of me pursued the 'human' by singing the melody and feeling the dynamic nuances of the second piano part. In other words, it looked as if by imitating the 'machine', my actions became mechanical, but inside me, something still longed to integrate with the 'human'. Unfortunately, without 'material' means, that is to say, any way to gain access (prior to the arrival of the second pianist) to this 'humanly' and 'enjoyable' intercourse, I was doomed to fail. I was even reminded of Marx's idea that the worker cannot 'achieve all-round development of all his abilities' by 'the division of labour' during the development of industrialisation (Marx and Engels 1998: 309). In the case of this musical construction of the 'human' and the 'machine', the task assigned to me prevented me from outwardly communicating 'human' expression. Merely imagining the 'human' without leaving the 'machine', I would inevitably fail to fulfil the need to integrate with the 'human' and to achieve all-round development of my abilities.

[60] The two parts of rhythmic canon in piano 1 are two crotchets apart at the beginning of the movement; from bar 18, the two parts are a crotchet apart, and the pitches in the right hand are transposed down a minor sixth (or augmented fifth) and the pitches in the left hand are transposed up a major third; from bar 38, the two parts are a quaver apart, and the pitches in the right hand are transposed up a major third and the pitches in the left hand are transposed up a major third.

Adorno states that ‘the best works of art are by no means the most perfect ones’, instead they are those that bear ‘the most profound witness to their fundamental contradictions’ (Adorno 2006a: 211), something that certainly characterises the construction embodied in *Visions*. The contradiction is conveyed to listeners by the ‘human’ versus ‘machine’ construction and inwardly perceived by myself as first pianist.

If the antagonism between the ‘human’ and the ‘machine’ reflects Adorno’s notion of contradiction in fine artworks and if the sense of alienation I felt – as the first pianist, working closely with the ‘machine’ – implies Marx’s depiction of the division of labour in bourgeois society, the antagonism and the sense of alienation are gradually resolved by the dissolution of the ‘machine’, as discussed above. The first pianist, having experienced alienation, can eventually share ‘human’ joy with the second pianist, who had the privilege of humanity all along, and will celebrate the ‘human’ triumph with the integrated accompaniment of piano 1.

In the first chapter, we observed that the first piano is united with the second piano in A major from bar 67, which leads to the ‘resurrection’ of the Creation Theme from bar 71. In the ‘resurrection’ of the theme, the first piano is not yet integrated fully with piano 2. The chords from bar 71 do not harmonically relate to the theme but merely decorate piano 2 as a ‘harmonic carillon’ (*carillon harmonique*) (Messiaen 1996: 273). The ‘Un peu plus vif’ section with fast chords is certainly one of the most, if not the most, difficult parts of the piece. This section, in which the chords are rather repetitive, alternates between a passage repeating a five-chord pattern and a passage of slurred chords. For example, in bar 71, the first piano repeats five chords, the first four of which are already employed in bar 193 of the second movement in piano 1. In bar 72, the slurred chords on the fourth quaver beat and the eighth quaver beat are employed in bars 149, 159, 177 and 188 of piano 1 in the second movement and in bars 142–3 of piano 1 in the fifth movement. The slurred chords on the first three quaver beats, the fifth quaver beat, the sixth quaver beat and the seventh quaver beat are a whole tone higher than the slurred chords on the fourth quaver beat and the eighth quaver beat. The most difficult aspect of the chords is to maintain the speed as well as the dynamic of *ff* from bar 71 to bar 90. That is to say, this section requires stamina.

Although Messiaen’s notation in bar 71 indicates four semiquavers per group in piano 1, the periodicity of the chords is not in accordance with the regular crotchet beat. Instead, the first piano, as mentioned, repeats a five-chord pattern in 71. In the working process, as I paid

attention to theme in the second piano part, I followed the regular crotchet beat and the way the rapid chords are notated in the score, four semiquavers per group. Grouping the chords according to the crotchet beat, I could not perceive the repetition of the five-chord pattern, but instead four different groups of semiquaver chords. The slurred chords in bar 72 were more straightforward as each group of the slurred chords corresponds to each quaver beat and each quaver in the second piano part.

As mentioned in third chapter, after the struggle in bars 91–94 between the rhythmic pedal and the rolling dominant E, the two pianos unite in A major from bar 95. From bar 95 to bar 101, the Theme of Creation in piano 2 is also emphasised by the first note of each group of sextuplets in piano 1. Therefore, I slightly accented the first note of each group of the sextuplets to bring out the Creation Theme. The fast finger work of the coda provided a good opportunity to apply the ideals of the *jeu perlé* style of piano playing in order to achieve clarity and brilliance. Especially in bars 104^4–108, such finger-based technique would certainly make the reminiscence of the birdsongs sparkle.

Rehearsal with Benjamin Frith

The rehearsal with Frith took place on 24 October, a week before the concert. As Frith had played *Visions* many times in concerts with Peter Hill, our working process was rather a smooth experience in terms solving different problems. He knew which passages could be difficult and could quickly find ways of tackling the difficulties. Despite the fact that I was led by him in terms of tempo choices for the most part, he also listened to my suggestions and during the rehearsal listened carefully to the first piano part. Although just one rehearsal before the concert seemed not entirely adequate, we went through the whole piece and rehearsed a number of passages to a reasonably satisfactory level.

Frith suggested starting the first movement, ‘Amen de la Création’, at a very slow tempo, even slower than marked, in order to create the sense of the timelessness of ‘Creation’. I asked his opinion on whether it was appropriate to gradually get faster throughout the movement. He replied, ‘not necessarily, but it happens’. This showed that Frith was happy to allow the kind ‘vital impetus’, which could drive us forward and not be confined by the tempo set at the beginning. In the rehearsal, I realised that it had been helpful for me to pay attention to piano 2 and to sing out the melodic line of Creation Theme in my own practice

sessions, which had prepared me to listen to Frith's playing while playing my own part during the rehearsal. At the climax of the first movement, from bar 25, similar to his recording with Hill, it was very clear that Frith engaged in tempo fluctuations to bring out the different nuances of the cadences. Instead of following the second piano part like Loriod, I decided to adopt the Adornian method by maintaining the mechanical or 'inhuman' quality of piano 1. That is to say, I wanted to bring out the objectivity of the first piano part to reveal how it conflicts with piano 2. Therefore, while Frith was playing *rubato* in the second piano part, I was attempting to play rigidly in tempo. Something intriguing that I felt at the time is worth mentioning: in addition to keeping a rigid tempo against Frith's *rubato*, I somehow had to force myself not to be affected by Frith's tempo fluctuations. The internal conflict I felt, in not reacting to the 'human' expression of piano 2, was surely no less than the external conflict engendered by the distinct materials in the two pianos.

The fast chords from bar 49 in the second movement, 'Amen des étoiles, de la planète à l'anneau', were rather challenging. As a result, it was quite hard for me to listen to Frith's part while playing my own part, especially at bars 69–79. It was very helpful that Frith listened to my part so carefully, such that even when I could not pay enough attention to the second piano part, we could still play together as an ensemble. In the 'Moins vif' section from bar 107, as in his recording with Hill, Frith's tempo was very steady, which also helped me ensure a rigid pace in the rhythmic pedal of the left hand of piano 1. Although we could, more or less, play through the section without major problems in the rehearsal, I felt rather insecure and it was an intense experience for me to play the two different materials of piano 1 while paying attention to the variations of the five-note motif in the second piano. As soon as the second piano returned to the tonic in E from bar 147, from which point, as mentioned before, rhythmic and gestural coherence can be identified between the two pianos, I felt a kind of relief from the intense experience felt in the precious section. Perhaps I was too excited by the sense of relief and the arrival of the home key: I was told by Frith that I had been too loud from bar 147, in a manner which might have overwhelmed the second piano.

We reconised that the passage at bars 13–16 in the third movement, 'Amen de l'agonie de Jésus', was difficult in terms of ensemble, for both pianos needed to play *rubato* together in rhythmic unison. In this passage and in the similar passage at bars 57–62, Frith led the tempo. We did find these two passages difficult to play together, but as Frith's body gestures were clear, it was not too hard for me to adapt to his tempo fluctuations. As I was able to play the

passages without relying on the score, I could therefore pay more attention to his body gestures. Frith asked me to allow more time between the last two semiquavers, because there is a big leap before the last semiquaver in bar 14 of the second piano part, so that he did not have to rush the jump in the second piano part. This respiration – engendered by the big jump between the last two semiquavers in bar 14 –reflected a kind of pianistic language and Frith allowed more time for the big jump to let the pianistic difficulty speak. The last chord in bar 14, marked *sf* and *fff* in piano 2, is also more emphasised by allowing this slight delay. As mentioned, in my own practice, I paid more attention to the rhythmic pedal from at bars 63–74 in the left hand of piano 1 and attempted to give enough emphasis to the bottom A, marked *poco sf*, such as to 'shock' the melody of the second piano. In the rehearsal, perhaps due to the fact that I was mainly focusing on the rigidity of the rhythmic pedal in the left hand, I was told by Frith that I had not shaped the line of the melodic pedal in the right hand of piano 1. It was certainly a challenge for me to shape the melody of the right-hand part while maintaining the mechanical quality of the rhythmic pedal. In the section at bars 75–94, although, as in the recording, the painful cry was depicted by Frith's dynamic changes and various articulations, he maintained a rather steady tempo, which did not cause any problem for me to follow him with the accompaniment of Debussian figuration in piano 1.

In the reprise of the first theme, resembling 'the calm perfume of Paradise' (Messiaen 1943: Author's Note), at bars 87–96 in the fourth movement, 'Amen du Désir', Frith suggested breathing between certain phrases. For example, he asked me to take a fraction of time after bar 90 to convey the change of colour in bar 91, which Messiaen indicates *avec un grande tendresse* (with great tenderness) for the second piano and the dynamic suddenly drops to *ppp* in piano 1 and *pp* in piano 2. In bar 94, Frith allowed time for the jump between the chord in the bass clef and the E flat in the treble clef in order not only to change the colour but also to let the pianistic language speak.

In the reprise of the passionate theme from bar 100, the first pianist should follow the fluctuations of piano 2, as Messiaen indicates in the footnote (Messiaen 1943: 40). Frith's *rubato* in this section was rather moderate. Moreover, he did not merely play *rubato* and expect me to follow. Instead, he was attentive to my part. When he came in from bar 100, Frith followed the pace I set up at bars 97–99. In bar 103, Frith listened to the last semiquaver in the right hand of piano 1 before he placed the first chord in bar 104 strictly in tempo. From bar 100 to bar 130[1], even though the double rhythmic pedals in the first piano part are not

rhythmically, dynamically and gesturally related to the 'passionate theme' of piano 2, the first piano is required to follow piano 2 in terms of tempo. I had already felt the alienation caused by the divergence between the two piano parts in my own practice, when I attempted to sing the melodic ling of piano 2 while playing the first piano part. The sense of alienation was deepened when I actually heard the second piano in the rehearsal. Despite the fact that, as the first pianist, I was allowed to join the pace of second piano, the 'human', I could not escape the feeling that the 'machine' under my hands remained irreconcilable to the 'human' and disturbed the 'human' expression. I certainly felt less alienated in joining with the 'human' when the second piano claimed its victory in the climax of the 'passionate theme' from bar 148. It is worth mentioning that in bars 148–9 and bars 154–5, as the second piano repeated the same chord at a quite fast tempo, it was very hard for me to hear the pulse. From bar 166 to bar 175, when I suggested taking some liberty of tempo in the birdsongs of piano 1, Frith agreed and carefully listened to my tempo fluctuations.

The beginning of the fifth movement, 'Amen des Anges, des Saints, du chant des oiseaux', is difficult in terms of ensemble, for the two pianos play the same melody at different octaves in unison and, as mentioned earlier, it would sound very obvious if the two pianos were even slightly not together. But unlike the passages in the third movement, the two pianos are not required to play *rubato*. Therefore, in the rehearsal, once we settled into a steady tempo, it became easier to follow each other. In the middle section, from bar 45 to bar 148, the tempo we chose was not too fast, which allowed me, as well as Frith, to bring out different nuances and to ensure the clarity of the birdsongs in piano 1. Especially in the counterpoint of birdsong in bars 77–96 and bars 113–26, I could play the very fast passages with clarity. As discussed in detail above, the way I counted in the counterpoint of birdsongs was rather complex, so the not-too-rushed tempo also allowed me to count with precision in these passages. However, by carefully counting the beats, or, from a Bergsonian perspective, focusing on the beats represented as points in space, the counterpoint of birdsongs lacked dynamic nuances and a sense of shape. In addition to suggesting the choice of tempo, Frith also gave advice on dynamics. For example, Frith told me to maintain the dynamic *pp* throughout bar 139 and not to become too loud too early from bar 140, which would ensure that the long-range *crescendo* from bar 139 to bar 148 would be more effective.

In the sixth movement, 'Amen du Jugement', Messiaen does not mark pedal from the last two semiquavers in bar 2 to bar 4^{1}. I originally used the pedal here in order to produce more

resonance, but Frith followed Messiaen's marking and suggested not employing the pedal. By not using the pedal in the first half of bar 4, the first two chords of the bar came to sound more effective, as the stiffness and the lack of resonance reinforced the terror of Judgement. The dryness of the high chords in bar 4 was contrasted by the pedalled low chord, preceded by a grace chord, imitating 'a bass drum "flam"' (Messiaen 1996: 266), which was ended by suddenly lifting the pedal. At the end of the sixth movement, Frith suggested not dwelling after the last chord and proceeding to the finale, 'Amen de la Consommation', with an *attacca*, as if we could not bear the terror of Judgement, which was to be immediately relieved by the glory of the march of the Creation Theme.

In the 'human'/'machine' construction of the final movement, I could clearly hear the steady pulse in the second piano part, which allowed me to play the mechanical rhythmic pedal according the notion of *temps espace*. In addition to feeling alienated from the 'human' part, I also perceived the conflict and irreconcilability, engendered by the harmonic and rhythmic differences between the two pianos. In their recording, Hill and Frith get slightly faster from bar 55. In the rehearsal, as in the recording, Frith also got slightly faster from bar 55, from which point, as mentioned in the first chapter, the second piano plays the 'deformed' versions of the Theme of Creation. This slight tempo change seemed to express the urge towards thematic death and tonal unification of the two pianos from bar 67. The gradually faster tempo from bar 55, employed by Frith, made it rather challenging for me to play the semiquaver chords with clarity. As in his recording with Hill, Frith's tempo dropped from the last two chords in bar 66. I followed Frith's tempo change and, as in his recording with Hill, relished the rare tonal coherence between the two pianos. Unlike at the beginning of the finale, the rhythmic pulse of the rapid chords in piano 1 is rather clear in the resurrection of the Theme of Creation from bar 71, which helped us follow each other and achieve ensemble. In the coda, from bar 95, Frith's tempo was not as fast as I had expected. Although I could play with more clarity at a moderate tempo, maintained by Frith, the lack of brilliance in the semiquavers of piano 1 was evident.

The Day of the Concert

A week after the rehearsal, on 1 November 2019, Benjamin Frith and I performed *Visions de l'Amen* at a lunchtime concert in the Concert Hall of the Barber Institute at the University of

Birmingham. Before the concert, we played through the piece and worked on a few details. In the rehearsal a week before the concert, we sat side by side, as Example 4.26 shows, so that we could easily see each other's hands as well as body movements by slightly turning the head. In the concert hall, as Example 4.27 shows, we could see each other across quite a long distance, but we could not see each other's hands.

Example 4.26: The positions of the pianos in the rehearsal



Example 4.27: The positions of the pianos in the concert



In the rehearsal, Frith led me through the most difficult passages for ensemble, and, as I could see his hands, it was rather clear for me to know when he pressed the keys. In the concert, although the positioning of the two pianos created some difficulty in terms of communication, Frith exaggerated his body gestures, which helped me acknowledge his tempo. For example, in bar 13 of 'Amen de l'agonie de Jésus', he started with a big nod and also signalled the start of every phrase in a rather exaggerated way. Frith also clearly communicated in bars 96 and 98, in which each chord was played with a big nod. In 'Amen de la Création', interestingly, Frith did not use any noticeable *rubato* from bar 25, which certainly created less of a conflict between the two pianos. In 'Amen de la Consommation', as in the rehearsal a week before, Frith got slightly faster from bar 55. Before the concert, I was concerned about accuracy and clarity and worried that in the concert I would not be able to cope with the slightly faster tempo in the passages with the fast chords from bar 55. Therefore, I suggested to Frith not to get any faster, and he happily agreed.

In the concert, Frith's tempo was rather steady throughout the piece. In the first movement, Frith did not challenge the rigidity of the double rhythmic pedals, played by the first piano, by engaging in tempo fluctuations from bar 25. Therefore, unlike in the rehearsal a week before the concert, I did not perceive the conflict or irreconcilability of tempo between the expressive 'human' and unemotional 'machine'. In contrast to the 'Moins vif' section from

bar 107 in the second movement, in which I maintained a steady tempo, I tried to convey freedom from bar 147. For example, in each group of off-beat semiquavers chords in bars 148–9, not only did I vary the dynamic of each group by gradually becoming louder, but I also employed *rubato* within each crotchet beat. This kind tempo fluctuation in my part at bars 148–9, within the confines of the regular beat, maintained by Frith, seemed to reflect Adorno's notion of tempo *rubato*, which should not be arbitrarily free but relate to the regular beat (Adorno 2006a: 76).

The most obvious mistake occurred in bar 13 of the third movement, 'Amen de l'agonie de Jésus', when I misread Frith's body gesture and played the first quaver too early, before I had to play the first quaver again together with Frith. From bar 63 to bar 74, in addition to shocking the melody of piano 2 with the bottom A in the rhythmic pedal of the left hand in piano 1, I also attempted, as Frith suggested in the rehearsal, to shape the melodic line of the right hand part. The ensemble in the coda from bar 95 was as satisfactory as if the chords in bar 96 and bar 98 were played by one pianist.

In the reprise of the 'tender theme' from bar 87 of the fourth movement, 'Amen du Désir' (Messiaen 1943: Author's Note), I was happy with the way I was able to bring out the 'gentleness' of Chopinesque or Debussian pianism. I felt that I had successfully explored different levels of quiet playing in this section of piano 1 by way of different soft touches and by using the soft pedal. In the 'passionate theme' from bar 100, although I carefully followed Frith's tempo, I was determined to present the dynamic difference between the two pianos by, for example, contributing more sudden strength in the *ff* passages.

In the counterpoint of birdsongs from bar 77 in 'Amen des Anges, des Saints, du chant des oiseaux', due to fact that I was very nervous, not only was it difficult for me to hear the second piano, but also I could not count as precisely as I did in the practice sessions and the rehearsal. At that moment, I had to rely on my mechanical memory. Instead of carefully listening to Frith, counting and attempting to bringing out the nuances of the birdsongs, I relied on 'the exact adaptation of our nervous system to the present situation', in Bergson's words (Bergson 1991: 84). I played the correct rhythm, more or less, and was generally together with Frith, and I may have shaped the phrases of the birdsongs, but by mainly depending on mechanical memory, trained through practice, the process of playing these passages of birdsong during the concert did not involve conscious or active listening and music making.

I became more confident in the sixth movement, ‘Amen du Jugement’, which is less technically difficult than the previous movement. As in the practice session, so in the concert I dynamically varied the ascending (right hand)/descending (left hand) chromatic scales. In addition, I also varied the length of the grace chords in bars 4, 8, 12, 19, etc. For example, after the three high chords in bar 4, I played the grace chord extremely short, and, as a contrast, in bar 8, I slightly lengthened the grace chord; in bar 19, I accented and slightly lengthened the first grace chord and played the second grace chord extremely short in order to render the following main chord more abrupt. The decision to vary the grace chords had not been envisaged before the concert. Perhaps it was my ‘whole soul’, which ‘gives rise to the free decision’ (Bergson 1910: 167), and which also engenders ‘new’ interpretations, which intervened such that the ‘flam’ of the drum was constantly varied.

In the finale, ‘Amen de la Consommation’, I felt that I overcame my nerves and became more confident. As mentioned before, in the practice sessions as well as in the rehearsal with Frith, I could sense the conflict between the two pianos and the alienation of my part from the ‘human’. However, in the concert, the mechanical quality of the double rhythmic pedals, the contradiction between the two pianos and the irreconcilability of the ‘human’ and ‘machine’ did not occupy my mind. Instead, I was dominated by ‘the drastic state’, as Abbate calls it, engendered by ‘real music, music-as-performed’ (Abbate 2004: 534, 532). Therefore, the earlier reflections on the music were no longer crucial at the time of the concert, for I seemed to be ‘caught up in its temporal wake and its physical demands or effects’ (Abbate 2004: 511). Just as words like ‘*doing this really fast is fun* or *here comes a big jump*’, as a kind of drastic knowledge, flow into Abbate’s consciousness during performance (Abbate 2004: 511), in the last movement, I was thinking: *this could be faster* and *this could be more exciting*. From the very beginning of the last movement, I already started to push forward, but the pace was steadily reined in by the Theme of Creation in piano 2. As mentioned earlier, I suggested to Frith before the concert that it would be sensible not to get any faster from bar 55, so that I could ensure the accuracy and clarity of the fast chords. Yet, in the concert, I changed my mind on maintaining a steadfast tempo, and sensed that I was capable of slightly pushing forward in order to express the urge towards the tonal unification at bars 67–70. As Frith respected what I suggested, he kept an unwavering tempo from bar 55, even though I was clearly pushing forward. Therefore, against Frith’s steady pace, I sounded unsettled, rushed, and almost ‘off the track’. In the coda of the finale, from bar 95, I wanted to imitate Martha Argerich’s virtuosity, the brilliance of the rapid sextuplets in her recording with

Alexandre Rabinovitch, and yet, the tempo that we had chosen did not allow me to endow the coda with the overflowing brilliance presented in Argerich's playing. If I had known that I would be capable of overcoming my nerves and stretching my technical facility in the concert, I would have had suggested to Frith to allow freedom. Before the concert I was more concerned with accuracy than with excitement. However, in the concert, by gradually immersing myself in the joyful spirit of the music and submitting to the experience of *durée*, I felt the perpetual change and inconsistency reflected in the 'whole soul', and, albeit unsuccessfully, attempted to reveal my free decision, to push forward, which had been unknown prior to the concert.

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In my own working process, I was mainly guided by Adorno's dialectical method. I analysed the music and attempted to articulate the gestural or 'neumic' element in the music and to reveal the tension it contains. For example, in the counterpoint of birdsong from bar 77 in 'Amen des Anges, des Saints, du chant des oiseaux', I tried to present the phrasing and the dynamic nuances of the swift birdsongs. In the mechanical constructions, such as the rhythmic pedals, in which no 'neumic' element can be subjectively articulated, I tried to present their mechanical quality or, from an Adornian point of view, to maintain their objectivity by adhering to what is written in the score. Here I was certainly inspired by the Bergsonian notion of space, in which the notes, regular beats and markings can be represented as symbols. Although, by merely following the symbolic or mensual aspect of the rhythmic pedals, my playing, in contrast to the manner in which Messiaen 'humanises' the machine in his recording with Loriod, seemed lifeless, akin to an 'automaton', the perception of the conflict between the two pianos and the alienation I felt, working with the 'machine' while longing for the 'human', seemed necessary and somehow reflected the reality of living conditions amid twentieth-century machinery.

In the concert, certain formal features of the music did come to my mind, such as metrical beats and rhythmic syncopations. I perceived the analytical results, such as the divergent qualities of different compositional materials, and the tonal connections, for example, in second movement, 'Amen des étoiles, de la planète à l'anneau', between the dominant section at bars 107–46 and the tonic section from bar 147. I also perceived what Abbate calls the drastic knowledge that springs from consciousness at the moment of performance. This

kind of knowledge – for instance: *I'm very nervous*, *watch Frith's nodding in order to play together*, *the piano is very good so I can play very quietly and still project* and *I want to push forward* – was more prominent than the knowledge gained through analysis. There was a sense of renunciation in the performance, in which what I learned formally no longer persisted and I turned my attention to the inconsistency of *durée*. However, it was not a renunciation through which I deliberately abandoned any perception of the formal elements of the music and merely let the perpetual change of conscious states flood out. In the concert, it was certainly impossible totally to renounce what I had analysed and prepared in the past by which the present was shaped. It would be more cogent to say that all kinds of knowledge contributed to the present of the concert and that they were, not in a well organised way, fused at the moment of the performance. That is to say, unlike in the process of analysing the music, I did not think about them systematically while I was playing. Moreover, by 'turning towards events' (Abbate 2004: 509) and allowing the conscious states to fuse, I could not prevent myself from experiencing something new during the creative process of music making.

In conclusion, it is worth recalling the passage by Bergson quoted in the Introduction. *Durée* will be reflected in 'the succession of our conscious states'

> when our ego lets itself live, when it refrains from separating its present state from its former states. For this purpose it need not be entirely absorbed in the passing sensation or idea … Nor need it forget its former states: it is enough that, in recalling these states, it does not set them alongside its actual state as one point alongside another, but forms both the past and the present states into an organic whole, as happens when we recall the notes of a tune, melting, so to speak, into one another. (Bergson 1910: 100)

Appendix

The List of Recordings of *Visions*:

Messiaen/Loriod (1949) (2007) *

Messiaen/Loriod (1962) (2001) *

Katia Labèque/Marielle Labèque (1969) (1970) *

John Ogdon/Brenda Lucas (1971)

Peter Serkin/Yuji Takahashi (1973)

Begoña Uriarte Mrongovius/Karl Hermann Mrongovius (1974)

Maarten Bon/Reinbert De Leeuw (1988) (1994) *

Rodolfo Llambias/Tove Lønskov (1989)

Martha Argerich/Alexander Rabinovitch (1989) (1990)

Edmund Niemann/Nurit Tilles (1992)

Begoña Uriarte Mrongovius/Karl Hermann Mrongovius (recorded twice in 1974 and 1992) (1974, 1993) *

Gerard Bouwhuis/Cees van Zeeland (1992)

Peter Hill/Benjamin Frith (1993)

Jean-Louis Delahaut/Jacques Moreau (1995)

Elisabeth Vatn/Steffen Horn (1999) (2000) *

Andreas Grau/Götz Schumacher (2002) (2005) *

Paul Kim/Matthew Kim (2002) (2003) *

Yuri Didenko/Maria Parshina (2002)

Steven Osborne/Martin Roscoe (2003) (2004) *

Klaus-Georg Pohl/Ute Gareis (2007) (2008) *

Lucia Huang/Sebastian Euler (2007)

Ralph van Raat/Håkon Austbø (2012)

Christina Naughton/Michelle Naughton (2016)

*The former is the year in which the piece was recorded; the latter is the year that the recording used for the thesis was released.

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