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The Role of Landscape
in *Catalogue d'Oiseaux* by Olivier Messiaen

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ABSTRACT

This thesis explores the French composer, Olivier Messiaen's '*Catalogue d'oiseaux*' (Catalogue of birds, 1956-1968) for the solo piano, a collection of birdsong works which is widely regarded as one of the great repertoires from the modern period. The complete work consists of thirteen pieces that progressively present a main group of birds, followed by representations of other birds. These birds were found in France, embedded in their natural habitats. The repertoire is usually selected to be performed as separate pieces or as a group, depending on the length of time available, given that the total running time of the works extends to two and half hours. In this research, there follows a close examination of landscape, which signifies natural settings, the passage of time, as well as little creatures. All of these elements are discussed, including to what extent the introduction of landscape affects both birdsong as well as my own performance.

There are six substantive chapters in this study.

Introduction

Chapter I – Birdsong: Pieces include birdsong by Messiaen and other composers

Chapter II – Landscape: Works include landscape by Messiaen and other composers

Chapter III – *Catalogue d'oiseaux*: General information regarding *Catalogue d'oiseaux*

Chapter IV – Analysis of Landscape in *Catalogue d'oiseaux*

Chapter V – The Role of Landscape in Messiaen's Birdsong Music

Chapter VI – Effects of Analysis on the Performance

Conclusion

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TABLE OF CONTENTS

<u>INTRODUCTION</u>	<u>1</u>
MOTIVATION	1
LITERATURE REVIEW	3
ANALYSIS	8
STRUCTURE OF STUDY	8
<u>CHAPTER I</u>	<u>11</u>
BIRDSONG IN MUSIC	12
1. REASONS WHY MESSIAEN USES BIRDSONG	13
2. EARLIER COMPOSERS' BIRDSONG	17
3. MESSIAEN'S BIRDSONG PROCESS	18
I) EARLY WORKS WHICH INCLUDE BIRDSONG	19
II) BIRDSONG WORKS WRITTEN BETWEEN 1952-59	21
III) <i>CATALOGUE D'OISEAUX</i> (1956-58)	24
<u>CHAPTER II</u>	<u>28</u>
LANDSCAPE IN MUSIC	29
1. MOTIVATIONS	33
2. IMPORTANCE OF LANDSCAPE	37
3. ELEMENTS OF APPROACH TO LANDSCAPE	42
I) EXAMINATION OF NATURE	43
II) ENHANCEMENT OF BIRDSONG	44
III) PAINTING OF MUSICAL SOUNDS	45
IV) ADDING REALITY TO ART	46
<u>CHAPTER III</u>	<u>51</u>
<i>CATALOGUE D'OISEAUX</i>	52
<u>CHAPTER IV</u>	<u>64</u>
ANALYSIS OF LANDSCAPE IN <i>CATALOGUE D'OISEAUX</i>	65
1. TIME	67
I) DAY	71
II) NIGHT	73

2. LIGHT	79
3. WATER	87
I) THE WAVES OF THE SEA	98
II) THE WAVES (<i>LES VAGUES</i>)	99
III) THE WATER (<i>L'EAU</i>)	99
4. GEOMETRICAL FEATURES (MOUNTAINS, CLIFFS AND ROCKS)	100
5. OTHER NON-BIRDSONG MATERIALS	108
I) LITTLE ANIMALS	108
II) FLOWERS	109
CHAPTER V	111
<hr/>	
THE ROLE OF LANDSCAPE IN MESSIAEN'S BIRDSONG MUSIC	112
CHAPTER VI	118
<hr/>	
EFFECTS OF ANALYSIS ON THE PERFORMANCE	119
CONCLUSION	129
<hr/>	
APPENDIX	139
<hr/>	
LIST OF PIANO WORKS BY MESSIAEN IN CHRONOLOGICAL ORDER	139
MESSIAEN'S MODES OF LIMITED TRANSPOSITION	141
MESSIAEN'S CHORDS	144
1. CHORD OF RESONANCE (CR)	144
2. CHORD OF CONTRACTED RESONANCE (CCR)	145
3. CHORD ON THE DOMINANT (CD)	146
4. CHORD ON THE DOMINANT WITH APPOGGIATURA (CDA)	148
5. CHORD OF TRANSPOSED INVERSIONS (CTI)	149
6. TURNING CHORDS (TC)	151
BIBLIOGRAPHY	153
<hr/>	
MUSIC EXAMPLES	157
<hr/>	

FIGURES

FIGURE 1-1. ARCH-FORM OF <i>RÉVEIL</i>	22
FIGURE 2-1. DATES AND PLACES OF MESSIAEN'S COLLECTION OF BIRDSONGS USED IN <i>CATALOGUE</i>	40
FIGURE 2-2. MAP OF MESSIAEN'S TRIP IN FRANCE BETWEEN 1955 AND 1959	42
FIGURE 2-3. THE MONTHS IN <i>CATALOGUE D'OISEAUX</i>	48
FIGURE 3-1. LANDSCAPE IN <i>CATALOGUE</i>	56
FIGURE 3-2. EXAMPLES OF MESSIAEN'S HARMONIC PROGRESSION USED IN <i>CATALOGUE D'OISEAUX</i>	60
FIGURE 3-3. THE LIST OF SETTINGS IN <i>CATALOGUE D'OISEAUX</i>	62
FIGURE 3-4. MAP OF THE PLACES IN FRANCE FROM WHERE BIRDSONG IN <i>CATALOGUE D'OISEAUX</i> WAS COLLECTED	63
FIGURE 4-1 LANDSCAPE CATEGORISATION IN <i>CATALOGUE</i>	65
FIGURE 4-2. CATEGORISATION BY LANDSCAPE	66
FIGURE 4-3. TYPES OF TIME IN <i>CATALOGUE D'OISEAUX</i>	70
FIGURE 4-4. STRUCTURE OF PITCHES AND DYNAMICS IN <i>LA CHOUETTE HULOTTE</i>	75
FIGURE 4-5. STRUCTURE OF <i>LA ROUSSEROLLE EFFARVATTE</i>	84
FIGURE 4-6. SUNRISE AND SUNSET IN <i>LA ROUSSEROLLE EFFARVATTE</i>	86
FIGURE 4-7. RHYTHMIC CANON BY VALUES IN <i>LA BOUSCARLE</i>	93
FIGURE 4-8. CONSTRUCTION OF THE RHYTHMIC COMPONENT OF THE ISORHYTHM IN <i>LA ROUSSEROLLE EFFARVATTE</i>	95
FIGURE 4-9. SHARNGADEVA AND MESSIAEN'S RHYTHMS IN <i>LE MERLE BLEU</i>	104
FIGURE 4-10. THE PERMUTATION OF THE STONE MUSIC IN <i>LE MERLE DE ROCHE</i>	106
FIGURE 6-1. DYNAMICS DUE TO WAVE TYPE	123
FIGURE 6-2. TEMPI TAKEN IN THE OPENING BARS OF <i>L'ALOUETTE CALANDRELLE</i> FROM THE RECORDINGS	125
FIGURE 6-3. TEMPI TAKEN AT THE BEGINNING OF <i>L'ALOUETTE LULU</i> FROM RECORDINGS	126

MUSIC EXAMPLES

CHAPTER I

BIRDSONG IN MUSIC 158

CHAPTER II

LANDSCAPE IN MUSIC 172

CHAPTER III

CATALOGUE D'OISEAUX 176

CHAPTER IV

ANALYSIS OF LANDSCAPE IN *CATALOGUE D'OISEAUX* 177

CHAPTER V

THE ROLE OF LANDSCAPE IN MESSIAEN'S BIRDSONG MUSIC 237

CHAPTER VI

EFFECTS OF ANALYSIS ON THE PERFORMANCE 244

INTRODUCTION

Introduction

1. Motivation

Over ten years ago as part of my MMus piano recital, I performed one movement from *Catalogue d'oiseaux* by the French composer Olivier Messiaen. This was the first time I had performed his music. My piano teacher had originally asked me to read it and, while listening to it, I was shocked. Up to that point, I had only ever played one piece by Alberto Ginastera which could possibly have been categorised as contemporary music. Even for someone like me, who considered both Claude Debussy and Maurice Ravel to be modernists, it was hard to understand and interpret many aspects of the music, especially the complicated rhythms and harmonies. In fact, those aspects represent the most difficult features of his music and, because of these, Messiaen is regarded as one of the most influential composers and teachers in twentieth-century music.

The reasons behind why Messiaen is regarded as such an important composer of the music of the twentieth century has been a favourite and much-studied subject for scholars. Many have researched Messiaen's compositional techniques¹ such as his use of Greek and Hindu rhythms, modes of limited transposition, chords, Catholic symbolism, colour association and so forth. Birdsong music, including *Catalogue d'oiseaux*, has also been discussed as a main topic by many researchers.

The performance was enough to stimulate my curiosity surrounding Messiaen's piano pieces in particular when considering first *Catalogue d'oiseaux*² (hereafter referred to as *Catalogue*). Although this first experience was brief, it did serve to arouse and prepare me for the demands involved in studying the piece deeply and to render all movements of *Catalogue*. It made me wonder how Messiaen transcribe real birdsong into music and how these two real birdsong and Messiaen's birdsong are similar. I was, however, more captivated to questions what landscape was used for the music, how it was presented in piano writing, how it was described in music, how landscape which does not have its own sound was reproduced as music in *Catalogue*. In theory it should be much easier to transcribe birdsong into music as it possesses actual sound, in comparison to landscape features such as rocks, mountains, night, and so on which do not inherently produce any sounds of their own. Messiaen, therefore, needed to create a musical device or develop his own musical language to represent the 'sound' of landscape to put into his birdsong work.

¹ This term has the same meaning as 'musical language' which Messiaen used in his treatise *Technique de mon langage musical* (The technique of my musical language) and is used alternately.

² Olivier Messiaen, *Catalogue d'oiseaux*, (Leduc, Paris, 1958)

This study began with the question of how to perform *Catalogue* precisely as the composer, Messiaen intended. It was one of the first, if not the first, pieces that was focused on birdsong- how to play birdsong accurately, beautifully and realistically. It was not long before there was an acknowledgment that the non-birdsong parts were just as important as birdsong. It was a natural progression where I then decided to concentrate more on landscape than birdsong for this research. The process by which the musical device or language used for landscape is defined should assist in understanding more completely how to interpret *Catalogue* for successful performance.

For the modern performers, listening to recordings seems to be essential to comprehend the works, although that does not detract from the need to analysis music before playing. This is especially true with *Catalogue* in which the space considered as landscape is expressed in a variety of forms of resonance, birdsong and non-birdsong. The purpose of this study is that, as a pianist, I am going to explore *Catalogue* given its great popularity and that it is such an attractive piece among the twentieth-century solo piano works. My study will, however, focus on non-birdsong rather than birdsong in order to reveal how the musical languages were adopted in the pieces and to explore the relationships between the various materials. This research will examine background music more specifically, referred to as 'landscape' in this thesis, in *Catalogue* rather than that present in the foreground music, being the birdsong itself. The application of this study will be shown in how this research influences in interpreting the piece and how it changes my performance compared to prior performance that may previously have been highly focussed on birdsong. The presence of various landscape materials such as sea, rocks, dessert, vineyard, swamp, night, day, frogs and so on was enough to provoke my intrigue so that I could examine *Catalogue* in detail. It has widely been shown that *Catalogue* became more diverse and enriched by adding non birdsong materials on top of this birdsong piece.

This study will be conducted by investigating literature reviews (including an interview with Peter Hill), birdsong music by Messiaen, general information about *Catalogue*, analysis of landscape within *Catalogue*, the effects on my performance and final recital which includes two pieces from *Prelude* (*La Colombe* and *Chant d'extase dans un paysage triste*) and six pieces from *Catalogue* (*Le Chocard des Alpes*, *La Chouette hulotte*, *L'Alouette lulu*, *L'Alouette calandrelle*, *La Bouscarle* and *Le Courlis cendré*).

2. Literature Review

Several theses, books and articles which focus entirely on the *Catalogue* are found for this study.

In his book 'Messiaen'³, Robert Sherlaw Johnson provides general information concerning Messiaen and his music including *Catalogue*. This book became essential reading book for any researchers of Messiaen. Chapter 11 considers the pieces produced during the birdsong period and chapter 12 is devoted to *Catalogue* specifically. His classification and diagram of the structure of *Catalogue* in chapter 12 are especially helpful in understanding the work. He divides the materials into two groups - birdsong and other material, and birdsong into four groups according to the song-patterns of birds. Sherlaw Johnson suggests five groups of non-birdsong materials. Firstly, the 'twelve-note sets',⁴ which were common compositional features in an earlier organ work '*Livre d'Orgue*', are used in several ways and employ several combinations of rhythms. When composing for night, Messiaen applies 'modes of pitches, durations and intensities' and, for colours, he uses modes of limited transposition. The last two features of '*Turangalila*' motifs and 'colour-chords'⁵ are described in Sherlaw Johnson's book. All the features relating to non-birdsong compositions are crucial to my study and are therefore applied later in Chapter 4. Sherlaw Johnson's book, however, is restricted to narrating the overall information through his book about Messiaen. Although it covers everything from his birth to his last work, only one chapter is dedicated to *Catalogue* which means the contents about *Catalogue* may not be comprehensive enough for those who desire a more thorough review. His analysis of *Catalogue*, besides, depends on musical language not on landscape. That is to say, Sherlaw Johnson regards compositional devices as more important features than mere natural habitat. It is in any view a good textbook but may be considered short when still need to examining landscape, which is a crucial feature that Messiaen hopes to be presented in conjunction with birdsong in his birdsong work.

Peter Hill edits several articles concerning Messiaen's music including a revision of Sherlaw Johnson's writing in relation to birdsong and statements about piano music, Hill's experience with Messiaen and, when considering an interview with Yvonne Loriod in his book, 'The Messiaen Companion',⁶ chronologically explains the full suite of Messiaen's piano works including his very early compositions which include his

³ Robert Sherlaw Johnson, (Omnibus Press, Updated and additional text in 2008 ed. by Caroline Rae)

⁴ The 'twelve-note sets' will be used in Chapter 4 for analysis of non-birdsong.

⁵ The term 'colour-chords' is quite ambiguous so it will be reconsidered in Chapter 1.

⁶ Peter Hill, *The Messiaen Companion* (Faber and Faber, London, 2008)

performance experiences.⁷ In his chapter on ‘Birdsong’, Hill mentions every birdsong piece and bird-related piece which involves birdsong or bird-style⁸ material, and states that a period of time such as ‘dawn’ and non-birdsong materials, which are derived from birds’ habitat, is crucial to express a natural ‘realistic world’. That is to say, the dawn which appears in ‘*Liturgie de cristal*’ from his quartet *Quatuor pour la fin du Temps* is symbolic of the time for religion but it is in fact used in *Catalogue* as a ‘narrative element’ to present the period time for realism.⁹ Especially in *Catalogue*, Messiaen uses non-birdsong material including time flows (Hill uses the term ‘additional material’) ‘in order to create the sense of pictorial background to the principal bird’¹⁰ and provides some examples.

According to the interview that I conducted, Hill had prepared a new book which includes articles about landscape in Messiaen’s music, culminating in his book ‘Olivier Messiaen’s *Catalogue d’oiseaux* from Conception to Performance’¹¹ which was published recently. The theme of this book is quite similar to mine and therefore must be reviewed in this research. Messiaen’s voluminous cahiers are used in the book. In contrast to his former works, this book is focused on *Catalogue* only and profoundly examines both birdsong and non-birdsong. Hill refers that time and colour are linked deeply and they are as important as birdsong in *Catalogue*. For Messiaen there is no distinction between current and past time.¹² Hill compares birdsong from cahiers and recordings.

Clearly, the ability to discuss *Catalogue* with Peter Hill, especially concerning the landscape in *Catalogue*, was of great assistance for my research.¹³ According to Hill, Messiaen made considerable efforts to integrate birdsong and landscape where he tried various ways to present them together in one piece of music. The question then flows: what is the difference between a birdsong only piece, and a birdsong with landscape piece? In a birdsong only work, birdsong is more harmonised than in work where non-birdsong is included. In birdsong containing landscape work, the birdsong is simple and the landscape is harmonised. For instance, in *Catalogue*, being a birdsong with landscape music piece, the birdsong heard is simpler than that from *La Fauvette passerinette*, which as a representation of birdsong only music, there nothing

⁷ Hill, *The Messiaen Companion*, p.81

⁸ ‘bird-style’ will be discussed in Chapter 2 in this thesis.

⁹ Hill, *The Messiaen Companion*, p.258

¹⁰ *Ibid*, p.258

¹¹ Roderick Chadwick and Peter Hill, *Olivier Messiaen's Catalogue d'oiseaux From Conception to Performance*, (Cambridge University Press, 2017)

¹² *Ibid*, P. 59

¹³ Interview with Peter Hill, See the appendix, p. 154

about landscape but colour chords. This issue will be discussed in greater detail in Chapter 5.

In her thesis, 'Olivier Messiaen's *Catalogue d'oiseaux*: A Performer's Perspective', Loo Fung Chiat chooses five pieces from *Catalogue* to analyse in detail and selects seven recordings of each piece to compare how each performer interprets the various works. She closely examines them in terms of performance with a discussion on structure, fingerings and specific features of Messiaen's piano writing. She divides the materials into two parts: a) static (describing landscape) and b) mobile materials (imitating birdsong). She goes on to explain the features of each. She insists that a performer needs to understand the role of pauses and rests in *Catalogue* because they are fundamentally related to the construction of the music.¹⁴ Such an example is found in Loriod's recording and Hill also mentions the 'prolonged stillness' of her performance.¹⁵

Considering both birdsong and non-birdsong materials, she regards birdsong as 'new sources' compared to non-birdsong. Messiaen's birdsong changed and developed extensively after his studies with the ornithologist, Jacques Delamain. However, Messiaen continued to incorporate some of the previous features for his landscape such as developed modes of values and intensities, modes of limited transposition, use of twelve tone technique, colour chords, Greek and Hindu rhythms and so on.¹⁶ This thesis is a useful source as she focuses on *Catalogue* and deals with two materials divided by locomotion. She observes both birdsong and landscape equally, although she only analyses five pieces of the total thirteen movements. In order to examine landscape in detail, all of the non-birdsong material needs to be concerned and subdivided into more groups. Specifically, non-birdsong materials will be divided into several groups according to their characteristics in this study. In particular I will reveal that several of Chiat's figures are related to my research and are directly quoted.

As the title demonstrates, David Kraft's book, 'Birdsong in The Music of Olivier Messiaen'¹⁷ discusses chronologically and examines more closely all of Messiaen's birdsong in general rather than focusing on just one birdsong work, *Catalogue*, which occupies only one chapter. Kraft states that Sherlaw Johnson's study is essential to understand *Catalogue*¹⁸ and borrows Sherlaw Johnson's categorisations which explain 'texture, timbre, tonalities bird-group relationships and the association

¹⁴ Loo Fung Chiat, PhD thesis submitted to University of Sheffield (May 2005), 'Olivier Messiaen's *Catalogue d'oiseaux*: A Performer's Perspective', p. 213-4

¹⁵ Hill, Olivier Messiaen's *Catalogue d'oiseaux* from Conception to Performance, p.194

¹⁶ Ibid, p. 215

¹⁷ David Kraft, *Birdsong in The Music of Olivier Messiaen*, (Arosa Press, London and California, 2013)

¹⁸ Ibid, p. 176

between birds and their natural environment.’¹⁹ Kraft analyses each piece in numerical order and starts with the environmental settings. In actual fact, he divides both birdsong and landscape material for analysis yet focuses more on Messiaen’s birdsong. Kraft’s analysis is undeniably general in scope yet, for ‘*La Rousserolle effarvate*’, he decides not to use other musicologists’ terminology such as ‘strophes’, ‘refrains’, ‘introductions’ and ‘codas’. Instead he creates structure by following Messiaen’s indication of time from the score which runs from midnight to three a.m. the following day: resulting in twenty-seven hours. This example is similar to my own research methods. Messiaen’s use of technical issues such as pedalling, timbre and colour associations, are also examined in Kraft’s book.

In his thesis, ‘Musical and Formal Interrelationships in Messiaen’s *Catalogue d’oiseaux*,’²⁰ Achilles Guy Calenti divides landscape into two groups: non-bird and bird-related material. The relationship between birdsong and other material is examined by pitch, tempo, dynamics and rhythm, not programmatically, but musically. He selects only two pieces ‘*Le Chocard des Alpes*’ from book I and ‘*La Bouscarle*’ from book V which are studied in depth and delves into both pieces. Each piece is divided into three parts by materials – birdsong, non-birdsong and bird-related material – and, two features of pitch and rhythm are used in order to analyse those materials. Natural habitat presents non-birdsong material and bird-related material such as flight and colour of feather describes bird itself. My thesis focuses on landscape so that bird-related material will be excluded. Mode of limited transposition and twelve-note mode are frequently used devices and intervals for sonorities are examined for pitch section. Hindu rhythm and rhythmic permutation which is sometimes augmented are observed. Despite this study is quite interesting, it is insufficient to analyse landscape part with only two features because habitat covers nearly 50 percentage of each movement of *Catalogue*.

Cheong’s approach to *Catalogue* is more concerned with symmetrical permutation.²¹ In her article, she explains the ‘Symmetrical permutation scheme’ and its interversions designed by Messiaen and, because of the use of interversions²², *Catalogue* seems similar to *Île de feu 2* from *Quatre études de rythme* (Four studies in rhythm) for solo piano. This conclusion is reached even though they are rarely used in *Catalogue*. The most interesting point of Cheong’s insight is that the symmetrical permutation scheme

¹⁹ Kraft, *Birdsong in The Music of Olivier Messiaen*, p. 178

²⁰ Achilles Guy Calenti, MMus thesis submitted to the University of Arizona, (1980), ‘Musical and Formal Interrelationships in Messiaen’s *Catalogue d’oiseaux*’

²¹ Wai-ling Cheong, ‘Symmetrical Permutation, the Twelve Tones, and Messiaen’s *Catalogue d’Oiseaux*’, *Perspectives of New Music*, Vol. 45, NO.1 (Winter, 2007), p.110-136

²² ‘interversion’ is used interchangeably with ‘permutation’ in this article. Ibid, p.112

controls much of the twelve-tone writings which are related to non-birdsong materials such as rock formations, fog and flowing water or bird-related material such as bird flight in *Catalogue*. She also states that the permutation of durations allows for more freedom to Messiaen in colouring his music. Cheong's approach to landscape, through symmetrical permutation, is a greatly attractive proposition to me and assists in examining Messiaen's landscape in works other than the *Catalogue*.

In his article,²³ Schellhorn examines the role of 'time' in *Catalogue* and states that Messiaen's time is derived not only from the 'small-scale technical level such as rhythm, harmony and birdsong melody' but is also stretched to the 'large-scale formal level'. Messiaen's ordering of each movement and arrangements in the books are related to 'time of performing length' that causes the palindromic shape. In particular, he states that the longest piece set in the middle, '*Le Rousserolle effarvate*', is the movement most influenced by a 'sense of time': it is progressed by the passage of time. According to Messiaen's birdsong classification²⁴, a dawn chorus or song at sunset are the most beautiful demonstrations of birdsong, so the sun also plays an important role in birdsong in his music. Schellhorn concludes that *Catalogue* is deeply connected to time and the 'movement of the sun'.

In Freeman's article²⁵, the term 'nature' is mentioned directly in the title. He contrasts two recordings of *Catalogue*: one by Anatole Ugorski and another by Peter Hill. However, he relates more to the aspects of performance and interpretation such as dynamics, tempo, timbre, articulations and pedalling rather than an analysis of nature itself. He still considers birdsong to be just as important as non-birdsong.

Throughout the reviews, it is noticeable that there is no existing research which focuses on non-birdsong material solely in *Catalogue*.

It is always the case that birdsong and non-birdsong are considered together. Therefore, the aim of this study is to establish the role and function of landscape in the piece, both pictorially (its programmatic aspects) and structurally (as abstract musical material among others) by analysing and examining only landscape in *Catalogue*. It will be also stated in what ways my performance is influenced through this study and

²³ Mathew Schellhorn, 'Messiaen Time in *Catalogue d'oiseaux*', adapted from a talk given at the London International Piano Symposium Hosted by the Royal College of Music, London, in February 2013

²⁴ Claude Samuel, p.86, Messiaen divides birdsong into four categories: 'territorial possession', 'amorous impulse', 'free songs' evoked by dawning or dying light at sunset and bird calls. (Amadeus Press, p.85-86)

²⁵ Robin Freeman, 'Courtesy towards the things of Nature: Interpretations of Messiaen's '*Catalogue d'oiseaux*', *Tempo*, New Series, No. 192 (Cambridge University Press, April, 1995, p.9-14)

how anacoustic landscape should be rendered in order to express the composer's purpose accurately.

3. Analysis

Chapter 4 will be devoted completely in analysing only the non-birdsong materials in *Catalogue*. It will be divided into three sections:

1. Time - night and day
2. Habitat/Landscape
 - a) without movement or sound: rock, cliffs, vineyard, foghorn at the lighthouse and mountains
 - b) with movement or sound: water, river, swamp, reflection of trees, sea and wave
 - c) with colour: sunrise, sunset and light
3. Other creatures - flowers, insects and small animals.

The criterion is made from the most comprehensive approach of 1) passage of time, 2) spatial impression and 3) other living creature except birds. The three standards are then fractionised by their own characteristics. The numbers of movements or chronological orders are largely irrelevant. The non-birdsong materials will be analysed by the criterion and the trait of each material will be explained.

4. Structure of Study

This introduction provides a summary of the extent of the study into Messiaen's birdsong for solo piano, *Catalogue d'oiseaux*. One of the principal objectives of this work is to provide some of the reasons why this research should be undertaken and to understand the way in which to process the subject to prove the necessity for this thorough investigation. This study is comprised of five chapters and the contents and outline of each chapter are as follows.

Chapter 1 will focus on birdsong works before *Catalogue* and examine their development and progression. This section will demonstrate the differences between birdsong works which exclude landscape or which include landscape but where the

role of such is less important than birdsong. This chapter will demonstrate the validity of this research which focuses on the significant role of landscape in *Catalogue*.

Chapter 2 will consider the list of works which portray landscape by other composers and addresses specifically the landscape that is described in Messiaen's music and his motivation for presenting landscape in his birdsong music. This chapter is essential in order to compare how Messiaen's works are different from other composers. The differences also help in emphasising the variety, uniqueness and significance of landscape employed by Messiaen. This will be the precondition to assert why non-birdsong material should be examined closely.

Chapter 3 will give general information about the main work, *Catalogue* so that it supports to understand it before moving forward to chapter of analysis. Why only the piano is used as medium in mimicking various birdsong, what landscape features are used in the work, which chords are applied for landscape, where Messiaen collected real birdsong are explained in this chapter. Furthermore, a map will be given to help understand the geography used in *Catalogue*.

Chapter 4 will deal with an analysis concerning landscape only in *Catalogue*. Non-birdsong materials will be categorised into several sections and this will be the criterion in analysing each movement. This chapter will focus on the role of landscape – including the effects on building structure, the resonance, colour, time flows and how non-birdsong is presented in *Catalogue*. Moreover, the contrast between birdsong and non-birdsong will be highlighted as part of the examination into Messiaen's own musical devices used for landscape. Through this analysis, the importance of landscape and the validity of this investigation will be demonstrated.

Chapter 5 will discuss the role of landscape in birdsong music. It is used in particular to survey the effects of landscape, the differences between birdsong with landscape and birdsong without non-birdsong will be examined in detail. Therefore, we can recognise how landscape works in birdsong pieces and the importance of its role in *Catalogue*.

Chapter 6 will cover how this research causes a direct influence over the performance, especially in the rendering of landscape in *Catalogue*. Generally speaking, playing birdsong seems to be much easier to make appropriate timbre than with landscape. For example, the rendering landscape such as mountains, rocks, sunrise and lighthouse at night is difficult to portray without a vivid imagination. Therefore, it is not surprising that this study will help to understand, interpret and ultimately perform Messiaen's masterpiece.

The last section will contain a summary and conclusion regarding landscape in *Catalogue*. What the role of landscape in *Catalogue* is and how landscape is applied in programme music will be discussed as evidence in this research. There follows an

explanation as to how significant and essential this study is and how this research influences pianists who try to play *Catalogue*.

The introduction will touch upon what the essence of this study is, why it should be examined and how this research will process. The subsequent chapter will investigate the importance of birdsong for Messiaen, how birdsong was presented in music before Messiaen, and then how it was used by him to prove how his birdsong is different and unique from other former composers.

CHAPTER I

BIRDSONG IN MUSIC

Chapter 1

Birdsong in Music

Messiaen's birdsong music has a particular and special standing among his works so it cannot be ignored when considering his work as a whole. One might even consider if there is even a need for such a chapter as this given that birdsong is not the main subject of this research and the title is 'Role of Landscape', or why other composers' birdsong even needs to be mentioned. However, it simply must be that Messiaen's birdsong should be considered in advance in order to understand the reasons why landscape had been added in Messiaen's birdsong, to understand how it works in Messiaen's music and to show how unique his birdsong is compared to that seen in other works. Above all it stands to reason that birdsong is considered before getting into the main issue since this study deals with Messiaen's birdsong work, *Catalogue d'oiseaux*. To assist the validity of landscape in birdsong, the development of birdsong should be a prerequisite step in the overall process.

According to the statement below, we can begin to understand how important birds are for Messiaen.

...The birds are my first and my greatest teachers. I have not finished attending their school. Each year, I spend fifteen days in the countryside in company with an ornithologist ...²⁶

Here follows an overview of birdsong in Messiaen's works leading up to *Catalogue*.

This chapter will examine:

1. Reasons why Messiaen uses birdsong
2. Other composers' birdsong
3. Messiaen's birdsong process in: a) Early works
b) Works in the 1950s²⁷

²⁶ Messiaen, in Goléa 1954, p.196, Messiaen talking about birdsong in his class at Darmstadt in 1953.

²⁷ The period divided by birdsong. In early works it appears as material among others, and in the 1950s it is considered his main work.

1. Reasons Why Messiaen Uses Birdsong

Although Messiaen was fascinated by birdsong from an early age, it was from about 1923, during his teens, when he started notating birdsong during a holiday in the Aube district of France.²⁸ Messiaen was willing to walk through woods, seaside, mountains and city without caring what time of day it was in order to listen to birdsong and to record it. He notated birdsong directly on his paper and transcribed the sound including Loriod's recording²⁹ in nature. Moreover, the meeting with ornithologist, Jacque Delamain in 1952 is one of the most important events for Messiaen. For this reason, Messiaen fully earns his reputation as someone who can claim to capturing authentic birdsong as a direct result of his various activities.³⁰

From Messiaen's statements we can notice the reasons why he uses birdsong in his music. In conversation with Claude Samuel:

It is probably that in artistic hierarchy, the birds are probably the greatest musicians to inhabit our planet... the great of all these marvels, the most precious for a composer of music is obviously song. A bird's song is something extraordinary...³¹

The beauty of bird songs leads him to compose birdsong music, a fascination that remains with him until the end of his life. There is no one like Messiaen whose music is full of birdsong.

Messiaen is trying to be as accurate as he can in depicting those subtle sounds but at the same time, he is trying to make an art out of birdsong material. Messiaen claims in relation to his birdsong's accuracy:

²⁸ Messiaen Companion, Birdsong by Sherlaw Johnson, p. 249

²⁹ Messiaen never used recording machines. Only Yvonne Loriod made recordings of birdsong with a tape-recorder when she went out with him to collect birdsong. (Kraft, p.47)

³⁰ It can be said that the sound of birdsong is not authentic as being transcribed, meaning that a composer's subjective views are added in the music. Yet the birdsong itself which is collected in the wild is authentic because of the actions that Messiaen engages in, including going out to real places where the actual birds sing. There have been many pieces of research about the authenticity of birdsong in Messiaen's works among musicologists and ornithologists but it is not the main point to be discussed in this study. There is appropriate reference about the authenticity of Messiaen's birdsong by Lee, Chi Keun 'The Evolution of Messiaen's Birdsong Music: The Case of Blackbird.' (2004, MPhil dissertation submitted to The Chinese University of Hong Kong) See literature review in Introduction.

³¹ Samuel, Olivier Messiaen : Music and Color, p.85

I tried to copy exactly the song of the bird typical of a region, surrounded by the neighbouring birds of its habitat... I am personally very proud of the accuracy of my work; perhaps I am mistaken, because those who are truly familiar with birds cannot recognise them in my music. ... Evidently it is I myself who listen and, involuntarily, I introduce something of my own style, my own way of listening, when interpreting the birdsongs. ³²

Although Messiaen tried his best to mimic real birdsong into his music, it is reasonable that an expert of birds cannot notice familiar birdsong because birdsong is sometimes layered with diverse kinds of birds or landscape. These case makes different resonance and sonority. While real birdsong in nature is generally single lined melody, harmonised birdsong or layered birdsong is heard as chords or polyphony. That is why recognise which birds are singing is not easy work.

It can be acceptable that as an ornithologist himself, Messiaen's birdsong is more precise than any other composer's one. Griffiths' insist supports it: Messiaen is far more conscientious an ornithologist than any earlier musician, and far more musical an observer than any other ornithologist.³³ That is to say, birdsong music is not a recording of real bird calls but just an art which composer's individuation such as emotion, experience, personality, musical characteristics and purpose which composer to present in music are added.

In writing down birdsong, Messiaen is indeed trying to recreate it through instruments. He is trying to achieve the proper timbre, for instance, in orchestrating birdsong and using harmony in piano music by duplicating two or more parts going on. It seems that the accuracy is important for him, especially in his birdsong music. However, the main point of this discussion is to remember that Messiaen's birdsong is not science or a documentary about nature but merely a form of art, music that is created by a humane. Messiaen, simply, used birdsong as a material part of his music; it does not need to be real, but we should appreciate that at least he tried to make the sound as accurate as possible by conducting his research directly out with nature. This point also makes Messiaen's birdsong unique: combined realistic and artistic birdsong very ably.

Messiaen's birdsong is found in the early pieces but it appears as one of many materials, or it is used in only one or two movements as a musical device. Birdsong, besides, plays minor role such as decorating or resonant. For instance, there are eight movements in *Préludes* for solo piano (1928-29) and the first movement, *La Colombe* (Dove), is titled in name of bird. It is just a little taste of what happens in the later birdsong music. In Ex 1- 1 the soft chorded descant takes form of traditional 'like birdsong' (*comme un chant d'oiseaux*) and it creates a numinous mood with E major in the left hand. It seems that the descant presents a fluttering of birds but not real birdsong. At the same

³² Samuel, *Music and Color*, p.111-112

³³ Paul Griffiths, *Olivier Messiaen and the Music of Time*, p.168

time, it expresses a biblical symbol³⁴ by adding chords in such an early period work. The influence of Debussy's *Préludes* on Messiaen is obvious. Like Debussy, Messiaen gave titles to each movement of *Préludes* and used vague and unresolved harmonies, together with a mystical mood. That is, birdsong composed of chords supplies holy mood as an acoustic device in *La Colombe*.

Another example in which Messiaen did not identify any particular bird is the second movement³⁵ from *L'ascension* (1932-33). The first piece which birdsong was used properly as a main compositional source is 'Liturgie de cristal' from *Quatuor pour la fin du temps* in 1941.³⁶ One of reasons that birdsong was used in this work seems to express his desire for freedom as he was in prison at the world war II. Messiaen's birdsong period³⁷, when all the works were full of birdsong, began with *Le merle noir*³⁸ and continued with *Réveil des oiseaux* (Dawn Chorus), *Oiseaux exotiques* (1956), *Catalogue d'oiseaux*. This was followed by *Chronochromie* (1960)³⁹ which is categorised as a different era as '1960 works' because it contains not only birdsong but colour, which is another important source of material for Messiaen. It is noticeable that colour became more meaningful material for the composer after *Catalogue*. It gives strength to the view that Messiaen truly has put every effort about birdsong into *Catalogue* and then he seeks new materials for his music. It seems that there is none like *Catalogue* for birdsong, even though Messiaen left several birdsongs only pieces and birdsong appears continuously until the last work. In 1961, Messiaen was composing another birdsong for solo piano, *La Fauvette passerinette* which was found by Peter Hill in 2012. This work looks like that Messiaen projected new birdsong cycle like *Catalogue* or Book VIII of *Catalogue*.⁴⁰ Compared to *Catalogue* birdsong in *La Fauvette passerinette* is more harmonised but far less birds are included in this one movement piece. Messiaen explains the settings in the preface yet there is no landscape material in the later piece, *Petites esquisses d'oiseaux*.

³⁴ Dove is a symbol of the Holy Spirit in the bible. Although dove is, also, considered such as universal symbol of peace, it has much stronger meaning of Christianity for Messiaen.

³⁵ The title of the second movement is *Alleluias sereins d'une âme qui désire le ciel* (Serene alleluias of a soul that longs for heaven)

³⁶ Peter Hill, *Messiaen Companion* by Sherlaw Johnson, p.251

³⁷ The 'birdsong period' is used to divide the period when birdsong was used as the only material or the foremost subject in his music between 1952 and 1959.

³⁸ Usually *Le merle noir* is not included in the birdsong period works because of its short length. However, I would like to regard it as being part of the birdsong period piece because it is the first piece to be devoted to birdsong.

³⁹ The title *Chronochromie* derived from Greek words means Time- colour.

⁴⁰ Hill, Olivier Messiaen's *Catalogue d'oiseaux*, p. 204-205

Also see the preface from the score of *La Fauvette passerinette*

It seems that Messiaen's extraordinary sense of pitch, especially his precise recognition of the extreme high or low notes, makes him fascinated with birdsong and natural sound.⁴¹ Moreover his personality tends to prefer sounds from nature and seek freedom, inspires him to use birdsong in his music according to his conversation with Antoine Goléa:

It is in a spirit of no confidence in myself, or I mean in the human race, that I have taken bird-songs as model. If you want symbols, let us go on to say that the bird is the symbol of freedom. We walk, he flies. We make war, he sings. Among birds most fights are settled by tournaments of song. Finally, despite my deep admiration for the folklore of the world, I doubt that one can find in any human music, however inspired, melodies and rhythms that have the sovereign freedom of bird-song.⁴²

Messiaen's statement gives another reason why he used birdsong in his music:

My faith is the grand drama of my life. I'm a believer, so I sing words of God to those who have no faith. I give bird songs to those who dwell in cities and have never heard them, make rhythms for those who know only military marches or jazz, and paint colours for those who see none.⁴³

Messiaen's interest in birdsong is deeply connected to his faith.⁴⁴ That is to say, Messiaen uses birdsong as a symbol of his faith. Birdsong appears in Messiaen's work throughout his life because it is a symbolic medium through which he is able to express his faith. He has previously called birds 'God's own musicians'. That is why Messiaen still employs birdsong in his religious music not only as mere musical material but also to act as a musical device to express his belief, which for him it is rather natural. Therefore, it is no surprise that we find birdsong in a piece titled as religious subjects such as '*Vingt regards sur l'enfant-Jésus*'. One of the typical birdsong patterns is made up of short notes with grace notes and are found in high register in Ex 1-2 and Ex 1-3, but the composer notates '*oiseaux*' simply. In Ex 1-4, Messiaen actually labels names of real birds: *le rossignol* (nightingale) and *l'alouette* (lark).

⁴¹ Hill, *The Messiaen Companion* by Sherlaw Johnson, p. 73, 76

⁴² Requoted from the article 'Messiaen's Birds' by Trevor Hold, p. 122, Messiaen in Antoine Goléa's book, *Recontres avec Olivier Messiaen* (Paris, 1961), p. 19, quoted by Austin, op. cit., p. 395

⁴³ *Independent*, 9, December, 1988

⁴⁴ Messiaen's birdsong music confesses his love of nature which arises from his faith.

Messiaen simply wanted people to listen birdsong which held an important meaning for him. It is not just birdsong acting as decorations to make music beautiful but birdsong itself is a representation of his faith, his concern with nature and his life.

Up to this point we can observe that birdsong is used in conjunction with other materials so it is not necessary that it alone is precisely accurate. It could be explained due to the fact that it is hard to transcribe real birdsong which is registered extremely high and has very small intervalled scales when compared to tempered musical instruments.⁴⁵ Another possible explanation is that it is simply used for religious symbolic resolution.⁴⁶ Messiaen was attempting to reintroduce a kind of melodic material into his music following his experiments of the late 40s, where he was playing with abstract concepts such as durations and dynamics (His own students were writing athenatic integral serial pieces in the early 1950s) and/or express his faith.

2. Earlier Composers' Birdsong

It is common that a birdsong is represented as single melodic line, in high register and sung fast with irregular rhythm so it is difficult to notate. It seems impossible to describe birdsong exactly as the bird sings with untempered tuning. Given these challenges, many composers have used it simplistically, in a '*style oiseaux*' such as scales, arpeggios, trills, grace notes and so on. Taken together with articulations, simple birdsong makes beautiful sound. It may be easy to recognise birdsong but it should not be regarded as a true imitation of birdsong, rather merely a symbol to express birdsong.

Before Messiaen, there were several well-known composers who composed pieces containing birdsong.⁴⁷

Daquin employed the call of the cuckoo in his solo harpsichord piece, '*Le Coucou*' (Cuckoo). It starts with minor third falling motif on the left hand which is regarded as

⁴⁵ Later to solve this problem Messiaen expands the intervals as appropriate into present instruments. "I am obliged to suppress the very small intervals which our instruments cannot play. I replace these intervals of the order of one or two commas by semitones, but I respect the scale of values between different intervals; that is to say, if several commas correspond to a semitone, then to the true semitone will correspond a whole tone or a third." (Sherlaw Jonson, p. 117, quoted from Samuel, p.95)

⁴⁶ Hill, *The Messiaen companion*, p.252

⁴⁷ They include Vivaldi (*The Goldfinch*), Couperin (*Rossignol en amour*, *Nightingale in Love*), Louis-Claude Daquin (*Le Coucou*, *Cuckoo*) and Beethoven (*Pastoral Symphony*), and are referred in the conversation between Messiaen and Samuel.⁴⁷ Added to these are Liszt who used birdsong in *Legend No.1 St. François d'Assise: La prédication aux oiseaux* (St. Francis of Assisi: Preaching to the Birds) and Ravel composed *Oiseaux Tristes* (Sad Birds) from *Miroirs* (Mirror). (Samuel, *Olivier Messiaen: Music and Color*, p.97)

a typical interval for song of cuckoo with major third. (Ex 1-5)

Beethoven used birdsong such as the cuckoo, quail and nightingale in his Symphony No. 6 'Pastoral', in his song 'Der Wachtelschlag' (WoO129) and 'Der Gesang der Nachtigal' (WoO 141).⁴⁸ In the 'Pastoral', Beethoven indicates the names of birds yet without stating the actual names directly, although it is not too hard to recognise the birdsong because the composer applies 'style oiseaux': stressed short notes finish with trills for nightingale, repeated notes in high register for quail and falling major third for cuckoo.(Ex 1-6)

Particularly Liszt's *Legend* No.1 from *Deux Légendes* was regarded as the one of the greatest birdsong repertoires until Messiaen is appeared. Liszt employed birdsong in his piano solo work, *St François d'Assise: la prédication aux oiseaux* (St Francis of Assisi preaching to the birds) and Ex 1-7 shows the typical birdsong shape: fast single line, trills and scales with regular rhythm of demisemiquavers.

Another example of *Oiseaux tristes* from *Miroirs* by Ravel shows simple birdsong with repeated notes and single lining in arpeggio. (Ex 1-8)

There are many more examples that have a typical birdsong shape, but clearly all shapes are adapted to that particular composer's own distinctive style.

Granados employed the song of the nightingale in 'Quejas, o la maja y el ruiseñor' (Complaint, or the Girl and the Nightingale) from his piano suite 'Goyescas' to contrast a sad girl with the beautiful sounds of a bird which sings freely in the garden. Birdsong in this piece represents a typical birdsong role which express beautiful virtuosic sound. For Messiaen, birdsong is not as simple as that expressed by other composers. It is more than just birdsong. Firstly, it has to be more realistic compared to other composers from early to modern music. Secondly, realism comes into Messiaen's music and that leads him into trying to notate even the environment that is the naturally occurring habitat of birds as well. Thirdly, he suggests towards imitating specific instruments for the proper timbre of birdsong. For example, for the Common Mynah (*Mainate Hindou*) and Red-billed Mesia (*Liothrix de Chine*), Messiaen instructs the player to produce the sound of wood (*timbre de bois*) for Chinese *Leiiothrix* in *Oiseaux exotiques*. (Ex 1-9 and Ex 1-10)

3. Messiaen's Birdsong Process

Like other composers, Messiaen's birdsong from his early works is used as a decorating device, which means that it contains several features of 'fluttering', 'chattering' or 'chirping' with high registered trills, abrupt calls and cluster chords. It is easy to find the examples because they have traditional 'bird-like' (*comme un oiseaux*) shapes. Through his life, however, Messiaen's birdsong had developed greatly in a variety of

⁴⁸ Sylvia Bowden, The theming magpie: the influence of birdsong on Beethoven motifs, *The Musical Times*, Summer 2008, p.17

complex ways to mimic real birdsong, and the birds appear in his music in many forms. They appear as various shapes: from a single melodic line to wide ranged harmonisation, as a main character or a decoration, as a soloist or chorus, or even as a sacred symbol, although the '*style oiseaux*' is still found in the pieces before the 'birdsong period'.

1) Early Works Which Include Birdsong

The next birdsong piece after *Lascension* is *La Nativité du seigneur* (1934-35) for organ, and is one that does not identify and specific birds. The term of '*oiseaux*' is used for the first time in *Quatuor pour la fin du temps* as indication and at the title. In the first and third movement of *Quatuor*, Messiaen indicates his intention to produce the sound 'like a bird' but there is no clue which bird is presented.

Ex 1-11, notated 'like a bird' (*comme un oiseaux*), shows 'bird-like' song which starts with high registered staccato and continues with trill, added notes, repeated calls and quick ascending and descending arpeggio. It is early work so that the approach of birdsong in this period is not so different from early composers like Beethoven. However, in Messiaen's birdsong the rhythm is irregular and more rhythmic, the note skips between, and the range is wider than in Beethoven's birdsong.

The examples below show the typical birdsong patterns in different ways: fast staccato arpeggios are ascending and descending with trill and accents (Ex 1-11 and Ex 1-12). Chords appear from *Vision de l'amen* and are very fast and loud chords presenting bird-like calls. (Ex 1-13, Ex 1-14 and Ex 1-15)

In *Visions de l'amen* (1943), the 5th movement is entitled '*Amen des anges, des saints, du chant des oiseaux*' (Amen of angels, saints and birdsong). For the primo part Messiaen demonstrates to play like birdsong and actually the primo consists of a faster moving single line with grace notes compared to the secondo which is notated with soft chords to give more resonance and underlying harmonies. (Ex 1-16) This is in fact the first appearance of birdsong in Messiaen's music. Hill insists that *Visions de l'Amen* is merely 'advanced' when compared to birdsong in the later piece, '*Quatuor pour la fin du temps*'.⁴⁹

The next piano piece, *Vingt regards l'enfant- Jésus* (1944) includes three movements – 5, 8 and 14th – which contain birdsong. In *Regard des hauteurs* (Contemplation of the heights) the exact names of the birds are notated on the score in the preface. Messiaen, especially, references 'lark' (*L'alouette*) which is 'the symbol for the heights'.⁵⁰ (Ex 1-17) However in the other two pieces, the birds are not specified as with earlier works and the pattern also has a traditional shape. (Ex 1-18 and Ex 1-19) In Messiaen's song cycle for soprano and piano, *Harawi: Chants d'amour et de mort*

⁴⁹ Hill, *The Messiaen Companion*, p.84-85

⁵⁰ *Ibid*, p.95

(Song of love and death, 1945) which consists of twelve movements, birdsong appears in various ways. The second, seventh and last movements are devoted to *colombe verte* (green dove), in particular in the second movement which involves real birdsong. Although the subject of this piece is about 'love and death' as the subtitle indicates, birdsong serves important functions. There are only two movements which directly mention a specific bird: the second *Bonjour toi, colombe verte* (Hello There, You Green Dove) and the tenth *Amour oiseaux d'étoile* (Love Star-bird). Messiaen occasionally indicates '*comme un oiseaux*' by using chirping or chattering sonority, and applies his musical technique to birdsong in the form of trills, repetition of notes, staccato, high pitches, grace notes and rapid movements. As a medium which has a huge advantage for describing birdsong, the piano not only accompanies the soprano but also takes a 'soloistic role'.⁵¹

In the fourth piece, *Chants des oiseaux* from *Livre d'orgue* (1951) and the seventh piece, *Soixante-quatre durées*, birdsong appears as the main material. *Livre d'orgue* contains seven movements and is symmetrically formed by *Chants des oiseaux* as a pivot. At the beginning of the score, Messiaen notated the exact names of birds and the time were notated.

'Après-midi des oiseaux: merle noir, rouge-gorge, grive musicienne - et rossignol quand vient la nuit...'

(*'Afternoon of the birds: blackbird, robin, song thrush - and the nightingale when darkness falls...'*)

In the last movement, *Soixante-quatre durées*, three birds are included: the great tit, great spotted woodpecker and blackcap. This group are used as main material with rhythmic series.

In *Livre d'orgue* each of the birds possess their own characteristics: specific tempo, register, dynamics and articulation. As a result, it is easy to recognise which species are singing. It seems that there is a direct association between *Chants des oiseaux* and the next work, *Le Merle noir* (1951-52) in which Messiaen employs the blackbird as a main character.⁵²

⁵¹ Kraft, *Birdsong in the Music of Olivier Messiaen*, p.84

⁵² *Ibid*, p.123

2) Birdsong Works Written Between 1952 - 1959

Between 1952 and 1959, Messiaen considered birdsong to be the most important material in his music. During this period four pieces are dedicated to birdsong: *Le merle noir*, *Réveil des oiseaux*, *Oiseaux exotiques* and *Catalogue d'oiseaux*, and the performance lengths increase from about 6 minutes to nearly 3 hours.

Messiaen was asked to compose a test piece for the Paris Conservatoire, and in 1952 he completed '*Le Merle noir*' for flute and piano that was the first piece entirely devoted to a specific bird, the blackbird.⁵³ Since '*Le Merle noir*', birdsong was applied into every one of his works until his death.⁵⁴

It seems obvious that in 1952 the meeting with Jacques Delamain affected Messiaen's music. *Le Merle noir* is the first piece that ornithologists admit to include sounds of birds and one that is entirely devoted to birdsong.⁵⁵ Until then he transcribed birdsong 'without being able to determine the name of the bird that was singing'⁵⁶ but after the lessons with Delamain, he could recognise the exact species of birds so started to mark the name of bird, its specific location and precise date on his music.⁵⁷ Messiaen commenced collecting birdsong distinctively. It is clear that the labelling of the exact names of birds on the music scores shows his confidence in his own ability to recognise specific birds.

According to Almut Rößler's conversation with the composer, Messiaen uses the principle of the Wagnerian 'leitmotif' for his birdsong which helps the listeners to recognise it easily by using same patterns, devices, instruments and timbre.⁵⁸ For instance, similar musical patterns are repeated for the song of the golden oriole. Ex 1-20 and Ex 1-21 from *Catalogue* are titled '*Le Lorient*' (Golden oriole) and in Ex 1-22 and Ex 1-23 from *La Fauvette des Jardins* it is noted in the score. In *Le Lorient*, the left hand sings golden oriole, in combination with the chords of resonance⁵⁹ on the right hand to give rich colour. It has regular rhythm with the same intensity. (Ex 1-20 and Ex 1-21) In *La Fauvette des Jardins*, and Messiaen placed a similar rhythmic pattern of demisemiquavers but focused more on birdsong itself without resonance. This time the song of oriole has more various intensities and articulations. (Ex 1-22 and Ex 1-23)

⁵³ Christopher Dingle, *The Life of Messiaen*, p.140

⁵⁴ Ibid

⁵⁵ Before *Le Merle noir*, birdsong mainly plays role of decoration in music. Birdsong became more realistic and more complicated.

⁵⁶ Samuel, *Music and Color*, p.91

⁵⁷ Dingle, *The Life of Messiaen*, p.140

⁵⁸ Kraft, *Birdsong in the music of Olivier Messiaen*, p.16

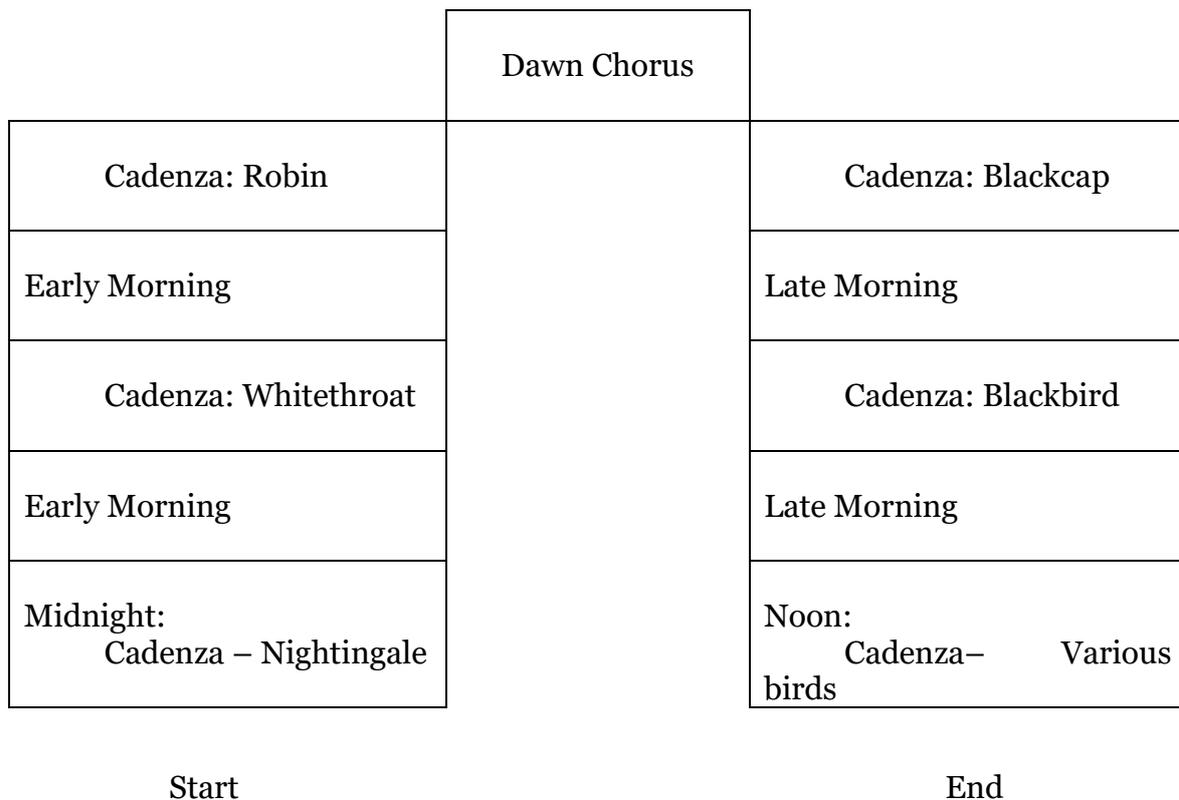
⁵⁹ See Appendix, p.144

***Réveil des Oiseaux* (1953)**

Réveil des oiseaux for piano solo and orchestra is a piece in which only birdsong is employed, and nothing else. This work is dedicated to the ornithologist Delamain and also to Yvonne Loriod who assisted in the notation of the piano part and ‘to the blackbirds, thrushes, nightingales, orioles, robins, warblers and all the birds of our forests’.⁶⁰ This piece was commissioned by Heinrich Strobel for the Donaueschingen Festival and premiered on 11 October 1953.

Réveil consists of birdsong that Messiaen collected on Delamain’s estate between *Cognac* and *Jarnac* in south-west France and in the woods around *St-Germain-en-Laye* and *Orgeval* of western Paris. For *Réveil*, Messiaen takes the idea of ‘time passing’ which begins at midnight, continues through dawn and culminates at midday, and the passage of time becomes an important source for the later work, *Catalogue d’oiseaux*. This arch-formed piece is divided by ‘dawn chorus’ which is also used for the title and the vigil in which some of birds kept throughout the night in spring are presented. (Fig.1-1)

Fig 1-1) Arch-form of *Réveil*



⁶⁰ See the ‘*Dédicade*’ (Dedication) in the score

This piece involves none of Messiaen's modes but it does return to a 'world of pure chromaticism'⁶¹ (nor does it use any rhythmic patterns drawn from Hindu or ancient Greek examples).

An impressive thirty eight species of birds sing in this piece and they primarily have a polyphonic texture and are rarely monodic. *Réveil* starts with nocturnal birds such as nightingales, little owls, woodlarks and Cetti's warblers which all reappear in the night music in *Catalogue*. Acting as the main instrument, the piano plays an important role including: 1) presenting many kinds of bird, 2) helping listeners to recognise important features of the music by using the piano marks structural devices, 3) creating specific timbres with harmonies and 4) changing mood between time flows.

Messiaen describes birdsong in spoken phrases such 'tikotikotiko' and 'tio, tio' and this indicates that which sounds should be made 'like a clavier' (*comme de clavecin*). There are many imitations of bird's singing in this piece: zap zip zap, é-di-di e-di-di, tioto tioto, vo- ï-dja, tiatïa tia and so on. (Ex 2-24 and Ex 2-25)

Birdsongs appear in the piano cadenza, arriving alternately with few instruments, whereas in contrast the orchestra presents twenty one birds in the 'dawn chorus'. Given that he proclaimed that the birds are the real composers of *Réveil des oiseaux*, Messiaen declared in his programme for the premiere this comment: "Don't include any biography, or any personal or musical information with my analytical note: I'm anxious to disappear behind the birds."⁶² Messiaen wanted only birdsong to be highlighted in *Réveil* because, according to him, birds are the real musicians.

***Oiseaux Exotiques* (1955-56)**

Due to his wife Claire's grave illness, Messiaen was not able to compose anything during although he was finally able to return to birdsong in 1955. *Oiseaux exotiques*, for solo piano and an ensemble of woodwind brass and percussion, was commissioned by Pierre Boulez and premiered as a part of the 'Domain Musical' series of concerts in March 1956. For *Oiseaux exotiques*, and distinguishable from other birdsong, Messiaen uses birdsong in America taken from gramophone records and transcriptions which were notated from his visit to the bird market in the centre of Paris where exotic birds from North and South America, China, Malaysia, India and the Canary Islands were exhibited.⁶³ Messiaen juxtaposes 48 kinds of birds that could

⁶¹ Malcolm Troup use this phrase for *Réveil des oiseaux*.

⁶² Hill and Simeone, Messiaen (2005), p.208

⁶³ Samuel, Olivier Messiaen: Music and Color, p.131.

Also see the article "*Oiseaux Exotiques* – Olivier Messiaen" by Birmingham Contemporary Music Group from the website <http://resources.bcmg.org.uk/assets/Resource/Downloads/Files/Oiseaux-Exotiques-Downloadable-Version.pdf>

never practically meet up or sing together in the real world. That is to say, this piece presents a ‘surreal’ situation which is impossible in nature but possible in an artificial environment, such as in a zoo or aviary. Messiaen juxtaposes birdsong without string instrument arrangement in order to produce ‘exotic’ timbre, and ancient Greek and Hindu rhythms are used as the only non-birdsong material to provide a steady rhythmic framework. These rhythmic devices produce a musical contrast with birdsong in free rhythms.

Birdsong serves to thicken the harmonies in an attempt to suggest timbre colourations. Messiaen uses birdsong more freely and is no longer limited on the melody possibilities or combinations. This piece includes various types of birdsong from monophony to hybrid texture where a number of parts are not fixed, but flexible. (Ex 2-26, Ex 2-27, Ex 2-28 and Ex 2-29)

Invented various musical devices combined with diverse birdsong are an attractive point of this work. The sentence below informs that Messiaen’s experiments through years had been assimilated:

By the time of *Oiseaux exotiques* the changes in language brought about by experiment had taken root. Messiaen’s music had become recognizably more modern in sound and spirit, stripped of excess emotional baggage (a world away from *Turangalîla*), with sharply sculpted ideas and concentrated structures. Most of all, *Oiseaux exotiques* was the work in which birdsong ceased to be an end in itself and became the starting point that challenged Messiaen’s creative imagination.⁶⁴

3) Catalogue d’Oiseaux (1956-1958)

In the cahier dated on 12 July 1953⁶⁵, there is evidence that Messiaen has a plan for a new birdsong piece for solo piano:

‘Pour pieces piano sur oiseaux: noter les rythmes et les silences des bruits de la forêt qui font le milieu dans lequel chante l’oiseaux... spécialement le soir: tombée de la nuit – grive musicienne et chouette hulotte (forêt)’

For the piano pieces on birds: notate the rhythms and silences within the

⁶⁴ Hill and Simeone, *Oiseaux exotiques*, p.112

⁶⁵ Cahier 23086, p.7

sounds of the forest which make the surroundings within the bird sings... especially in the evening; nightfall-song thrush and tawny owl (forest).⁶⁶

Messiaen composed the last work of the birdsong period (1952-1959), *Catalogue d'oiseaux* which was premiered by Yvonne Loriod on the 15th April 1959. This solo piano work, which is the second longest piece (about two hours and forty five minutes) among his works, is his finest achievement among birdsong pieces and should be considered as one of the greatest editions of the twentieth century piano literature. The thirteen pieces are divided into seven volumes symmetrically the longest piece of book four as a pivot: 3121213 and describes seventy seven kinds of bird and their natural habitat in France. The titles of each piece are determined by the principal birds and each piece is preceded by a short preface which indicates the specific place and time, describing the birds and their habitat. As we have said before, nineteenth century music is confined in its musical style and very particular idiom. In contrast with nineteenth century music, Messiaen could be more realistic and he therefore expresses his uniqueness⁶⁷ when he incorporates realistic birdsongs in the twentieth century. There are differences among birdsong pieces even within the birdsong period. One aspect is that *Réveil des oiseaux* and *Oiseaux exotiques* are played by many kinds of instrument, which could allow for an easier reproduction of various sounds and timbre of birds. However, and in reality, it might be one of the hardest tasks to reproduce proper birdsong in *Catalogue* with only one medium-piano. This seems to force the composer to invent 'new chords, sonorities, combinations of sounds and sound complexes'.⁶⁸ Another fascinating feature among his birdsong music is that *Catalogue* uses not only many kinds of birdsong but also numerous natural resources which are combined and juxtaposed with the main birdsong. In *Catalogue*, as programme music, Messiaen indicates every moment very specifically employing the exact colour and timbre he intends.

There are several ways of classification in *Catalogue* according to the materials at hand. The following broad facts should be considered in advance: the time of day, the time of month and the time of year, these all represent environments which may also give an indication as to whether or not the surroundings are noisy or not like sea, river or cliff, and also give sound to other creatures like insects and frogs.

It is already well-known that Messiaen's birdsong is based on real birds that he

⁶⁶ Hill, article *Réveil des oiseaux to Catalogue d'oiseaux* : Messiaen's *Cahiers de notations des chants d'oiseaux*, 1952-59, p.152 from *Messiaen Perspectives* 1, edit. Christopher Dingle and Robert Fallon (Ashgate, 2013)

⁶⁷ Firstly, the motivation that Messiaen employs birdsong to his music is unique because he wants to express his faith through birdsong. Secondly, his composition of birdsong is also unique because he had lessons from a bird expert and explored the wild to listen in order to and collect real birdsong. Finally, the composer develops his unique musical language to describe birdsong as he intends. Therefore, it is natural to say that Messiaen's birdsong expresses his uniqueness.

⁶⁸ Samuel, *Music and Color*, p.116

collected in the wild. As a natural following question, one should therefore consider whether the listeners are required to possess a similar level of knowledge of birdsong in advance to enjoy and understand Messiaen's music like he or other ornithologists would do. Here is Messiaen's opinion on this subject:

Knowing the bird and the landscape I want to depict must impart particular pleasure for the listener who rediscovers friends, childhood memories, or certain things lost in the back of the mind; in any case, that's my feeling. Nevertheless, the musical result is there, and the listener who doesn't recognise the bird songs may take pleasure in the music alone. Moreover, if the work succeeds, life is revealed on its own without identification being necessary. So many beautiful portraits of past centuries are of characters we don't know, yet they seem to us to be crying out with life and truth! We think we recognise people we've never seen because the paintings are successful.⁶⁹

That is to say, if the listeners have an ability to recognise birdsong, it can be helpful to recall their own, personal special memories. It is, however, not necessary in the enjoyment of the music for the listeners who just listen without any prior knowledge. After *Catalogue*, Messiaen composed *Chronochromie* (1959-60) for a huge orchestra, which contains eighteen bird sounds, all from France and sung together. Messiaen, then, continues to compose large scale pieces with big instrument arrangement and rarely composes birdsong works for solo piano. His next significant piano works include *La Fauvette passerinette* (1961), *La Fauvette des jardins* (1970) and *Petites esquisses d'oiseaux* (1985) and one piece of combination of birdsong and faith, *Un Vitrail et des oiseaux* (Stained-glass window and birds, 1986) for solo piano, brass, wind and percussion.

In this chapter, there is an exploration as to why Messiaen used birdsong in his music, what the characteristics of his birdsong are and how his birdsong is developed leading up to the production of *Catalogue*. Moreover, in order to compare this with other composers' birdsong, several pieces which involve birdsong by others are briefly introduced. They play a less important role in terms of acting as a decorating device than Messiaen's one.

It is impossible to deny that birdsong is the most valuable and fascinating material for Messiaen. That is why birdsong is the most often used source in his music throughout his life. It seems that the period between 1952 and 1959 is key for the prosperity of Messiaen's birdsong. Among the birdsong works, one can say with absolute certainty that *Catalogue* is the work which the composer highly shows his ability to present birdsong accurately and beautifully and is regarded as a remarkable standout piece.

⁶⁹ Samuel, *Music and Color*, p.96

Before going straight to examine non-birdsong material in *Catalogue*, I will discuss in the following chapter Messiaen's landscape/habitat to provide some strong suggestions as to why Messiaen was interested in landscape and used non-birdsong materials in his birdsong music. This will acknowledge the validity and role of landscape in birdsong by Messiaen.

CHAPTER II

LANDSCAPE IN MUSIC

Chapter 2

Landscape in Music

II Paysage

Le lac comme un gros bijou bleu,

*La route pleine de chagrins et de
fondrières,*

*Mes pieds qui hésitant dans la
poussière,*

Le lac comme un gros bijou bleu.

*Et là, verte et bleu comme le
paysage!*

*Entre le blé et le soleil je vois son
visage:*

Elle sourit, la main sur les yeux.

Le lac comme un gros bijou bleu.

II Landscape

The lake like a big blue jewel,

The road is full of pitfalls and
quagmires,

My feet falter in the dust,

The lake like a big blue jewel.

There she is, green and blue like the
landscape!

Between the corn and the sun I see her
face:

She smiles, her hand up to her eyes.

The lake like a big blue jewel.

From *Poèmes pour Mi*, song cycle
(1936)⁷⁰

Landscape, that place where birds live and sing, is one of Messiaen's three loves (God, human, nature) that are repeatedly presented in his music. The lyrics of this song, titled as '*Paysage*' (Landscape), are filled not only with his love for his first wife, Claire Delbos but with 'images reflecting'⁷¹ a small village, Petichet where the couple's

⁷⁰ Translation from Sherlaw Johnson, Messiaen, p.56

⁷¹ Hill and Simeone, *Oiseaux exotiques*, p. 66

summer house was located near Grenoble in the French Alps. This also demonstrates that Messiaen has long been attracted by to nature/ landscape.

Messiaen's love for nature started when he was very young. His mother, Cécil Sauvage wrote a volume of poetry, entitled '*L'âme en bourgeon*' (The Soul in Bud) for him⁷² and it served to motivate him in relation to both nature and music. Her works inspired him and influenced in his music which contains birdsong. According to her letter to her husband, Pierre Messiaen, (Olivier) Messiaen appears to begin showing an interest in nature.

With Olivier I leafed through *L'âme en bourgeon*. It's for you, I said to him, with its bees and grasshoppers. Mummy, he said, you're a poet just like Shakespeare. Like him, you have suns, planets, ants, and frightening skeletons. I prefer things which are frightening.⁷³

Here follows Messiaen's reference to nature which explains the background against which he began writing down birdsong.

As with music and faith, always.... my memories go back to the age of fourteen or fifteen, when I used to stay in the Aube region with aunts who owned a rather quaint farm, with sculptures by one of my uncles, a flower garden an orchard, and cows and hens. ... The Aube countryside is very beautiful and very simple: the plain, the big meadows surrounded by trees, magnificent sunrises and sunsets, and a great number of birds. It was there that I first began jotting down bird songs. ⁷⁴

After meeting with Delamain in 1952, Messiaen's knowledge surrounding birds became deeper and more professional, while at the same time his interests in musical experiment⁷⁵ seemed to get lessen. As his interests in birdsong grew further, he

⁷² There is no dedication in the first edition (1910) but it has dedication to Messiaen after her death posthumous (1929).

⁷³ Hill and Simeone, *Oiseaux exotiques*, p.10

⁷⁴ Samuel, Olivier Messiaen Music and Color, p.33

⁷⁵ Messiaen invented a diverse musical language such as mode of limited transposition, mode of values and intensities, various chords and so on. He also used Ancient Greek and Hindu rhythms. He sought new musical ideas like other modern composers and applied them to his works. This was particularly prevalent during the period between 1949 and 1951, which is known as 'The Experimental Period'.

started to observe nature as a whole, where birds live and sing and of which he had been fascinated throughout his life. Messiaen explained the reason why he converted from his technical theory to one that was more based on nature, as per his programme note about *Catalogue d'oiseaux* in 1959:

Nature, birdsong! These are my passions. They are also my refuge. In melancholy moments, when my uselessness is brutally revealed to me, [...] what else is there to do except search for the true face of Nature, forgotten somewhere in the forest, in the fields, in the mountains, on the seashore, among the birds? For me, it is here that music lives: music that is free, anonymous, improvised.⁷⁶

For Messiaen, nature is a great wellspring which is full of sound. According to Hill, Messiaen is such a person inspired more by the wild, and his papers (cahiers) are filled not only with birdsong but also with squiggling of all kind of birds and landscape.⁷⁷ Hill also states that 'nature was his great passion: he would vocalize birdsong imitations, his expression suffused with enchantment as he recalled the settings in which he had collected their song...'⁷⁸

Messiaen spent his spare time devoted to researching birdsong in nature: during weekends during the spring he escaped to the forests on the western edge of Paris and during the summer he visited his holiday house at Petichet. He travelled throughout France and abroad to teach music at the music schools and attended concerts of his music. Visits to his wife Claire Delbos at her nursing home in La Varenne on Sundays were of crucial importance to his composing as it allowed him to notate birdsong while he was there. In his interview Matthew Schellhorn mentioned that Messiaen made "no distinction between noise and sound – the sounds of wind and water, or mountain streams and waterfalls, all constituted music."⁷⁹ For him it is, also, perfect.

⁷⁶ Guide du concert, 3 April 1959, p.1093, requoted from Hill and Simeone, Messiaen, p.201

⁷⁷ Hill, From *Réveil des oiseaux* to *Catalogue d'oiseaux*: Messiaen's *Cahiers de notations des chants d'oiseaux*, 1952-59 from *Messiaen Perspectives 1*, edited by Christopher Dingle and Robert Fallon, p.143 (Ashgate, 2013)

⁷⁸ Hill, *The Messiaen Companion*, p. 274

⁷⁹ Interview with Matthew Schellhorn about 'Messiaen and the freedom of birdsong, quoted from *Fifteen Questions*, www.15questions.net

... nature never displays anything in bad taste: you'll never find a mistake in lighting or coloration or, in bird songs, an error in rhythm, melody, or counterpoint.⁸⁰

As mentioned in Chapter 1, there are many composers who are fascinated by birdsong. In the same way, there are many composers who were interested in landscape and nature. And in a conversation with Samuel, Messiaen directly mentions several composers, such as Berlioz and Wagner, who were captivated by mountains, and Debussy, who was fascinated by water, clouds, mists and all of nature's spectacles.⁸¹ There are other composers that can be added to the list: Liszt travelled to Italy and Switzerland and composed '*Années de pèlerinage*' (Years of Pilgrimage) which describes the scenery with the inspirations during the voyage. Ravel, who loved water, composed '*Jeux d'eau*' (Fountains) – in this piece, not only describes water but adds his emotions. Ravel also composed '*Ondine*' from *Gaspard de la Nuit*.⁸² Messiaen also composed several pieces which portrayed only the landscape. For instance, in *Préludes* there are two pieces that depict landscapes: No.2 *Chant d'extase dans un paysage triste* (Song of Ecstasy in a Sad Landscape) and No.8 *Un reflet dans le vent* (A Reflection in the Wind).

As mentioned previously, it is not hard to find musical works related to birds or nature. However, the most distinctive features of Messiaen's birdsong compared to others is when considering the coexistence of habitat and birdsong. The greatest intrigue is found in the organisation of them and the way he expresses landscape, which obviously does not have actual sounds as music. Of course, it can be said that wind and water do in physical action create sounds, although it would probably be more appropriate to consider it as noise rather than sound. Messiaen organises landscape as one of the structural elements and one of the devices with which to distinguish birdsong in music. Needless to say, it is hard to search for music that has been treated equally in terms of both birds and habitat together in one piece by other composers. There is one example; and we turn to Bartók, who Messiaen was influenced by and composed several pieces associated with birds and nature. Bartók's love of nature⁸³, especially his attraction

⁸⁰ Samuel, Olivier Messiaen: Music and Color, p. 33

⁸¹ *ibid* p.97

⁸² There are lots of orchestral and vocal pieces about landscape but here only piano pieces are listed.

⁸³ Bartók's works using birdsong and nature together form 'Night music' from the 'Out of Doors' piano suite (1926), the third movement of the String Quartet No.4 (1928), the second movement of Piano Concerto No.2 (1930-31), Music for Strings, Percussion and Celesta (1936), Sonata for Two Pianos and Percussion (1937), 'Elegia' from Concerto for Orchestra (1943), and the second movement of Piano Concerto No.3 (1945). On particular note at the beginning of 'Night Music' from 'Out of doors', frogs' calls and noises of insects are presented, which may have influenced Messiaen himself to add noises of frogs and insects in his birdsong piece '*La Rousserolle effarvate*' from *Catalogue*.

with bird calls and insects is relatively less known than Messiaen. Bartók travelled to collect and record folk songs with an old-fashioned heavy recording machine like Messiaen and Yvonne did.

In this chapter, I will examine:

- The motivations for adding landscape into Messiaen's birdsong music
- The importance of landscape in Messiaen's birdsong music
- The evolution of the process in effecting the transition from nature to music
- The features of landscape which have effect on birdsong

1. Motivations

When Messiaen heard birdsong, he considered it to be genuine music. Additionally, when he finished the *Réveil des oiseaux*, he assured that the birds were the real composers.⁸⁴ At the same time Messiaen refers for the first time to his new birdsong.

For the piano pieces on birds, notate the rhythms and silences within the sounds of the forest, which make the environment within which the bird sings.⁸⁵

Laszlo Somfai and M.A. Harley mentioned the similarity between Messiaen and Bartók in their books.

Laszlo Somfai, 'Analytical Notes on Bartók's Piano Year of 1926', *Studia Musicologica Academiae Hungaricae*, 26(1984), p.8 Harley, Bartók's Essay, 'Natura Naturans, natura naturata and Bartók's Nature Music Idiom', *Studia Musicologica Academiae Hungaricae* 36/3-4 (1995), p. 331

(Quoted from Chiat, Olivier Messiaen's *Catalogue d'oiseaux*; a performer's perspective, p. 28-9)

⁸⁴ Hill and Simeone, Messiaen, p.208

⁸⁵ Cahier 23086, p.7 made on 12 July 1953, quoted from Chapter 7 *Réveil des oiseaux* to *Catalogue d'oiseaux*: Messiaen's *Cahiers de notations des chants d'oiseaux*, 1952-59 by Peter Hill from Messiaen Perspective 1: Source and Influences edited by Christopher Dingle and Robert Fallen, p.152 (Ashgate, 2013)

When he travelled to several countries to collect birdsong, he always took pen and paper. It was a form of 'lifelong rule' to write down birdsong on paper straight from nature:

I make one notation on the spot with all the variations, and my wife makes a tape recording which is less varied than mine, but which captures everything exactly. Then I make a second notation from the tape recorder which is more exact but less artistic. [...] So, I always have my notations, one exact and one more artistic, and I mix the two.⁸⁶

Sherlaw Johnson mentions that 'composition was inspired by Messiaen's journeys throughout the different regions of France for the purpose of gathering birdsong'.⁸⁷ There is no wonder that anything he felt, saw, heard and smelt during the journey has an effect on his compositions even though the purpose of Messiaen's trip was just collecting birdsong. In other words, it is neither listening to audio nor watching scenery at home, but physically going out into wild, itself, that should have the full effect on his music.

According to Sherlaw Johnson's classification of non-birdsong material used in *Catalogue*, there are five groups:⁸⁸

- I. Mode: twelve-tone. Rhythm: (a) Greek of Sharngadeva
(b) Permutation series
(c) Free
- II. Mode of pitches, durations and intensities
- III. Modes of limited transposition
- IV. 'Turangalila' motives
- V. Colour-chords other than those in groups I and III

These groups will be explored in greater detail in Chapter IV Analysis of landscape.

⁸⁶ Roger Nichols, unpublished interview with Messiaen, 1978, quoted from Hill and Simeone, Messiaen, p.208

⁸⁷ Sherlaw Johnson, Messiaen p.116

⁸⁸ Ibid, p.136-137

In order to collect birdsongs, Messiaen had to go out to nature to listen to and notate birdsong directly and this operation plays a significant role to the composition of his birdsong. In such a natural setting, it is reasonable to assume that the composition was affected by the composer's own experience of the genuine habitat where birds dwelt, flew and sang. In fact, the journey itself was a source of inspiration, providing him with the astonishing views of the blue sea, cliffs, terraced vineyards, woods and permanent snow. These features and more became the base of the pieces from *Catalogue d'oiseaux* entitled 'Le Merle bleu', 'Le Traquet rieur' and 'Le Traquet stapazin'.⁸⁹

Hill refers to the importance of landscape as follows:

He relied always on observations made 'in the wild'; for this reason, the place is important to his music – and the pieces of the *Catalogue* are as much about the landscapes of France as about the birds that inhabit them.⁹⁰

From Hill's statement, we can notice that for Messiaen, landscape and his feelings for the nature as a whole are as important as the birdsong itself. In particular in *Catalogue*, landscape plays a highly significant role. There are a whole range of birds that sing at night, during the day or at dawn, in the mountain, desert, field or at sea, in April, June or July – birds usually sing between spring and summer. Thus, it is not an exaggeration to say that birds sing not only because of the surrounding landscape and time but also for any multitude of reasons, including mating calls.⁹¹ If *Catalogue* was composed without all these non-birdsong materials, it might have been difficult to recognise the piece as solely one of the great repertoires for the pianist. One might suppose that were *Catalogue* composed without non-birdsong materials, it would likely be much shorter, and simpler such as that found in later birdsong pieces for solo piano such as *La Fauvette passerinette* (the Subalpine warbler, 1961)⁹², *La Fauvette des jardins* (Garden warbler, 1970)⁹³ and *Petites esquisses d'oiseaux* (Small sketches of birds,

⁸⁹ Samuel, Olivier Messiaen: Music and Color (1994), p.35

⁹⁰ Hill, The Messiaen Companion (2008), p. 326

⁹¹ Messiaen contains not only song for love but also 'flight of nuptial' (*vol du nuptial*). See score *La Bouscarle* from *Catalogue*.

⁹² There is one more birdsong work for solo piano which is *La Fauvette passerinette* (the Subalpine warbler. This piece was composed in summer, 1961 although it was uncompleted. It was found and completed by Peter Hill and premiered in 2013. This is will be excluded in this study because Hill edited it, and should simply be regarded as another of Messiaen's pieces for *Catalogue*.

⁹³ The main bird is a garden warbler, although eighteen other birds are also presented. The birds sing at the Dauphiny mountains of Isère during a mid-summer night and the following day. (from the preface)

1985).⁹⁴ In fact, the length of *La Fauvette des jardins* (app. 30 minutes) is only than one fifth⁹⁵ of *Catalogue* and is of a similar length as *La Rousserolle effarvate*, the longest movement of *Catalogue*. *Petites esquisses d'oiseaux* lasts only 15 minutes, and is one eighth of *Catalogue*. In these two works, landscape does appear, although its role was noticeably and sharply reduced.

La Fauvette des jardins consists of only one movement and there are presentations of birds' singing as well as landscape which presents the composers' favourite place to visit, the mountain Dauphiny. In this work non-birdsong material is still presented yet the overall impression of his feature was weaker than that found in *Catalogue*.

Each movement that excludes IV *La Grive musicienne* from *Petites esquisses d'oiseaux* starts with complex chords before birdsong appears. According to the preface, the chords progression presents colour changing as non-birdsong material. For the blues, reds, oranges and violets Messiaen uses transposed reversal chords⁹⁶ and in order to add more violent or delicate colours, chords with contracted resonance and chords of the chromatic total are applied. Of particular note is that most of the chords and notes are arranged in treble clef except for a few chords or notes. That is a strong indication that birdsong plays the main role in this piece, in contrast with the harmonic chords as non-birdsong material which play a less important role. There are examples of this contrast in *Le Rouge gorge* and *Le Merle noir*. (Ex 2-1 and Ex 2-2)

Kraft reports that Messiaen used natural sound to accompany his birdsong. As an accompanying part plays an important role in song works, background music should also not be undervalued. Besides, Messiaen's synaesthesia⁹⁷ makes it possible for him to describe non-birdsong material which does not have sound such as the landscapes, fragrances, colours and the passage of time.⁹⁸ It also supports the reason why Messiaen applies nature to his birdsong music.

⁹⁴ Composed of six short movements and dedicated to his wife Yvonne Loriod. Three pieces are devoted to *Le Rouge gorge* (robin) and the other three pieces appears alternately with the robin

⁹⁵ The running time varies due to several popular recordings of *Catalogue*. Peter Hill's version is about 130 minutes, Pierre-Laurent Aimard is about 150 minutes and Anatol Ugorski's is about 150 minutes.

⁹⁶ TRC (transposed reversal chords) are the chords that Messiaen developed for his music. The explanation and the examples are attached in the appendix.

⁹⁷ Messiaen mentioned "I see colours when I hear sounds, but I don't see colours with my eyes. I see colours intellectually, in my head." (From *How Olivier Messiaen Heard in Color* by Geoffrey Brown, 25/01/08 Times newspaper) That statement proves that Messiaen has synaesthesia. However, it is still debated among scholars, and Messiaen's synaesthesia has not yet been conclusively confirmed.

⁹⁸ Kraft, *Birdsong in the Music of Olivier Messiaen*, p.17

2. Importance of Landscape

One of the most important components to observe in the *Catalogue* is the landscape. The habitat cannot be separated from the birdsong because bird calls are varied depending on the variety of time and places in which it is found; even if they are the same kind of birds, it makes a difference from the other pieces.

Messiaen insisted on the reasons why ‘nature’ was important material:

There are a thousand ways of probing the future... I only wish that they would not forget that music is a part of time, a fraction of time, as is our own life, and that Nature, ever beautiful, ever great, ever new, Nature, an inextinguishable treasure-house of sounds and colours, forms and rhythms, the unequalled model for total development and perpetual variation, that Nature is the supreme resource.⁹⁹

For Messiaen, therefore, ‘Nature’ presents not only musical material but also serves as a musical device through which there is a plentiful supply of a variety of birdsong.

In the conversation with Samuel, Messiaen refers to how the background affects the birdsong:

“... free songs... generally (birds are) provoked by the beauties of dawning or dying light. Thus, I’ve noticed in the Jura an especially gifted song thrush, whose song was absolutely brilliant when the sunset was very beautiful with magnificent red and violet lighting. When the colour was less beautiful or the sunset was shorter, the thrush didn’t sing, or sang less interesting themes.”¹⁰⁰

Because birdsong is changed by time and places, music can be enriched and varied by non-birdsong resources. Messiaen referred to the ‘great diversity’¹⁰¹ of different areas:

⁹⁹ Quoted from Dingle, ‘The Life of Messiaen’ p.137, Olivier Messiaen, *Conférence de Bruxelles, prononcée à l’Exposition Internationale de Bruxelles en 1958* (Paris: Alphonse Leduc, 1960), p.14

¹⁰⁰ Samuel, Olivier Messiaen: Music and Color, p.86

¹⁰¹ Quoted from *ibid*, p.86

Indeed, the difference is considerable according to the species; first, according to the species of the same habitat, and, finally, on a larger scale, according to the same species throughout the world.¹⁰²

From the view expressed above, we can notice that even the birds of the same species sing in a different way in different regions. It also proves that birdsongs are affected by landscape whereby the habitat gives variety to the avian calls. The result is that adding non-birdsong sources can be one of the methods to make birdsong music more diverse. In order to listen to more beautiful birdsong Messiaen seems to travel directly into the wild and collect it at specific time at certain places. The statement below supports this.

Messiaen also mentions the difference with listening to birdsong in woods:

If he (a listener) was taken to the edge of a forest or into a park, he'd also have the beauties of light, the perfume of dew on the leaves and on the grass, the perfumes of the flowers; he'd have an entire familiar context of landscape, scent, colour, and thermal sensation, which would render the aural phenomenon very natural for him... Also, an individual hearing these bird songs in nature gives them minimal attention ...¹⁰³

From these quotations, we recognise the importance of landscape in Messiaen's birdsong works. Messiaen once again insists that birdsong is changed by the surrounding landscape.

The reason why non-birdsong is important is that landscape here plays the role of structure. For instance, very loud chords constructed by the twelve tone are used to describe diverse mountain sceneries: glacier of the Meije (*le glacier de la Meidje*) at the beginning, the fallen logs around the warren of Saint Christophe (*chaos de blocs écroulés du Clapier Saint Christophe*) in the middle, and the mystic stone circle of Bonne Pierre (*Cirque fantomatique de Bonne Pierre*) at the end of the first movement, *Le Chocard des Alps*. These three sections are called 'Strophe', 'Antistrophe' and 'Epode'¹⁰⁴ by Messiaen and are distinguished from strictly birdsong.

Moreover, by juxtaposing birdsong and landscape, birdsong becomes radiant: usually birdsong is arranged in a high register with a single melody line and is fast-paced. On the other hand, non-birdsong is organised in low register with various chords.

¹⁰² Ibid, p.86

¹⁰³ Ibid, p.132

¹⁰⁴ They are poetic terms originated from Ancient Greek tragedy and Messiaen borrowed the concept for his music and it is also used in *Chronochromie*.

For this study, *Catalogue* is the main work under discussion and the landscape is the most distinguishable compositional feature, in contrast with other works. To present landscape, Messiaen takes his various musical language and uses it to mimic instruments or express colours, the overall efforts and effect being that *Catalogue* becomes a truly special piece.

In *Quatuor pour la fin du temps* (1941), Messiaen indicated a specific time (between three and four o'clock in the morning) for the first time. Subsequently, *Réveil des oiseaux* (1953) was the first piece that portrays a time flowing from midnight to midday.

Messiaen's cahiers are filled with not only music but also words which describe 'unfamiliar landscapes of Japan or Utah, a storm in the mountains, the colours of dawn and sunset'.¹⁰⁵ They show that he started to collect both birdsongs and landscape at the same time. In fact, only birdsong is transcribed on the manuscript papers, whereas there is no music for landscape transcribed when he was in the wild. He seems to write down the single melodic line of birdsong which represents his first hearing of the sound, together with sketches of the landscape which are his first visual impressions of the scene, with some comments.

This may be because the landscape does not possess musical sounds but it does have shapes or movements. In order to transcribe landscape into music, therefore, imagination is needed so that the procession is quite subjective compared to birdsong. That is why Messiaen's writing of natural components can, and should rightly, be considered to be one of his most unique characteristics when assessing how he differentiate his birdsong music from other birdsong or pieces which represent natural landscape.

In order to explore how *Catalogue* was processed I quoted and edited the Fig 2- 1 from Chiat's thesis. Fig 2-1 informs us what Messiaen did between 1955 and 1959 during his birdsong period. It also shows us the exact places where Messiaen listened to and collected birdsong and the dates when the birds were singing. Messiaen made a short note to capture the landscape, such as ponds, lakes, Mediterranean coasts, mountains and so forth and translated it into music in *Catalogue*.

Fig 2-2 is drawn on the evidence of Fig 2-1 and shows how the journey had proceeded when Messiaen was collecting birdsong. Here we can observe that Messiaen travelled to collect French birdsong between 1955 and 1959. He spent a great deal of time wandering around the mountains in the south of France, as well as the south and west seaside areas.

¹⁰⁵ Hill and Simeone, Messiaen, p.204

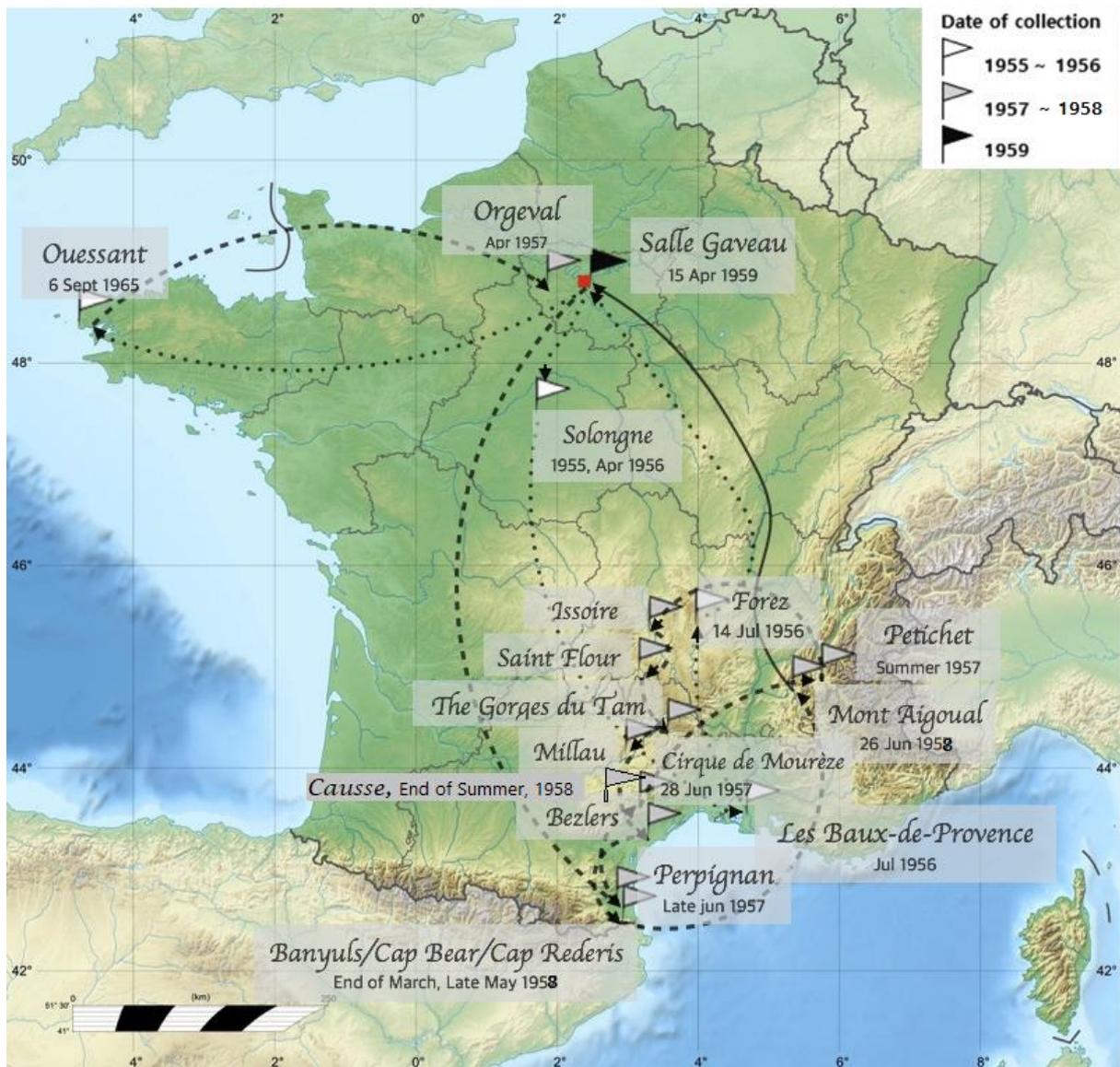
Fig 2-1) Dates and places of Messiaen's collection of birdsongs used in *Catalogue*¹⁰⁶

Date	Place and Event	Related movement in <i>Catalogue d'oiseaux</i>
1955	In the Solongne region (south of Orléans), with its network of ponds and lakes and among the marshes where Messiaen found the reed warblers	<i>La Rousserolle effarvatte</i>
1956 April	Second visit to the same place after the performance of <i>Oiseaux exotiques</i>	<i>La Rousserolle effarvatte</i>
July	First time experiencing the birds of Provence and Mediterranean coast	<i>Le Merle bleu</i> and <i>L'Alouette calandrelle</i>
	Discovered the interesting landscape which are strange shapes of rock at Les Baux	<i>Le Merle de roche</i>
14 Jul	Went to Paris, travelled via the Forez, an area on the north-eastern slopes of the Massif Central. On the way Messiaen heard a flock of woodlark.	<i>L'Alouette lulu</i>
6 Sep	Second trip to Ouessant	<i>Le Coulis cendré</i>
Early 1957	Composed six pieces of <i>Catalogue d'oiseaux</i>	1. <i>Le Chocard des Alps</i> 2. <i>L'Alouette lulu</i> 3. <i>La Chouette hulotte</i> 4. <i>Le Lorient</i> 5. <i>L'Alouette calandrelle</i> 6. <i>Le Courlis cendré</i>
30 March	Loriod gave the premiere of these six movements at a Domaine Musical concert.	
April	Went to <i>Orgeval</i> On the way, Loriod and Messiaen visited Chartres. At Gardépée, he discovered a number of 'warblers'. This trip may have inspired him to set ' <i>La Bouscarle</i> ' on the banks of the Charente.	<i>La Bouscarle</i>

¹⁰⁶ Quoted from the thesis by Chiat and edited to make proper to my subject, p.20-22

Late June	Travelled south to the region of Perpignan where he explored with the ornithologist Herni Lomont. Saw rocky coastline near Banyuls.	Sketches which have some notation contributed to <i>Le Merle bleu</i> , <i>Le Traquet stapazin</i> and <i>Le Traquet rieur</i> .
28 June	Cirque de Mourèze	<i>Le Merle de roche</i>
Summer	Petichet	Reworking <i>La Rousserolle effarvate</i> which grows from 14 minutes to 32 minutes.
1958 End of March	Collecting birdsong – South through central France, via Issoire, Saint Flour, The Gorges du Tam, Millau and Beziers, to Banyuls on the Mediterranean coast south of Perpignan	
Late May	Returned alone to Banyuls, enchanted by the scenery of Cap Béar and Cap Rederis.	Later stage of <i>Le Merle bleu</i> and <i>Le Traquet stapazin</i> .
End of summer	Set off south, research the birds of Causse	
26 June	Arrived at Mont Aigoual, the highest peak in the Cévennes	
	Loriod accompanied Messiaen on his birdsong voyages with a tape recorder	
End of summer	Showed Loriod new pieces	<i>Le Merle de roche</i> and <i>Le Traquet rieur</i>
Early 1959	Loriod had six new pieces to prepare	<i>Le Merle bleu</i> , <i>Le Traquet stapazin</i> and <i>La Buse variable</i>
15 April	Première of <i>Catalogue d'oiseaux</i> at the Salle Gaveau	

Fig 2-2) Map of Messiaen's trip in France between 1955 and 1959



3. Elements of Approach to Landscape

The four general elements that make up Messiaen's approach to landscape will be stated briefly.

1) Examination of Nature

As mentioned in chapter one, nature is one of the most important themes in his music. Needless to say, Messiaen's interest in birdsong is deeply related to his love of nature. Nature, such as 'wind and the waves of the sea', which can be said to have sound and rhythm, frequently gives off essential effects in the birdsong pieces.¹⁰⁷ Messiaen himself said that 'nature ... is a marvellous teacher and has been very useful to my work'.¹⁰⁸ Moreover, he suggests that there is no distinction between the sounds of nature such as wind, water, streams and waterfalls, all create music.

For Messiaen the natural world, that God created, means more than reality; it is a more completed reality than the artificial world that man has made.¹⁰⁹ He records his perspective on nature in his article '*Le Guide du Concert* (3 April 1959).

... when I suddenly became *aware of my own futility, when every musical idiom- classical, oriental, ancient, modern and ultramodern-* appears to me as no more than admirable, painstaking experimentation, without any ultimate justification, what is left for me but to seek out the true, lost face of music somewhere off in the forest, in the fields, in the mountains or on the seashore, among the birds.¹¹⁰

His love of nature compelled him to become even closer to nature, to meet the vastness of landscape and observe the habitat for himself and in great detail. Taken together with all of his own musical language, he expresses his love of nature, that is, love of God. Therefore, for Messiaen as such a believer of God's creation, natural settings deserved to be an important element with which he could express his love of nature.

¹⁰⁷ Sherlaw Johnson, Messiaen, p.116

¹⁰⁸ Samuel, Music and Color, p.35

¹⁰⁹ Sherlaw Johnson, Messiaen, p.117

¹¹⁰ Requoted from Sherlaw Johnson, p.117, quoted by André Hodeir in his book *Since Debussy* (trans. By Nigel Burch), p.117

2) Enhancement of Birdsong

Let us suppose that there is a listener who has little knowledge of birds and has rarely heard a birdsong because he lives in the big city without woods or parks nearby. He may not recognise exactly what sort of birdsong Messiaen intended to describe, but he may notice which part concerns birdsong and which part does not. Messiaen's birdsong has developed and progressed throughout his years (in fact throughout his whole life) so his take on the bird and its song has its own character as well as possessing a traditional 'bird style' (*style oiseaux*).¹¹¹ Birds sing fast or start slow and get faster with a high registered single line or octave. Added notes and dotted rhythms satisfy Messiaen's love of rhythmic freedom. Trills and repetitions create the birds' chattering and flickering sounds. All of these devices give insight into birdsongs to listeners, while low registered slow chords, simple rhythmic patterns, and steady speed are used for non-birdsong materials. There can be one exception causing confusion between birdsong and water due to the fast ascending and descending movements with *cresc.* and *dim.*

In Ex 2-4, the 1st *Cochevis de Thekla* (Thekla lark) has a shape of E \flat -B \flat -A \flat -E \sharp which is similar with water in Ex 2-1 and similar shape of *cresc.* and *dim.* The beginning of the water figure looks like birdsong yet the ending shows a traditional water shape like wave which concludes with a softer descending pattern. (Ex2-3)

Ex 2-5 looks like there is an interruption of birdsong (the second bar) between waves yet it is still one continuous wave. It is a traditional bird-style with stressed short notes finished shortly and here Messiaen actually notates 'whip' (*fouetté*). The whipped pattern seems to represent dropping or splashing water.

Guillemot (*Guillemot de Troil*) (Ex 2-6) has similar shape of D \flat -E \flat -A \sharp (C-E) -B \sharp to that of a wave (Ex 2-7) and also of the ascending and descending ideas with *cresc.* and *dim.* However, the wave moves faster ($\text{♩}=176$) and is placed in a lower register than the guillemot. ($\text{♩}=144$) The last bars of both Ex 2-7 and Ex 2-8 have the similar shape of D \sharp - C \sharp - (F \sharp) - C \sharp - (G7- F \sharp - A \sharp - E \flat) - E \flat in the same tempo and range, even though one is a wave and the other is the guillemot. This means that water is the element most closely associated with birdsong among non-birdsong materials. This shows that Messiaen did not always add big differences between birdsong and non-birdsong. By adding little changes into the music, the work subtly identifies the diversity of sounds. Aside from a few exceptional examples, Messiaen juxtaposes landscape at the beginning, between birdsongs and at the end, and it provides excellent points of comparison, allowing us to divide them easily so that it does adorn only to birdsong.

¹¹¹ The term of '*style oiseaux*' is used for the features which is unlabelled but can be assumed as a bird or sounds like birdsong. (Hill, *The Messiaen Companion*, 2008, p.250)

However, it is not too difficult to recognise which one is birdsong or water.

Messiaen uses dynamics to make big comparison between birdsong and non-birdsong. Commonly bird calls have weak volumes so that the range of volume could be wider from *ppp* to *fff*. The loud unfamiliar chords for landscape give more focus on the soft melodic birdsong with splendid grace notes. That is to say, Messiaen adds landscape for the sake of demonstrating the variety within the birdsong.

3) Painting of Musical Sounds

While birdsong is expressed in vivid, short and rhythmical timbre to imitate the real birdsong, the non-birdsong material excluding water is noted slowly with exaggerated and lengthened notes. It is difficult to create smooth phrases in the landscape sections due to the unexpected directions and irregular phrase shapes that the composer has to contend with.

In interview with Claude Samuel, it is clear that Messiaen considered the habitat as an important source of material and strove to depict it accurately. On the *Catalogue*, Messiaen says:

I have tried to render precisely the typical song of a region, surrounded by those of neighbouring habitats, as well as the singing at different hours of the day and night, accompanied in the harmonic and rhythmic material by the perfumes and colours of the countryside in which the bird dwells. Personally, I am very proud of the exactitude of my work.¹¹²

Claude Debussy seems to know that nature gives a colour to music and that there is a connection between sound and colour: “To see the sunrise is more useful than listening to Beethoven’s Pastoral Symphony.”¹¹³ Messiaen, who considers colour as one of the most important factors for his composition, may need to paint his birdsong with nature. Like stained glass which needs light to make fabulous colours, the composer actually labels colours where he needs them.

¹¹² Samuel, Olivier Messiaen: Music and Color, p.94

¹¹³ Ibid, p.36

4) Adding Reality to Art

Each bird has a different habitat and sings in different circumstances. Messiaen tried to be as scientific as an ornithologist as well as artistic as a composer.¹¹⁴ In other words, he remains being balanced between focusing on birdsong, which needs more of an objective view, with landscape, which places greater emphasis on the subjective view. Compared to earlier pieces such as the *La Colombe* (Dove),¹¹⁵ we notice that birdsong has been described in a more realistic way. (Ex 2-9)

During the various journeys to collect birdsong, he hears birdsong from specific areas and at specific times. According to the interview of the fifteen questions with Matthew Schellhorn, he states that Messiaen's music has a reality:

In particular, I have visited the areas of France that inspired the *Catalogue d'oiseaux* and also *La Fauvette* – the *Meije* Glacier and the *Dauphiné* (Isère), for instance. Here, I have got a feel for the landscape; I have seen – and heard! – the environment that has inspired this music. Perhaps I have heard some descendants of the birds Messiaen himself heard.¹¹⁶

This explains the feeling of a performer who plays Messiaen's birdsong when he subsequently listens to real birdsong. He feels it is very similar and familiar, when a performer who plays *Catalogue* is in the actual place which is described in *Catalogue*, and when that performer hears the music which Messiaen himself listened to. It seems that the landscape is the path taken to connect the composer with the performer and the audience. This reminds us of the significant role that landscape plays all throughout *Catalogue*.

Even with a single source material, Messiaen presents it in different way according to the state, time or location. For instance, although Messiaen describes 'sea', he would like to classify it into several varieties to express different sounds such as 'sea', 'water', 'wave', which itself has various sounds depending on the landscape and 'noise under

¹¹⁴ Samuel, Olivier Messiaen: Music and Color, p.95

¹¹⁵ This is one case highlighting this lack of reality and he is only concerned about the making of the mood with veiled sonority (*d'une sonorité très enveloppée*). See Chapter I Birdsong

¹¹⁶ This interview was published in December 2012 on 15questions.net: <http://www.15questions.net/interview/interview-matthew-schellhorn/page-1/> and Schellhorn's home page: <http://www.matthewschellhorn.com/press/messiaenandthefreedomofbirdsong/>

the sea'. The pianist Anatol Ugorski who recorded the whole of *Catalogue* refers to water below.

For the sea, like all other natural phenomenon, has its own way of sounding in Messiaen. There are a thousand examples of the sea in music, from Debussy to Rimsky Korsakov. You can usually expect to hear some kind of wave movement, an arpeggio or something like that. But the sea sounds different for Messiaen, like short, hard, firm knocks, for example. Or pointillist, in separate, flashing droplets; the way a wave runs back, or the way the wave strikes a rock, the way the spray flies up or shines in the sun – we all know it really. Yet it has nothing to do with imitation. Messiaen doesn't compose individual characteristic of the sea, and thus something of the platonic idea of the sea itself, which is represented in the sound. Sometimes he doesn't use the word 'sea' but 'water', and then it's quite different. For example, if you swim under water for a while you get a particular sound in your ears. It's not silent, it's quite a specific noise. And that's exactly what is heard in Messiaen: it is absolutely the same sound. And sometimes the water sounds happy, sometimes melancholy, and then at other times the chords are as sharp-edged and cold as blocks of ice knocking against each other. How can there be sounds like that in the piano? It's his secret.¹¹⁷

The water examples are found often in *Catalogue* so will be observed more specifically in Chapter 4 Analysis of *Catalogue*.

Further non-birdsong material which needs to be considered is the concept of time. Here, seasons, a type of time, will be considered and time will be examined in detail in the section discussing time in Chapter 4. In general, time affects the birdsong. Even though it is the same kind of bird, the bird sings differently or does not sing at all according to the months and time of day. Messiaen calls it 'the role of the seasons'.¹¹⁸ Messiaen states:

¹¹⁷ Quoted from Chiat, p. 27-8, DG 493251-2, taken from CD notes- conversation with Anatol Ugorski on 13 May 1993, transcribed by interviewer Eleonore Buning (translation: Mary Whittall).

¹¹⁸ Samuel, Music and Color, p.93

Schellhorn, article 'Sunsets and Silences: The Passage of Time in Olivier Messiaen's *Catalogue d'oiseaux*. This article is adapted from a talk given at the London International Piano Symposium hosted by the Royal College of Music, London, UK, in February 2013

The best time is spring, the season of love- the months of April, May, and June. The best times of day correspond to the sun's rising and setting, rising around six o'clock in the morning in the month of April or between four and five o'clock in June; and setting around seven o'clock in the evening in April, around nine o'clock and even nine thirty in June. ... when you hear nothing: that's between noon and one o'clock ... everyone is silent. ... summer is a time of silence. ... Finally, winter comes: no more singing. ... That leaves autumn, when a few birds start singing again. ¹¹⁹

Fig 2-3) The months in *Catalogue d'oiseaux*¹²⁰

Month	Volume	Title
End of April	IX	<i>La Bouscarle</i>
May	X XII	<i>Le Merle de roche</i> <i>Le Traquet rieur</i>
June	III	<i>Le Merle bleu</i>
End of June	II IV	<i>Le Lorient</i> <i>Le Traquet stapazin</i>
July	VIII	<i>L'Alouette calandrelle</i>

The Fig 2-3 simply shows us when birds are singing and supports Messiaen's views on seasons. In other words, we can notice which birds in *Catalogue* are affected by time/season and the season of love, spring and early summer is the best time to sing for birds.

This also helps us to understand the natural settings which is suitable for the seasons. We can imagine the scenery according to how the seasons change such as the green

¹¹⁹ Samuel, Music and Color, p.93

¹²⁰ Adapted from Ibid

field in April, colourful blooming flowers in May, woods with lush vegetation in June and dazzling sunshine in July.

In the cahier which is noted from the Black Forest, on 6 October 1953, we can find the list of birds categorised according to landscape and among them twelve species that appear in *Catalogue*:

Birds of the high mountain: chough

Birds of the vineyards: linnets and ortolan bunting

Night birds: tawny owl

Tropical birds: shama, Indian minah and white-throated laughing thrush

Sea birds: curlew

Birds of the reeds and ponds: great reed warbler

Birds of the pine woods: willow warbler and great tit

Birds of the cornfields and open sky: lark

Birds of orchards and woods: blackbird and robin

Birds of the oak trees: golden oriole

Birds of gardens and parks: blackcap, garden warbler, starling and chiffchaff

Birds of the copses: robin

Birds of the woods: green woodpecker and great spotted woodpecker¹²¹

This categorisation informs us that his birdsong is bound with specific landscapes and will be observed in particular in Chapter 4 Analysis.

In the following composition, *Chronochromie* (The Colour of Time, 1959-60) for orchestra, the importance of habitat is less important whereby Messiaen blends all birds from different countries even in the distance. It is not realistic music any more but a genre that could be considered as 'surrealistic' work. Messiaen now only needs

¹²¹ Hill, Messiaen, p. 210-211

the memory of the birdsong in his imagination rather than engage in the activity of going out to collect it himself.

Up to this point we have discussed in detail the reasons for the existence and the importance of landscape in Messiaen's birdsong works. The next chapter will consider *Catalogue d'oiseaux* in general and more specifically in terms of landscape.

CHAPTER III

CATALOGUE D'OISEAUX

Chapter 3

Catalogue d'oiseaux

Before analysing the landscape of *Catalogue* in detail, it is well worth examining *Catalogue* in general in this chapter.

During his interview with the newspaper *France-Soir* in celebration of his 40th birthday, Messiaen refers to his deep admiration of birds. It was an unpredictable answer.

M: The birds.

F: Excuse me?

M: Yes, the birds: I've listened to them often when lying in the grass, pencil and notebook in hand.

F: And to which do you award the palm?

M: To the blackbird, of course! It can improvise continuously eleven or twelve different verses, in which identical musical phrases recur. What freedom of invention, what an artist!¹²²

Catalogue was composed between 1956 and 1958 after *Oiseaux exotiques* (1955-56), although its research truly originated in 1953.¹²³

Between 1952 and 1960, a period in which Messiaen composed only birdsong pieces, he was suffering in his personal life with his wife, Claire's illness (she was sent to a nursing home in 1953 which meant that he composed no work in 1954) leading up to her death in April 1959. In addition, he had worries about his son, Pascal as well as concerns for his own health. At the same time his work as a teacher at the Conservatoire and as an organist at Sainte-Trinité church became a heavy burden upon him. Nonetheless Messiaen composed as many master pieces during this difficult time as in any other period. All the evidence suggests that birdsong is rightly an absolute and essential part of his music and it would be easy to assume that he had tried to overcome his melancholy with widespread use of that birdsong in his music.

¹²² *France-Soir*, 28 March 1948

¹²³ Dingle and Fallon, *Messiaen Perspectives I*, p.144

One of the reasons for choosing birdsong might be that birds are regarded as symbols of freedom because of their free singing style and flight in the sky without any limitation. Another reason why he appears to escape from modern life is that he did not want to be so engaged with the modern world which is full of unnecessary complications and stresses. His wife's illness may also cause him to think of the 'eternity' expressed by the bird which he regards as an eternal symbol, and as God's messenger on earth. It seems to be a symbol of hope and a reason for Messiaen to keep composing his music that he and his wife Claire could one day meet in heaven.

At this point, there is one obvious question about the instrumentation: why does Messiaen use only a piano in *Catalogue*? During the birdsong period, a flute and piano duo is used in *Le merle noir*, then continues with orchestra and piano in *Réveil des oiseaux*, and further wind ensemble and piano are used in *Oiseaux exotiques* and finally only for orchestra in *Chronochromie* (surprisingly no piano in this work). However, a piano is the only medium in *Catalogue*. For Messiaen, the piano seems to be one of the best mediums with which to imitate birdsong and describe landscape. It is difficult to deny that the piano as a solo instrument is one of the most useful instruments in mimicking this 'bird style' sound, utilising its fast movement of scales and arpeggios. Moreover, it makes use of as wide range that covers everything from the nightingale which sings rapidly in high register to the raven which sings in low register with both hands laid on bass clef, and from waves in high to fear of night. Even though piano is the most appropriate instrument with which to mimic birdsong, we cannot avoid the question that it does not fundamentally sound like a nightingale, as it essentially is a piano. According to Hold, the authenticity of how the actual birdsong sounds is not an issue in *Catalogue*, rather more important is how the real birdsong is sublimated into Messiaen's unique music through his musical techniques.¹²⁴

Another very simple explanation for the use of the piano could be that Messiaen just likes the piano and there with him is Yvonne Loriod who is able to play the 'extraordinary new things' he invented.¹²⁵ The reason therefore could be, more specifically, perhaps more concerned with how he went out to collect birdsong in the wild. From Messiaen's *cahiers*¹²⁶, it is clear that Messiaen started to describe the scenery with birdsong transcription on paper. Besides, the length of the introductory texts grew longer and the detail became more and more specified over time. At the beginning of each *cahier*, the dates and places where he collected birdsong were notated. The important thing is that *Catalogue* is the first proper birdsong work for solo piano, and the reason why the landscape is portrayed in his birdsong is that use of birdsong alone would not be sufficient as a masterpiece when compared to other

¹²⁴ Trevor Hold, *Messiaen's Birds: Music and Letters* (1971), p. 118

¹²⁵ Samuel, *Music and Color*, p.114

¹²⁶ The cahiers which are owned by Peter Hill and photocopied by himself.

birdsongs. In other words, the two hands can only represent the song of a maximum of two or possibly a few birds, and the result is that there is a lack of sound and harmony. Typically, birdsong is expressed as figures of high registered scales, arpeggios, trills and single lined notes in rapid tempo rather than full harmonies. By setting the landscape which is presented as forms of low registered full chords, scales or arpeggios in slow tempo, the work could now include rich sounds and various effects. (Ex 4-101, chorus of grasshoppers from *L'alouette Calandrelle*)

For instance, *Catalogue* cannot become a great work until the non-birdsong is added into the birdsong. As Messiaen has always denied being an impressionist,¹²⁷ he pursues reality as his focus. As a result, he tries to create the most systematic structure possible.

A natural follow-up question to the above is: why then do later birdsongs for solo piano not include landscape, or why is that role extremely reduced. The later birdsong works for solo piano present only birdsong, or alternatively present just a few chords to present the mood or colour. These reasons seem to demonstrate that Messiaen's eagerness to present reality is weakened by combining birdsongs from different places into one piece and he satisfies himself with more harmonised splendid birdsong in the short works.

It is worth formulating a list to show the exact places where Messiaen collects the specific birdsong, which assists in our understanding and imagination surrounding the landscape which has a visual, rather than an audible, sense.

Geographically it is reasonable that he starts to collect birdsong from his own country, France. He then goes on to collect birdsong from other countries and experimentally puts the birds together, a quite surreal task.

Between 1956 and 1958, Messiaen composed *Catalogue* which was premiered by Yvonne Loriod on the 15th of April 1959. This collection of thirteen pieces, which describe seventy-seven varieties of bird and their natural habitat in France, is divided into seven volumes symmetrically, using the longest piece of book four as a pivot: 3121213¹²⁸ as Messiaen was attracted to the palindrome arrangement such as non-retrogradable rhythms.

Any distinct movements of *Catalogue* can be selected and played in isolation because there are no organic/structural relationships among the pieces, collectively rather just being a collection of birdsongs. In contrast, Book III is presenting night and Book V is presenting day, so it could be a natural progression to perform both books consecutively to show the symmetric permutation or comparison. However, it is not easy for the listeners to recognise which piece presents day or night by listening only to the performance, and without any previous instruction surrounding the pieces beforehand. The preface which explains the natural settings provides the opportunity

¹²⁷ 'I am a French composer, but not a French Impressionist' – in conversation with Peter Hill, quoted from Chadwick and Hill, p.13

¹²⁸ This refers to the numbers of pieces in each volume.

to imagine the scenery but it is still vague and unclear for the performer exactly how to present or express that section. For example, both night from *L'Alouette lulu* and day from *L'Alouette calandrelle* start with low registered soft chords moving very slowly and both imitate larks. (Ex 3-1 and Ex 3-2) To represent night, 'chords of resonance' (**ppp** for right hand and **p** for left hand), composed with five notes, are used to describe the abundance in the empty darkness. For day, sparse chords, composed with four and three notes in one octave, are used with *pp* for both hands. This can be considered as producing a warmer atmosphere.

Fig 3-1 shows the materials used in the *Catalogue* yet all the birds, except the main birds, are excluded due to the focus of the research which is the non-birdsong materials. The titles are based on the principal birds which are noted as 'Subjects' in Fig 3-1, and describes birds and their habitat with Messiaen's own musical language. After what could perhaps be regarded as the golden age of programme music in the nineteenth century, its notion of association with description and explanation became less common and declined in esteem. However, in *Catalogue*, as programme music, Messiaen indicates every moment very specifically with the exact colour and timbre he intended.

Messiaen's first composition, *La dame du Shalott* (1917), was for piano solo and the piano is used most frequently in Messiaen's music, even in the orchestral pieces such as *Réveil des oiseaux* (1953) and *Oiseaux exotiques* (1955-6). Such reliance means that the piano plays a significant role in Messiaen's music. It is a well-known fact that Messiaen was an organist himself but the predicaments that he found himself in from the 1940s made him use the piano as his major instrument.¹²⁹ Moreover Messiaen needs more identical instruments to produce 'more homogeneous'¹³⁰ chordal sounds than the orchestra which deals with each bird discretely. The piano, which has wide dynamic ranges, 'great flexibility' and plentiful expression that can express everything from tiny insects to enormous mountains, is the most suitable medium to satisfy his requirements.¹³¹

¹²⁹ Hill, Companion, p.72 The situation was that Messiaen was in prison and there was an old piano which was the only keyboard instrument and he premiered his piano quartet *Quatuor pour la fin du temps* (Quartet for the end of time) for violin, cello, clarinet and piano (1940-41)

¹³⁰ Sherlaw Johnson, Messiaen, p.128

¹³¹ *ibid*

Fig 3-1) Landscape in *Catalogue*

Book	No.	Titles	Subjects	Landscape
1	I	<i>Le Chocard des Alpes</i>	Alpine chough	glacier, stone circle
	II	<i>Le Lorient</i>	Golden oriole	sun, morning, rainbow
	III	<i>Le Merle bleu</i>	Blue rock thrush	sea, cliff, water, wave, rock
2	IV	<i>Le Traquet stapazin</i>	Black-eared wheatear	vineyard, sea, field, sunrise, sunset
3	V	<i>La Chouette hulotte</i>	Tawny owl	night, fear
	VI	<i>L'Alouette lulu</i>	Woodlark	night, calm
4	VII	<i>La Rousserolle effarvatte</i>	Reed warbler	Swamp noises, pond, sun, flowers, frogs, night, stone
5	VIII	<i>L'Alouette calandrelle</i>	Short-toed lark	desert, day, grasshoppers, cicadas, passage of time
	IX	<i>La Bouscarle</i>	Cetti's warbler	river, reflection of poplar, bank
6	X	<i>Le Merle de roche</i>	Rufous-tailed rock thrush	night, stone hand, rock formations
7	XI	<i>La Buse variable</i>	Buzzard	flight over the landscape
	XII	<i>Le Traquet rieur</i>	Black wheatear	sea, wind, sun
	XIII	<i>Le Courlis cendré</i>	Curlew	wave, water, foghorn, night and fog

Messiaen himself gives the reason why he predominantly used the piano for birdsong:

The rendering of the timbre of the birdsong is particularly difficult. As the timbre is determined by a greater or lesser number of harmonies, I had to look for combinations of unexpected, reinvented sounds for almost every note of each birdsong. On the other hand, the piano, due to its extensive register and the immediacy of its attacks, is undoubtedly the only instrument capable of rivalling the rapid tempo and the changes in 'altitude' of certain great virtuosos such as the woodlark, the skylark, the garden warbler, the blackcap, the nightingale, the song thrush, the sedge warbler and the reed warbler. The piano alone is able to render the raucous or grating percussions of the raven and the great reed warbler, the scarping of the corncrake, the howl of the water rail, the barking of the herring gull, the dry and imperious struck-tone-like timbre of the black-eared wheatear, the sunny charm of the rock thrush or the black wheatear.¹³²

Loo Fung Chiat also states her reason for such heavy use of the piano in her thesis.¹³³ The composer seems to give more freedom to a performer as a soloist. In particular when attempting to express nature, a solo instrument is a more appropriate medium than the orchestra which is always controlled by a conductor.

In general, there are several ways of classification in *Catalogue*: by volume, by chronicle, or by birds of similar specie or from the same regions. There are some examples of classification from the previous researches.

The following division by Kraft is derived from both Philips and Sun's approaches¹³⁴:

- 1) 'Technique' Material¹³⁵
 - a) Modes of limited transposition

¹³² Requoted from the Thesis by Loo Fung Chiat, quoted from CD liner notes, *Catalogue d'oiseaux*, Erato ECD 71590 (March 1970)

¹³³ Ibid, p.3

¹³⁴ ibid

¹³⁵ This 'material' is explained in Messiaen's treatise, *Technique de mon Language Musical* (Paris, Leduc, 1944)

- b) Greek and Hindu rhythms
 - c) Characteristic harmonies from early period
 - d) Use of *Turangalila* motives
- 2) 'Experimental period' Material
- a) Quasi-several treatment: modes of pitch, rhythm and dynamics¹³⁶ (as in *Mode de Valeurs*)
 - b) Twelve-tone modes (appearing in any sequence or permutation)
- 3) Birdsong
- a) Varied species (77 different songsters)
 - b) Using full gamut of complex sonorities available on the pianoforte
 - c) Hybrid, polyphonic and many one-voice-dominant textures
- 4) Innovations
- a) Use of chordal-complexes (not belonging to Messiaen's modes)
 - b) Attempts to depict bird habitats, animals, human perceptions
 - c) Experimental use of pedal markings
 - d) Hybrid textures using both inferior and superior resonance effects
 - e) Homorhythm and homophony (one voice or part dominant)
 - f) Quasi-glissando effects
 - g) Polyphony on piano¹³⁷

¹³⁶ While Messiaen did not employ the twelve-tone technique, after three years teaching analysis of twelve-tone scored, including works by Arnold Schoenberg, he experimented with ways of making scales of other elements (including duration, articulation and dynamics) analogous to the chromatic pitch scale. The results of these innovations were the '*Mode de valeurs et d'intensités*' for piano.

¹³⁷ Messiaen is the composer who is deeply aware of resonances, sonorities and tone colours so that he layers birdsongs and landscape. He often uses three staves for solo piano.

According to Sherlaw Johnson's classification, birdsongs in *Catalogue* are divided into four distinct groups, mirroring the characteristic song patterns of each bird: I calls, II short repetitive song-patterns III varying declamatory or melodic song-patterns and IV rapid, chattering songs¹³⁸. In comparison, non-birdsong materials are divided into five groups by his own compositional elements: whole tone scale (twelve-tone) with different rhythms, mode of values, rhythms and dynamics, modes of limited transposition, 'Turangalila' motives and Colour chords.¹³⁹ Several common points are found from both classifications regardless of which material is concerned: birdsong or non-birdsong.

1. Early musical languages are employed: mode of values, rhythms and dynamics, modes of limited transposition and twelve-tone modes.
2. Turangalila' motives are used.
3. Various rhythms are applied: ancient Greek and Hindu rhythms, non-retrogradable rhythms and other free rhythms.

In this research, however, the classification and analysis are strictly focused on the non-birdsong materials and in this respect, several facts should be considered in advance: time (day, night, and dawn), environments (containing movement or not) and other creatures.

Fig 3-2 provides the information of harmonies and what the harmonies present in *Catalogue*.

Catalogue will be analysed by the following categorisations:

1. Time: Day, Night, Dawn and Time flows
2. Landscape
 - 1) with movement - water (sea, wave, river, swamp, pond and water) and reflection of trees
 - 2) without movement – mountains, cliffs, stones, dessert, bank and lighthouse
 - 3) light – sun and rainbow
3. Other creatures – small insects, flowers

¹³⁸ Sherlaw Johnson, Messiaen, p.132

¹³⁹ Ibid, p.136

Fig 3-2) Examples of Messiaen's harmonic progression used in *Catalogue d'oiseaux*¹⁴⁰

Harmony	Titles	Presentation	Bar No.	Ref: <i>Traité</i> Vol. VIII
<i>Résonance contractée</i>	<i>Le Merle bleu</i>	Resonance of bell	31-32	Pages 150-164
	<i>Le Traquet stapazin</i>	vineyard	2	
	<i>La Rousserolle effarvate</i>	Sunrise	135, 140, 146	
	<i>L'Alouette calandrelle</i>	Resonance	15	
	<i>La Bouscarle</i>	Resonance	12,14	
	<i>Le Merle de roche</i>	Night	1	
<i>Renversement transposé</i>	<i>Le Traquet stapazin</i>	Sunrise-sunset and resonance for the goldfinch's song	107	p. 142-147
	<i>L'Alouette calandrelle</i>	Resonance	24-5, 49, 51	
<i>Accords tournants</i>	<i>La Rousserolle effarvate</i>	Water lily	367-74	p. 166-172
	<i>L'Alouette calandrelle</i>	Resonance	19	
Four chords pattern- <i>Tarangalila</i>	<i>Le Traquet stapazin</i>	Vineyard	1	Vol. II p. 240
	<i>La Rousserolle effarvate</i>	Sunrise	168-9	
	<i>L'Alouette calandrelle</i>	resonance		

¹⁴⁰ Direct quotation from Chiat P.49

Changing seconds and thirds - <i>Tarangalîla</i>	<i>L'Alouette calandrelle</i>	resonance	20	Vol.II p. 239 Vol. III p.303
'anacrouse, accent, désinence'	<i>La Rousserolle effarvatte</i>	Sunrise	149, 162-3	Vol.II p. 372
	<i>L'Alouette calandrelle</i>	Resonance	46	
<i>thème d'accords</i>	<i>Le Traquet stapazin</i>	Sunrise	133	Vol.II p. 486

As a rhythmist, time might be one of the most valuable features observed, and Messiaen refers to time as follows: "...I sought to reproduce in condensed form the vivid course of the hours of day and night."¹⁴¹

Fig 3-4 is drawn from the evidence of Fig 3-3 and shows the exact place where Messiaen collected birdsong, together with the exact names of the birds which are used in *Catalogue*. This figure helps to recognise roughly the landscape in which the birds live without any further information. For example, the background of *Le Courlis cendré* is the east coast and *La Buse variable* is located in the Alps of the Dauphiné. Moreover, this map shows us the intimate relationship between birds and their habitat. We can therefore establish that birdsong in *Le Lorient* and *La Chouette hulotte* was collected in two different places and combined into one piece of music. In particular the birdsong in *La Chouette hulotte* was collected from two places quite far apart, one in the forests around Orgeval on the western edge of Paris and the other from the mountains between Petichet and Cholonge. It appears that Messiaen is partially free from the restrictions of location if the bird is living and singing. It is therefore not incongruous that he combines the same kind of birdsong from a variety of places with the music as he did it for several other works such as *Oiseaux exotiques* and *Chronochromie*.

¹⁴¹ Samuel, Music and Color, p.117

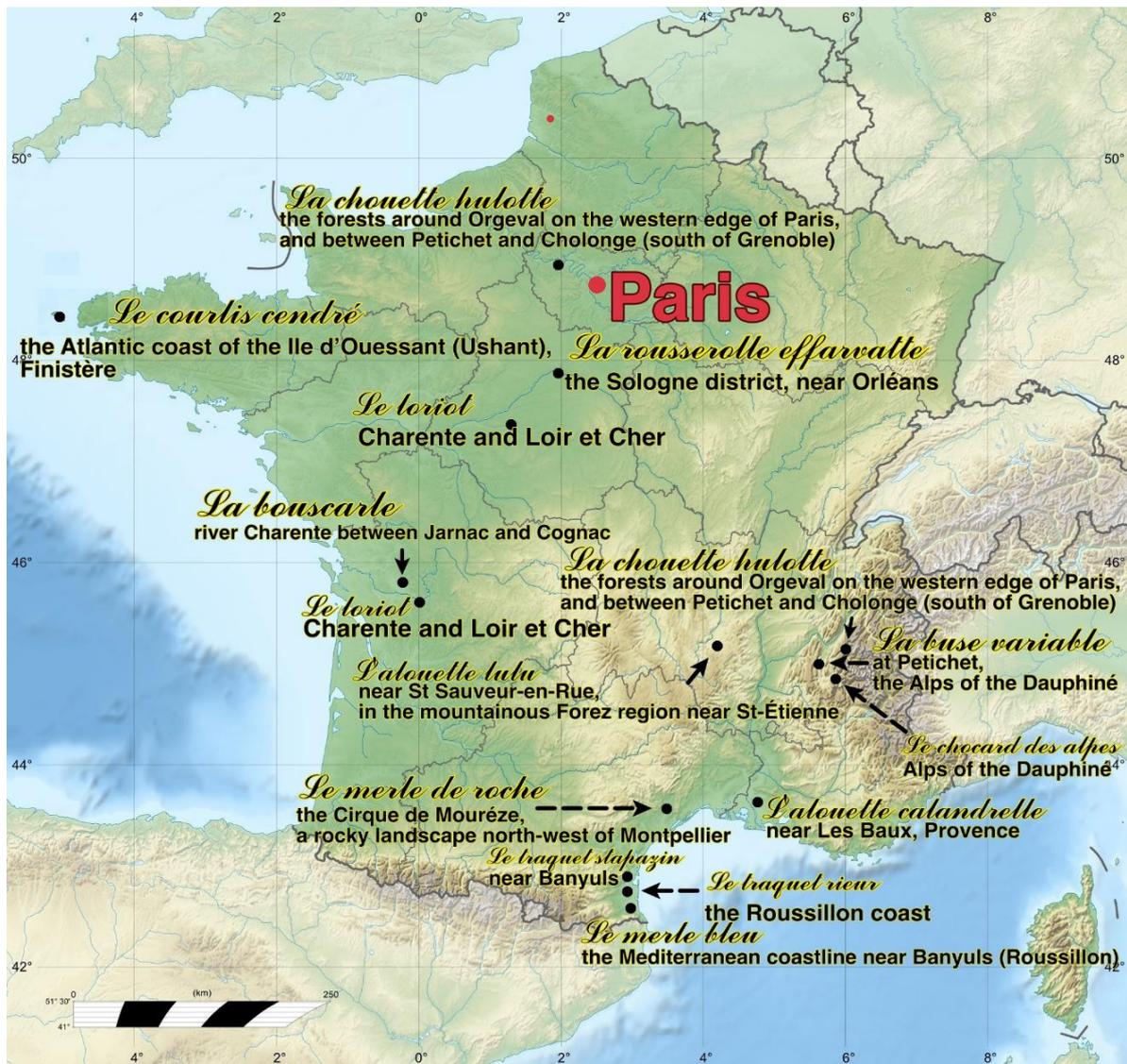
Fig 3-3) The list of settings in *Catalogue d'oiseaux*¹⁴²

Books	Titles	Settings
Book 1	I. <i>Le Chocard des Alpes</i>	Alps of the Dauphiné
	II. <i>Le Loriot</i>	Charente and Loir et Cher
	III. <i>Le Merle bleu</i>	the Mediterranean coastline near Banyuls (Roussillon)
Book 2	IV. <i>Le Traquet stapazin</i>	vineyards near Banyuls
Book 3	V. <i>La Chouette hulotte</i>	the forests around Orgeval on the western edge of Paris, and between Petichet and Cholonge (south of Grenoble)
	VI. <i>L'Alouette lulu</i>	near St Sauveur-en-Rue, in the mountainous Forez region near St-Étienne
Book 4	VII. <i>La Rousserolle effarvatte</i>	the lakes and marshes of the Sologne district, near Orléans
Book 5	VIII. <i>L'Alouette calandrelle</i>	near Les Baux, Provence
	IX. <i>La Bouscarle</i>	beside the river Charente between Jarnac and Cognac
Book 6	X. <i>Le Merle de roche</i>	the Cirque de Mouréze, a rocky landscape north-west of Montpellier
	XI. <i>La Buse variable</i>	the Alps of the Dauphiné, at Petichet, Messiaen's summer home

¹⁴² The list is quoted from Chadwick and Hill, Olivier Messiaen's *Catalogue d'oiseaux* from Conception to Performance (Cambridge University Press, 2018) p. 9-10.

Book 7	XII. <i>Le Traquet rieur</i>	the Roussillon coast
	XIII. <i>Le Courlis cendré</i>	the Atlantic coast of the Ile d'Ouessant (Ushant), Finistère

Fig 3-4) Map of the places in France from where birdsong in *Catalogue d'oiseaux* was collected



The next chapter will examine which musical languages are used for landscape and how the landscape is used efficiently by analysing non-birdsong materials.

CHAPTER IV

**ANALYSIS OF
LANDSCAPE
IN *CATALOGUE
D'OISEAUX***

Chapter 4

Analysis of Landscape in *Catalogue d'oiseaux*

Although a great deal of focus so far has been put on birdsong as one of the main characteristics of *Catalogue*, the main focus of this chapter is to analyse only non-birdsong materials. Birdsong is not considered at all in this chapter.

In order to analyse *Catalogue*, firstly, landscape elements need to be categorised into five groups: (1) time, (2) light, (3) water, (4) geometrical features and (5) others. Fig 4-1) shows which non-birdsong materials are involved in each group.

Fig 4-1) Landscape categorisation in *Catalogue*

Categorisation	non-birdsong materials
Time	day and night
Light	sun (sunrise and sunset)
Water	sea (wave), river and pond
Geographical Features	mountains and cliffs/ rocks/ stones/ vineyard
Others	flowers and small animals

Those pieces which involve sunrise or sunset are distinguished from day music which only refers to specific moments and is more focused on the sun itself. The passage of time plays a significant role in *Catalogue* but it works in combination with several features. It will not form a category in itself, but will rather be subdivided into smaller categories. For instance, although *La Rousserolle effarvate* plays on the time flow of twenty-seven hours, it is classified into separate sun and night categories. The piece which involves day time seems more appropriate to be classified firmly in in the sun section because the exact colours of the sun have already been indicated by Messiaen, and the movement and colour changes of the sun result in a crucial contribution to *Catalogue* as part of the non-birdsong materials.

Fig 4-2) Categorisation by landscape¹⁴³

Landscape		Titles
Time (moment)	Day	VIII. <i>L'Alouette calandrelle</i> IX. <i>La Bouscarle</i>
	Night	V. <i>La Chouette hulotte</i> VI. <i>L'Alouette lulu</i> VII. <i>La Rousserolle effarvatte</i> X. <i>Le Merle de roche</i>
Light	Sun	II. <i>Le Lorient</i> VII. <i>La Rousserolle effarvatte</i> XII. <i>La Traquet rieur</i>
Water	Sea	III. <i>Le Merle bleu</i> IV. <i>Le Traquet stapazin</i> XII. <i>La Traquet rieur</i> XIII. <i>Le Courlis cendré</i>
	River, pond	VII. <i>La Rousserolle effarvatte</i> IX. <i>La Bouscarle</i>
Geographical Features	Mountains	I. <i>Le Chocard des Alpes</i>
	Cliffs, Rock, Stone	I. <i>Le Chocard des Alpes</i> III. <i>Le Merle bleu</i> IV. <i>Le Traquet stapazin</i> VII. <i>La Rousserolle effarvatte</i>
	Vineyard	IV. <i>Le Traquet stapazin</i>
Others	Flowers	VII. <i>La Rousserolle effarvatte</i>
	Animals	VII. <i>La Rousserolle effarvatte</i> VIII. <i>L'Alouette calandrelle</i>

¹⁴³ A piece can be included in more than one category.

The order of analysis will follow this classification. (Fig 4-2) Each group will be considered according to how Messiaen's musical language is applied to the landscape and where possible, the examples will be given if they exist.

Messiaen's rhythmic arrangement is one of the most difficult features to perform and therefore demands a great deal of study and scrutiny. In fact, and apparently in an attempt to be helpful, Messiaen actually instructs the player in a footnote to observe exactly the nuances and durations on his own score (*Observer très exactement les nuances et les durées*).¹⁴⁴ For instance, rhythms in the night motif, *La Chouette hulotte* are complicated indeed but the composer claims they must be played strictly as he notated. However, we learn that some freedom of expression is allowed to the performer. According to Hill:

He urged me always to phrase with flexibility, to allow the music to breathe.... 'always relaxed' Messiaen wrote at several points in my score.¹⁴⁵

La Buse variable is excluded from this analysis because there is no direct landscape available to act as a reference point, but rather only a depiction of the flight of the bird. *La Rousserolle effarvatte* will be analysed in the greatest detail as it contains the most materials.¹⁴⁶

1. Time

Messiaen was preoccupied with the concept of 'time' and he considered it, like colour, to be one of the most important elements. In fact, there are clear examples where he associated 'time' with 'colours'- such as in *Chronochromie* and *Couleurs de la Cité celeste*. On the whole, Messiaen's time is not indicative of real time, but rather surreal time which is profoundly connected to his faith. He even uses the term 'time' in his music directly. Such an example may be found in his quartet for 'the End of Time' (*Quatuor pour la fin du temps*), inspired by the Biblical Book of Revelation. As Esa-Pekka Salonen, the principal conductor of the Los Angeles Philharmonic and artistic advisor of London's Philharmonia Orchestra, mentioned in his lecture on Messiaen's time based on the bible:

¹⁴⁴ See the footnote on the first page of the score of *La Chouette hulotte*.

¹⁴⁵ Hill, *The Messiaen Companion*, p.278

¹⁴⁶ The fig 5-2 shows the numbers of analyses. VII will be discussed three times and others will be considered one or twice depending on how many non-materials are used in each piece.

Unlike almost all other Western music which is mainly dominated by a kind of forward movement, the recapitulation of earlier motifs and crescendo, Messiaen alone, and characteristically, was capable of achieving a kind of timeless and contemplative sheer stopping of time, inhabiting, for a moment, eternity.¹⁴⁷

In the preface to the third movement *Abîme des oiseaux* (Abyss of birds) from the Quartet, Messiaen writes about time using a reference to birds:

‘The abyss is Time, with its weariness and gloom. The birds are the opposite of Time; they are our longing for light, for stars, for rainbows and for jubilant outpourings of song’.

Messiaen states that time is related to his faith: ‘... all God’s creations are enclosed in time, and time is one of God’s strangest creatures since it is totally in conflict with this eternal nature, ...’¹⁴⁸

Time is also related to rhythm and Messiaen calls himself a ‘rhythmist’; with highly irregular rhythms playing an important role in his music, often reproducing the rhythms of nature.¹⁴⁹

‘...time has always been at the centre of my preoccupations. As a rhythmist, 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.’¹⁵⁰

Rhythm, which Messiaen considers to be ‘the first, essential element in music,’ is indeed one of the most important elements of his music given its unrestricted possibilities for diversity and innovation.¹⁵¹

Moreover, Messiaen dictated to Samuel that time is engaged with the form of the works:

¹⁴⁷ ‘Maestro of Joy’, article by John A. Coleman from Magazine America: The Resit Review, 24 November 2008

¹⁴⁸ Samuel, Music and Color, p. 34

¹⁴⁹ Ibid, p. 67

¹⁵⁰ Ibid, p.34

¹⁵¹ Kaltchev, Ivo, Article, Rhythmic Aspects of Messiaen’s Musical Language in *Vingt Regards sur L’Enfant-Jesus*, p. 192 from ‘Journal of Piano Music’, No. 99572247, Vol. 6 (2012)

It's in my *Catalogue d'oiseaux* and in *La Fauvette des jardins* that you'll find my great formal innovation. There, instead of referring to an antique or classical mould, or even to some mould I might have invented, I sought to reproduce in condensed form the vivid course of the hours of day and night.¹⁵²

While Messiaen's 'time' usually has meaning in terms of religious and spiritual time as in the Quartet, the 'time' in *Catalogue* is more representative of 'realistic and physical' time. Messiaen ventured out to collect birdsong at specific times and notated those sounds indicating the exact time, month and surrounding habitat. According to his conversation with Samuel, we are able to notice his preferences regarding 'time'.

Samuel: How do you go about collecting bird songs?

Messiaen: The best time is spring, the season of love... The best time of day corresponds to the sun's rising and setting, rising around six o'clock in the morning in the month of April or between four and five o'clock in June and setting around seven o'clock in the evening in April, around nine o'clock and even nine-thirty in June.

Samuel: In the middle of the day, there's no chance of hearing any birds?

Messiaen: Yes. Certain birds like the blackcap sing in the morning and afternoon; but there is one hour when you hear absolutely nothing: that's between noon and one o'clock.¹⁵³

The above statement explains how important a role 'time' plays in birdsong music and how time affects birdsong. In other words, birds' singing depends on the time and the seasons, and they sing differently at different times. The eighth movement, *L'Alouette calandrelle* is one such example where we can find the changes in the song of a short-toed lark as time flows. ¹⁵⁴

'Sunrises and sunsets occupy a very special place in Messiaen's *Catalogue*, not merely present as representations of realities or memories. Instead, they become truly musical,

¹⁵² Samuel, *Music and Color*, p. 117,

Chadwick and Hill, *Olivier Messiaen's Catalogue d'oiseaux from Conception to Performance*, p. 57

¹⁵³ Samuel, *Music and Color*, p. 93

¹⁵⁴ Day section, p. 72

identifiable parameters by which to measure our sense of the passage of time.’¹⁵⁵ Sunrise and sunset are good examples of symmetry, Messiaen’s favourite structure.

Fig 4-3) Types of time in *Catalogue d’oiseaux*

Types of time	Titles	Number
Abstract time	<i>Le Chocard des Alpes</i>	I
	<i>Le Merle bleu</i>	III
	<i>Le Buse variable</i>	XI
Locative time ¹⁵⁶	<i>La Chouette hulotte</i>	V
	<i>L’Alouette lulu</i>	VI
	<i>La Bouscarle</i>	IX
	<i>Le Traquet rieur</i>	XII
	<i>Le Coulis cendré</i>	XIII
Narrative time ¹⁵⁷	<i>Le Lorient</i>	II
	<i>Le Traquet stapazin</i>	IV
	<i>La Rousserolle effarvatte</i>	VII
	<i>L’Alouette calandrelle</i>	VIII
	<i>Le Merle de roche</i>	X

Fig 4-3 which reproduces Schellhorn’s categories is worth quoting in relation to time. This figure shows an arrangement of movements from *Catalogue* according to three types of ‘time’: (1) Abstract time, (2) Locative time and (3) Narrative time.¹⁵⁸

Abstract time indicates that the composer does not notice the exact time, or even give any clues about the general time. Locative time points to specific moments such as night, day or morning. Although the night gets deeper, it is still night. Hours can

¹⁵⁵ Article ‘Sunsets and Silences: The Passage of Time in Olivier Messiaen’s *Catalogue d’oiseaux*’ by Schellhorn, adapted from a talk given at the London International Piano Symposium hosted by the Royal College of Music, London, UK, in February 2013

¹⁵⁶ The time is indicated by the composer when certain activities are happening or ‘contains the drama within a limited time frame.’ For instance, locative time in *La Bouscarle* is morning and in *L’Alouette lulu* is night.

¹⁵⁷ This type of time is ‘intrinsic to the musical narrative’. The narrative time is used in presenting the sunrise and sunset.

¹⁵⁸ They are Schellhorn’s term which I would like to cite.

represent flows, yet do not change into entirely different moments or phases. Narrative time has the same meaning as time flows and passage of time. It shows the development of the events, and usually the process of sunrise or sunset is described.

Catalogue is not the first work which involves an exact period of time. In *Réveil des oiseaux*, the composer specifies in the preface the time from midnight to midday, as well as clearly identifying the season of spring. As we can assume from the title *Réveil* (translated as ‘awakening’, ‘revival’ or ‘alarm clock’), this particular passage of time is used to identify the moment when different kind of birds are singing. That is to say, *Réveil* is full of birdsong and the specific time stamps of dawn and midday provide the clues with which to note the arch-shape structure that accompany the silences. This portion of the passage of time in *Réveil* is much less than the time period in *Catalogue*.

Works in *Catalogue* which contain ‘time’ are divided into two sections for analysis in this study: day and night music. It is a likely and deliberate notion that day and night is the first creation on the first day.

1) Day

Book V is devoted to ‘day music’ and is arranged symmetrically with Book III which presents night music. In Book V, there are two pieces: *L’Alouette calandrelle* and *La Bouscarle*.

L’Alouette calandrelle, the shortest piece from *Catalogue*, portrays a warm day in the desert and recollects Messiaen’s visit to the desert of La Crau in Les Baux Provence, in Les Alpilles in July 1956.¹⁵⁹ The location where the birds were singing was an arid, rocky terrain filled with broom and cypress. Messiaen mentions three specific times in the preface: two, four and six o’clock in the afternoon (*2 heures de l’après- midi*, *4 heures de l’après- midi* and *vers 6 heures du soir*).¹⁶⁰ In a marked difference from other day movements (*La Bouscarle* and *Le Lorient*) the composer treats the day motif simply as a ‘harmonic support’ for birdsong in this piece. (Ex 4-1) This treatment is also found in *Le Lorient* and *L’Alouette lulu*.¹⁶¹ At the beginning, the two-chord motif, which represents the heat and isolation of the Crau desert (*Charleur et solitude du desert de la Crau*), has a resolution of F# Major and bears an unmistakable similarity with the two chord motif which represents the sunrise in the early morning in *Le Lorient*. The two fifth chords in the left hand and the B# and A# in the right hand in *L’Alouette calandrelle* are exactly the same with the parallel fifths in the left hand. By contrast, the bottom notes (A# and B#) in the right hand move in the opposite direction. (Ex 4-

¹⁵⁹ Chiat, p. 95

¹⁶⁰ Notes from preface.

¹⁶¹ Chiat, p. 101

2) While the sunrise motif in *Le Lorient* conveys a wider and brighter feeling by moving upwards, the day motif in *L'Alouette calandrelle* portrays a closing (resolving) and stifling feeling by moving downwards.

The day motif is always followed by depictions of the principal bird, a short-toed lark. Between the two characters of day and the lark's song, several remarkable comparisons are found. The day motif is invariable and low registered with relaxed chordal movement while the lark's song is mainly comprised of the second which are in fact sevenths and ninths with slight changes, in high register with rapid birdsong.

right hand: F \sharp - D \sharp - B \flat - A \flat - D \sharp - B \flat

left hand: E \sharp - C \sharp - A \sharp - B \sharp - E \sharp - C \sharp

The day motif is overlapped with the lark's song yet the birdsong finishes with a short note and stays silent until the next day motif appears.

The motif with the tempo marking 'Lent' representing a lazy afternoon, the principal bird and the rests, creates a 'sense of sparsity'¹⁶² and provides for a stark comparison with the following chorus of cicadas (*chœur des cigales*) and birdsong which have rapid repeated movements. This motif is repeated three times in section 1¹⁶³ and reappears at the end of section 3, just before the coda which presents the energetic joy of a sky lark (*jubilation véhémente*). The close of this piece is sustained until the birdsong disappears. It is typical of Messiaen that a motif appears, both at the beginning and at the end.

The other piece in Book V is *La Bouscarle* which can be classified as day or morning music. In the preface, Messiaen describes the time as 'a beautiful morning of shadow and light' (*C'est une belle matinée d'ombre et de lumière*). Its setting is near a small river on the banks of the Charente, and Charenton in Saint-Brice, La Trache, Bourg-Charente on the last day of April.¹⁶⁴

There is no direct or overt indication of 'morning', yet we can see the 'morning motif' from the preface. As with the normal day motif, its shape consists of the typical voicing of 1st CCR and 9th CCR¹⁶⁵, and merges gently into the birdsong. This morning motif appears twice, in the introduction and coda. The emphasised top notes in each of the hands move in opposite directions. (Ex 4-3)

By repeating the morning motif both at the beginning and at the end of this section, Messiaen hints at the passage of time, even though it is still in the morning: he says,

¹⁶² Kraft, *Birdsong in the Music of Olivier Messiaen*, p. 195

¹⁶³ The structure of this work is section 1, section 2, section 3 and coda.

¹⁶⁴ See the preface.

¹⁶⁵ See appendix, p. 155

‘Minute by minute, the form follows the living march of the hours of day and night!’¹⁶⁶ In addition, the appearance of a nightingale (*Rossignol*) which is one of the representative nocturnal birds, provides the evidence that time flows through this piece.¹⁶⁷ However it is notable that there can be found nowhere in the preface the actual word ‘night’, or indeed any musical motif directly related to night in the score. That being the case, it may be more reasonable to regard this as day music as Messiaen notates ‘a beautiful morning of shade and light’ (*une belle matinee d'ombre et de Lumiere*) in the preface. (Ex 4-4)

1) Night

Among the various landscape materials considered, ‘night’ is undeniably the most difficult and complex material to transcribe into music. Night is merely a status of darkness, indicating only the absence of light. The moment of night is difficult through which to see movements, and does not have its own sound, shape or even colours. On the other hand, and by contrast, day is the period where it is naturally easier to see movements, colours and hear noise made by people or nature. Messiaen tends to describe the ambience and mood at night rather than any specific events happening at night.

Typically Book III is classified as ‘night music’ and arranged symmetrically with Book V which is ‘day music’. However, there are three further works which include a night motif; *La Rousserolle effarvatte*, *Le Merle de roche* and *Le Courlis cendré*.

There is no landscape material described other than night in two works from Book III. Of course, night is a colourless material and it is fascinating to witness how Messiaen expresses it effectively as a composer, especially for such a composer who himself considers colour to be one of the most important elements in his music. In simple terms, we might be able to predict that the chromatic scale could be used to represent the night, according to Messiaen the serial language always represents black to him.¹⁶⁸ *La Chouette hulotte*, *L’Alouette lulu* and *Le Merle de roche* are written in a very low register and the last piece skips across a wide range. The night motif in *La Rousserolle effarvatte* starts in the middle register and descends to the lowest A. Although the same material of night is used for these pieces, the mood and the language which is applied for the night are significantly different.

The background of *La Chouette hulotte* is the woods, one in which specifically the owls’

¹⁶⁶ Quoted from Schellhorn’s article

¹⁶⁷ See the score p.15

¹⁶⁸ Samuel, Music and Color, p. 241 Messiaen said ‘the serial language is... black! I see it without coloration. Always black, gray, black, gray...’

Sherlaw Johnson, Messiaen, p.135 ‘twelve-note sets are used for the purposes of describing the more colourless aspects of nature – the white of the Meidje glacier in *Le Chocard des Alpes*, or the grey of descending for and the dark night in *Le Courlis cendré*, for example.’

call is heard at about 2 o'clock in the morning at Orgeval, St Germain en Laye, on the way from Messiaen's summer house in Petichet to Cholonge (Isère).¹⁶⁹ Among those places where birds in *L'Alouette lulu* are singing are the woods and the meadow, the pond in *La Rousserolle effarvatte*, the fantastically shaped dolomite rocks in *Le Merle de roche* by the sea in *Le Courlis cendré*. These works present nocturnal birds in their various habitats. It is curious to note in how many different ways Messiaen portrays the same material of the night. While the other night pieces are made up of very soft and slow moving chords¹⁷⁰, monophony keeps moving very fast with all its dynamics and without rests in *La Chouette hulotte* at the beginning and in the middle of the piece.

The technique, which is borrowed from *Mode de valeurs et d'intensités* (Mode of values and intensities) from *Quatre études de rythme* (Four Rhythm Studies), is applied in *Cantéyodjayâ* (Ex 4- 5) and *La Chouette hulotte* to express the terror of night at 2 am.¹⁷¹ To give a sense of the fear of night, Messiaen developed his technique by adding pitches to an earlier technique, mode of values and intensities. The more accurate term with which to describe this technique may be better called as the 'Mode of pitches, durations and intensities'¹⁷². Over time, this technique was developed to 'Mode of timbres, durations and intensities' in the opera, *Saint-François d'Assise* (1975-83) which includes the call of a tawny owl and fear of night. In this respect, Messiaen emphasises its necessity: 'there's a mode of timbres, durations and intensities. This is not comparable to my "*Mode de valeurs et d'intensités*", but it is in the same spirit. This super-serial passage gives you an idea of my feelings about serial music: I find it capable of expressing only fear, terror, and night, ...'¹⁷³ This statement supports why the mode of pitches, durations and intensities is used in *La Chouette hulotte*.

The range of notes is four octaves from the lowest B \flat to middle A \sharp and the rhythm is irregular inside the two-beat bars. Serving as a comparison with *Mode de valeurs et d'intensités*, the attacks are not included in the mode in *La Chouette hulotte*. Dynamics range from **ppp** to **fff**, excluding **mp**, and are arranged in the shape of an arch where one dynamic is fixed on two notes except D \sharp with **ppp** which is a pivot and A with **fff**. These two are only fixed on one note each. (Fig 4-4) Hence, as the distance between the intervals is increased, the range of dynamics is widened. According to this, we can

¹⁶⁹ From the preface of the score.

¹⁷⁰ An exception is *Le Courlis cendré* composed of slow-moving chords with changing dynamics from **fff** to **ppp**.

¹⁷¹ See the preface. *Plus encore que son aspect, la voix de cet oiseau nocturne provoque la terreur. ... vers 2 heures ad matin, ...* (Even more than its appearance, the voice of this nocturnal bird provokes terror. ... around 2 o'clock in the morning, ...)

¹⁷² The phrase 'mode of pitches, durations and intensities' is used in *La Chouette hulotte* as a technical musical term in this research.

¹⁷³ Samuel, *Music and Color*, p. 241

assume that the biggest comparison in dynamics is the tritone interval A-D# and, actually, there is an example of it in bar 8. ((a) in Ex 4-6) However, the contrasting level of dynamics descends after the tritone although the distance of intervals is increased because of the symmetrical system. For instance, the interval of the 7th A-G# with **fff-ff** has only one degree of difference between the notes. ((c) in Ex 4-6) Each note has the same dynamics even if the range is not the same as before. In other words, dynamics and durations are related to the notes not the register. For instance, the first note F# in the middle and the lower F# in bar 15 are **mf**.

Durations increase chromatically by a semiquaver as the Mode of pitches, durations and intensities is used. On the score, there seems to be a mis-print on D# in the second bar which indicates **pp** instead of **ppp**.¹⁷⁴ ((b) in Ex 4-6)

Fig 4-4 shows how the notes and dynamics are related to constitute the mode and the ranges are not considered in this piece.

Fig 4-4) Structure of pitches and dynamics in *La Chouette hulotte* ¹⁷⁵

A	B \flat	B	C	C \sharp	D	pivot ⎵	E	F	F \sharp	G	G \sharp	A
fff	ff	f	mf	p	pp	ppp	pp	p	mf	f	ff	fff

This night passage has no pedal marking at all and the dynamics are constantly changing. More besides, all the notes are skipping about so it is difficult to create flowing phrases. It seems that there is no obvious relationship between the notes, but rather a combination of permutations. In such a fast progressing passage, the long notes and sustained notes can provide clues as to how and where to divide phrases because they give a similar feeling of resolution. In bars 7, 13 and 19, there are sustained notes, which are registered low and remain for a slightly extended moment, suggesting the ends of the phrases. The last notes of each phrase are note B \flat in bar 6-7, note G \sharp in bar 11-13 and note C \sharp in bar 18-19. (Ex 4-6, v means end of phrases)

The second night passage, which separates this piece into two sections in the middle, is expanded to more than twice its length (first motif- 26 bars and second motif- 55bars). The motif has the tritone interval A-D# but it is shared with other voices on this occasion. In other words, the tritone in the first motif is only in the top voice (Ex 4-7) but it is shared with the middle and top (Ex 4-7 (a)) and the middle and bass as a

¹⁷⁴ According to the rule of the mode, it must be **pp** on D#.

¹⁷⁵ Adapted from Chiat, p. 82

form of chord, like a ‘chord of resonance’. (Ex 4-7 (b))

Messiaen adds two types of emotional motifs between night figures and owl motifs. One is labelled the ‘fear motif’ (*le peur*) and the other is ‘vague and terrifying’ (*vague et terrifiant*). Both types maximise the fear of night by utilising the chilling effect of the calls of owls,¹⁷⁶ which are not beautiful or lyrical at all. In order to mimic this horrible feeling of night, Messiaen instructs the player to produce a very dry hitting timbre like a kettledrum (*très sec, percuté, comme une timbale grave*). In order to achieve that objective a monotonous C, in the lowest register, is repeated as the central note with D_b and F_#, all which combine to increase the fear at night. The tritone of F_# and C, which is one of Messiaen’s peculiar characters, appears at the end of the fear motif. This percussion-like motif raises the thrilling and tense atmosphere of night. (Ex 4-8)

This motif appears three times through the work and is followed by the owl’s call each time with the articulations and the tempo that also act as devices that contribute to the frightful mood.

It is worth mentioning that C is the main note for presenting ‘fear’ (Ex 4-8) and A, the lowest and highest note, is the most emphasized note, with fortississimo most prevalent in the night motif.¹⁷⁷ The fact is that a combination of C-A is used for the principal bird, the tawny owl, with the chord of resonance regardless of whether it is an inner or outer voice. (Ex 4-9)

The second type of emotional motif also has C-A shape but in order to create truly terrifying resonance, Messiaen uses harmonies such as perfect fifths, augmented and diminished octaves, and seconds. The tempo is changed rapidly in order to increase the tension. (Ex 4-10)

From the beginning, all the sections (night- fear- owls- terrifying) stack on top of one another and culminate in the creation and building of a dreadful mood of a deep, dark night in the forest.

Finally, the climax of the call of the tawny owl is described as a sound akin to ‘the cry of a murdered child (*comme un cri d’enfant assassiné*).¹⁷⁸ This thrilling part where the C-A motif remains is one of the most dreadful parts of the piece. Subsequently, the owl hoots in the distance like a tolling bell from another world (*Ulement plu lointain, semblant une cloche de l’autre monde...*).¹⁷⁹ Messiaen does not forget to insert the interval C-A into the inner and the outer voices at the end so that it reminds us that the C-A motif flows through the entire work as an important motif. (Ex 4-11)

There is an explanation for the setting in *L’Alouette lulu* in the preface. That location is the col of the Grand Bois at St-Sauveur en Rue, in the mountains of the Forez. There are pinewoods to the right of the road, and meadows to the left.¹⁸⁰ In *L’Alouette lulu*, soft chords which have a chromatic progression move towards B_b major chords. In the

¹⁷⁶ See Table VI in Messiaen, p. 134. The owls are categorised as Group 1 (a) which usually consists of short calls, thick homophonic and dissonant, and atonal by Sherlaw Johnson.

¹⁷⁷ See the Fig. 4-4

¹⁷⁸ From the preface.

¹⁷⁹ This is notated in the preface of score.

¹⁸⁰ There is an indication in the preface.

main, full chords of three quavers and a full chord of one crotchet create the basic form of 'night' (Ex 4-12) – with four exceptions: one quaver and one crotchet in 6/5/2 and 7/3/1, (Ex 4-13) eight quavers and one crotchet in bar 49 (Ex 4-14) and nine quavers and one crotchet in bar 55. (Ex 4-15) The key of B \flat Major seems to be selected as the opposite pole of E Major, which Messiaen uses for implying the 'light' in *La Colombe*, in order to present 'night' in this piece.¹⁸¹

The chord of resonance, which emphasises a lower sound, is used to depict the calm night and melts into the song of the woodlark which is placed in the high register and sings with a fast tempo. The typical night motif which moves slowly and is in low register opens into a peaceful mood and usually finishes with a falling third on the top note. (F-D) The last two chords of the night motif play an important role in this piece for the night and appears throughout the work. This night motif may on first glance appear very simple and easy to perform, but Hill insists it is a deceptively difficult section. Proof of this lies in the fact that he spent a longer time working on this with Messiaen than on any other passage in the *Catalogue*. Hill suggests that 'the right hand chords have to be balanced with the left most precisely: soft enough to shadow the bass octaves, but not so quiet as to be entirely submerged.'¹⁸² In particular, Messiaen asked him to 'give a very slight preference' to each D \sharp which is the pitch makes feel of 'major character' (B \flat).¹⁸³ (Ex 4-12)

These short motifs are made up of two chords falling by a third with much louder dynamics to describe the night, which is gradually becoming deeper and darker. (Ex 4-13) When the night gets deep enough, a nightingale, one of the representative nocturnal birds, starts to sing as if it is having a conversation with the woodlark. Their dialogue raises the tension that is already beginning to set into the dark night.

After the woodlark's *agitato* conversation with the nightingale, the long night motif is still in a passionate mood, the dynamics changing and pedal marks used on each note. The first and the last chord of this motif are composed of the falling third (F-D), indicating representative device of night in *L'Alouette lulu*. (Ex 4-14)

The longest night motif consists of four groups and finishes with B \flat chord which seems to signify that the night is deep and becoming calmer. This moment also hints at the ending of the piece. Each group of each part moves chromatically and skips at significant intervals. (Ex 4-15)

By its conclusion, the night motif implies finality with the two softest chords of falling by a third. By repeating the night motif, Messiaen leads us to imagine that we are wandering in a tranquil forest at night. This call to our imagination provides a clear comparison with different nocturnal moods, all while using the same material of 'night'. By the end, the softest night motif emerges into the song of the woodlark and disappears in the darkness of the woods leaving the reverberation of the calm night. (Ex 4-16)

¹⁸¹ Chadwick and Hill, Olivier Messiaen's *Catalogue d'oiseaux*: From Conception to Performance, p. 49-50

¹⁸² Hill, The Messiaen Companion, p. 275

¹⁸³ Ibid.

More varied language is used in the night music of *La Rousserolle effarvatte*. The night motif has a frantic beginning consisting of loud sounds, and chords of resonance to indicate the imminent solemnity of the piece. Messiaen indicates specific instrumental sounds to imitate: cymbals, tam-tam, trombone and metal vibration. It is helpful to express the appropriate timbre for a performer. In order to produce the magnificence of night, a performer should produce sounds like a tam-tam or trombone as chords of resonance. Written down, these clues appear in what looks more like organ writing: in four staves with a sustained low bass note, usually held by the pedal. (Ex 4-17)

In contrast to other works which contain a 'night motif', *Le Merle de roche* describes not only night but the passage of time – that indefinable period from night to sunset, and one which provides the best opportunity for Messiaen to express his favourite characteristic, colour. The piece commences with a deep and dark night motif which always appears with the immense stone motif hand defined as a mystical or magical sign (*levee en signe magique*). Likewise, and in other pieces which involve the night motif, Messiaen uses bass clefs for both hands and a CCR (Chord of Contracted Resonance) depicts the profound night (*noir et profound*). The night motif in this piece is composed of three two-chord sequences: two 1st CCR 9 and one 2nd CCR 3 emerging into the 'stone' motif (*la main de pierre*)¹⁸⁴ which is in the treble clef, and moves very slowly in the same tempo as the night motif, albeit with different dynamics. This device indicates a clear contrast between the deep and dark night, and the massive stone hand which the moonlight shines on.¹⁸⁵ (Ex 4-18) The night motif in *Le Merle de roche* excludes any emotional element and plays the role of resonance in order to highlight the stone motif.

In *Le Courlis cendré*, Messiaen describes not only night but also the fog which spreads over the sea (*la nuit et le brouillard se répandent peu à peu*) and makes the night even darker and more sombre. Prior to the night motif, the water motif, made with the chromatic scale, appears in single-line passages in each hand with undulating shapes.¹⁸⁶ Suddenly terrible thick chords made up of twelve-notes¹⁸⁷ again begin in a high register and profound at the same time to describe sublime night. In contrast to the water motif composed of twelve semiquavers strictly, although each beat of this motif is fixed in a quaver note, the number of quavers in each bar is permuted more freely. The sustained pedalling helps to create mood in which the night is becoming increasingly blurred and confused (*brouillé, confus*).¹⁸⁸ (Ex 4-19 (a)) The foggy night motif becomes lighter with the use of softer dynamics and slows up until the appearance of a magnificent lighthouse motif made up of the loudest (*fff*) eleven-note

¹⁸⁴ This stone motif will be explained in Geographical Features.

¹⁸⁵ See the preface.

¹⁸⁶ See the section of 'water'.

¹⁸⁷ According to Jeremy Thurlow, twelve-note writing is Messiaen's normal medium for 'neutral' impartial material. 'Messiaen *Catalogue d'oiseaux*', p.138

¹⁸⁸ See the music of *Le Courlis cendré*, p.17

chord. (Ex 4-19 (b)) The lighthouse motif appears three times before birdsongs to play the role of refrain. This repetition also implies the ending is closing and preparing for the main bird's final solo.

Even though the same essential material is described, different musical languages can be used according to the mood or feelings which the composer intend to emphasis. For instance, for calm night, the chord of resonance is used. However, for fearful night the mode of pitches, durations and dynamics is applied. Landscape materials for day or night play the role of creating the entire mood in birdsong music. Both pieces in Book III present night yet only one depicts calm night whereas the other describes horrible night. The owls' piece starts with twelve-note mode to express the dreadful night yet on the contrary soft chords of resonance determine the tranquil mood at night in the lark's piece. That is to say non-birdsong materials determine the whole mood when the birds are singing. Moreover, landscape arranged at the beginning can be a hint for the performer as to which feelings to hold in advance and ultimately how to render the piece.

2. Light

It is commonly held that light has a deep relationship with the passage of time. In addition, light has also held a profound connection with Christianity. The theological imagery of the sun is likewise a rich common vein through Messiaen's works: quoting Malachi 4.2, Marmion refers to the 'Sun of Justice, who rises in the midst of our darkness to enlighten every man'.¹⁸⁹ Namely, the sun means Jesus. For Messiaen, therefore, the sun is one of the most meaningful landscape features in both his music and also for his faith. It is inevitable to consider the sun for the light motif because there is an obvious, natural connection between the two.

The very essence of light is that it has more inseparable and direct connection with colours than any of the other materials examined thus far. Of course, the sea music contains its own array of colours but the descriptions in that environment relate more to the aspects of the shapes and the movements rather than the pure colours in the *Catalogue*.

According to his own statement it is clear that light is deeply related to chords for Messiaen. In fact, as Messiaen himself mentioned 'When I hear music ... I see colours. Chords are expressed in terms of colours for me'.¹⁹⁰ His colours are deeply connected to his synaesthesia and naturally reassigns chords to describe the various colours of

¹⁸⁹ Quoted from MMus Thesis by Dunbavand, S.J. p. 35, Marmion, Dom Columba, *Christ in His Mysteries*, trans. By Mother M St. Thomas (London: Sands and Co., 1939) p.115

¹⁹⁰ Rößler, Contributions to the Spiritual World of Olivier Messiaen, p.54 quoted from Messiaen's *Chronochromie* by Amy Bauer, Messiaen Studies, p.160

'light' such as those found in the sun and in a rainbow. That is to say when he listens to chords which are made of several notes, he can see numerous colours because different notes illuminate different colours for him.

The light motif appears in five pieces of the *Catalogue* as the shapes of the sun, the day and the rainbow. The pieces under consideration here are *Le Lorient*, *Le Traquet stapazin*, *La Rousserolle effarvate*, *L'Alouette calandrelle* and *Le Traquet rieur*. However, it is important to separate 'Day Music' from 'Light Music' because it is better to categorise it according to an 'Analysis by Time' which is the fundamental basis for dividing the 'Day' and 'Night' motifs. Set in this context, *L'Alouette calandrelle* will be examined in the section labelled the 'Analysis by Time'.

In *Le Lorient*, the main motif is a passage of time that covers that period from early morning at 5.30 am to midday. The sun is used as the main non-birdsong material to present the passage of time. The opening is similar to the opening of '*L'Alouette calandrelle* in stylising the characters which present early morning in *Le Lorient* and day in *L'Alouette calandrelle* and using added resonance¹⁹¹ for the birds. This movement starts with the arrival of sunlight early in the morning and all is very calm. The two-chord sun motif is formed from F#7 Major and G#7 Major chords which ascend whenever the golden oriole follows on except at the ending. (Ex 4-20) After the sun motif associated with other birds, it descends in a resolution onto E Major. It seems at this point that a new section will begin. E Major¹⁹² itself has a theological connection which means 'hymnic praise of God' and the progression of F# Major and E Major should be considered as one of Messiaen's favourites.¹⁹³ (Ex 4-21)

At the end, the sun motif announces its end by staying on F#7, neither ascending nor descending. The isolated sun motif from the golden oriole brings about the conclusion of this work. (Ex 4-22)

In actual fact, the descending sun motif (b) reminds us of the second movement, '*Feuilles Mortes*' (Autumn leaves) from *Préludes* Book 2 by Debussy. It is well known that Messiaen was influenced by Debussy, and indeed Debussy's chords patterns are recalled by the transpositions witnessed in this piece. (Ex 4-23)

¹⁹¹ The device of 'added resonance' is used for emphasising one part with louder dynamics. According to Sherlaw Johnson's definition: 'the device can take the form either of a note or chord played quietly above a louder principal note or chord, or of a chord played loudly in the bass register of the piano against other material (inferior resonance). In *Catalogue*, there are many examples of birdsong coloured with either upper or lower resonances, or both.'

¹⁹² E Major key has a theological implication and the example is the fifth movement, *Louange à l'Éternité de Jésus* and the last movement, *Louange à l'Immortalité de Jésus* from *Quatuor pour la fin du temps*. (Siglind Bruhn, *Messiaen's Interpretations of Holiness and Trinity: Echoes of Medieval Theology in the Oratorio, Organ Meditations, and Opera*, Pendragon Press, 2009, p.9).

¹⁹³ Ibid

Here we see a longer sun motif without a label in the score. Sherlaw Johnson simply notes 'E major' but does not consider it to be the 'sun' motif.¹⁹⁴ However an important point should be made here because it is made very clear that the sun motif has different shapes and harmonic progression compared to those found in the birdsong material. The sun motif is duly repeated between the appearances of various birdsongs to express the sun rising, indicating that it is not involved directly in any birdsong motifs but that it is a motif in itself. Moreover, the features of 'sun motif' such as tempo marking (*Lento*), pedal markings (pedal on each chord) and dynamics (*pp*) clearly distinguish this motif from birdsong. (Ex 4-24) It appears constantly in a similar shape from the beginning to the end. The motif is expanded continuously to describe the sun rising until the song of the golden oriole is introduced once more.

Ex 4-25 seems to show the expansion of the sun visually by ascending in the right hand and descending in the left hand which creates a bigger gap with crescendo. In *Le Loriot* only tonal chords are used for the sun material and the chord progression is caused by whole tone descending.

The sequence of chords seems to depict the sun, still blurred and not quite yet a perfect circle as it starts to rise from the sea. As the sun reaches its zenith, the shape gradually becomes more perfect and Messiaen uses tonal triads to describe this serene transformation. A magnificent five-octave chord of E major is used for the colour of copper (*cuivré*) and melts into the song of the *Pouillot véloce* (chiff chaff) as a depiction of the full sunlight visible at midday. (Ex 4-25 ④) The last two chords are repeated once again in an attempt to recreate the climax of feeling when the sun is rising. (Ex 4-26)

The golden oriole sings very slowly with added resonance and with the chords in the left hand quoting the 'love theme' of '*Cinq Rechants*' (*Five Rechants, 1948*) (*tous les philtres sont bus ce soir*). This presents the sun which 'resembles the golden and rainbow rays of the oriole's song'.¹⁹⁵

Messiaen associates the sun motif with the memory of the golden oriole's song and is labelled as *nonchalant- souvenir d'or et d'arc-en-ciel* (memory of gold and the rainbow in the sky). Fundamentally, the motif of the main bird is based on mode 2 with colour chords and consists of a homorhythmic texture throughout the movement. However, only this combined passage is arranged on three staves in very slow tempo (*Lento*) which seems to represent the recalling of the memory concerned with the sun: the two top parts imitate the song of the golden oriole and the bass part depicts the memory of the sun. Added resonance is used for the song of golden oriole in the middle staff. The melody in the middle staff crosses between mezzo and alto parts. In order to emphasise the melody, the composer separates it from the top staves and it is

¹⁹⁴ See Sherlaw Johnson's diagram in which he categorises birdsongs and E major. At the Form section, he does not even put it in the diagram. He just states 'E major, contrast between birdsong and colour-chords in tempo. Sherlaw Johnson, Messiaen, p.144

¹⁹⁵ From the preface in the score. Griffiths, op. cit., p.183, Hill, Messiaen Companion, p.333

notated in the middle stave. The bass part moves smoothly in the vertical chord progression while the principal birdsong remains in a similar pattern which skips with articulations. (Ex 4-27)

The combined passage implies an approach towards the end of *Le Lorient* and in fact the sun motif reappears only twice before the end. Adding this section that involves Messiaen's personal memory notated as '*souvenir d'or et d'arc-en-ciel*' (memory of gold and rainbow), this piece not only stays in 'reality' in describing nature but also takes further steps towards achieving a kind of artistic 'supernaturality'. This is also an example of the anthropomorphic feature of landscape.

Messiaen's favourite piece, *Le Traquet stapazin*¹⁹⁶ has as its temporal setting almost exactly the same time of day as *Le Lorient*, in other words early morning (between 5 am and 9 am) at the end of June (*Fin juin*). While the sun, which charts the passage of time by its movements from dawn until midday, opens *Le Lorient*, it is held back until the second section is initiated in *Le Traquet stapazin*. This provides for an extended cycle from sunrise to sunset where Messiaen had previously indicated a specific time: sunrise between 5 am and 9 am, sunset between 9 pm and 10 pm. After alternating between the vineyard motif and songsters' solo, sunrise is ushered in with colour chords. Messiaen describes the sunrise as a red and gold disc rising from the sea to the sky (*le disque rouge et or du soleil sort de la mer et monte dans le ciel*). At the same time all the other chords resonate in a majestic colourful sonority (*majestueux, sonore, colore – laissez resonner toutes les notes*). This sun motif increases dynamically until it reaches the zenith with its full rays on display.

For the first chords of each bar, one of the Chords of Transposed Inversions (CTI)¹⁹⁷ is used to represent the sun and the remaining chords are selected from the Turning Chords (TC), Group A or Group B¹⁹⁸ to portray the colourful sun spells. In fact, the TC is used without the top notes or with the semi tone rising notes at the top. (Ex 4-28 and Ex 4-29)

The sustained CTI chords drawn from Group A and B in the middle register, present the sun itself with accents for emphasis, and TC are used for describing sunshine, which can be described as the sun disc, a halo around the sun or broad sun rays. (Ex4-28)

While the pattern of the two chords preserves the rhythmic pattern of semiquaver-quaver, the melody which commences in a very high register gradually varies. A very low melody is maintained on Group A or B, thereafter alternating between the two melodies. In other words, the bass line remains constant while the upper chords are transposed. (Ex 4-29)

¹⁹⁶ Hill, Companion, p.336

¹⁹⁷ See Chord and the CTI table.

¹⁹⁸ Group A and B are divided to make it easier to explain.

For the sunset, the sustained chords, which are set in the treble at the beginning of each bar and are made of CTI, describe the sun itself by means of the falling minor third, and the other chords, which are brought from the motif of sunrise, present the colours of red and gold (*sang et d'or*). This motif has a similar shape to that found in the sunrise section, and the only difference is the location of the sun which is placed in the high register to represent the sunset starting from the zenith. (Ex 4-30)

In the last section, Coda, the slow homophonic chords describe the colours of sunset which are red, orange and violet in the sky behind the mountain (*rouge, orange, et violet du ciel, au dessus de la montagne*). (Ex 4-31)

The outer notes of both hands are the same notes across two octaves and display the fifth intervals for both the first four chords and also from the eighth to eleventh chords. However, it seems that these chords are placed in no particular order for representing colours so Messiaen elects to arrange the chords with a flat rhythm to focus on the harmonies. (Ex 4-32 ①) The sunset motif recalls *Cantéyodjayâ* which is used for the yellow iris motif¹⁹⁹ in *La Rousserolle effarvate* (Ex 4-32 ②) and originates from the sixth movement, *Jardin du sommeil d'amour* from *Turangalîla*. (Ex 4-32 ③).

In the longest piece, *La Rousserolle effarvate*, time flows for twenty-seven hours from midnight to 3 am the next day. In this extended time various non-birdsong materials are applied to cover the long period.²⁰⁰ As a programmatic piece, the movement of the sun which has an 'arch-like' shape plays a significant role in presenting the passage of time and it appears after the night music as a motif of sunrise and reappears as a motif of sunset at the end in Coda. Fig. 4-5 shows the structure formed by time and non-birdsong materials in *La Rousserolle effarvate*.

In order to describe the colour changes of the sun motif efficiently, Messiaen combines his musical languages because this motif portrays not only the sun but other natural elements as well, such as 'the lilies on the pond' (*sur l'étang des nénuphars*). Mode 2 (1) is used for the colours of pink and mauve (*lever de soleil rose et mauve*) at 6 am and Mode 3(1) is used for the colour of orange which should be a very soft sound.²⁰¹ This sun motif finishes with the Chord of Contracted Resonance (CCR). The primary function of the 1st CCR, which emerges into and birdsong, is to portray the sunshine as the backdrop between the birdsong and sunrise in front.²⁰² (Ex 4-33) Likewise, as observed in the sun motif in *Le Traquet stapazin*, it is layered on three staves in *La Rousserolle effarvate*.

¹⁹⁹ See Chiat, p.164

²⁰⁰ See the category of 'Non-birdsong Material' of the figure.

²⁰¹ These colours are labelled in the score.

²⁰² Chiat, p.125

Fig. 4-5) Structure of *La Rousserolle effarvatte*²⁰³

Section	Time	Non-birdsong Material	Other
A	Midnight 12:00 am	Pond, frog	Landscape
B	3:00 am	Solemnity of night, Noise of the marsh, frog	Sunrise Day 
	8:00 am	Sunrise Yellow iris	
	Midday 12:00 pm	Tam-tam (Bird)	
C	5:00 pm	Purple foxglove Water lily	
B'	6:00 pm	Tam-tam Yellow iris	Sunset
	9:00 pm	Sunset Memory of sunset	Night
	Midnight 12:00 am	Solemnity of night Metallic instrument, trombone, xylophone Noise of marsh Frog	
	3:00 am	(Principal bird)	
A'	3:00 am	Frog, Pond	Landscape in retrograde order of section A

If there are no specific directed explanations in the score, we are able to identify the sunrise and sunset because of the typical shapes ascending and descending previously recognised, consisting of two layers marked *p* and *pp*.

²⁰³ Quoted directly from Chiat, p. 106

There are a few symmetrical devices with which to compare the sunrise and the sunset. Firstly, they are easily recognised by the ascending and descending chords or notes which are symmetrical. The ascending notes D- E_b- E- F[#]- G[#]- A[#] at the top are descending as in exact symmetrical form: A[#]- G[#]- F[#]- E- E_b- D. (Ex 4-35 and Ex 4-36).

Secondly, the habitat is arranged symmetrically. The sun rises on the pond of lilies at 6 am and goes down on the pond of iris (*sur l'étang des iris*) at 9 pm. (Ex 4-33 and Ex 4-40) The pond with iris (Ex 4-40) is formed in the same way as the pond of lilies (Ex 4-34 and Ex 4-35) but the CCR between the longer gesture is used once before the descending chords. Another examples are Ex 4-37 and Ex 4-39 which show the symmetrical process of sunspells. Sun which is hanging in the sky for a while just before sunset is used as a pivot. (Ex 4-38)

Messiaen explains the sunset motif in detail through the following description: the red disc of the sun reaches its reflection and sinks in the water (*le disque rouge du soleil rejoint son reflet et s'enfonce dans l'eau*). (Ex 4-41) Messiaen's common language is used: one can observe descends with softening dynamics to present the descent of the sun.

Fascinatingly, Messiaen uses his favourite intervention into the landscape in describing the sunset, which is labelled as 'memory of sunset' (*souvenir du coucher de soleil*) in two sections with the colouration of dark violet (*violet sombre*) (Ex 4-42 and Ex 4-43). Fig 4-6 shows the list of colour association of sunrise and sunset in *La Rousserolle effarvatte*. This motif appears occasionally in a number of ways and shows Messiaen's splendid colouration for the sun.

In the shortest movement of *Catalogue, L'Alouette calandrelle*, there is only one kind of non-birdsong material, that of light presented as a 'day' in the desert. The light portrayed is not only the sense of sight but also includes a sense of touch which gives a feeling of dryness and heat by using simple chords which are moving down slowly and softly, adding to the overall association one feels with the desert here. Colour chords which resolve to F[#] are used. (Ex 4-44)

The soloist, short-toed lark's song has a similar pattern in tempo, range and rhythm so it is easy to recognise it even if there is no specific labelling of birds. It seems obvious that the passages in bars 15, 17, 19, 21, 24-25, 43, 46, 49, 51, 53 and 55-56 are not presenting short-toed lark's songs, even if there is no label between bars 15 and 26, and between bars 43 and 57. These passages are divided into two types and built with Messiaen's special chords. One such type is found in the pattern of arpeggio and the other type is in the form of vertical chords. In bar 15 the first half of arpeggio is formed with the 1st CCR 1 A-B and the second half is the 2nd CCR 4 A-B. Bar 49 consists of CTI 11 A-B and bar 51 is figured with CTI 1 A-B. According to Chiat's analysis, the passages are used for 'warmth and loneliness at the Crau desert' (*Chaleur de solitude du desert de la Crau*), or may be considered to be merely a harmonic function to expand the

development of the short-toed lark's song.²⁰⁴ Ex 4-44 has precisely the same progression as the vineyard motif from the beginning of *Le Traquet stapazin*, although it differs in range and tempo. (Ex 4-45)

Fig 4-6) Sunrise and Sunset in *La Rousserolle effarvate*²⁰⁵

Page	Description/ Characteristics	Location	Time/ Period
11	Sunrise 1 – pink and mauve Orange Rose and mauve (dreamy)	Waterlily pond	6 am
12	Sunrise 2 – dense chromatic chords		6-8 am
12	Sunrise 3 – dense chromatic chords and cluster ascent		6-8 am
13	Sunrise 4 – mauve + gilded		6-8 am
14	Sunrise 5 - mauve + gilded		6-8 am
15	Sunrise 6 - chordal ascent		6-8 am
38-39	Sunset 1 - red and violet Orange, red violet Descending chromatic chords + violet and gilded (dreamy)	Iris pond	9 pm
40	Sunset 2 – red and violet descending chromatic chords (dreamy)	Iris pond	9 pm- midnight
40	Sunset 3 – all lower in range	Iris pond	9 pm- midnight
41	Sunset 4 – ‘the red disc of the sun meets its own reflection and sinks into the water’ Chromatic descending cluster chords (extended version)	Iris pond	9 pm - midnight

In the *Le Traquet rieur*, the light motif appears briefly noted as ‘glistening silver of sun on the sea’ (*poudroiment argenté du soleil sur la mer*) before ending. In spite of

²⁰⁴ Chiat, p.102

²⁰⁵ Quoted from Kraft, p. 193

dealing with it as water music²⁰⁶, later, it will be considered in this section as well, given that it was more likely to be intended as music associated with light.

The sun feature is homophonic and formed with regular rhythm (only using semi quavers). It is mostly made up of semitones in a combination of sevenths and ninths. It is likely that Messiaen prefers to use chords here rather than any other materials such as scales or rhythms because chords are related to colours. One can deduce that clearly in Messiaen's mind, light is deeply connected with colours. (Ex 4-46)

Through the study of several works which contain light or sun motifs, there has been a careful examination of how Messiaen uses these motifs in his birdsong. Sometimes sunshine is more brilliant than birdsong. Sometimes the sun moves from the bottom to the top and all the way back to the bottom, sometimes light is described as a colourful rainbow and usually chords are used to represent the light and all the various colours. For the self-styled colourist Messiaen, issues pertaining to light/sun are rich sources for material which cannot be ignored in the process of producing such an array of dazzling sounds. One might use the example of a stained glass window in a chapel as a source of inspiration for the performers to make their glittering timbre to present this light.

3. Water

Water is probably one of the most favoured topics for discussion by the artists, and we can find many pieces related to water. It is, also, the most common non-birdsong material used in six pieces in *Catalogue*; nearly half of the work involves a water motif. In general, water is material which flows or waves, and has its own sounds so it seems much easier to depict this in music than the more complicated mountains, fields, woods and so on. That is why water is such a popular subject for composers.

Particularly, French culture itself has a deep relationship with water, not only in music but also in art, and in great abundance. For instance, there are several works by French composers: the piano part representing water ripples from 'The Swan' by Saint-Saens, Barcarolles by Faure, 'La Mer', 'L'Eau pure du bassin' from the music for *Chansons de Bilitis*, 'Reflets dans l'eau' from *Images I* and 'Ondine' from *Préludes* by Debussy and 'Jeux d'eau', 'Une Barque sur l'océan' from *Miroirs* and 'Ondine' from *Gaspard de la nuit* by Ravel. At this point one should of course also refer to other composers from other countries who have used water as their main material such as Elgar, Chopin, Liszt and Smetana.²⁰⁷ One famous representative French artist who loves water was

²⁰⁶ See the section that refers to water music.

²⁰⁷ Example lists: the 2nd movement from Symphony No. 6 by Beethoven, Barcarolles by Chopin, Faure and Tchaikovsky, 'The Trout' by Schubert, 'Sea Pictures' by Elgar, 'Dawn on the Moscow River' by

Claude Monet, and his series of masterpieces, 'Water Lilies', which pieces show the artist's deep relationship with water.

Water is a 'symbol of grace and eternity' for Messiaen.²⁰⁸ He cites the text from John 4:14: 'but whoever drinketh of the water that I shall be in him a well of water springing up to everlasting life' in his music, *Fêtes des belles eaux* (Festivities of beautiful waters) for six Ondes Martenot.²⁰⁹

It is common for scales or arpeggios for waves and skipping notes or repeated notes to be used to describe falling water.²¹⁰ Messiaen, however, uses diverse techniques and divides water types more specifically such as water (*eau*), wave, sea, pond and river by locations or size. In *Le Merle bleu*, Messiaen's intention seems to be to create the idea of energy disappearing from a central point with descending tones, and eventually softening. This perhaps gives a kind of resonant, visualisation of water ripples dying out in nature. (Ex 4-47)

In *Catalogue*, water is the only landscape material that is a creator of noise in itself. It is used in various forms depending on the place, such as the sea, waves, rivers, ponds or just water itself²¹¹. Moreover, water has inherent movements and specific colour associations related to harmony, which makes it distinguishable from other materials. There are three kinds of water present here: water (*l'eau*), blue sea (*la mer bleu*) and waves (*les vagues*) in *Le Merle bleu*. Based on these variations of water, Messiaen describes them in order, from near to far away.

Firstly, for water, described simply as '*l'eau*', Messiaen uses various types and they are repeated alternately. Type (a-1), formed with freely juxtaposed atonal monophony fixed in *mf*, seems to represent tranquil water drops and introduces placid water. (Ex 4-48)

When the water motif is repeated, it becomes more complicated (a-2), an expanded gesture of the first motif placed in a higher register. (Ex 4-49)

Water (b) is a form of homophony with articulations and dynamics changing to express small movements of water, which are not big enough to be called 'waves', and where

Mussorgsky, '*Au lac de Wallenstadt*' (At Lake Wallenstadt and '*Au bord d'une source*' (Beside a spring) from *Première année: Suisse* by Liszt, '*Die Moldau*' (Vltava) by Smetana and '*Sea Interludes*' from the opera '*Peter Grimes*' by Benjamin Britten.

²⁰⁸ Messiaen, Commentary for *Fêtes des belles eaux*, reproduced in Nigel Simeone, '*Catalogue of Works*' (Tutzing: Schneider, 1998), p.194, See also Vincent P. Benitez, '*Olivier Messiaen: A Research and Information Guide* (New York and London: Routledge, 2008), p. 54 and Fallon, '*Messiaen Perspectives 1: Sources and Influence*' (Routledge, 2016) p.254

²⁰⁹ Fallon, *Messiaen Perspectives 1*, p.254

²¹⁰ Examples: an arpeggio-style progression in the left hand from bar 4 of *Barcarolle* op. 60 by Chopin and a mixture of triplet scales and arpeggios in the left hand from the beginning of *Au lac de Wallenstadt* by Liszt.

²¹¹ Messiaen states just '*eau*' on the score.

the gesture descends at the end very softly. Both (b-1) and (b-2) contain the same gesture that consists of ascent with a crescendo and descending at the end with a soft sound, which implies natural sounds and is a traditional pianistic shape. (Ex 4-50)

Water (b2) is similar to (b1) in that it arises with three chords, but the difference here is that it has a bigger and longer gesture than (b1) to burst and it takes time to exhaust all the energy contained within. It has a similarity with the waves of the sea (*les vagues de la mer*) in *Le Courlis cendré* in terms of its ascending and descending shape, dynamics of crescendo and decrescendo and its depiction of the time it takes for the huge waves to lose energy. In other words, an archetypal shape is used to express waves in both pieces. (Ex 4-50 ② and Ex 4-51)

Water (c) appears in a low register and has a narrowly layered homophony in a soft dynamic to express the calmest water type. This presents a natural reverberation that settles down after being disturbed and is characteristic of water which never can be still in nature and flows from place to place. (Ex 4-52 ①) This type appears only twice and it has the same shape but is transposed down a major second. (Ex 4-52 ②).

Ex 4-53 water (d), which starts loudly and becomes softer as if it were lapping water (*clapotis de l'eau*) - a reduction of the water shape, is composed of the last gesture of Ex 4-50 ② b-2. Acting as a contrast to those waves which have a bigger gesture with sweeping scales or arpeggios, dropping water is better represented with small gestures with a few notes or chords and movement in an unexpected direction. Water (d) seems to describe precisely the characteristic of water via the use of staccatos. Chords composed of 4th and 5th in 5/4/1 are especially well-presented water drops: staccato presents the lightness of the water drops derived from big waves, and the grace chord and note of the second chord arranged in lower position describes the natural phenomenon where a bouncing drop starts from a lower level as it falls than when it started.

Water motifs mainly appear in the introduction, once before waves (Ex 4-48), and finally reappearing as a form of water drops with the softest sound at the end in the coda between recalls of the blue rock thrush (*souvenir du Merle bleu*). The reappearance of water motifs shows us what a significant role water plays in this piece and informs us of Messiaen's unmistakable permutation. That is to say, water is potential as an effective 'painterly backdrop' for the birds with his special memories; in particular, those memories that he experienced directly at the place where he heard birdsong together with the sound of water. In the light of this factual background, he is not a passive-observer but an active participant in his music and reminds us of his physical presence in the landscape when he transcribed the birdsong and its surroundings. Messiaen directly notates to produce 'very pure, like a choir of ladies' voice in the distance' in the score, a souvenir of Debussy's *Sirènes*.²¹² (Ex 4-54)

²¹² Sherlaw Johnson, Messiaen, p. 129

For the variety of water motif, the title '*Le Merle bleu*' sounds very similar to '*le mer bleu*' (blue sea) which is used as the main material in the middle section containing waves. The blue sea has the role of 'refrains' so appears three times between *Le Merle bleu* and wave/water motifs.²¹³

Messiaen was captivated by the sea and his first portrayal of landscape in his cahier is also of a sea description in Brittany. His interest in the changing colours and movements of waves that he observed from Brest to the island of Quessant is expressed in detail.

Blue sea, marine blue, Prussian blue, with reflections of silver and fold. The wake behind the boat glistens with white foam... Huge waves: hills becoming valleys, valleys transformed into hills, in ceaseless exchange. Within the blue of the sea the sun traces figures-of-eight, grey-orange, and at the centre a murky pale green.²¹⁴

Messiaen uses modes of limited transposition in several pieces in *Catalogue* to present specific colours and Mode 2²¹⁵ is used in *Le Merle bleu* to describe the 'blue' colour of the sea. In addition, A major, which is associated with the colour blue and is used for the sea in *Le Traquet rieur* and for the river in *La Bouscarle*, is used to portray the blue sea in this piece. The sea motif starts with a moderately loud chord sustained through the bar and ascends softly in steady tempo. Messiaen instructs the performer to make soft, harmonious and contemplative (*doux, harmonieux et contemplative*) sounds for the sea and to stay in moderate dynamics to present a calm sea. It describes the surf crashing on the sea shore and ebbing away. The bass notes with pedals also play an important role in the resonance of the tide. (Ex 4-55)

Considering the third variation of water, wave motifs are changeable like real waves and different timbres should be created in each bar. Due to the dynamics and shape of those bars, the size of the waves can be estimated. After gentle, descending waves, which are probably medium sized, we suddenly find that furious (*furieux*) waves which are assumed to be larger and composed of white keys on the right hand and black keys of the left hand, appear (Ex 4-56) and they remind us of the gesture in '*Jeux d'eau*' by Ravel. (Ex 4-57) This wave motif can easily be distinguished from the other types of waters because of its various shapes and dynamics. (Ex4-58)

There is an unlabelled example which could easily be considered as water material in addition. It appears as if it is involved in the motif of *Le Merle bleu* but is more likely

²¹³ Ibid, p. 145

²¹⁴ Cahier 23040, on 22 September 1955 trip to Brittany, p.2 trans. by Peter Hill

²¹⁵ Mode 2 is used not only for the blue but also for the pink and mauve of sunrise in *La Rousserolle effarvate*. (Sherlaw Johnson, Messiaen, p.136)

to evoke the tides flowing from far to near and crashing against the cliffs. The tempo of the blue sea ($\text{♩} = 138, 6/1/1$) and the descending shape which is similar to the inversion of the blue sea shape lead us to regard it as a sea motif. (Ex 4-58)

In order to create the loudest, most resonant sound of splashing waves on the rocks, which is notated as echoes from the rock walls (*résonance des parois rocheuses*), Messiaen writes *fff* on an E \flat Major eleventh chord overlapped with the song of the blue rock thrush. He also indicates the fingering of the left hand with three fingers to emphasise the 7th note, D \sharp which lingers longer than the element representing the blue rock thrush. (Ex 4-60)

Rocks and sea waves are the main non-birdsong features in *Le Merle bleu* and for the climax of the piece, Messiaen uses both materials at the same time. As a result, some extraordinary non-birdsong effects are derived. (Ex 4-59)

It would be perhaps too convenient to consider *Le Merle bleu* as mere 'sea music'. However, there is more information about the work provided in the preface and it is important to read that section carefully in order to be able to fully understand the piece as intended by its author.

Le Traquet stapazin is set in Rousillion like the other sea music, *Le Merle bleu* and *Le Traquet rieur*. This work was notated at the end of June in the region of Banyuls.²¹⁶ The landscape is described at the beginning of the preface:

*... le cap l'Abeille, le cap Rederis. Les falaises rocheuses, Les montagnes, la mer, les vignobles en terrases. La vigne est encore en feuilles vertes. ...*²¹⁷

(...capes, rock cliffs, mountains, sea, terraced vineyards. The vines are still green leaves. ...)

Messiaen describes his unforgettable impression of the landscape in conversation with Claude Samuel:

In the course of the journey that was the origin of the pieces in my *Catalogue d'oiseaux* entitled '*Le Merle bleu*', '*Le Traquet rieur*' and '*Le Traquet stapazin*,' I became acquainted with the region of the Pyrénées-Orientales, and was absolutely thrilled by that extraordinary place, which combines the blue of the

²¹⁶ From the preface

²¹⁷ Ibid.

sea, overhanging cliffs, terraced vineyards, forests of cork oak, and even perpetual snow.²¹⁸

Landscape is consistently connected with the birdsong in this piece: there are nods to the black-eared wheatear at the edge of the road (*Traquet stapazin – au bord de la route*), the ortolan bunting singing in the vine (*Bruant Ortolan - dans la vigne*), the spectacled warbler in the scrubland (*Fauvette à lunettes – dans la garrigue*), the herring gull flying above the sea (*Goéland argenté – volant au dessus de la mer*) and the raven heard from the rock cliffs (*Grand Corbeau – sur les rochers de la falaise*). Only three landscape motifs are established individually: the terraced vineyards, sun music and the sea motif which is associated with the *Turangalila* motif.²¹⁹

Among the non-birdsong materials, sea music appears in only three bars of the coda and is overlapped with the thekla lark's song. For the sea, the composer asks us to visualise and then hear the sounds of a gentle sea without waves. The outer staves, which are in the left hand (for the first stave, Messiaen instructs the performer to cross the left hand) stay on the same chord of C# minor 7th and the inner stave presents the movement of the sea through gently oscillating harmonies. (Ex 4-61)

La Bouscarle, which contains fourteen kinds of birds (three more than the longest piece, *La Rousserolle effarvate*), can be considered to contain the 'most birdsong' and indicates the highest concentration of birdsong. It is set at the edge of a little river, the Charenton.²²⁰ In the cahier written in Banyuls, the plans for *La Bouscarle* are found. A little piece for a bank of a river; the Charente and the Charenton. Entitled *La Bouscarle*. ... The wind – reflections of trees in the river – willows – poplars, aspens. Reflections of the green water of the Charenton – blue and green flight of the kingfisher ...²²¹

As the setting is by a river, there is no wonder that water plays a necessary and central role in this piece. Messiaen describes the water as being of two types: one is 'river' and the other is 'water reflection' of willows and poplars (*l'eau reflète les saues et les peupliers*) which brings to mind the paintings of trees by Claude Monet. The chords seem to reflect the artistic technique known as 'pointillism', for which Georges-Pierre Seurat is better known. Surprisingly, the twelve-note mode which usually presents the achromatic colours of nature is used to depict the green reflection of the trees on the water. We can surmise that this water refers to the river rather than the pond by use

²¹⁸ Samuel, *Music and Color*, p.35

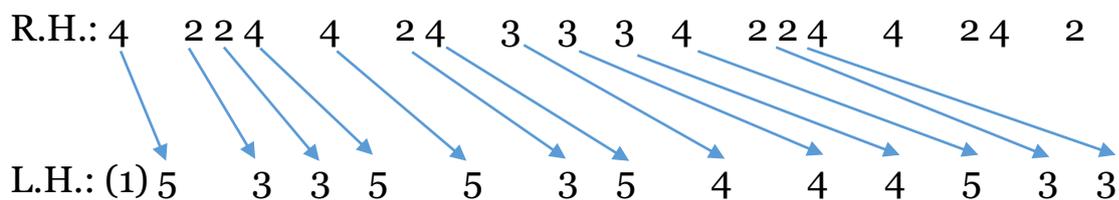
²¹⁹ These two motifs are the first two subsidiary themes from '*Jardin du sommeil d'amour*', the sixth movement of *Turangalila*. (Sherlaw Johnson, p.129), Chiat, p.152

²²⁰ The location from the preface.

²²¹ Cahier 23056 (2), trans by Hill

of the expressive terms *'liquide et fluide'*. With *pp*, the observer is standing in the distance admiring the scene of a great artistic masterpiece. (Ex 4-62) The rhythmic canon to which semiquaver value is added (1 unit) in the left hand after the right hand, and the speedy tempo employed, supports this view. Fig 4-7 shows the rhythmic canon applied to these two parts. At the beginning of the canon, it is recognisable yet, after a few bars, it is no longer perceived as such by the listener any more. The more values that are added, the more complicated it seems. The right hand part is augmented regularly by a semiquaver until the second note in the bar 3/4/2 while the left hand finishes its development at the end of the canon in bar 4/1/2. The coherent linkage of such phrases might be one of the hardest elements in a section like this. However, the composer is constantly dropping hints and clues. For the 'reflection', the bass notes with a pedal might provide such a clue as to the ways of traditional pedalling.

Fig 4-7) Rhythmic canon by values (♩=1 unit) from bar 2/3/3 to 2/5/3



Mode 3, which describes the blue-green arrow of the kingfisher's flight (*flèche bleu-verte du Martin-pecheur*) with splendid chords, presents the calm river polyphonically.

The river motif has two styles: river (a) is a short motif and river (b) is a longer motif. Both motifs always lead to birdsongs and are sustained until the next river motif or other materials appear. River (a) consists of octave intervals and (b) contains river (a) and added sixth chord. Both end with an F#7 resolution. (Ex 4-64 and Ex 4-65)

A moderate chordal gesture for the river, which is constructed from mode 3, is resolved with an F#m7 chord which lingers for a while, and which then overlaps with the morning motif. This motif itself consists of a low-register quick and soft gesture which results in a distant 'tam-tam' timbre (*comme un tam-tam lointain*). The overall effect is that the piece appears as if one is watching a documentary showing a calm river with the sun rising from afar (meaning morning), together with the sound of distant birdsong. (Ex 4-66) The F#m7 resolution creates a sense of stability where it is the composer's intention to portray the tranquil river. Furthermore, it allows to demonstrate the comparison with a splendid kingfisher's flight.

Chords of the river (b) recollect the falling fourth of the 'love theme' from *Turangalila*, harmonised with added sixth chords.²²² If the question at this point is why Messiaen uses the love theme in this piece, the answer could be that it is because this is the only piece that sings about the nuptial flight of a kingfisher (*vol nuptial du Martin-pêcheur*). In other words, if the love theme from *Turangalila* sings about the love of a human being, this nuptial flight sings about the love of a bird. (Ex 4-66 and Ex 4-67)

In *La Rousserolle effarvate*, which is set in the Sologne near Orléans, between Saint Viâtre, Nouan le Fuzelier, Salbris and Marcilly in Gault, water is used as the main material with the exception of birdsong. As the longest central piece, it naturally contains the most various materials: eleven kinds of birdsong, water (pond and swamp), night, sun, frogs and flowers (yellow irises and purple foxglove) There are two types of water music in this piece: the 'mysterious' (*mystérieux*) music of the pond (*Musique des étangs*) and the noises in the swamp (*bruits dans le marais*). Both motifs are related to night materials.

This piece starts and finishes with pond music, which conveys a mystical mood at night in the woods and fields. Messiaen describes several ponds from different places.²²³ The pond motif consists of a twelve-note mode with chromatic rhythms, and looks very different when compared to other water music in both shape and movement. It is a long progression running over two pages. The use of the twelve-note mode for water is probably for the same reason as the notation of birdsong in the chromatic scale²²⁴ in that the natural sound has untempered tone and contains 'very small intervals' which musical instruments cannot produce. Another simple reason might be that it is midnight, meaning that twelve tone, symbolic technique of night, is used. Each hand plays a different role: the right hand stays on only two chords, composed of major ninth intervals of G^b-A^b and A^b-B^b, to portray the calm water of the pond. The chords in the left hand seem to present the deep, dark night by staying at a soft volume (**p**) and being presented in a much lower register. The hands share the twelve-note mode; the right hand has only three notes of G^b, A^b and B^b while the chords of the left hand cover the rest. Moreover, the motif is developed in different ways in that the left hand has the same chord progression but depends on the right hand for rhythmic progression, while one semiquaver chord of G^b-A^b is added on the right hand. The sixth chord, played in the order C-F-B in the left hand is increased in length by adding

²²² Sherlaw Johnson, Messiaen, p.130

²²³ See the preface.

²²⁴ Messiaen refers to the impossibility in transcribing the birdsong because of its micro intervals. In his conversation with Samuel, he says 'I am obliged to eliminate any tiny intervals that our instruments cannot execute. I replace those intervals, which are on the order of one or two commas, by semi-tones, but I respect the scale of values between the different intervals, which is to say that if a few commas correspond to a semitone, a whole tone or a third will correspond to the real semitone. ... It's a transposition of what I heard, but on a more human scale.' (Samuel, Music and Color, p.95)

the value of a semiquaver and consequentially each bar is increased from fourteen semiquavers to twenty three semiquavers. The accents in the right hand, important elements in making the rhythmic canon, should be detached and played lightly to produce a sound like a xylophone (*les notes accentruées de main droite: comme un xylophone*) rather than strongly as with a normal accent. While Messiaen notated to produce the resonance of a tam-tam for a solemn night, this way seems to increase the numinous temper of night with resonance of a xylophone. The right hand should play as hitting the piano keys, albeit lightly. On the contrary, the left hand should press softly to produce a subtle, mysterious mood.

Fig 4-8) Construction of the Rhythmic Component of the Isorhythm in *La Rousserolle effarvate*

Bar No.	Rhythms on the left hand	Total values
1	[2 2 2 1] 3 ① 3	14
2	[2 2 2 1] 3 ② 3	15
3	[2 2 2 1] 3 ③ 3	16
4	[2 2 2 1] 3 ④ 3	17
5	[2 2 2 1] 3 ⑤ 3	18
6	[2 2 2 1] 3 ⑥ 3	19
7	[2 2 2 1] 3 ⑦ 3	20
8	[2 2 2 1] 3 ⑧ 3	21
9	[2 2 2 1] 3 ⑨ 3	22
10	[2 2 2 1] 3 ⑩ 4	23

Between the first (G \flat -A \flat) and second accents (A \flat -B \flat), the numbers of semiquavers are increased from 0 to 12; this ebb and flow is therefore perfectly and between the second (A \flat -B \flat) and the next first accents (G \flat -A \flat), the numbers of semiquavers lessen from 12 to 0; it is exactly retrogradable. This motif builds a mysterious mood by repeating the ninth with a rhythmic canon progression which has underlying rules but sounds irregular. The counts in the bar become longer, as if the composer draws the darkness of the night gradually deeper. (Ex 4-68) Fig 4-8 shows a construction of the rhythmic canon focus on the left hand.

On the contrary, the music of the ponds reappears as coda on the following day at 3 a.m. The motif looks like a retrogradable rhythm of the pond music in the beginning, yet it is not exact. The chords in the left hand are the chords of second (b) in Ex 4-68 and progress backward to the first chord in bar 2. The value of the first chord is 10 semiquavers and becomes shorter from ten, nine, eight, six, four. There are rests which increase by adding a crochet rest. By getting longer the period of mute, the (Ex 4-69) It may be sensible to categorise the noises in the swamp (*bruits dans le marais*) as water music yet Sherlaw Johnson regarded them as night music, because Messiaen indicates the time 'night' and 'at 3 in the morning'.²²⁵ In other words, it is clear that night has a deep connection with the noise from the swamp. However, one cannot escape the fact that it has a similar gesture to the water motif which ascends and descends, (Ex 4-70) as well as the repeated chords which are similar to the pond music. (Ex 4-71) The continuous movement implies that it is purely a water motif. It also has subtle dynamic changes like water.

It is worth noting the motif of the frogs - the only creatures associated with the water other than the birds - and that they have a close relationship with the swamp. Frogs will be discussed in further detail in the section on 'Little Animals'.

In the last book, there are two pieces presenting water, specifically the sea, and the setting for both pieces is the coast of France. *Le Traquet rieur* is in collaboration with sea music and begins with a bedazzling motif to express the joy of the blue sea (*joie de la mer bleu*). *Le Traquet rieur* has a close relationship with '*Le Merle bleu*'. Both pieces include songs of swifts and herring gulls and present the joy of the blue sea, a celebratory example of Messiaen's anthropomorphic.²²⁶ Nature clearly does not have feelings like joy, sadness or terror but Messiaen shows his empathy for nature by using emotional words and mentions that the nightingale changes the feelings from sadness to joy abruptly.²²⁷ For instance, in *La Chouette hulotte*, Messiaen maximises the effect

²²⁵ 'the piece and the various other night-sounds from the swamp.' Sherlaw Johnson, Messiaen, p.129

²²⁶ The term of 'anthropomorphic' is mentioned by Messiaen' in the conversation with Samuel (Music and Color, p. 88) and Sherlaw Johnson cites to explain Messiaen's subjective expression which reflects human reaction to nature. (Messiaen, p. 130)

²²⁷ Samuel, Music and Color, p. 88

of anthropomorphic by describing the owl's song as 'like the cry of a murdered child' (*comme un cri d'enfant assassiné*). For Messiaen, it seems that not only are birds obviously living material but also that inanimate nature has its own life and emotions. Perhaps he thinks that everything in nature is organically linked, rendering them so absolutely and fundamentally inseparable from each other.²²⁸ All of the above in combination is one of the overall reasons why *Catalogue* can be called 'programme music'. Furthermore, the notated, emotive words encourage performers to use their own imagination and freedom of expression.

The magnificent first cluster chord, which opens this piece is in the low register and is composed of black keys in the right hand and white keys in the left hand. It seems to be formulating an image of the surf rushing against a rock cliff on the shore²²⁹ and reminds us of 'the crashing waves against cliffs in *Le Merle bleu*. 'After the crash', an A Major chord, associated with the blue colour of the water, prepares us for a bigger gesture and is followed by long rests. (Ex 4-72)

This four-bar sea motif is repeated four times as a refrain in exactly the same way. The refrain is used as a frame at the beginning and the end.

There are two more features present that are related to water: the gust of the wind on the sea (*coup de vent sur la mer*) and the silver glistening of the sun on the sea (*poudroisement argenté du soleil sur la mer*). The wind resembles the water in the next piece, *Le Coulis cendré*, using a twelve-note mode arranged in two-part chords. (see Ex 4-81) However, it simply ascends with a crescendo, moves quickly with staccato and uses a single pedal so that the motif is played in a single breath, much like the blowing of the wind. (Ex 4-73)

The sun motif is also homophonic yet, compared to the wind motif, it has a different gesture: more parts are added, wider ranges are used and the pedal keeps changing.

²²⁸ The reference to *Saint-François d'Assise* (St. Francis of Assisi) suggests the validity of their connection.

Saint Francis lifted up his eyes, and saw on some trees by the wayside a great multitude of birds... and the substance of the sermon was this: "My little sisters the birds, ye owe much to God, your Creator, and ye ought to sing his praise at all times and in all places, because he has given you liberty to fly about into all places; ... He has given you fountains and rivers to quench your thirst, mountains and valleys in which to take refuge, and trees in which to build your nest; so that your Creator loves you much, ... my little sister, of the sin of ingratitude, and study always to give praise to God." As he said these words, all the birds began to open their beaks... endeavouring by their motions and by their songs to manifest their joy to Saint Francis. And the saint rejoiced with them. (from Saint Francis of Assisi: Sermon to the Birds - c1220)

We can recognise that birds should sing at every time and in every place because God loves them and gives everything for them. Therefore, it is absolute that presenting everything in nature in music is representing the reasons why birds sing and act as a confirmation of Messiaen's faith.

²²⁹ There is no notion for the cliff on the score but it can be analogised from the preface where Messiaen narrates the scene.

In addition, the sun motif starts with a tempo more than twice as slow and finishes with a freer tempo which becomes much slower and sustains with a loud sound to express the magnificence of the sun. In comparison, staccato is used for the wind motif. Here is the most appropriate moment to show the gust ending in *ff*. It seems that Messiaen strives to describe more movement for the wind motif and more colour and shape for the sun motif to present their characteristics. All the values are fixed as semiquavers and could be called ‘regular rhythm’ yet the density of the chords is irregular and unpredictable. (Ex 4-74)

The last piece, *Le Coulis cendré* presents the seascape of the western coast of Brittany with a curlew and other sea-birds which live on a desolate island. Unlike *Le Traquet rieur*, which describes a delighted impression of the sea, this piece portrays an unsettled and godforsaken image of the sea where the sea-birds are busy, and constantly noisy.

In this piece, there are three types of water labelled as follows: ‘the waves of the sea’ which plays the role of a refrain, ‘waves’ and ‘water’. Sherlaw Johnson classifies both waves into one feature yet it may be a better interpretation to separate them as they have different gestures.²³⁰

1) The Waves of the Sea (*les vagues de la mer*)

After the long introduction of the curlew’s song comes a motif of the waves of the sea as a combination of three different gestures: a traditional wave form of ascending and descending arpeggios which includes crescendo and decrescendo, an unpredictable, whipped (*fouetté*) ascending sound which depicts the slapping water and ends with a descending gesture that goes down to the lowest C natural; this stays unusually loud where it might be expected to lose energy. (Ex 4-75)

This wave motif is distinguished by rests and is repeated three times as a ‘refrain’ and whenever repeated it becomes a longer and bigger gesture with more dynamics to present the roughness of the sea. Before the second refrain, even though it is still undoubtedly the song of a herring gull (*Goéland argenté*), it sounds more like the ‘wave’ motifs repeating because the shape of the last bar is similar to the traditional shape of the waves, encouraging the listener to consider it to be a wave feature. However, it seems that Messiaen intended to divide the birdsong from the wave by inserting a short rest. (Ex 4-76)

The second time, the motif of the wave starts with the lowest F# which is the same note as the first note of (a), but this time is transposed to a lower sound in (b) in order to make a wider range. All of this preparation is intended to create a bigger gesture. This gesture, that should be rushed (*pressez*), to express an appropriate, natural wave, leads

²³⁰ According to the Form section, Johnson indicates ‘the waves of the sea’ and ‘waves’ as ‘m’ only. Sherlaw Johnson, Messiaen p.158

to the lowest F# which gives the effect of an ending. Surprisingly, this motif is not finished until another gesture comes. The last gesture, which is made up of high-registered and spread chromatic notes from A to F (except C and D#) and finishes loudly (*fff*) without diminuendo, is abrupt and creates an unexpected feeling because of the contrast with the former two gestures which have a standard resolution of *cresc.* and *dim.* As unexpected and incongruous as this may seem, one has to accept that this is the way Messiaen narrates his music. To make a longer gesture, Messiaen adds extra dynamics, maybe other materials in the middle of the second wave and it satisfies the realistic suggestion that the waves are diverted and transformed by hitting against something solid such as rocks²³¹, mountains and so on. (Ex 4-77) This motif is reminiscent of the cadenza section of *Jeux d'eau* by Ravel because the shapes and dynamics are similar and the same materials are used in both works. (Ex 4-78) An entire page from the score is devoted to the third wave, which is composed of three kinds of wave: (1) traditional wave, (2) the bigger gesture in the middle and (3) the ripples which continue until the sea calms down. The bigger wave (2), similar to wave (b), starts with F# and adds more content in the middle. (Ex 4-79)

2) The Waves (*les vagues*)

This simple wave motif appears three times as a traditional wave shape: on two occasions exactly the same as (a) which is symmetrical and once narrower (b) as before. The wave (b) has a longer gesture in the way of observation of nature because it goes further. (Ex 4-80)

3) The Water (*l'eau*)

The water section (interlude)²³² looks strange because, although there is a movement that resembles normal water (ascending and descending), it is not easy to catch the melody and recreate the phrasing as a performer. The reason for this is that while there is nothing connected with each other, all the notes are just skipping. It can be said that the dynamics and rests provide the clues as to how to successfully make the phrasing. Moreover, there are little moments in time to make us aware of in G Major which

²³¹ The waves with rocks will be explained next section of 'Mountains, cliffs and rocks',

²³² Sherlaw Johnson uses the term 'interlude' for the water which is apt. It is found in the middle of the piece and is unique enough to be distinct. (Sherlaw Johnson, Messiaen p.158),

provides a reassuring sense of stability during the progress which is normally unstable through two pages in the score. (Ex 4-81) A twelve-note mode is used in each hand to describe the water (probably 'wavelet') and arranged to express the resilience of the water. This motif keeps moving quickly without a break; on the score, there are semiquaver rests that act as a guide to make the phrases rather than as a proper rest,²³³ but with crescendo and diminuendo, the water motif soaks into the foggy night (*la nuit et le brouillard se répandent peu à peu*) gradually and slowly. Despite the rhythm being stuck on twelve semiquavers, there is scope for it to be played freely.

The water motif flows into the fog at night and leads to the siren of the lighthouse composed of frightening full chords. (Ex 4-82) Through his detailed notation, Messiaen's music stimulates the performer's own imagination and creative spirit.

Water is assuredly the easiest material to transcribe into music among the landscape materials. It flows like music and the shapes observed resemble the musical archetype shape. However, due to his deep knowledge and appreciation of water, Messiaen strays from mere simple descriptive passages. Rather, he crafts his pieces using all of his technical language in combination with traditional musical elements, creating his own unique interpretation of water. By separating water into several types and expressing its natural characteristics in various ways, his version of water material not only overcomes the potentially over-familiar resonance with birdsong but also gives exclusive attraction to the birdsong work. In case of sea music, Messiaen describes not only the sea itself but creates a division between large scale and small size (wave of sea – wave itself – water). That is to say, water material adds variety to birdsong music by segmenting.

4. Geometrical Features (Mountains, Cliffs and Rocks)

There are four pieces in *Catalogue* related to landscape features, such as mountains, glaciers, rocks, cliffs and stones. These materials, of course, do not produce sounds themselves and do not change their shapes; they are all inanimate, solid and fixed. Messiaen generally uses loud and dense chords to describe the enormous and hard landscape features to contrast with the comparatively freer birdsong, which sets the background against the foreground. In the cahiers, there are Messiaen's own drawings of landscape such as mountains, cliffs with surf and the various shape of rocks.²³⁴

²³³ The chords are to be shared.

²³⁴ Cahier 23044, p.2 collected in Ouessant, Brittany

According to Messiaen's statement, it is quite reasonable that he should start with using the landscape of Meije Glacier in *Le Chocard des Alpes*, the first piece of the first book, because of his love of it.

... I have a predilection for mountains ... and the particularly wild places which are the most beautiful in France, like the *Meije Glacier*, less famous than *Mont Blanc*, but certainly more awesome, purer, more isolated.²³⁵

Messiaen's summer house in Petichet is situated in a meadow near the Lake of Laffrey and which enjoys a mountain view of the Alps and a glacier. He used to visit the house for his summer holidays from the 1930s. In the cahier, there is found a description of the view which is directly related to *Le Chocard des Alpes*: specific colours and scenery are depicted.

The meadows are full of mountain flowers: yellow, sky blue, pink, and violet – all the colours of the rainbow. A forest of fir trees, close to the Meije. Full sun, the Meije glacier, with its peaks and tormented rocks. The Tabuchet glacier, to the left of the Meije: more snow completely white, wearing a huge cloud. Between two peaks an immense path of snow climbs towards the sky like a giant's highway. The firs – like large dark green hoods – press together to see the giants who scale the highest snows towards a terrible immortality.²³⁶

In *Le Chocard des Alpes*, there are three long dissonant chordal passages (pp. 1-2, 4-6, 11-12) that are composed of twelve notes and the structure consists of 'Strophe', 'Antistrophe' and 'Epode' as Messiaen indicates in the preface.²³⁷ The Strophe describes diverse aspects of the mountains of the Dauphiny. The Antistrophe presents the rocks of Saint-Christophe which is standing in disorder before Saint-Christophe-en-Oisans near the mountain. Finally, the Epode portrays the amphitheatre Bonne-Pierre which looks like giant phantoms, or resemble the towers of a supernatural

Cahier 23044, p. 5 collected in Ushant

²³⁵ Samuel, *Music and Color*, p. 34

²³⁶ Cahier 23065, p. 2 dated on 3 June 1955, trans. By Peter Hill

²³⁷ The form of 'Strophe', 'Antistrophe' and 'Epode' is derived from Greek choral lyrics. In Greek poetry, mostly, the strophe and the antistrophe have a same structure but the epode is different. (Sherlaw Johnson, Messiaen, p. 160)

fortress in Messiaen's view. A long description of glaciers is provided, using terms such as 'implacable and massive' (*implacable et massif*), which informs us of the hardness and the great scale which opens this piece. The twelve-note mode is used for the achromatic colours of nature and here it represents the white of the glaciers against the grey mountain.²³⁸ All the notes of the chromatic are dealt with equally in this passage; although the notes appear in the same quantity they are not of the same quality, because certain important notes or chords are held on for longer.

Nonetheless by understanding the effective equal treatment afforded to all the notes, it seems that Messiaen wants the music to be led by the left hand rather than the right hand in terms of pedalling. It is certain that the pedal changes rely on the left hand because of the sustained bass notes. The ascending and descending chords in the right hand present the shape of mountains as seen by an onlooker. The chords in the left hand move up and down yet eventually descend very low to depict the glacier extending from the top to the bottom of the mountains. From the durations in semiquavers written under the score (Ex 4-83), we can see that the left hand moves more frequently than the right hand, leading us inevitably to believe that the left hand presents material in the landscape that is actually moving, in other words the glacier. The lengthy glacier passage (27 bars) is fixed in two beats (two crotchets) with the intensity (*f*) and finishes with a sustained chord that leads to the song of Alpine chough. (Ex 4-83 and Ex 4-84)

The long silence between the sections representing mountains and the alpine bird clearly distinguishes the quietness of the huge landscape in the background from the noise of the main bird in the foreground. (Ex 4-84)

This piece ends with the *Cirque fantômatique de Bonne Pierre* (mystical stone valley of Bonne Pierre in Ecrins) which Messiaen describes as "the epode lining up like giant ghosts or like towers of a supernatural fortress (*gigantesque et surnaturel*)."²³⁹ This mountain with its stone passage, composed in the twelve note mode, is similar to the mountains with the glacier at the beginning in terms of tempo ($\text{♩}=120$), presenting a regular two beat bar and fixing the intensity at forte. However, the mountain with stone motif gives a slightly different impression with its short notes. In the case of the mountain with stone, semiquavers are used more frequently and holding notes seem to possess less importance or impact than in the mountain with glacier motif. It seems that Messiaen's intention was to present the different materials effectively using minor inflections of the same musical language. The result is that mountains are, indeed, gigantic and the rapid progression of chords with irregular rhythm for the stones creates a surreal mood, just as Messiaen intended. (Ex 4-85)

²³⁸ Messiaen regarded twelve-note sets as a principal device in *Livre d'Orgue* so used it in nearly all pieces except the fourth and the last movements. The usage of the sets is, also, essential in *Catalogue*. (Sherlaw Johnson, Messiaen, p.113 and 135)

²³⁹ From Messiaen's preface of the piece

Although the twelve-note block is used, the antistrophe, which is usually derived from the strophe and therefore has fundamentally similar qualities, is nevertheless different in this piece. This section portrays the fallen logs around the warren of Saint Christophe by mainly using descending homophony and consists of irregular beats, added notes and accents with higher volume: *ff*, *énorme et puissant* (enormous and powerful). The direction of descent seems to represent the physical movement and status of fallen logs. (Ex 4-86)

Deciding on the structure of phrasing can be a crucial issue in this type of music. The rhythmic pattern seems to be significant for phrasing. This motif starts with a rhythmic pattern like this:



This appears every four or five bars and sometimes the last note has an added value - semiquaver or a quaver.

In *Le Chocard des Alpes*, there is no superimposition of materials which is a common device in *Catalogue*. The landscape is divided into three sections, and between them, Messiaen arranges birds' songs and their flights, which make for a simple yet remarkable comparison between birdsong and landscape.

Le Merle bleu and *Le Traquet stapazin* are set on the south coast in the Roussillon district in France. Although the main characters in both pieces are the different features of the sea with birds, the cliffs or rocks also play significant roles in illustrating the habitat accurately.

At the beginning of the third piece, *Le Merle bleu*, the twelve-note blocks that are also used in *Le Chocard des Alpes* for mountains with glaciers, rocks and fallen logs are emphasised and applied homophonically to describe the cliffs by the sea. Messiaen expresses his own view about the cliffs in the preface: '*Les caps s'allongent dans la mer comme des crocodiles*. (The headlands stretch into the sea like crocodiles)'

The cliff passage (a) which consists of the lengthened rhythm 'râgavardhana'²⁴⁰ (Fig 4-8) starts with major seventh chords and descends from high to very low B \flat . The last note of the cliffs is overlapped with high register *Martinets noirs* (Swift), which consists of major seventh chords.

²⁴⁰ Messiaen discussed Indian rhythms and notated them in Chapter 2 of *Technique de mon langage musicale* and Chapter 4 of *Treatise d Rythme, de Couleur, et d'Ornithologie*, Volume 1. 'Râgavardhana' is one of the most his favorite rhythm of 120 deçî-tâlas which is found by Sharngadeva, Indian musician of the thirteen century.

The second phrase (b) using the rhythm of ‘candrakalâ²⁴¹’ is more than twice as long as the first bar, allowing for a more detailed depiction of the cliffs. Messiaen frequently modified the rāgavardhana. Adding semiquaver results in producing sounds like water hitting the cliffs. (Ex 4-87) The Fig 4-9 shows how Messiaen uses the Sharngadeva’s rhythm in his music.

The cliff passage (c) is an example which Messiaen reverses the passage (a) and divides dotted minim into three crochets. (Ex 4-88)

The intervals of the first passage are wide with non-retrogradable rhythms and the intervals of the second passage become narrower to describe the cliffs. This descending gesture seems to imitate the gaze of an observer (perhaps Messiaen himself), looking at the cliffs from top to bottom. In other words, the first passage only portrays the outline of the cliffs and the second passage describes them more precisely. We can therefore easily assume that the next passage will present the shape of the cliffs in full detail via the use of a much longer passage.

Fig. 4-9) Sharngadeva and Messiaen’s rhythms in *Le Merle bleu*

Rhythm	Examples (a)	Rhythm patterns	Examples (b)	Rhythm patterns
Sharngadeva	93 rāgavardhana		105 candrakalâ	
Messiaen	Bar 1 from <i>Le Merle bleu</i>		Bar 4 from <i>Le Merle bleu</i>	

The third refrain is a much longer passage (five bars) which does go on to depict the cliffs in greater detail. The rhythm of the last three chords in 3/1/2 is the same as the first passage for the cliffs at the opening, and the rhythm of the whole bar 3/2/1 is exactly the same as the second passage of the cliffs. However, when compared to the former gestures, the chords are not only descending but are also occasionally ascending, describing in particular the uneven and jagged shape of the cliffs. The values, added and omitted, seem to describe the equally uneven surface of the cliffs. That is, longer notes (dotted crotchet and minim) are used to depict the overhang surface, and shorter notes (quavers and semiquavers) are used to portray the hollow part. The figure of demisemiquavers scales and quavers followed by a dotted minim

with huge volume, represents the water hitting the cliffs again.²⁴² This pattern seems to suggest that Messiaen's own viewing position is much closer than in the former passages so that he can see the uneven surface of the cliffs more precisely.

Messiaen occasionally uses landscape as a musical device. Here the rocks are shown as creating echo and whirling resonance (*écho des rochers, resonance tournoyante*) because of the waves crashing on them. (Ex 4-89)

Le Traquet stapazin (black-eared wheatear) begins at the vineyard and also has a cliff motif. The passage relating to the cliffs appears twice, but each time accompanied by the song of the raven (*Grand Corbeau*). The cliffs are expressed by a loud chord overlapped with a very low register B \flat and this shape recalls the cliffs in *Le Merle bleu*. (Ex 4-90 and Ex 4-91)

In many cases, while birdsong is played at the top of the keyboard, music describing the birds' habitat is sustained under the birdsong. The music for the terraced vineyards, however, does not overlap with the black-eared wheatear's song in *Le Traquet stapazin*: the pedal must be taken off. This slow homophonic vineyard music that finishes with the first Chord of Contracted Resonance²⁴³ is repeated four times in the exactly the same form. For the vineyards, Messiaen follows the movement of the viewer's gaze from top to bottom as he does for the cliffs by using descending chords. (Ex 4-92)

The pivot of *Catalogue, La Rousserole effarvate* can be referred to as 'a complex collection of materials'²⁴⁴ because many materials, such as time flowing, the pond, the swamp and other creatures such as frogs and grasshoppers as well as flowers are all found within it. There are no real rocks in this piece yet Messiaen invokes 'landscape' to describe the sound of a coot (*Foulque*) - little stones hitting each other (*comme si l'on choquait des pierres*). In other words, even landscape is in a sense a component of birdsong in this work. (Ex 4-93)

Le Merle de roche is set on the rocks with fantastic shapes in Mourèze in the Hérault in May. The location is full of rocks, so naturally rocks and stones are the main non-birdsong material together with the night motif in this second longest piece of *Catalogue*. The opening evokes the mysterious mood at moonlit night with two slow soft low register chords followed by a cluster chord in the treble representing the huge hand of stone (*la main de pierre*). The hand stone motif is varied in rhythm by semiquavers and divides up the piece into sections: it appears in the introduction and coda. (Ex 4-94)

Apart from the first chord, this motif is made up of exactly the same shape in both hands, although the parts are not symmetrical. This group of cluster chords does have

²⁴² See the score 8/4/2-5/1

²⁴³ See chapter of Harmony (*Traité VII*, p. 158-160)

²⁴⁴ This is my own term which is used to explain the piece, *La Rousserole effarvate* in one word.

a similar shape with an ascending and descending water shape, but the density of chords produces a more mystical feeling of the night.

For the rock formation, Messiaen indicates the parenthesized numbers of the 32 chromatic durations in his score.²⁴⁵ It seems this is especially identified because performance with the accurate duration is one of the most considerable elements. One demisemiquaver is counted as one beat. The Fig 4-10 shows the relevant numbers.

The differences between the stegosaurus stone motif and the diplodocus stone motif are that the latter consists entirely of chords made from the twelve-note mode and the range is much wider than that found in the stegosaurus stone motif. (Ex 4-95 and 4-96)

Fig 4-10) The permutation of the stone music in *Le Merle de roche*

Pages	Rock formation	Duration
5-6	<i>Stégosaure de pierre</i>	(17) (21) (9) (5) (11) (2) (8) (7) (23) (3) (31)
6	<i>Stégosaure de pierre</i>	(19) (25) (29)
7	<i>Diplodocus de pierre</i>	(4) (3) (5) (12) (13) (2) (8) (11) (9) (17) (27) (6) (10) (1) (7)
10-12	<i>Cortège de fantômes de pierre, transportant une femme morte</i>	(3) (28) (5) (30) (7) (32) (26) (2) (25) (1) (8) (24) (9) (23) (16) (17) (18) (22) (21) (19) (20) (4) (31) (6) (29) (10) (27) (11) (15) (14) (12) (13)
21-	<i>Stégosaure, diplodocus, et divers monsters- tout de pierre</i>	(13) (1) (6) (15) (2) (11) (21) (7) (19) (3) (4) (29) (31)
25	<i>Stégosaure de Pierre- interlaced with other materials</i>	(14) (21) (16) (2) (5) - (9) (3) (15) (18) - (13) - (5) (19) (3) (23) - (4) (7) (25) (32)

²⁴⁵ *Le Merle roche* is the only movement which Messiaen labels the parenthesized numbers of chromatic durations among thirteen pieces of *Catalogue*.

Messiaen 's imagination creates the scene of 'a funeral procession with the phantom stone transporting the corpse of a woman (*cortège de fantôme de pierre, transportant une femme morte*)' which represents the rocks formation observed at midday. For the phantom stone motif, the permutation of thirty two durations which recalls '*Soixante-quatre durées* from *Livre d'orgue*' are used.²⁴⁶ Notably, Wai-Ling Cheong insists that this motif evokes Claire Delbos's death. This is quite persuasive because we know that this occurred only a week after the premiere of *Catalogue* on 15 April 1959.²⁴⁷ It is probable that Messiaen therefore predicted her death to be close. (Ex 4-97)

Interestingly, Messiaen creates all the stone motifs by gathering the stegosaurus and diplodocus stone motifs together. This motif is thirty bars long and reveals the original characteristics of both stone motifs. (Ex 4-98)

In the last piece of *Catalogue*, *Le Coulis cendré*, there is no clear label for non-birdsong material but we can suppose from Messiaen's script in his cahier that sea music is incorporated with the rocks. Messiaen describes his impressions of the sea in Brittany and the rocks which have grotesque shapes:

Chaos of overhanging rocks... Terrible! The rocks are grey, green, black, brown ochre, jagged... like the teeth of a lion, dragon's tongues, the snouts of a hippopotamus, the jaws of crocodiles... Ovoid pebbles, white, pale blue, pink. The smaller rocks are entirely covered with brown algae, like hair – the hair has the fetid, salty smell of the sea gods... Rocks like decayed molars, grotesquely shattered... a veritable cathedral of columns, phantoms, or iguanodons, upright with index finger raised. The sea Prussian blue or purple – the waves leap furiously around the rocks, which are surrounded by water, leaving great wakes of white foam, the waves like horses with white manes! Opposition of the active sea, constantly at work, agitated, furious, and the still, motionless, cold fury of the rocks ...²⁴⁸

The waves consist of two types: the wave itself and the waves of the sea, and the second wave has extremely loud attacking chords which seem to describe the waves hitting the rocks in the middle of the sea. The gesture of the waves might differ according to whether other non-birdsong materials are inserted into the sea motif or not. In other words, if there is an obstacle encountered, the waves have a crashing gesture or loud resonance, while the simple waves merely move up and down smoothly. By taking note

²⁴⁶ Kraft, *Birdsong in the music of Olivier Messiaen*, p.199

²⁴⁷ Cheong, article 'Symmetrical Permutation, the Twelve Tones, and Messiaen's *Catalogue d'oiseaux*, p.127 from *Perspective of New Music* Vol. 45, No.1 (winter, 2007)

²⁴⁸ Cahier 23044, p.5 trans. by Peter Hill

of what Messiaen describes here the performer could develop in great detail a sense of what the scene looked like and this would help to produce the resonance accurately. Non-birdsong materials which have enormous size and solid surface without action and noise such as rocks, cliffs, mountains and so on are presented at the beginning, between birdsongs and at the end.

5. Other Non-birdsong Materials

1) Little Animals

In *Catalogue*, other animals do appear in addition to birds. This is because Messiaen portrays the natural habitats where the birds live with other animals. There are, of course, many other kinds of plants and Messiaen does not ignore them. In the wild, however, it is natural that big animals live in the same habitat with birds and strong animals kill and eat the weaker ones. Messiaen does not describe those happenings. He only presents things such as birds singing and flying in the vast landscape. It is perhaps due to his positive personality that he wants to depict only the beautiful aspects of nature. It seems to be one of the ways in which he expresses his faith and praise of God.

As this part of the study is focused on the non-birdsong materials, it is worth examining the other little animals which exist in the same habitat as the birds, and which appear in *Catalogue*. There are only two works which include them: *La Rousserolle effarvate* and *L'Alouette calandrelle*.

As the longest and centrally located movement, *La Rousserolle effarvate* contains the most varied non-birdsong materials among the movements of *Catalogue*. One of the materials relates to the frog which seems essential to present 'pond' music (*les grenouilles répondent dans l'étang*). (Ex 4-100 ②) Its inclusion may be influenced by Bartok and his night music. The 'Out of doors' piano suite chorus of frogs (*chœur des grenouilles*) is imitated with long trills centred on A- E- A (tonic- dominant- tonic) in the upper voice and by use of the triplet constituting of two notes of major 2nd in the lower voice. Both voices, in the very low register, produce interrupting noises in order to break the stillness of the calm pond at night. This motif is located between the background music, the bell-like sounds of the pond and the brilliant birdsong of the bittern. The chorus of frogs are preparing for the first appearance of the main bird, the reed warbler. (Ex 4-99)

A single frog produces different sounds from a group of frogs. The second is the main interval for the group of frogs but the pattern is peculiar, skipping about with several dynamic changes. More besides, various articulation makes for vivid sounds while the chorus of frogs express vague sounds. The pattern 10/4/2-5/1 describes the jumping

motion of a frog whereas the pattern 10/5/2 mimics the ‘ribbit/croak’ sounds typically associated with frogs. (Ex 4-100 ①)

The shortest movement, *L’Alouette calandrelle*, contains not only birdsong but also the periods of time discussed in the ‘Day Music’ section, as well as a choir of grasshoppers (*chœur des cigales*) which consists of repeated chords and trills with rapid dynamic change. The quickly repeated chords placed in the low register are an appropriate way to delineate the movements of grasshoppers, trills for the sounds they make. Repeated chords in the upper register are used for birdsong in this piece yet with different articulations to contrast with the grasshopper sounds. (Ex 4-101)

2) Flowers

The only movement which contains flower motifs is *La Rousserolle effarvate*. There are three types of flower motif: yellow irises (*iris jaunes*), foxglove (*digitale pourprée*) and water-lilies (*néphars*). All the flower motifs, which are derived from *Turangalîla* motifs, have undulating shapes reminiscent of the water motif. They are used individually or in combination with the pond motif. (Ex 4-102)

All the flower motifs are notated with the same tempo marking, Lent (♩=80) which is also used for the frog motif.

The first yellow iris motif appears at 8 am after the sunrise motif, leading to the duet between the blackbird and the red-backed shrike. The yellow iris motif finishes with the Chord of Transposed Inversions (CTI 1A and 1B). (Ex 4-103) It is worth quoting here Chiat’s discovery. According to her thesis, this motif is derived from the theme of *Turangalîla-Symphonie* (Ex 4-104) which is already used in *Cantéyodjayâ* (1949) and *Le Merle noir* (1952) even though the theme is modified in rhythm and range.²⁴⁹ (Ex 4-105 and Ex 4-106)

The second yellow iris motif is placed between two pairs of two crotchet chords. Unlike the first motif, this consists of three parts in contrary motion. According to Chiat, there is another example which is derived from *Cantéyodjayâ* in the second motif.²⁵⁰ (Ex 4-107) The motif in the left hand resembles the melody in the middle stave in *Cantéyodjayâ*. (Ex 4-108)

The purple foxglove motif appears twice, similar to the yellow iris motif. At the first occurrence, the foxglove motif comes at 5 in the afternoon.²⁵¹ (Ex 4-109)

²⁴⁹ Chiat, p. 131

²⁵⁰ Chiat, p.132

²⁵¹ See the score 18/4/1. The reed warbler (*La Rousserolle effarvate*) and the sedge warbler (*Phragmite des joncs*) sing at 5 pm just before the purple foxglove motif appears.

The second purple foxglove motif, with a gradual chromatic descent in the top notes of the chords, is derived from *Turangalîla* again and has been used already in *Cantéyodjayâ* and *Le Merle noir*. (Ex 4-110, Ex 4-111 and Ex 4-112) Each motif is a variation of the original version in *Turangalîla*. (Ex 4-113)

The last flower motif in *La Rousserolle effarvatte* is the water lily, which is arranged in three staves and precedes the duet of the reed warblers. The flower motifs are expanded from monophonic melody to passages in full chords right through the work until 6 pm when the sunset starts. The water lily motif appears to have a different kind of presentation from the earlier two flower motifs: yellow iris and purple foxglove, and takes up a much longer passage. It starts with parallel fourths in the right hand and both hands have to cover a wide range. (Ex 4-114)

The chord progression is made up of Turning Chords (TC) and it appears earlier in *Cantéyodjayâ*. While the top notes stay the same, the other parts move by step. The TC in *Cantéyodjayâ* is emphasised in fortissimo with accents yet the TC in the water lily motif is repeated in soft intensity. (Ex 4-115)

Messiaen's interest in birds was growing and his eagerness to compose perfect birdsong is reflected in *Catalogue* by his decision to include small animals and flowers in the habitat. Messiaen could not bear to neglect anything in the wild because they are all God's creation. This is the most distinctive point of *Catalogue* from other birdsong pieces by Messiaen. *Catalogue*, indeed, is a work which is fully a reflection of its composer's characteristics, his love of nature, his love of God and his interest in colour association. It is seen clearly how Messiaen uses his musical language effectively in order to transcribe these interests into music in this piece. It is also obvious that the work becomes enriched and more complex by adding landscape, even though the medium employed is the solo piano.

Before moving onto the next chapter, it might be helpful to discuss *La Buse variable* (where there is no landscape to set the birds against) in relation to other pieces where the landscape is a vital component. It starts directly with cry from the buzzard, which glides in circles, the orbit of its flight covering the whole landscape. Dynamic changes (**pp** – **cresc.** – **f** – **cresc.** – **ff**) notify that the buzzard descends very slowly. ($\text{♩}=48$, the most slow tempo in *Catalogue*) This passage appears at the end of the section, and this time it ascends slowly. This flight motif shares certain similarities with the water motif in *Le Coulis cendré*, aside from the tempo. If the tempo is fast and it can be easily confused with the water motif. (Ex 4-116) As no landscape material is involved in this piece, it has less of a rounded story to present and therefore holds less of an attraction for me.

In the next chapter, there will be a narration of how this research impacts my own performance of *Catalogue*, what is the most helpful manner by which to understand and express the work, and how to render landscape materials efficiently.

CHAPTER V

**THE ROLE OF
LANDSCAPE
IN MESSIAEN'S
BIRDSONG WORKS**

Chapter 5

The Role of Landscape in Messiaen's Birdsong Works

In this chapter, there will be a discussion concerning how birdsong is affected and changed by landscape and how different *Catalogue* is compared to other birdsong pieces for solo piano by Messiaen. The other works considered are *La Fauvette des jardins* (1970), *Petites esquisses d'oiseaux* (1985) and *La Fauvette passerinette* (composed in 1961 and published in 2015).

As mentioned in previous chapters, it can be supposed that birdsong in *Catalogue* is composed of monophony because non-birdsong sound secures full resonance with chordal passages and by applying various musical languages.

Surprisingly, *La Fauvette passerinette* does away with the preface which explains the natural settings and habitat and landscape materials even though it was composed just three years after *Catalogue*. Moreover, it could be considered as another birdsong cycle or Book 8 of *Catalogue*.

Another birdsong piece for solo piano after *Catalogue* is *La Fauvette des jardins*, which still involves landscape. *La Fauvette des jardins*, composed more than ten years later than *Catalogue*, is considered as programme music as it comprises non-birdsong materials and does include a preface. It has a similar length to *La Rousserolle effarvate*, the longest movement from *Catalogue* and all the birds from *Catalogue* appear, apart from the black kite. One more similarity between the pieces is the passage of time that covers just before 4 am to 1 pm. Messiaen mentioned the reason why he considered this work to be similar to *Catalogue* in conversation with Samuel.

If age didn't prohibit me from thinking about a second *Catalogue d'oiseaux*, the *Fauvette* could be the central piece of a new cycle, somewhat in the way 'La Rousserolle effarvate' constitutes the central portion of the first *Catalogue*. But I'll have you notice that *La Fauvette des jardins* lasts forty minutes: it's the longest of my piano pieces.²⁵²

As Messiaen considered this piece as another great birdsong work that was comparable to *Catalogue*, it is not surprising that *La Fauvette des jardins* contains landscape materials. This is due to the fact that non-birdsong motifs play an important role in *Catalogue*. However, despite the importance of landscape which explains the natural setting and passage of time, the portion of landscape presented in *La Fauvette des*

²⁵² Samuel, *Music and Color*, p. 151

jardins seems to be much reduced and its role is not as important as that seen in *Catalogue*.

On the contrary, the latest birdsong piece for solo piano, *Petites esquisses d'oiseaux* excludes non-birdsong materials and birdsong is more harmonised and chorded. Instead of the use of various techniques to describe landscape, only colour chords survive. Messiaen arranges them at the beginning and between birdsongs as he more focuses more on colour than natural settings. This phenomenon is also found in *La Fauvette passerinette*.

The second movement, *Le Lorient* from *Catalogue*, is one of the most appropriate pieces with which to compare the other birdsong pieces that either entirely eliminate landscape materials, or only contain a few such examples. *La Grive musicienne*, the fourth movement from *Petites esquisses d'oiseaux* is chosen to make this comparison. This is because the same kinds of birds appear in both works.

From the examples below, we can readily notice that are similar dynamics, although the song thrush without landscape material is more harmonised (Ex 5-1) than a song thrush with non-birdsong material. (Ex 5-2)

Ex 5-3 and Ex 5-4 provide further examples of a blackbird. The blackbird is composed of two-part homophony in *Petites esquisses d'oiseaux*, in contrast with the form of monophony found in *Catalogue*.

That is to say, in the context of landscape material Messiaen makes the birdsong simpler and this is much closer to the natural bird calls which Messiaen was enthusiastic to collect at the time of composition. As landscape satisfies the essence of rich resonance, the birdsong does not need to be unnecessarily decorated or exaggerated. It seems to be enough for him that the birdsong which Messiaen heard in nature is transcribed into music with his own musical language.

There are several pieces which start with landscape passages such as night, day, mountain with glacier and so on. They narrate the entire mood or explain the natural settings, and they inform us about the time when the birds are singing and the events are happening. These roles reasonably coincide with the traditional characteristics of programme music.

Landscape plays the role of creating structure and distinguishing sections by being arranged between birdsong and non-birdsong materials. In *Le Merle bleu*, the cliff motif is shown in both the beginning and at the end as with an arch type. Further, it is employed to notify the commencement of sections such as Strophe, Antistrophe and Epode by starting with landscape. In *La Chocard des Alpes*, landscape, composed of twelve note mode, appears three times as form of Strophe- Antistrophe- Epode.

Landscape plays the role of creating mood. For instance, chordal passages following birdsong in *L'Alouette lulu* and *L'Alouette calandrelle* work together to create a fearful mood by using the mode of pitches, durations and intensities, although they can also encourage a peaceful atmosphere by adding the chord of resonance.

Landscape plays the role of building towards a climax. In the middle of *Le Courlis cendré*, the water motif starts softly and lightly, rises in crescendo and leads to the climax of the night with the siren of the foghorn from a lighthouse. It is one of the most stimulating and imaginative sections, encompassing full sound in *Catalogue* for the performer.

These examples show that the resonance of the landscape music becomes simpler and shorter in later pieces than in *Catalogue*, where landscape also plays a significant role in the piece. Single line melody is used for the night motif (Ex 5-5) while a chordal passage is used in *L'Alouette lulu*.

There are several examples which demonstrate that other birdsong pieces are directly affected by *Catalogue*, that remind us of specific pieces from *Catalogue*.

The water motif is suggestive of the water from *Le Courlis cendré*. Even though both motifs are not the same in tempo, pedalling and technique (twelve note mode in *Catalogue*), as they describe undulating water, their sounds are similar and it is not difficult to notice that the passage presents water. Instead of applying the mode, Messiaen uses a simpler way of descent to portray water through the falling major scale tones on the first note of the semiquavers in the left hand. (A-G-F-E-D-C-B-A-G-F) (Ex 5-6)

The mountain motif reminds us of Antistrophe, the chaos of crumbling blocks around St. Christophe, in *La Chocard des Alpes*. The rhythm and the shape of major sevenths with same tempo, same dynamic and same articulation are applied for the mountain yet the motif is arranged in extremely short bursts (only one bar) compared to *Catalogue*. One exception to this is the section of nine bars which seems to describe the bumpy mountain in detail from top to bottom by adding semiquavers between quavers. (Ex 5-7)

Noticeably in *La Fauvette des jardins*, trees appear frequently. As they themselves do not make any particular sounds, their silhouettes only seem to be depicted. In particular both of the purple mint and green herb, and Purple willow and green reed motifs look very similar to the river motif in *La Bouscarle*. (Ex 5-8 and Ex 5-9) It is quite strange that Messiaen describes trees in a similar way to the river. It may be because Messiaen was trying to bear in mind the water reflection of willow and poplars in *La Bouscarle*, although there we do witness a slightly different shape overall. This is another example where *Catalogue* affects Messiaen's other birdsong work.

In *La Fauvette des jardins*, the song of the garden warbler, the main bird, keeps singing for an extended period over six pages (from the last staves of page 35 to page 41) which means that birdsong takes up a much greater percentage of playing time than in *Catalogue*.

Rests

As it is mentioned earlier, the rest is one of the most important elements in Messiaen's works. It expresses distance and space between birdsong and non-birdsong materials. In particular, its role is greatly emphasised when considering landscape. Above all, a bird is able to be singing and flying at the same time. In *La Fauvette des jardins*, after the song of oriole (*Le Lorient*), the rests are deployed to feel the distance which the bird flies away, and as Messiaen notates 'leave the resonance' (*laissez résonne*). Another

rest appears at the end in the form of twelve crotchets with fermata. A depiction of mountain which appears from time to time in this piece is followed by the long silence which recalls elements of *Catalogue* and also affects my performance. Moreover, this is used to deeply feel the perception of space around the grand mountain, *Le Grand Serre*. From above, we can notice that the space perception and rests are significant in the work with landscape. On the contrary in *Petites esquisses d'oiseaux*, the role of silence is reduced as the landscape becomes less important. In fact, a long pause appears only once at the end of the fifth movement, *Le Rouge gorge* from *Petites esquisses d'oiseaux* while the majority of movements from *Catalogue* finish with long rests which create a long reverberation. The effect is that Messiaen focuses on only birdsong and it seems that he makes a concerted effort not only to mimic birdsong accurately but also to give full sonority to birdsong without landscape. In order to accurately depict a spatial sense and distance, overlapping with birdsong, lasting reverberation with pedaling and waiting until the sound gradually fades away all contribute to the essential process.

Musical Language

It is naturally to assume that fewer variable musical languages are used in the works which exclude non-birdsong materials. *La Fauvette des jardins* is programme music and still contains landscape. Therefore, there are several of Messiaen's unique musical languages adopted, such as modes of limited transposition, chords of transposed inversions and chords of contracted resonance to present the mountain, the lake and the passage of time in the piece. Twelve note mode, however, is the most representative technique for the portrayal of landscape but it is not found in *Petites esquisses d'oiseaux*. This mode is also applied in diverse ways in *Catalogue* to represent mountains, sun, night, water, pond and so on. Since *Chronochromie* Messiaen's major concern has been about colours. He therefore uses his unique chords to depict colours, and other musical languages are in decline as the role of landscape becomes less and less important in the grand scheme of the work.

In *La Fauvette des jardins*, Messiaen uses the grand lake Laffrey as a symbol of time passage. It notices that time is passing by in tandem with the changing of the colours of the lake with his developed chords. The colours morph and develop from blues, reds, oranges and violets. For the description of those colours, chord of transposed inversions (CTI, chords on the same bass note with changing upper notes)²⁵³ are used. In the preface of another birdsong work for solo piano, *La Fauvette passerinette*, Messiaen explains the settings briefly but there are otherwise no direct references or comments in relation to the landscape. Only birdsongs are contained in this piece together with colour chords. In order to satisfy the plentiful sound in resonance,

²⁵³ See the appendix, 'Chords', p. 148

Messiaen adds a depiction of instruments for a nightingale such as sounds 'like a clavecin mixed with gong' which is notated in exactly same terms as with *L'Alouette lulu* from *Catalogue*. By adding birdsong such as a red backed shrike (*pie-grièche écorcheur*) and a roller (*rollier*) singing in the low range, the wider range of resonance can be secured.²⁵⁴ In particular the shrike has to be loud in full chord and it means that the shrike is in the very close distance. Likewise, the song of the roller starts loudly and gradually becomes softer (***ff*** - ***f*** - ***p***), and this seems to depict the roller flying from close to far away and back again. There are seen the same kinds of birds from *Catalogue*: a woodlark, a nightingale, a golden oriole and an Orphean warbler.

It is clear that there are several differences between *Catalogue* and *La Fauvette passerinette*. Firstly, tempo is noticeably changeable in *La Fauvette passerinette* compared to *La Traquet stapazin* from *Catalogue*. An Orphean warbler is arranged only in four bars yet the tempo is changed four times while it remains on Moderato in *La Traquet stapazin*. (Ex 5-10 and Ex 5-11) This is because birdsong is usually very fast and rapid. In *Catalogue*, it is most common to find that landscape is played in a slow tempo. In *La Fauvette passerinette*, however, several birds sing, with a variety of speeds. While *L'Alouette lulu* largely remains quite fast (*Un peu vif*), the tempo of woodlark in *La Fauvette passerinette* is kaleidoscopic, even within a single bar. (*Un peu vif – rall. – Modéré*) (Ex 5-12)

There is no landscape motif in the music but colour chords. The natural assumption is that landscape does not play any significant role in *La Fauvette passerinette*.

The passage of time does not appear to hold as much importance any more in *La Fauvette passerinette*. Although a golden oriole sings in the morning, it appears between the songs of the nightingale, a representative nocturnal bird with a few other birds. In *Catalogue*, time flows are certainly narrated but such flow is not quite as clear in this work.

A woodlark sings twice in the very short form and is registered one octave higher than in *Catalogue*. Just before the appearance of the woodlark, colour chords are arranged in very slow tempo. It seems to portray 'night', given that the woodlark is a nocturnal bird.

As a whole, birdsong is in a higher register than in *Catalogue*, and the lower range is not applied as frequently.

Dynamics

The dynamics are changed frequently and birdsong is more harmonised in *La Fauvette passerinette*. This is a common feature where there is birdsong without landscape. The dynamics of a garden warbler from *La Fauvette des jardins* keep

²⁵⁴ The premise being that birds sing in very high range so that birdsong is registered very high with irregular rhythm.

changing while the dynamics of a garden warbler from *Catalogue* remain relatively stable in *mf*. (Ex 5-13 and Ex 5-14)

A golden oriole in *La Fauvette des jardins*, again, repeats with increasing and decreasing volume while it remains in the chord of resonance with *mf* in the right hand and *ff* in the left hand in *Catalogue*. (Ex 5-15 and Ex 5-16)

From these three pieces which all present birdsong without non-birdsong materials, there are some undoubted comparisons to be made with *Catalogue*. Firstly, birdsongs in other works are more harmonised so that they are enriched in resonance by themselves. The effect is that landscape plays the role of creating plentiful resonance. Secondly there is less room between birdsongs because landscape gives the sense of space and distance. There is rather a continuous medley containing various birdsongs. In order to set the mood efficiently and accurately describe the natural habitat such as the surface of cliffs and rocks, the room between chord/notes are essential.

Thirdly, birdsong in *Catalogue* is markedly closer to real birdsong. It is perhaps because Messiaen gratifies the sonority of landscape which achieves the full resonance, even though birdsong is monophony or homophony. Crucially, Messiaen does not sense the need to artificially decorate the birdsong which he scribbled on his cahier in the wild by adding landscape just for the sake of it. The birdsong already on show is an almost perfect representation of the reality and accuracy which proves why Messiaen wandered so in the wild. Further, the landscape which does not have its own inherent sound meets Messiaen's artistic desire and subjective view. Therefore, the birdsong is presented simplest form, and thus we can understand why Loriod, who was not herself an ornithologist, but merely someone who followed Messiaen's trip to collect birdsong and then played his works for piano, could recognise which bird was singing when she listened to real birdsong.²⁵⁵

Finally, without landscape, Messiaen's developed techniques are less useful. He uses his musical languages to describe an array of other non-birdsong materials such as night, water, mountains, sunrise and so on.

This chapter examines the role of landscape and the effects on other birdsong works by Messiaen. By adding landscape, *Catalogue* is distinguished from the other works and becomes a more interesting piece. As a performer, this study motivates me to perform more movements from *Catalogue*. Therefore, there will follow a statement concerning how this investigation affects my performance of *Catalogue*.

²⁵⁵ Out walking with her husband one day, Loriod heard a bird calling nearby that she identified by ear as a curlew. Messiaen said that this was impossible, given how far inland they were. But Loriod was adamant that she recognized the bird from having played its song in *Catalogue d'oiseaux*. Sure enough, they looked up and saw a curlew flying overhead.

Excerpted from <https://www.bbc.co.uk/programmes/articles/3gJFSH6W6wXVgybrqqNtFGq/the-composer-who-took-a-cue-from-birdsong>

Yvonne Loriod remembers recognizing a bird, the *courlis* (curlew), in the field with Messiaen only from having played the corresponding movement in the *Catalogue d'oiseaux*. (quoted from DVD review: Olivier Messiaen, Not for the Birds by Charles T. Downey, Ionarts: Something Other Than Politics in Washington, D.C. (08 January 2008)

CHAPTER VI

EFFECT OF ANALYSIS

ON THE

PERFORMANCE

Chapter 6

Effect of Analysis on the Performance

It is absolutely understood that the analysis of works is one of the most important processes for performers to undertake. In particular, when considering modern music such as Messiaen which rarely contains classical musical elements, but instead is filled with the composer's own musical language or newly invented techniques, the analysis must take on an even greater importance.

Above all, the performance of *Catalogue* is complicated and technically difficult, although we do of course realise that the piece is designed for the pianist and includes appropriate piano markings (which Loriod seems to contribute extensively to the work) while playing the piece.²⁵⁶ In particular when considering aspects of fingering, pedalling and dynamics, the complexity and difficulty is laid bare.

As we have seen through the previous chapters in my analysis, it is observed that the abrupt changing of tempi, pointillism with twelve note mode, kaleidoscopic articulations, added notes and rests, varied chords for colours, mode of pitches, durations and intensities, extreme dynamics from *ppp* to *fff* and various other musical languages are applied into *Catalogue* to represent the landscape. For Messiaen, the transcription of landscape into music might have presented an insurmountable challenge. Indeed, it still remains a formidable test for the performer in order to produce the appropriate timbre that the composer intends in such an enormous piece. All composers have their own characteristics and it is generally regarded as their typical timbre. Being fully aware of the many kinds of musical language employed here must be one of the important tasks for the performer to understand the work. In particular, for a performer who is unfamiliar with the pieces, preliminary study of the musical language is very helpful in understanding the work adequately.

As a performer myself, it was a very curious puzzle to solve as to how landscape was transformed into musical sounds by Messiaen. However, Messiaen himself provides the necessary information concerning the exact time when the birds were singing and the place where he collected them for the performers. This is explained in the preface of each piece.

²⁵⁶ Chadwick and Hill, Olivier Messiaen's *Catalogue d'oiseaux* from Conception to Performance (2018), p. 192

In my case, rendering non-birdsong has proved much more difficult than birdsong. I am quite confident that I cannot be the only one to suffer from this dilemma. That is to say, birdsong contains reasonable and familiar melodies which we can imagine and it is not such a great leap to discover the composer's intention behind the notations. Furthermore, as we encounter great advances in IT (information technology), we can listen to all kinds of bird calls at home, even from our mobile phones when we are walking down the street in the city where birds never appear or sing. This means that there are available many references and sources to decipher real birdsongs.²⁵⁷

On the other hand, truly understanding the landscape used in birdsong music is not that easy. Although I could find several pictures of landscape which Messiaen described in *Catalogue*, it is still hard work to figure out exactly how to produce the appropriate timbre and tone colour that the composer intended. Hence through this study my own intention was to find out how to play the music of landscape efficiently and this chapter hopefully serves to guide fellow performers as part of their own process of understanding.

One issue to bear in mind is that the viewpoint of which birdsong is foreground music and landscape is background music is not the correct attitude. Namely landscape music is not just background music but it is the device to enrich birdsong, and at the same time it is the main material with which to decide the entire mood through the work and development. It is also great music itself and it can equally act as foreground music. In fact, some non-birdsong materials are noticeably prominent in comparison to the birdsong.

Hill compares several well-known recordings of *Catalogue* in the section relating to performance in his latest book.²⁵⁸ He suggests that one should start with interpreting *L'Alouette calandrelle*. This makes sense as it is simpler to notice which part is birdsong and which part is landscape. Moreover, it includes Messiaen's traditional chord of resonance where the symmetrical piece, *L'Alouette lulu* which is as simple as *L'Alouette calandrelle* and easy to recognise where is landscape, then becomes another suitable piece to start with. Both pieces are very similar in structure and mood.

This study focused my mind on the background music indicated as landscape or non-birdsong materials. Before commencing this research, my performance was focused on birdsong; how to mimic birdsong like real bird calls. Landscape such as water, the waves of the sea or the river, all for which I could fairly easily guess the sounds or movements, was not too difficult to express. However non-birdsong such as cliffs, glacier or rocks, as obscure materials proved much more challenging to produce the musical sounds. I also considered various moments during the day such as night, day

²⁵⁷ To produce realistic bird sound is not the point here. I would like to emphasise that much more kinds of reference for birdsong exist than landscape.

²⁵⁸ Ibid, p. 192-201

and morning as a bridge passage or passing passage which notices starts and ends because the materials are very short (one or two bars) and not hard to play.

Through this research, consequently, landscape materials provided me with vast information about the kind of music that the composer wanted to narrate in the music, how the music flows, what the story of the music is, how each material has to be played to produce the exact timbre, how birdsong and non-birdsong are associated, what length is appropriate for the rests and pedals and so on. All this information is remarkably contained in the landscape. Therefore, in order to perform *Catalogue* competently and appropriately, a diligent analysis of landscape materials must be a necessary task. This is because the effect of *Catalogue* can be different according to how differently non-birdsong materials are played.

There are several issues concerning landscape which have an effect on my performance of *Catalogue* as a result of this research. Firstly, landscape materials, which require the performer's imagination and superior expressive ability, give me an impression of films or paintings. They help a lot to stimulate my imagination to inspire the scenery. In particular, in *La Bouscarle*, the water reflection of willows and poplars is such a pictorial work which reminds us of famous paintings, 'Water Lilies' by Claude Monet. In *Le Chocard des Alpes*, an Alpine chough flies over the mountain covered by a glacier. This piece evokes in me memories of an opening scene of a vast mountain from a film or documentary taken by a drone or a helicopter from high up in the sky. The last movement, *Le Courlis cendré* also has a tableau of sea. Nightfall and fog are the covers on a wavy sea. The water may appear still but is constantly swaying into the dark and foggy night. In the darkness something comes closer and finally the foghorn of the lighthouse startles the listener with a very loud siren (with accented *fff* in both hands). In this section, a very stark image of a painting depicting a lighthouse amongst the stormy seas comes into my head caused by explanation of setting.²⁵⁹

Secondly, in terms of being programme music, non-birdsong materials tell me stories. At fearful night, it is very dark and feels like something is but to leap out and frighten the listener. Something is very close and suddenly distant, and is then closer once more. Some kinds of owls appear and start to make their distinct sounds. One sings like a cat, making a 'meow' sound, whereas others cry out and make horrible sounds as if murdering a child and then disappears into the dark night. Another story starts at midnight at the pond. Birds are singing, frogs and the swamp make their own noises, flowers are shown, sunrise and sunset, and twenty seven hours pass. Every single material sings its songs or narrates its stories alternately while time flows constantly from midnight through to dawn the next day.

Finally, by understanding the various musical languages used in representing landscape, it is much easier to appreciate how landscape materials should be played and how to balance birdsong and non-birdsong.

²⁵⁹ See preface

My recital programme includes I *La Chocard de Alpes*, V *La Chouette hulotte*, VI *L'Alouette lulu*, VIII *L'Alouette calandrelle*, IX *La Bouscarle* and the last movement XIII *Le Courlis cendré* from *Catalogue*. This represents a symmetrical arrangement and comparison of night and day, and between mountain and sea. It is also same order of beginning and ending with Loriod's recording in 1959 and performance in 1965. The order of recording was designed by Messiaen and the order of performance follows the published order leaving out five pieces. Loriod played eight pieces (*Le Chocard des Alpes*, *Le Lorient*, *La Chouette hulotte*, *L'Alouette lulu*, *La Rousserolle effarvatte*, *La Bouscarle*, *Le Traquet rieur* and *Le Courlis cendré*) in December 1965 at Metz Conservatory.²⁶⁰ I will mention later on how the musical languages listed below affect my performance.

1) Dynamics

The effects of this research allow me to determine the level of dynamics. Of course, dynamics is always relative in music. Even though the same level of dynamics is indicated, it can naturally produce a different level of dynamics depending on the balance. We can decide the level according to the mood. That is to say, when **f** is notated for water, for rock, for mountain or for night, every single **f** is not necessarily at the same level. For instance, the feeling of **ppp** in *La Chouette hulotte* and **ppp** in *L'Alouette lulu* do not the same impact upon me. In my opinion, **ppp** is used for night motif in both movements, although it does provide for better sonority to play both **ppps** at different levels. For the fearful night, **ppp**, the softest dynamics, should be expressed nearly mute or whispering because all the dynamics have to fulfil their own range and serve as an obvious comparison between dynamics which always frighten or attract the audience. (Ex 4-6) On the contrary, **ppp** in peaceful night is used as a part of chord of resonance and it is still very soft, although it must nevertheless allow people to hear the chord progression. Above all, the range of dynamics used needs to be considered. In *La Chouette hulotte*, there are seven levels (**ppp** – **pp** – **p** – **mf** – **f** – **ff** – **fff**) but in *L'Alouette lulu*, there are five levels (**ppp** – **pp** – **p** – **mf** – **f**). It is natural that **p** in *La Chouette hulotte* and **p** in *L'Alouette lulu* to be expressed in different volume. That is why it is called 'chord of resonance' and Messiaen uses it to portray an empty space of the forest at night. (Ex 4-12)

²⁶⁰ Chadwick and Hill, Olivier Messiaen's *Catalogue d'oiseaux*, p. 183

Fig 6-1) Dynamics due to wave type

Small waves	$p \quad \leftarrow f \quad \rightarrow p$ or $mf \quad \leftarrow ff \quad \rightarrow mf$
Big waves	$mf \quad \leftarrow ff \quad \rightarrow mf$ or $f \quad \leftarrow fff \quad \rightarrow f$
Inflow after waves	ff, fff
Wavelets	pp, p, mf
Ripples	$p \quad \rightarrow \quad ppp$

One of the most dramatic pieces is *Le Courlis cendré*. For the sea (with wavery sea) motif, dynamics of arpeggio are changed abruptly. As we can imagine, dynamics plays a very important role for the waves so that element of dynamics should be played sensitively. Based on the wave type, dynamics can be arranged like Fig 6-1. From Fig 5-1 we can imagine the several types of waves present, and it can help to produce the material effectively.

2) Rests

This study made me focus on rests as much as notes. It is natural that rests need to be considered in their exact beats across all the works because music always has to move and stop, sound and mute, and flow and rest. In *Catalogue*, however, they play an even more important role. Essentially, rests mark the advent of different materials. They inform us of the appearance of other birds or landscape, and act to shift the structure. Rests herald in change and crucially a performer has to notice that change. For instance, in *Le Courlis cendré*, the crotchet rests between massive wave and ripples must not be hurried. There is tendency to rush this because the tempo is fast ($\text{♩}=176$) and the dynamics are changeable. (13/1/1-2) In another wave the rests also keep their duration fully because each bar expresses a different shape of wave; small wave – ripples – big wave. (Ex 4-75)

Rests also imply movements of birds, for example when they fly away. For instance, in *L'Alouette lulu* a lark flies away and this action is portrayed by rests using the pedal. This combination also evokes in us the spatial impression and distance. The lark disappears into the forests. The reverberation of the last note or chord with pedal expresses the disappearance and empty place.

Fermata should be sustained for long enough. In particular in the recordings of Loriod, a long fermata is found. In order to focus on water particles from big waves, it seems to take time. Thus, it is important that this pause should be held for long enough. (Ex 4-79)

3) Tempo

It seems to be a common occurrence that landscape should be presented seriously, in contrast with birdsong, which is portrayed lightly and brightly. In fact, other pianists play landscape in slower tempo than Messiaen's notation and play birdsong in faster tempo. In the opening of *L'Alouette calandrelle*, Messiaen indicates ♩=54 for a hot day in the dry desert and ♩=108 for the short-toed lark's song. Birdsong is played at nearly double the speed of day in the desert. Fig 6-2 shows that most pianists (except Cominique and Ugorski who play exactly at double speed) play birdsong faster than double. In the case of Kodama, landscape is much slower and birdsong is actually played at three times faster than that seen for landscape. It seems that the slower tempo represents the lazy atmosphere on a very warm day. In turn the short-toed lark sings relatively fast to maximise the dramatic effects between birdsong and non-birdsong. Compared to her earlier recording, we can notice that Loriod, who is the only pianist who truly knew about the work intimately and even premiered it herself, plays in slower tempo entirely, although she still keeps the tempo relationship not quite 2:1 in both recordings. Consequently, it is not a significant issue as to how fast to play, but in any case the big gap between birdsong and the day motif (non-birdsong) should be considered. In particular, it is worth mentioning why the recording in 1970 became slower. According to Hill, 1970 is a 'watershed year'. At that time, Messiaen's compositions had been developed into 'more monumental', abundantly harmonised, and the role of stillness had become important. Given her unique position, Loriod might respect these tendencies. Practically, this means that there is more room in her rendition which also effects on my playing. Another reason for the change in tempo is that the recording environment had been moved from studio to the 'ecclesiastical setting' of a church in this period.²⁶¹ Therefore the resonance might become one of the most important elements in her performance and this is the reason why her pacing of *Catalogue* became slower than the recording in 1959. The other reason which is quite humorous is their marriage in 1961 made them relaxed and it is reflected in her performance.²⁶²

²⁶¹ Chadwick and Hill, Olivier Messiaen's *Catalogue d'oiseaux*, p. 185

²⁶² Ibid, p.186

Fig 6-2) Tempi taken in the opening bars of *L'Alouette calandrelle* from the recordings²⁶³

Pianists	Tempo of Landscape (day)	Tempo of Birdsong (short-toed lark)
Yvonne Loriod (1959)	♩=54	♩=116-120
Håkon Austbø	54	120
Robert Sherlaw Johnson	54	116-120
Momo Kodama	36	116
Yvonne Loriod (1970)	46	108
Michael Kieran Harvey	46	108
Carl-Axel Cominique	54	108
Roger Muraro	52	104
Peter Hill	48	98
Anatol Ugorski	48	96
Paul Kim	40	98
Martin Zehn	36	96

Fig 6-3 is another example about tempi according to several pianists. There are a few pianists who shorten the duration of the last chord of night motif (♩) and go straight to birdsong. In her first recording, Yvonne Loriod performed the night motif in the exact tempo which Messiaen notated, although the woodlark's song appears earlier than the full duration of ♩ (about half of original duration). In the later recording, however, she plays much more slowly for night like the recording of *L'Alouette calandrelle* in 1970 and the last chord is held almost in full length. I prefer to hold the crochet chord sufficiently in order to listen to the resonance and feel the deep and calm night in hollow woods. Although there are damper pedal marks, holding the last chords in both hands (not moving to next motif) until birdsong starts is one way to express the tranquil night efficiently. Namely, night and birdsong are overlapped but sufficient space should exist between them. This is because spatial sense is a meaningful element in *Catalogue*.

²⁶³ Chadwick and Hill, p. 194

Fig 6-3) Tempi taken at the beginning of *L'Alouette lulu* from recordings

Pianists	Tempo of Landscape (night)	Duration of the Last Chord of Landscape
Yvonne Loriod (1959)	63	half of crochet (♩ → ♪)
Yvonne Loriod (1971)	48	nearly full duration of crochet
Peter Hill (1986)	50	exact crochet duration
Håkon Austbø (1993)	63	exact crochet duration
Anatol Ugorski (1994)	50	exact crochet duration
Jocy de Oliveira (2000)	50	exact crochet duration
Roger Muraro (2000)	60	exact crochet duration
Paul Kim (2001)	56	about three fourth duration of crochet (♩ - ♪)
Robert Sherlaw Johnson (2008)	63	exact crochet duration
Pierre-Laurent Aimard (2018)	63	half of crochet (♩ - ♪)

It is not such a major issue to keep the speed as Messiaen indicates, but rather more important is to make certain comparisons between birdsong and non-birdsong. In order to express the three-dimensional effect of landscape with sound of a piano, the space is required and the pace satisfies the demand.

4) Twelve Note Mode and Mode of Pitches, Durations and Intensities

Turning to twelve note mode, Messiaen seems to regard this as one of the most favourite musical languages in *Catalogue*. This is mainly applied to chromatic colourful landscape, hard surfaced landscape or night. We can observe it in several movements in *Catalogue* yet it has different formations depending on the applied materials. This device is the most difficult to understand and interpret among non-birdsong materials. Above all, it is hard to produce proper timbre. For that is the key to be able to observe real landscape. In fact, just looking at the photos of the landscape Messiaen transcribed into music is very helpful to perceive the pieces more accurately. There was no opportunity to visit those places for me, although it is still a valuable

exercise to search for these images online.

Twelve note mode is usually used for landscape which has rough and hard surfaces so it needs to produce firm and solid timbre rather than reverberated timbre.

Twelve note mode is usually used for landscape which tends to incorporate rough and hard surfaces, meaning that a more firm and solid timbre is required rather than a reverberated timbre. It is very important to touch all the notes with the same power because all the notes of this mode should be handled equivalently. Particularly, in *Le Chocard des Alpes*, the mode plays a substantial role indeed. Both mountain with glacier in Strophe and ghost shaped stones in Epode are in two beats and require solid resonance. The chaos of piled rocks in disorder in Antistrophe is different from others. We should think why Messiaen uses irregular rhythm with very loud volume (**ff**) in this passage. More complex and powerful resonance must be produced for it.

Twelve note mode is used for thick fog at dark night in *Le Courlis cendré*. (Ex 4-19)

For the horrible night, the mode of pitches, durations and intensities is used in *La Chouette hulotte*. It is a quite challenging movement in expressing sudden dynamic changes on skipped notes in irregular rhythm. When listening to this movement for the first time, it sounds very disorganised. It also takes time to become accustomed to playing this motif. In order to be skilled, it is necessary to decide the exact levels of dynamics. As I mentioned in Chapter 4, the long notes and holding notes provide the hints for making phrases.

5) Timbre

In contrast to other pieces, *La Bouscarle* is the most romantic piece from *Catalogue* in A minor, played with rubato and the flight of the kingfisher²⁶⁴ resembles Chopin's Etude.²⁶⁵ The water reflection motif reminds us of Debussy. As Messiaen notates, the chords should flow evenly, which is reminiscent of the Debussy effect where the fingers remain on the keyboard.

In *L'Alouette calandrelle*, the two chord passage resembles the night motif in *L'Alouette lulu*. However, it is not a chord of resonance, but colour chords describing a dry day in the desert. The colour chords are likely to be played very softly because **pp** is notated. They must sound as dry as dust in tempo with less reverberation while the night motif in *L'Alouette lulu* needs a lot of sonority to feel space perception.

If there is no non-birdsong, it is common that chord passages appear rarely, the progressions are fast and register is high. Even if there is landscape motif in contrast *Catalogue*, the one seen here is very simple as with the colour chords in *Rouge gorge* (Ex 6-1); every chord in quaver arranged in same volume with pedal changing. Therefore birdsong music involves enriched resonance, attractive materials and diverse techniques by non-birdsong materials.

²⁶⁴ See score 5/3/1-4/2

²⁶⁵ Etude in A flat, Op.10, No. 10 (Chadwick and Hill, Olivier Messiaen's *Catalogue d'oiseaux*, p. 193)

In summary, the role of landscape is to highlight birdsong. Landscape determines the overall atmosphere of the music. Messiaen includes not only natural settings and habitat but also includes sunrise, sunset and time flows, all of which is intended to narrate what is going on as programme music. Besides, flowers and little animals such as grasshoppers and frogs further add to the sense of fun and diversity visible in the scene.

For the perfect performance of *Catalogue*, landscape materials must be played as intended by the composer. Accordingly knowing their role is one of the most crucial points of understanding for the performer. At my recital, I hope that my performance touches the audience deeply by expressing the role of landscape vividly and effectively.

CONCLUSION

Conclusion

Throughout the chapters in this research, I have examined Messiaen's musical character, together with one of his masterpieces for solo piano, *Catalogue d'oiseaux*. This analysis is focused on the non-birdsong or landscape materials which are primarily used and considered as background effects, but which actually play a significant role in the birdsong work, *Catalogue*. In fact, the landscape material enriches the birdsong music. Each movement involves at least one or more landscape materials which allow the performer to notice the differences with other birdsong works by others or even Messiaen himself. All these subtleties and intricacies all help the performer to understand, as well as convey, the music as a whole.

In this conclusion, I will emphasise those features which are newly discovered in this study, summarise the important techniques that should be noted in this piece, and finally outline the influences for Messiaen's later birdsong works.

One of the most curious questions was why Messiaen applied landscape materials in *Catalogue* unlike his other birdsong works for solo piano.

Firstly, the presence of landscape materials in *Catalogue* elevates it to the status of a one of the 20th-century's major piano cycles among Messiaen's solo piano works. If there were no landscape, the work would doubtless entail a much shorter length like other birdsong pieces for solo piano such as *La Fauvette des jardins* and *La Fauvette passerinette*. Further, the range of music without landscape is narrower- mainly limited to the high register, and where fewer musical languages are used - twelve note mode and mode of pitches, durations and intensities are primarily applied for landscape. Ultimately, the desire of Messiaen to express and portray a wide range of landscape features and details makes the work abundantly rich in texture and resonance.

Secondly, this is a form of programme music²⁶⁶ where the composer needs to render 'an extra musical narrative' and where the audience needs to allow themselves to imagine the associations between the material and the music. Messiaen's efforts in delivering his impression of the scenery where he was, as well as the natural phenomena found within, exactly coincides with the purpose of composing *Catalogue*.²⁶⁷ *Catalogue* is one of those works which should no doubt be called 'programme music' given its preface which narrates the settings and time and landscape. Therefore, it is inevitable to utilise landscape materials in *Catalogue*, given its principal function as programme music.

²⁶⁶ The definition of 'programme music' from Wikipedia, the free encyclopaedia is used as a reference. [www.en.wikipedia.org/wiki](http://www.en.wikipedia.org/wiki/Programme_music) 'Programme music' is a type of art music that attempts to musically render an extra-musical narrative. The narrative itself might be offered to the audience in the form of programme notes, inviting imaginative correlations with the music.

²⁶⁷ Another definition of 'programme music' is quoted from the website 'Dictionary.com'. www.dictionary.com 'Music intended to convey an impression of definite series of images, scenes, or events.'

Thirdly, landscape material plays a diverse role in *Catalogue*. On one hand it plays the role of forming structure by dividing sections and being arranged between birdsong and non-birdsong materials. For instance, it contains an arch form where it appears in both the beginning and at the end. Further, it is employed to notify the starts of sections such as Strophe, Antistrophe and Epode by starting with landscape. Landscape plays the role of creating mood. For instance, it creates fearful mood by using the mode of pitches, durations and intensities, and can also bring on a peaceful atmosphere by adding chord of resonance.

Finally, one aspect that needs to be emphasised is that *Catalogue* is the piece that presents Messiaen's faith. There is no mention of religion in the title, compared for example to *Visions de l'Amen* or *Vingt regards sur l'enfant-Jésus*. However, Messiaen regards birds as God's conduit for praising God, and his message is that it is they who are the real musicians in the piece. Of course, nature also acts as the general habitat for the birds, and a crucial part of their existence which allows them to thrive. This fundamental desire is why Messiaen does not omit landscape or the little animals from the *Catalogue*. One is always conscious, however, that birdsong is present not only in the wild or countryside but also in city areas. If Messiaen were to use birdsong in the city, *Catalogue* might come across as a very different piece surrounded by artificial architectures. However it seems one absolute impossibility for Messiaen to transcribe urban birdsong into music; according to his statement: 'I have an absolute horror of cities, a horror of the one I live in, despite all its beauties- I'm referring to the French capital.'²⁶⁸ This may explain then why Messiaen does not use birdsong from cities, and rather focuses on birdsong found in nature in his music. When birds are observed in nature, they sing in the way that they were created for. If birds are portrayed against the sky, then the landscape is properly set against the land. These relationships can serve as examples of arch shapes, and seem to depict a perfect world which the composer pursues.

Another distinctive discovery from this study is why landscape is important in *Catalogue*.

Firstly, the presence of landscape makes this work unique. *Catalogue* is certainly different from other birdsong pieces because of its unique relation to landscape. This is the only work presenting not only birdsong but also landscape equally on one solo instrument – piano. While earlier works tended only to contain birdsong, some of these pieces did in fact also incorporate studies of the passage of time. (e.g. *Reveil des oiseaux*) Even though Messiaen loves to depict nature, he does not combine it with birdsong until the arrival of *Catalogue*. In his earlier pieces, he arranges birdsong and landscape in movements separate from each other. For instance, in *Préludes* for piano solo (1928-9), the dove and the landscape are separated in the first movement, the second movement and the last movement. In *Visions de l'Amen* the second movement, *Amen des étoiles, de la planète à l'anneau* (Amen of stars, of the ringed planet) describes the landscape. However, this has been separated from the birdsong which is arranged in the fifth movement, *Amen des Anges, des Saints, du chant des oiseaux* (Amen of angels, of saints, and of bird chant).

²⁶⁸ Claude Samuel, *Music and Color*, p.33

During the birdsong period, Messiaen tries putting together birdsong and landscape, the result being that *Catalogue* is a work that shows off the supreme combination of both. Thereafter, Messiaen separates the ideas and returns to religious topics. He uses birdsong from different parts of the world (e.g. *Sept haïkaï* from Japan and *Des canyons aux étoiles* from USA) and brings together those varied birdsong elements, for example in *Couleurs de la cité céleste* (Colours of the Celestial City, 1963), *Et exspecto resurrectionem mortuorum* (And I await the resurrection of the dead, 1964), *La Transfiguration de Notre Seigneur Jésus-Christ* (The Transfiguration of Our Lord Jesus Christ, 1965–69), *Méditations sur le mystère de la Sainte Trinité* (Meditations on the mystery of the Holy Trinity, 1969), *Saint-François d'Assise* (St Francis of Assisi, 1975–1983), *Livre du Saint Sacrement* (Book of the Holy Sacrament, 1984) and *La ville d'en-haut* (The city on high, 1987).

Moreover, Yvonne Loriod's knowledge surrounding the combination of piano music and birdsong should be considered as one of the most valuable sources for Messiaen in *Catalogue*. Loriod, who was a piano master as well as Messiaen's second wife, accompanied him everywhere, helped him out on trips to collect birdsong and she was also the inspiration behind much of the piano writing itself.

Adding landscape into birdsong music is the most original characteristic of *Catalogue* and it was probably an area of great concern for the composer as to how to express the materials which do not have their own sound or movement. The result is that the composer needs to devise a concept of how to express those awkward elements in the music, and how to employ special musical devices to transcribe them into music. He found birdsong fascinating, notating bird songs worldwide and incorporating birdsong transcriptions into his music. His innovative use of colour, his conception of the relationship between time and music, and his use of birdsong are among the features that make Messiaen's music so distinctive. In terms of composition, Messiaen's own musical techniques, which are used in the earlier works such as the modes of limited transposition, new harmonic thought, rhythms, twelve-tone mode and so on, are more developed than before such as mode of pitches, values and intensities, enhance the uniqueness of *Catalogue*. More specifically, Messiaen uses the twelve-note music for depicting hard surfaces found in nature such as cliffs, mountains and stones, as well as the chromatic colour of nature such as night, or a white glacier. The mode of pitches, durations and intensities is used to represent the fear of night. The various chords which Messiaen invented are applied to water features such as the sea, river and pond. Messiaen enjoys designating specific colours for describing the sun and water. He also uses rhythmic canon, traditional Hindu and Greek rhythms, the modes of limited transposition and so forth.

Secondly, by adding landscape conception to the piece, Messiaen seeks to achieve the sonic evocation of reality in his music. In fact, his travelling to collect birdsong from the wild serves as evidence enough to support the fidelity of the composition. Messiaen was literally standing in front of the scenery, listening to birdsong, notating what he was hearing and drawing what he was seeing in that very moment. The result is that the authentic nature of Messiaen's jottings, which sometimes fill nearly two-thirds of a page, of A4, together with Loriod's recordings, are transcribed into music. Subsequently, he tries to imitate birdsong by using the direct documents - cahiers.

(Woodlark from cahier 23042, p.2) Likewise, Messiaen used his drawings and scribbles for the landscape taken from his cahiers (drawing from cahier 23044, p.5 and scribbling for Camargue from cahier 23043, p.34) although these fall somewhat short of reality because of the impossibility of describing in music the landscape which does not possess real sounds. The difficulty of such a task only serves to accentuate his remarkable imagination in expressing the differences found within the real landscape, depicted in each movement. That is to say, how he portrays non-noisy landscape in his music is the most subjective part in processing his music. If we examine the aspect of describing birdsong, it is comparable to a modern filmed 'documentary' which is based on reality. In documentary productions, one of the sublime scientific genres, the normal passage of time is usually reduced via editing to highlight only the most important moments; for instance, reducing a whole day to twenty minutes. Messiaen performs the task with his usual sensibility; for instance, he cuts a period of time from twenty seven hours (longer than a day) to half an hour in *La Rousserolle effarvate*. Thirdly, *Catalogue* satisfies the aspects of an 'art' by mimicking not only the real birdsong but also by adding the landscape which has shapes not sounds. This piece portrays real creatures, the real world and real sounds, although *Catalogue* is an 'art' which is necessary to add to the composer's impression, subjective view and imagination. This allows him to fully use his imagination in *Catalogue*. Whereas Messiaen portrays birdsong from a scientific point of view and in the way of naturalism, he also describes the surfaces, status and shapes of landscape from his (non-scientific) subjective view and in an artistic way. The fact that the composer uses his subjective view also informs us of the uniqueness of *Catalogue*. One term, 'anthropomorphism' can explain the composer's involvement in the music. Although *Catalogue* is a work presenting the objective materials of birdsong and non-birdsong, the process leading into music is through his ears, eyes and brain in a personal way. That is why his subjective view must be added to his music. Messiaen discussed this with Samuel as follows,

'Personally, I'm very proud of the exactitude of my work.... I assure you that everything is real; but, obviously, I'm the one who hears, and involuntarily I inject my reproductions of the songs with something of my manner and method of listening.'²⁶⁹

Sherlaw Johnson also observes in his book, 'he is concerned with the human world containing birds, rather than a 'bird-world' in its own right.'²⁷⁰

The process described above is more like a documentary yet it becomes, consequentially, an art by adding his subjective view on landscape. It is this

²⁶⁹ Samuel, *Music and Color*, p. 94

²⁷⁰ Sherlaw Johnson, *Messiaen*, p.131

manipulation that an artist introduces.

That is to say, Messiaen's works are closer to paintings than photographs. While photographs, which a photographer can add nothing to physically, are objective, paintings which an artist can add something to are subjective.²⁷¹ Similarly, recording or listening to birdsong is an objective method which becomes subjective via the interaction with, and interruption of, Messiaen's brain. He tries to mimic birdsong scientifically yet the works undoubtedly convey Messiaen's personality. He is more like a painter than a scientist even though he is an ornithologist. In the natural world, it is a natural phenomenon and certainty that there is, always, something dangerous and crude occurring such as animals killing and eating each other. However, Messiaen tends to depict only the beautiful part of nature by editing out the unpleasant things (although he does ask for the owl to sound like the killing of a child in *La Chouette hulotte*). This serves as evidence that his subjective view is inserted into his music. Nonetheless, it is not deliberate that Messiaen's works show only the beauty of the kind found in French romantic art. He describes birdsong in a more scientific way and landscape in a more private way. Therefore, it can be said that the pieces in *Catalogue* are well-presented works that contain a balance between Messiaen's scientific and artistic tendencies.

Finally, as a teacher, Messiaen might appreciate the importance of visualisation. Such a piece as *Catalogue* naturally contains many difficulties which could hamper full understanding, whereas the composer is likely to be motivated to give more information about each movement. By writing about non-birdsong materials such as the places, times, colours, events happening, sounds, movements, shapes, memories and so on in the preface and score, the composer helps the performer to study his music.

In the birdsong period, Messiaen attempts to present birdsong in various ways. The period begins with the short piece *Le merle noir* for flute and piano, which is then followed by larger pieces, *Oiseaux exotiques* for piano and wind ensemble and *Réveil des oiseaux* for piano and orchestra. Suddenly the composer turned to solo instrumental work, perhaps leading him to include landscape in order to make interesting sounds given only the one timbre of the piano. Perhaps there was no option but to use all the materials gathered from nature which could be a resource in composing music. The most effective sound to support birdsong might be the landscape. The diversity might be the only way to create an art using real materials so that in *Catalogue* the birdsong could not be detached from the landscape.

Messiaen worked with birdsong throughout his career so it is not hard to identify works which contains birdsong. Even in pieces where birds are not precisely identified there is still birdsong. Therefore, it is not controversial to say that birdsong is used in most of his works by copying real bird sounds or by using generalised birdsong. In early works before 1950, in many cases, Messiaen uses labels such as '*comme un*

²⁷¹ There is an exception when considering the functions available in 'Photoshop', which although can edit photographs with the benefit of modern technology, my aim is to compare the traditional processing methods of both photographs and paintings.

oiseaux' rather than noting actual names of birds, and where the sonority is close to 'bird-like sound'. Birdsong in that period takes the role of decoration in the works. In the 1950's, commonly known as the 'birdsong period', Messiaen made an effort to imitate realistic birdsong because he began to identify birdsong precisely through study with the ornithologist, Jacques Delamain. Messiaen was gradually able to recognise the exact names of birds by merely listening to the singing birds, and without having to visually identify them. Once this skill was established, Messiaen started to add different materials. Messiaen increased the sense of reality by adding landscape in *Catalogue*. After 1960, Messiaen expanded the geographical range from France to abroad and even to universe such as *Des canyons aux étoiles...* while birds in *Catalogue* are limited to those found inside France, in other words birds in their native French rural habitat.

Subsequently, Messiaen persisted with composing more birdsong works. In *Chronochromie* (Time-colour, 1960), Messiaen created a 'surreal' world of birds from across the globe which could never meet up in reality and sing together naturally. One does appreciate however that birds from different places can be observed together in artificial places such as a zoo or a bird park.

There are three more pieces for piano solo to be considered: *La Fauvette des jardins* (Garden warbler, 1970), *Petites esquisses d'oiseaux* (Small sketches of birds, 1985) and *La Fauvette passerinette* (Subalpine warbler, 1961). As we can witness, these pieces are much shorter than *Catalogue* due to the reduction of the role of landscape music in birdsong.²⁷² *La Fauvette des jardins*, composed as a single piece, is fairly similar in terms of describing both birdsong (seventeen kinds of bird which are imitated in *Catalogue* are used again) as well as landscape: night, water, mountain, lake and plants. The landscape where Messiaen's beloved house is located in Dauphiné is used to present the passage of time, especially the changing colours of the lake as the preface informs us. The landscape, however, seems to be described in a gentle and 'relaxed'²⁷³ way. The rhythm is not as complex as that found in *Catalogue* and the tempo becomes more stable than *Catalogue*. To depict the mountain Grand Serre, Messiaen uses the twelve-tone mode as he did in *Catalogue*.

Petites esquisses d'oiseaux consists of six little movements and is dedicated to Loriod. This work, the last piece for piano solo, only occasionally presents birdsong with the 'landscape-like'²⁷⁴ features and utilises the robin (*Le Rouge-gorge*) which has three dedicated movements as its role as the principal bird in conjunction with blackbird, song thrush and skylark. The piece gives the appearance of being very simple but it is, unexpectedly, very difficult technically because Loriod's pianistic skill is applied to this

²⁷² *La Fauvette des jardins* takes 30 minutes, *Petites esquisses d'oiseaux* takes 15 minutes and *La Fauvette passerinette* takes only 10 minutes to perform.

²⁷³ Hill, *The Messiaen Companion*, p.345

²⁷⁴ There is no preface and Messiaen did not notate any information in the score. However, we might suppose that the chord progressions between birdsongs present landscape as they resemble typical landscape materials such as night and day in *Catalogue*.

work. *La Fauvette passerinette* was edited and was premiered by Hill in November, 2013 and published in March, 2015. As with *Petites esquisses d'oiseaux*, *La Fauvette passerinette*²⁷⁵ the piece takes only ten minutes to perform and depicts only birdsong. *Sept haïkai* (Seven haikus, 1962) for solo piano and orchestra describes Japanese birds, *Des canyons aux étoiles...* (From the canyons to the stars..., 1971–74), solo piano, solo horn, solo glockenspiel, solo xylophone, small orchestra with 13 string players, and is another peculiar piece which includes birdsong. This work describes American birdsong with landscape which includes not only the earth but also the other spaces found on the earth. *Un Vitrail et des oiseaux* (A stained glass window and birds, 1986) for piano solo, brass, woodwind ensemble, trumpet and percussion depicts only birdsong and *Un oiseau des arbres de vie (Oiseau tui)* (A bird of the trees of life (Tui bird))²⁷⁶ for large orchestra presents a single birdsong of the 'tui' from New Zealand. Messiaen's last completed work, *Éclairs sur l'au-delà...* (Illuminations on the beyond..., 1988- 92) for orchestra presents elements of astronomy, applies biblical texts and incorporates birdsong from Australia, New Zealand, Papua New Guinea and Singapore. After *Catalogue*, Messiaen's birdsong tends to pursue interests beyond reality: surreal or super natural music. Therefore, it is shown once more that *Catalogue* is a work that demonstrates Messiaen's efforts in presenting real birdsong effectively and accurately, as well as serving as a well-balanced piece between realistic features and artistic views.

From the above paragraph, we can note that there are two turning points for Messiaen in his birdsong music. The first juncture is the time when he meets Delamain and the second is where Messiaen weaves other materials such as landscape, birds in different geographical regions. Furthermore, he adds stars, the universe and even paradise to complete the larger picture of the spiritual place into his birdsong in *Couleurs de la Cité céleste* (Colours of the Celestial City). The sixth movement, *Appel interstellaire* (Interstellar call) for solo horn produce the mystical sonority to portray the floating universe. Finally, the last movement, *Zion Park et la cité céleste* (Zion Park and the

²⁷⁵ *La Fauvette passerinette* (The Subalpine Warbler) for solo piano written in 1961 was discovered in 2012 from Messiaen's birdsong notebooks by Peter Hill. This work was reconstructed by Hill and published in 2015 by the British publisher, Faber. Messiaen used birdsong only in this work which probably was intended to be part of a second cycle of *Catalogue d'oiseaux* apart from a few background colour chords. (from the CD review by Andrew Clements on 22. October 2014, the Guardian).

As Messiaen's interests in non-birdsong material moved to colours, the description of landscape diminished, although colours played an important role in this piece.

(preface of the score and the website, <http://www.fabermusic.com/news/la-fauvette-passerinette--a-fascinating-messiaen-discovery25032015-1>)

²⁷⁶ This is an abandoned movement from *Éclairs sur l'au-delà...*. This piano sketch with orchestration annotations was discovered among Messiaen's papers, orchestrated by Christopher Dingle and first performed at The Proms in August 2015.

celestial city), presents the spiritual paradise, the spiritual destination.²⁷⁷ The evolution of this music continued after composing *Catalogue*. After study with Delamain, Messiaen had looked exclusively at French birds in a realistic way in *Catalogue* and then the composition of *Catalogue* led him to pursue the idea of adding something more abstract. The writing of birdsong became more and more accurate although the writing of background material became increasingly abstract.

It is an interesting question as to whether the performer or listener needs to have ornithological knowledge to identify Messiaen's birdsong and landscape.

Knowing the bird and the landscape I want to depict must impart particular pleasure for the listener who rediscovers these elements as one rediscovers friends, childhood memories, or certain things lost in the back of the mind; in any case, that's my feeling. Nevertheless, the musical result is there, and the listener who doesn't recognize the bird songs may take pleasure in the music alone. Moreover, if the work succeeds, life is revealed on its own without identification being necessary. So many beautiful portraits of past centuries are of characters we don't know, yet they seem to us to be crying out with life and truth! We think we recognise people we've never seen because the paintings are successful.²⁷⁸

A further query is found in why Messiaen was reduced to composing birdsong without landscape if *Catalogue* was such an important work and one of the best-known pieces in the modern piano literature. Why did the role of the landscape and non-birdsong material become less important in his birdsong music? Why did Messiaen create this significant role for landscape only in *Catalogue* among his other birdsong works?

The answer is possibly provided by supposing that his interest in birdsong became modified subsequently. *Catalogue* is a more realistic work in mimicking birdsong and using landscape than any of the later works. In his next completed work, *Chronochromie*, Messiaen brought together birdsong from such diverse areas as France, Sweden, Japan and Mexico. Although Messiaen still describes 'natural materials' such as rocks or waterfalls, he is more focused on the rhythmic complexity and colour combinations, as we can guess from the title²⁷⁹ and different resonances

²⁷⁷ Harriet Watts, *Colours and Birds: An Interview with Olivier Messiaen* (Tempo, New Series, No.128 (1979), p.2-8, Cambridge University Press)

²⁷⁸ Samuel, *Music and Color*, p. 96

²⁷⁹ Messiaen notates precise colour combinations: 'milky-white sonorous complex embellished with orange and fringed with gold' or 'pale grey with green and violet reflections.' Samuel, p.136

created by adding metallic percussion.²⁸⁰

For Messiaen, birds are perhaps the symbol for absolute liberty that he himself pursues in his own life on the earth. Just as birds sing freely when they are free in nature, so Messiaen feels utmost freedom when he goes to collect and listen to birdsong. The real freedom that Messiaen seeks is reflected in birds so he has no choice but to present the bird's flight. In conversation with Antoine Goléa, Messiaen says that 'we walk, he flies. We make war, he sings.'²⁸¹

He might wish to accomplish such a perfect world associated with his faith by reproducing that ideal situation: birds singing in the wild. In conversation with Goléa, Messiaen insists that nature is important for him and his music: 'for me, ... the only real music has always existed in the sounds of nature.'²⁸²

During my research, it surprised me that Messiaen's composing of *Catalogue* was developed by combination of the presentation of accuracy of birdsong together with the abstraction of landscape.

Landscape may be easy to dismiss as mere background to support or sustain the foreground music, birdsong, but its role is not insignificant at all. Instead, *Catalogue* is rightly acclaimed as a masterpiece alone by the addition of landscape to Messiaen's unique musical language. As a pianist, it is inevitable and necessary that one should fully understand, be fully aware of, and express in minute detail the landscape materials which all combine to create technically difficult musical languages. Whilst undoubtedly difficult, this complexity is as deep as it is for birdsong.

Mention has been made above that Messiaen may have planned to compose the second *Catalogue d'oiseaux*.²⁸³ Although he did not ultimately accomplish that goal, one does hope that he himself might eventually have recognised *Catalogue* as one of his most important piano works and like us, that perhaps he could have made another great achievement in contemporary piano literature.

²⁸⁰ Instrumentation of metallic percussion in *Chronochromie*: suspended cymbal, Chinese cymbal, 3 gongs, bells, glockenspiel, marimba, xylophone.

²⁸¹ Antoine Goléa', *Recontres avec Olivier Messiaen* (Paris, Julliard, 1960) p.19

²⁸² *Ibid*, p.223

²⁸³ See the reference no. 9 on the p. 7 in the Conclusion section.

APPENDIX

List of piano works by Messiaen in chronological order

Piano solo pieces

- *La dame de Shallott* (1917, unpublished)
- *Préludes* (1928-29)
 1. *La Colombe*
 2. *Chant d'extase dans un paysage triste*
 3. *Le Nomble léger*
 4. *Instants défunts*
 5. *Les Sons impalpable du rêve*
 6. *Cloches d'angoisse et larmes d'adieu*
 7. *Plainte calme*
 8. *Un Reflet dans le vent*
- *Fantaisie burlesque* (1932)
- *Pièce pour le tombeau de Paul Dukas* (Piece written as a memorial of Paul Dukas) (1935)
- *Rondeau* (1943)
- *Visions de l'Amen* (Visions of the Amen) for two pianos (1943)
- *Vingt regards sur l'enfant-Jésus* (Twenty Contemplations on the Infant Jesus) (1944)
- *Cantéyodjayâ* (1949)
- *Quatre études de rythme* ("Four studies in rhythm"), piano (1949–50)
 1. *Île de feu 1*
 2. *Mode de valeurs et d'intensités*
 3. *Neumes rythmiques*
 4. *Île de feu 2*
- *Catalogue d'oiseaux* (Bird catalogue) (1956–58)
- *La Fauvette des jardins* (Garden warbler) (1970)
- *Petites esquisses d'oiseaux* (Small sketches of birds) (1985)
- *La Fauvette Passerinettes* (Subalpine warbler) (1961, discovered and edited by Peter Hill)

Other works including piano solo

- *La Mort du nombre* (The death of numbers) for soprano, tenor, violin and piano (1930)
- *Thème et variations* (Theme and Variations) for violin and piano (1932)
- *Fantaisie*, for violin and piano (1933, published in 2007)
- *Vocalise* for voice and piano (1935)
- *Quatuor pour la fin du temps* (Quartet for the end of time) for violin, cello, clarinet and piano (1940–41)
- *Trois petites liturgies de la présence divine* (Three small liturgies of the Divine Presence) for women's voices, piano solo, Ondes Martenot solo, orchestra (1943–44)
- *Turangalîla-Symphonie* for piano solo, Ondes Martenot solo, orchestra (1946–48)
- *Le Merle noir* (Blackbird) for flute and piano (1952)
- *Réveil des oiseaux* (Dawn chorus) for solo piano and orchestra (1953)
- *Oiseaux exotiques* (Exotic birds) for solo piano and orchestra (1955–56)
- *Sept haïkai* (Seven haikus) for solo piano and orchestra (1962)
- *Couleurs de la cité céleste* (Colours of the Celestial City) for solo piano and ensemble (1963)
- *La Transfiguration de Notre Seigneur Jésus-Christ* (The Transfiguration of Our Lord Jesus Christ) for large 10-part chorus, piano solo, cello solo, flute solo, clarinet solo, xyloimba solo, vibraphone solo, large orchestra (1965–69)
- *Des Canyons aux étoiles...* ("From the canyons to the stars...") for solo piano, solo horn, solo glockenspiel, solo xyloimba, small orchestra with 13 string players (1971–74)
- *Un Vitrail et des oiseaux* (Stained-glass window and birds) for piano solo, brass, wind and percussion (1986)
- *La Ville d'en-haut* (The city on high) for piano solo, brass, wind and percussion (1987)
- *Pièce pour piano et quatuor à cordes* (Piece for piano and string quartet) (1991)
- *Concert à quatre* (Quadruple concerto) for piano, flute, oboe, cello and orchestra (1990–91, unfinished at the time of Messiaen's death, completed by Loriod and Benjamin in 1994)
- *Feuillets inédits* for piano and ondes martenot (not know when composed, published in 2001)

Messiaen's Modes of Limited Transposition

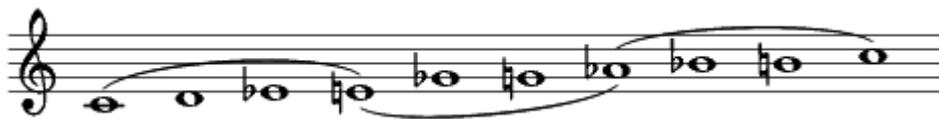
Mode 1



Mode 2



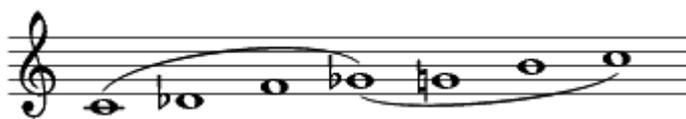
Mode 3



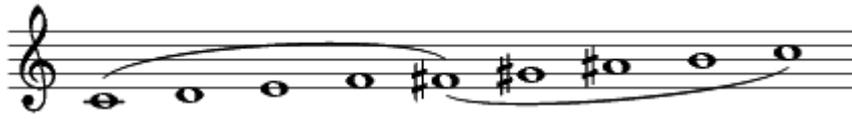
Mode 4



Mode 5



Mode 6



Mode 7



(Fig 1-1) Colouration of MLT²⁸⁴

Mode	Colours
Mode 2 ¹ (the 1 st transposition of Mode 2)	violet-blue
Mode 2 ²	gold, brown
Mode 2 ³	green
Mode 3 ¹	orange, gold, milky white
Mode 3 ²	gray, mauve, a bit of gold
Mode 3 ³	blue, green
Mode 3 ⁴	orange, red, a bit of blue
Mode 4 ¹	gray, gold, a bit of blue
Mode4 ²	streaks of iron gray, pink-mauve and coppery yellow, black and clear Prussian blue, green and purple violet
Mode4 ³	yellow, violet
Mode4 ⁴	violet with white veins
Mode4 ⁵	deep violet
Mode4 ⁶	carmine re, violaceous purple, mauve, gray, pink
Mode6 ¹	gray with bits of gold, orange, dark green
Mode6 ²	brown, russet, orange, violet
Mode6 ³	yellow, mauve, gold
Mode6 ⁴	yellow, violet, black
Mode6 ⁵	gold, pale blue, violet with brown outline
Mode 6 ⁶	black, white, a bit of pale blue
Mode 1, 5 and 7	Not indicated any specific colour

²⁸⁴ Samuel, p. 64, Quoted from Chapter 5. Modes of Limited Transposition and Special Chords, PhD thesis, by Jeffrey Brillhart, p. 51-54

Messiaen's Chords

① Chord of Resonance

Messiaen considered that Chords of Resonance (CR) could be a colourful characteristic of the harmonic series. CR contains all the notes of mode 3 of limited transposition and contains 'all its odd harmonics up to the fifteenth.'²⁸⁵ Messiaen utilises this device in a manner of relation to the harmonic series or to create an effect of pure fantasy, which is very distantly analogous to the phenomenon of natural resonance'²⁸⁶

Example 208 demonstrates Messiaen's original position of CR and its extended passage is found in *Réveil des oiseaux* for the golden oriole indicated for cellos. The first piece which both Ex. 209 and Ex. 210 are applied is *Chants de terre et de ciel*. CR is often used with CTI.²⁸⁷

Ex.208-210 of Chord of Resonance from Technique, p.37

The image shows three musical examples of Chords of Resonance (CR) from Messiaen's *Technique*, p. 37. Each example is presented on a grand staff (treble and bass clefs).
 - **Ex. 208:** Shows a single chord in the treble clef with a key signature of two sharps (F# and C#).
 - **Ex. 209:** Shows a sequence of four chords in the bass clef, each with a different key signature: two sharps, one sharp, one flat, and two flats.
 - **Ex. 210:** Shows a sequence of four chords in the bass clef, each with a different key signature: two flats, one flat, one sharp, and two sharps. A dynamic marking of *p* (piano) is placed below the first chord.

Example of Chords of Resonance in *Réveil des oiseaux*

The image shows a musical score for an example of Chords of Resonance in *Réveil des oiseaux*. The score is for three parts: 2nd violins, violas 1-3, and violas 4, cello & horns. The 2nd violins part is marked *pp* and includes a dynamic marking of *8va* with a dashed line. The violas 1-3 part is marked *pp*. The violas 4, cello & horns part is marked *ff*. The music consists of several chords of resonance, each with a different key signature, and some are marked with accents (>).

²⁸⁵ Sherlaw Johnson, p. 17

²⁸⁶ Messiaen, *Technique*, p.50

²⁸⁷ *Ibid*, p. 17-18

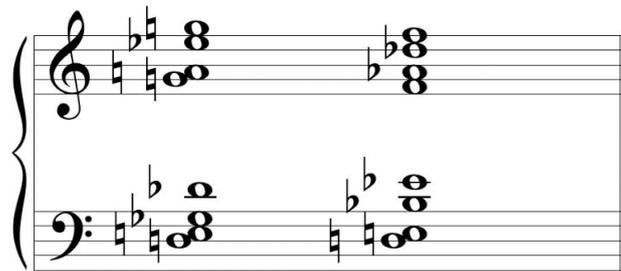
CR is used continuously in Messiaen's works such as *Pièce pour le tombeau de Paul Dukas* (1935), *Poèmes pour Mi* (1936), *Chants de terre et de ciel* (1938), *Visions de l'Amen* (1943), *Messe de la Pentecôte* (1949-50) and *Des canyons aux étoiles* (1971-74)

② Chord of Contracted Resonance (CCR)²⁸⁸

CCR is constituted of seven notes and shares the 'bass dyad' which Messiaen defined as 'combination tones' (*sons resultants*) and plays a role of resonance.²⁸⁹ CCR is divided into two types, whereby it mostly appears in pairs, but where each chord represents a different colour.²⁹⁰

Messiaen insisted that, 'In the case of the chord with contracted resonance, we will always have two colours: the colour of the appoggiatura chord, and the colour of the actual chord'^{291, 292}

Typical 1st CCR



CCR is used often in Messiaen's late works; the 1st CCR is used more often than the 2nd CCR. The first time the CCR is used in Messiaen's works is in *Vision de l'amen* (1943). The 1st CCR is used for the last two chords after descending into the second movement

²⁸⁸ *Accord à résonance contractée.*

²⁸⁹ Cited from Harris, Doctoral dissertation, *Musique Colorée: Synesthetic Correspondence in the Works of Olivier Messiaen*, chapter 5. Modes of transposition and special chords, p.70 (The University of Iowa, 2004)

²⁹⁰ Transpositions and colour association, *Traité VII*, p. 162-164,

²⁹¹ Harris, p. 69

²⁹² Modes of transposition and special chords, p.74

(Ex 1-20) and both chords are used for the song of the chaffinch in the fifth movement.
(Ex 1-21)

Vision de l'amen, 2. Amen des étoiles, de la planète à l'anneau, 19/3/1-2, Piano I

A musical score for Piano I, titled 'Amen des étoiles, de la planète à l'anneau'. It is in 2/4 time and marked *mf*. The score consists of two staves: a treble clef staff and a bass clef staff. The treble staff contains a sequence of chords, with a dashed line above the first four measures indicating an octave shift. The bass staff contains a melodic line with notes and rests. Below the bass staff, there are four measures, each starting with a 'Lea' marking and a '*' symbol, corresponding to the chords in the treble staff.

Vision de l'amen, 5. Amen des Anges, des Saints, du chant des oiseaux

A musical score for Piano I, titled 'Amen des Anges, des Saints, du chant des oiseaux'. It is in 2/4 time and marked *mf*. The score consists of two staves: a treble clef staff and a bass clef staff. The treble staff contains a sequence of chords, with a dashed line above the first four measures indicating an octave shift. The bass staff contains a melodic line with notes and rests. Below the bass staff, there are four measures, each starting with a 'Lea' marking and a '*' symbol, corresponding to the chords in the treble staff.

③ Chord on the Dominant (CD)²⁹³

This chord, which is linked with the colours of white and gold,²⁹⁴ is made of all the notes of the C major scale on the base of G^b. These chords are seen in *La Nativité du seigneur* (The Lord's nativity, 1935) for organ (Ex 1-11) and these have been marked with license as chords A B C D E to inform of their usage in the works. Messiaen's first piece in which CD is used with inversions is *Pièce pour le tombeau de Paul Dukas* (Piece written as a memorial of Paul Dukas, 1935).

²⁹³ Accord sur dominante.

²⁹⁴ Michaely, p.366, *Traité VII*, p.139: 'ce qui lui donnait une couleur blanchâtre'

La Nativité du Seigneur, Volume 1

A B C D E

CD with inversions in *Pièce pour le tombeau de Paul Dukas*, bar 8 and 10

Bar 8

A B B C A B B C D C D

p *cresc.* *molto*

Ped. Ped. Ped. Ped. Ped. Ped. Ped. Ped. Ped.

Bar 10

A B B C C C

f

Ped. Ped. Ped. Ped. Ped.

④ Chord on the Dominant with Appoggiatura (CDA)²⁹⁵

This chord is demonstrated in *Technique*, Example 201²⁹⁶, with the resolution onto a dominant ninth in Ex. 202. CDA with appoggiaturas is presented in Ex. 203 and Ex. 204 shows the progression of ‘appoggiatura and resolution’, producing *effet de vitrail*.²⁹⁷ (Ex 1-13)

Technique de mon langage musical, Volume II : *Exemples musicaux*, p.37

The image shows a musical score for four examples (201-204) from Messiaen's 'Technique de mon langage musical'. The score is written for piano and consists of two staves: a treble clef staff and a bass clef staff. Example 201 shows a simple chord in the treble staff. Example 202 shows a resolution of the chord. Example 203 is labeled 'Accord sur dominante appoggiaturé' and shows a complex chord with appoggiaturas. Example 204 shows a progression of chords with appoggiaturas, marked 'p expressif'. The score includes various musical notations such as notes, rests, and dynamic markings.

Messiaen begins *Quatuor pour la fin du temps* with a CDA to create an effect of a stained-glass window.²⁹⁸ (Ex 1-14)²⁹⁹

²⁹⁵ *Accord sur dominante appoggiaturé.*

²⁹⁶ *Technique I*, p.50 Messiaen

²⁹⁷ Messiaen, *Technique I*, p.43. By using chords that Messiaen invented, he creates harmony which has the same effect as the multi-coloured fragments from stained-glass window.

p. 50 ‘Let us make multicolour work, bring forth an effect of a stained-glass window and arrange the different inversions of the chord with such appoggiaturas over a common bass note (C# or D♭)’.

²⁹⁸ Messiaen, *Quatuor pour la fin du temps*, preface, ‘vous aurez le silence harmonieux du ciel’

²⁹⁹ The appoggiatura chords states to the 5th CTI table in *Traite VII*, p.142-147

Le traquet stapazin from *Catalogue d'oiseaux*, 3/4/2-4/2/28

* CTI with CD and arpeggiated CDA

Chardonneret
Vif (♩ = 160)

Très vif (♩ = 184)

mf

mf

P (*très clair, comme un glockenspiel*)

(*Péd. sempre*)

(*Péd. sempre*)

(*Péd. sempre*)

Leo.

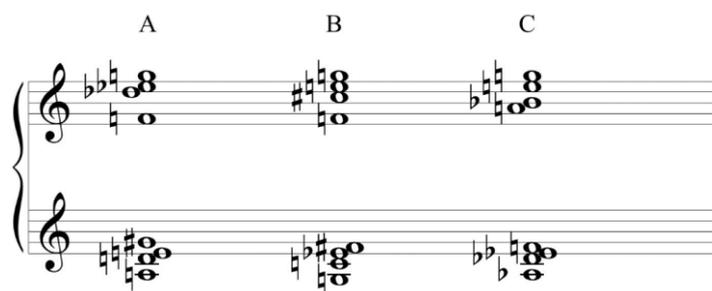
Leo.

Leo.

⑥ Turning Chords (TC)³⁰¹

Messiaen mentioned that the three TCs ‘are “columns of air in mobile resonances” (like the wind in the trees) around the note G’³⁰² and that there were contained therein ‘three chords of eight sounds, twenty four sounds in total’.³⁰³ He also said that ‘this resembles a translucent opal octahedron or more simply, iridescent glass’.³⁰⁴ (Ex 1-22)

Three TCs³⁰⁵



The image shows three Turning Chords (A, B, and C) in G major, arranged in a sequence across two staves. Each chord is represented by a cluster of eight notes, with the notes in the right hand (treble clef) and the left hand (bass clef) moving in parallel motion. The chords are labeled A, B, and C above the staff.

TC is used in *Visions de l'Amen* ‘as the stars and planets revolve above the cosmic dance’³⁰⁶ in the shape of arpeggio. The eight notes are divided into four chords progression.

Visions de l'Amen, 2. *Amen des étoiles, de la planète à l'anneau*, 13/3/1-3, Piano 1

³⁰¹ *Accords tournants*.

³⁰² *Traité de rythme, de couleur, et d'ornithologie* III, p. 238

³⁰³ *Traité* VII, p. 166

³⁰⁴ *Ibid.*

³⁰⁵ *Traité* III, p.282

³⁰⁶ *Dunbavand*, p.24



Messiaen used this chord to express the ‘divine light as a means of theological statement’.³⁰⁷

Messiaen presents these chords as ‘chiming sonorities’³⁰⁸

All the chords are closely related to colours which dazzle in Messiaen’s music.

³⁰⁷ Ibid, p.25

³⁰⁸ Technique 1, p.54

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Robert Kelly

<http://www.robertkelleyphd.com>

MUSIC EXAMPLES

Chapter 1

Birdsong in Music

Ex 1-1) No.1 *La Colombe, Préludes*

Lent, expressif, d'une sonorité très enveloppée

ppp
p
ppp
rubato
pp
expressif
pp

Ex 1-2) IV. *Regard de la Vierge, Vingt regards sur l'enfant-Jésus*, 14/ 2 3-4

(oiseau)

f
ff (pour 2)
8
8

Ex 1-3) V. *Regard du Fils sur le Fils, Vingt regards sur l'enfant-Jésus*, 19/4/1-2

Un peu plus vif (♩ = 92)

p
(comme un chant d'oiseau)
cresc.

Ex 1-4) VIII. *Regard des hauteurs, Vingt Regards l'Enfant-Jésus*, 49/4/1- 5/3

p
(Le rossignol)
p
mf stacc.
(L'alouette)
Un peu vif (♩ = 126)

Ex 1-5) *Le Coucou* by Louis-Claude Daquin

Rondeau

p
mf stacc.
(L'alouette)
Un peu vif (♩ = 126)

Ex 1-6) Symphony No.6 'Pastoral Symphony', 2nd movement by Ludwig v. Beethoven
bar 129-32

Flute

Nachtigall

Oboe

Wachtel

Clarinet 1&2 in B \flat

a₂ Kuckuck

Bassoons 1&2

Horns 1&2 in B \flat

Violins I

Violins II

Violas

Solo Cello

Cellos & Basses

cresc.

p

Ex 1-7) *Legend No. 1 St François d'Assise: La prédication aux oiseaux*, by Franz Liszt,
1/1/1-3/1

Allegretto

Ex 1-8) No.2 *Oiseaux Tristes, Miroirs*, by Maurice Ravel

Tres lent ♩ = 60

Ex 1-9) Piano solo part of *Oiseaux exotiques*, 1/3/3-4/2

CADENCE
 ③ Vif (♩ = 144)
 Mainate hindou

mf *ff* *p* *m.d. dessus* *m.g. dessus*

8^{va} 8^{vb} 8^{va} 8^{vb}

Ex 1-10) Piano solo part of *Oiseau exotique*, 2/4/3-5/1

Presque vif ♩ = 112

Vif (♩ = 144)

Liothrix de Chine

f (net, timbre en bois, proche du temple-block)

tres sec *tres sec* *sans ped.*

Ex 1-11) No. 1 Liturgie de cristal, Quatuor pour la fin du temps, 1/1/1

Bien modere en poudrioiement harmonieux (♩ = 54 environ)

comme un oiseau

VOLON

CLARINETTE en Si^b

VOLONCELLE

PIANO

comme un oiseau

ppp son flatk.

ppp (vibr.)

Bien modere en poudrioiement harmonieux (♩ = 54 environ)

pp legato (tres enveloppe de pedale)

Vln.

B^b Cl.

Vc.

Pno.

oers la pointe

gliss.

Ex 1-12) No.3 *Abîme des oiseaux*, *Quatuor pour la fin du temps*, 41/4/3

Presque vif, gal, capricieux (♩ = 126 env.)

sans presser.
progressif et quissant

ppp *cresc. molto* *fff* *f* *ensoleille, commi un olaeau, tres libre de mouvt*

Ex 1-13) bird-like calls in Secondo, 2nd movement, *Visions de l'Amen*, 8/1/2

Moderate (♩ = 69)

ff *solide* *8^{va}*

Ex 1-14) bird-like calls in Primo, 2nd movement, *Visions de l'Amen*, 8/2/3

1r

Ex 1-15) repeated calls, 2nd movement, *Visions de l'Amen*, 9/3/1-2

1r

2c

f *ff* *ff* *ff*

8^{va} 8^{va} 8^{va}

f *f* *f* *f*

f *f* *f* *f*

* * * *

Ex 1-16) *Visions de l'Amen*, 5th mov. 56/2/1-3/4

clair, libre et gai, comme un oiseau

1r *ff* 8^{va}

2c *pp* 8^{va}

4 8^{va}

1r *ff*

2c 8^{va}

Ex 1-17) VIII. *Regard des hauteurs, Vingt Regards l'Enfant-Jésus*, 49/4/1- 5/3

8^{va} 7 dr. *p* 7 *p* 7 *p*

(Le rossignol)

5 *f* 7 *mf* stacc. (L'alouette)

Un peu vif (♩=126) 8^{va}

Ex 1-18) V. *Regard du Fils sur le Fils*, 19/4/1-2

Un peu plus vif (♩=92)

8^{va}

p (comme un chant d'oiseau)

cresc.

Ex 1-19) XIV, *Regard de Anges*, 103/2/3- 3/3

Meme mouvement
(comme un oiseau)

8^{va}

fff

f

4

5

Ex 1-20) *Le Loiot*, *Catalogue d'oiseaux*, 1/1/2

Loriot
Bien modere ♩ = 100

8^{va}

mf sans sourd.

ff (coule, dore)

*

Ex 1-24) mimic birdsong, *Réveil des oiseaux*, 1/3

8va

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

(coule, dore) (tikotikoto, comme du clavecin)

Ex 1-25) mimic birdsong, *Réveil des oiseaux*, 2/3/1-2

ff *ff*

f *f*

(suppliant) (tio, tio, tiolaborixe)

Ex 1-26) Monophony of *Shama des Indes* (Shama), *Oiseaux exotiques*, 13/3/3-4/3

The musical score for 'Shama des Indes' is presented in two systems. The first system shows the beginning of the piece with a treble clef and a 7/8 time signature. It starts with a forte (*f*) dynamic and features a triplet of eighth notes. The melody then moves to a mezzo-forte (*mf*) dynamic. The piece concludes with the instruction *sans ped.* (without pedal). The second system continues the melodic line with a triplet of eighth notes and a fermata over the final measure.

Ex 1-27) two-voiced homophony, *Merle de Swainson* (Olive-backed thrush), *Oiseaux exotiques*, 7/7/1-3

The musical score for 'Merle de Swainson' is in two systems. The first system is marked *f staccato* and features a rhythmic pattern of eighth notes with triplet markings. The second system is marked *dr.* (drone) and continues the rhythmic pattern. Below the piano part, there are handwritten notes: 'Rea', 'Rea', 'Rea', 'Rea', 'Rea', 'Rea', 'Rea', and an asterisk (*).

Ex 1-28) two-voiced homophony, *Doliconyx* (Bobolink), *Oiseaux exotiques*, 17/4

The musical score for 'Doliconyx' is in two systems. The first system is marked *f tres brillant* and features a complex rhythmic pattern with many beamed notes. The second system continues this pattern. Below the piano part, there are handwritten notes: 'Rea', 'Rea', 'Rea', 'Rea', and an asterisk (*).

Ex 1-29) hybrid texture of *Grive des bois, d'Amérique* (American wood thrush), *Oiseaux exotiques*, 3/1/3-3/2

Grive des bois, d'Amérique
Tres modere (un peu rubato, laissez longuement vibrer)
 (♩=100)

eclatant
consoleillc

f *ff* *f* *ff*

(laissez vibrer) *(laissez vibrer)*

3 *3* *3* *3*

8va *8va* *8va* *8va*

poco rall.

a tempo

f *ff* *f* *ff*

3 *7* *3* *3*

(laissez vibrer) *(laissez vibrer)*

3 *7* *3* *3*

8va *8va* *8va* *8va*

*** *** *** ***

Chapter 2

Landscape in Music

Ex 2-1) *Le Rouge gorge*, from *Petites esquisses d'oiseaux*, 3/1/1-3

Musical score for *Le Rouge gorge*, from *Petites esquisses d'oiseaux*, measures 1-3. The score is in 3/1 time and consists of three measures. The first measure is marked **Très lent** (♩ = 40) and **p**. The second and third measures are marked **Un peu vif** (♩ = 120) and **mf**. The title *Rouge gorge* is written above the second measure. The score features a piano accompaniment with a treble and bass clef. The bass clef part includes a *scandalo* marking under the first measure.

Ex 2-2) *Le Merle noir*, from *Petites esquisses d'oiseaux*, 11/1/1-2/4

Musical score for *Le Merle noir*, from *Petites esquisses d'oiseaux*, measures 1-2. The score is in 11/1 time and consists of two measures. The first measure is marked **Un peu lent** (♩ = 80). The second measure is marked **Modéré** (♩ = 112) and **Un peu vif**. The title *Merle noir* is written above the second measure. The score features a piano accompaniment with a treble and bass clef. The bass clef part includes a *scandalo* marking under the first measure and a **p** dynamic marking under the second measure.

Ex 2-3) Water, *Le Merle bleu*, 2/2/1

Vif (♩ = 152)

p (*l'eau*) *f* *ff* *p* (*dessus*)

p *f* *p*

Led. * *Led.* * 8-

Ex 2-4) *Cochevis de Thékla* (Thekla lark), *Le Merle bleu*, 10/4/1-2

1st *Cochevis de Thékla*

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

f *p* *mf* *mf* *Led.* *mf* *Led.* *

* * * *

8-

2nd *Cochevis de Thékla*

Ex 2-5) wave, *Le Coulis cendré*, 5/1/2

(*les vagues de la mer*)
Très vif (♩ = 176)

(*fouetté*) (*brusque*)

p *f* *p* *mf* *ff* *dessus* *dessus*

Led. * *Led.* * 8-

Ex 2-6) Guillemot de Troil (Guillemot), *Le Coulis cendré*, 8/1/2

Guillemot de Troil
vif (♩=144)

Ex 2-7) wave, *Le Coulis cendré*, 8/2/2-3/2

Très vif (♩=176)

Ex 2-8) Guillemot, *Le Coulis cendré*, 8/4/1-5/3

Guillemot de Troil
vif (♩=168)

Ex 2-9) La Colombe, 1/1/1-2/4

Lent, expressif, d'une sonorité très enveloppée

The musical score is written for piano and consists of two systems. The first system includes a treble staff with a *ppp* dynamic marking and a bass staff with a *p* dynamic marking. The second system includes a treble staff with a *pp* dynamic marking and a bass staff with a *pp* dynamic marking. Performance instructions include *rubato* and *expressif*. The score features complex chordal textures in the treble and a steady bass line in the bass.

Chapter 3

Catalogue d'Oiseaux

Ex 3-1) night, *L'Alouette lulu*, 1/1/1-2

Alouette Lulu
Un pen vif (♩ = 126)

Lent (♩ = 63)
ppp (la nuit)

p 8^a bassa

* (sourdine)

**

p (poétique, liquide, irréel)

The score for 'Alouette Lulu' is presented in two systems. The first system is marked 'Lent (♩ = 63)' and 'ppp (la nuit)'. It features a piano introduction with a '8^a bassa' (8th octave bass) line and a 'sourdine' (mute) instruction. The second system is marked 'Un pen vif (♩ = 126)' and 'p'. It includes a '8^a' line and a performance instruction '(poétique, liquide, irréel)'. The score is written for piano with treble and bass staves.

Ex 3-2) day, *L'Alouette calandrelle*, 1/1/1-3

(Chaleur et solitude
du désert de la Crau)

Alouette Calandrelle
Un peu vif (♩ = 108)

Lent (♩ = 54)

pp

p 16

mf (Clair)

pp 8

*

The score for 'Alouette Calandrelle' is presented in two systems. The first system is marked 'Lent (♩ = 54)' and 'pp'. It includes a performance instruction '(Chaleur et solitude du désert de la Crau)'. The second system is marked 'Un peu vif (♩ = 108)' and 'p'. It includes a '16' line and a performance instruction '*mf* (Clair)'. The third system is marked 'Lent (♩ = 54)' and 'pp'. It includes an '8' line and a performance instruction '*'. The score is written for piano with treble and bass staves.

Chapter 4

Analysis of Landscape in *Catalogue d'Oiseaux*

Ex 4-1) Day motif, *L'Alouette calandrelle*, 1/1/1-3

(Chaleur et solitude
du désert de la Crau)

Alouette Calandrelle
Un peu vif (♩ = 108)

Lent (♩ = 54)

The score for 'Alouette Calandrelle' consists of three measures. The first measure is marked 'Lent (♩ = 54)' with dynamics *pp* in the piano and *mf* in the bass, and performance markings 'sourd.' and 'calme'. The second measure is marked 'Un peu vif (♩ = 108)' with dynamics *p* in the piano and *mf* (Clair) in the bass, and a performance marking 'sans sourd.'. The third measure is marked 'Lent (♩ = 54)' with dynamics *pp* in the piano and *mf* in the bass, and performance markings 'sourd.' and 'calme'. A dashed line with the number '16' spans the first two measures, and another dashed line with the number '8' spans the second measure. An asterisk is placed below the piano staff in the third measure.

Ex 4-2) Sunrise, *Le Lorient*, 1/1/1-2

Lorient
Bien moréré (♩ = 100)

Lent (♩ = 60)

The score for 'Lorient' consists of two measures. The first measure is marked 'Lent (♩ = 60)' with dynamics *pp* in the piano and *mf* in the bass, and performance markings 'sourd.' and 'calme'. The second measure is marked 'Bien moréré (♩ = 100)' with dynamics *mf* in the piano and *ff* (coulé, doré) in the bass, and performance markings 'sans sourd.'. A dashed line with the number '8' spans the second measure. An asterisk is placed below the piano staff in the second measure.

Ex 4-3) morning, *La Bouscarle*, 1/4/3-2/1/3

Martin-pêcheur
Un pen vif (♩ = 138)

Très moréré (♩ = 108) 16 Très moréré (♩ = 108) 16 Vif (♩ = 160) 16

(Péd. sempre)

Ex 4-4) morning motif, *La Bouscarle*, 21/4/2-4

Très moréré (♩ = 108)

Ex 4-5) Mode of pitches, durations and intensities in *Cantéyodjayâ*

Moderate (*mode de durees, de hauteurs et d'intensites*)

The musical score is divided into three systems. The first system consists of three staves: a piano part (pp), a vocal part (S), and a bass part (B). The piano part features a melodic line with dynamics ranging from *pp* to *ff*. The vocal part (S) has dynamics from *ff* to *pp*. The bass part (B) has dynamics from *ff* to *ff*. The second system consists of four staves: vocal (S), vocal (A), vocal (B), and piano (pp). The vocal parts (S, A, B) have dynamics from *ff* to *pp*. The piano part (pp) has dynamics from *p* to *ff*. The third system consists of three staves: vocal (S), vocal (A), and piano (pp). The vocal parts (S, A) have dynamics from *pp* to *ff*. The piano part (pp) has dynamics from *pp* to *ff*. Performance markings include 'dr' for dynamics and 'g' for grace notes.

Ex 4-6) Night, 'La Chouette hulotte', p.1

Un peu vif $\text{♩} = 126$
(la nuit)*

PIANO

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

(b)

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

5

p *p* *ppp* *ff* *ppp* *f* *pp*

(8^{vb}) *mf* *mf*

9

ff *f* *p* *pp* *ff*

(8^{vb}) *ppp*

13

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

(8^{vb}) *fff* *f* *p*

18

V (c)

pp *f* *fff* *ppp*

(8^{vb})

Ex 4-7) Second night passage, *La Chouette hulotte*, 4/2/3/-4 and 5/2/1/-6

Un peu vif (♩ = 126)
(la nuit)*

(a)

(b)

8^{vb} ff (avec un peu de pedale)

Ex 4-8) Fear, *La Chouette hulotte*, 2/5/1-5

Très vif (♩ = 152)
(la peur)

(très sec, percuté, comme une timbale grave)

pp p > poco cresc. mf

16 (sourdine seule)

Ex 4-9) C-A motif of the tawny owl, *La Chouette hulotte*, 2/3/4, 3/4/2

Chouette Hulotte
Lent ♩ = 66

C-A

C-A

C-A in the inner voice

C-A in the outer voice

Ex 4-10) Vague and terrifying, *La Chouette hulotte*, 4/1/1- 2/2

Moréré (♩ = 100)
(vague et terrifiant)

Lent (♩ = 66)

Vif (♩ = 144)

p *mf* *p* *pp* *ppp* *pp* (étrange, inquiétant)

sourd.

long

(*san sourd.*)

* [] indicates C-A shape

Ex 4-11) Tawny owl, *La Chouette hulotte*, 9/2/2-3/1

Un pen lent (♩ = 76)
(comme un eri d'enfant essassiné)

8 16

f *ff* *f* *ff* *mf* *ff* *mf* *fff* *f*

C-A in the inner voice

C-A in the outer voice

Ex 4-12) night motif, *L'Alouette lulu*, 1/1/1- 2/3

Alouette Lulu
Un pen vif (♩ = 126)

Lent (♩ = 63)
ppp (la nuit)

p *8^a bassa*

* (sourdine) **

p (poétique, liquide, irréel)

Lent (♩ = 63) Un pen vif (♩ = 126) Lent (♩ = 63)

ppp *p* *ppp* *p*

p *8^a b* *p* *mf*

8^a *8^a*

Ex 4-13) short night motif, *L'Alouette lulu*, 6/5/2, 7/3/1

Lent (♩ = 63) *mf*

f

Lent (♩ = 63) *p*

mf

Ex 4-14) Longer night motif, *L'Alouette lulu* 8/1/1

Lent (♩ = 63)
(la nuit)

p *mf* *p* *p*

(*calme*) *p* *mf* *mf* *mf* *mf* *p*

8.ª b

Teo. Teo. Teo. Teo. Teo. Teo. Teo. Teo.

Ex 4-15) The longest night motif, *L'Alouette lulu* 8/4/1

Lent ♩ = 63

ppp *mf*

8.ª b

Teo. Teo. Teo. Teo. Teo.

Ex 4-16) The last night motif, *L'Alouette lulu*, 9/3/2

Lent ♩ = 63

pppp *ppp*

8.ª b

Teo. Teo.

Ex 4-17) Night at 3 am, *La Rousserolle effarvatte* 9/1/1-2/3

(Solemnité de la nuit (3^h du matin))

Lent (♩ = 44)

Très lent (♩ = 54)

Vif (♩ = 160)

ff *d.* *ff* *g.* *ff* *pp* (comme des vibrations métalliques) *pp* *pp* *pp* *pp*

(comme un choc de cymbales) (comme un tam-tam) *ff* (comme des trombones) *ff* *ff* *ff* *ff* *p* *p* *p* *p* *Reo.* *p* *Reo.* *Reo.* *Reo.*

Lent (♩ = 44) *pp* *mf* *f* *mf* *ff* *p* *Reo.* (bruits dans le marais) *

The musical score is divided into three sections. The first section is marked 'Lent (♩ = 44)' and features a piano part with a series of chords and a bass line with a 'tam-tam' effect. The second section is 'Très lent (♩ = 54)' and includes a piano part with 'vibrations métalliques' and a bass line with 'comme des trombones' and 'Reo.' markings. The third section is 'Vif (♩ = 160)' and features a piano part with 'bruits dans le marais' and a bass line with 'Reo.' markings. Dynamics range from *pp* to *ff*.

Ex 4-18) Deep and dark night motif, *Le Merle de roche*, 1/1/1- 2/4

(nuit, clair de lune_ immense main de pierre, levée en signe magique)
 Très lent (♩ = 58)

p *mf* *f*

8ⁿ bassa Leo Leo

8ⁿ bassa Leo Leo

Grand Duc
 (ululement grave du mâle)

p *p* *ff* *mf*

Un peu lent (♩ = 66)

8ⁿ b. Leo Leo Leo *

Ex 4-19) night (a), *Le Courlis cendré*, 16/1/1-2/2

(la nuit et le brouillard se répandent peu à peu)
 Lent (♩ = 60)

fff

8- Leo Leo

ff

Leo Leo

(b) siren of lighthouse, *Le Courlis cendré*, 17/4/1-3

(sirène du phare, dans la nuit)
Très lent (♩ = 54)

8 —————
(noir et indistinct)

8 —————
Ped. **fff** *

Ex 4-20) sun (a), *Le Lorient*, 1/1/1-2,

Lorient
Lent (♩ = 60) Bien modéré (♩ = 100)

8 —————
Ped. 8 b. —————
Ped.

ff (Coulé doré) *

Ex 4-21) sun (b), *Le Lorient*, 1/4/3

Rouge - queue à front blanc
Lent (♩ = 60) Modéré (♩ = 108)

8 —————
Ped. Ped.

p **p**

Ex 4-22) last sun motif, *Le Lorient*, 11/5/2

Lorient

Bien modéré (♩ = 100)

Lent (♩ = 60)

pp *sourd.*

p

mf *sans sourd.*

ff

Red. *

Red. *

Ex 4-23) *Feuilles Mortes*, from *Préludes* Book 2 by Maurice Debussy, 7/1/1- 2

Lent et mélancolique

pp

douxment soutenu et très expressif

pp

Ex 4-24) longer motif of sun (b), *Le Lorient*, 2/2/2- 3/1

Lent (♩ = 60)

pp *legatissimo*

sourd.

8 + Leo III *

Merle noir
Vif (♩ = 144)

f *sans sourd.* (avec 2^e *ped.*)

(brillant et gai) (Leo III *sempre*)

Ex 4-25) more examples of sun (b), *Le Lorient*

① 3/5/1

Lent (♩ = 60)

pp *p*

8

F# E D C F# Am

② 4/5/2

Lent (♩ = 60)

p *mf*

F# E B^b A^b C F#m

③ 5/5/2

Lent (♩ = 60)

mf *f*

Leg. *Leg.* *Leg.* *Leg.* *Leg.*

Am G F Dm G#

④ 8/2/2

Lent (♩ = 60) *poco rall.*

f *ff* *p* (*cuivré*)

Leg. *Leg.* *Leg.* *Leg.* *Leg.* *Leg.* *Leg.* *Leg.* *Leg.*

F# B Am D Cm Am G F E

Ex 4-26) sunrise, *Le Lorient*, 8/4/2

Lent (♩ = 54) *Pouillot véloce*

p (*calme*) (*cuivré*) *mf* *Très modéré* (♩ = 80)

16

Ex 4-28) sunrise, *Le Traquet stapazin*, 8/4/1-2

Lent (♩ = 72)

mf 8-----

(le disque rouge et or du soleil sort de la mer et monte dans le ciel)

mf

(majestueux, sonore, coloré-laissez résonner toutes les notes)

mf

Reo 8-----

CTI 1A Group A TC 8A - C CTI1B Group B

Ex 4-29) sunrise, *Le Traquet stapazin*, 9/1/2-2/2

Traquet stapazin

Vif (♩ = 160)

Lent (♩ = 72) 8-----

f (dr. dessus) *sec*

(fier et brusque)

f

f

(sans péd.)

Reo 8-----

CTI 1C Group A TC 10A-C

CTI 1D Group B

CTI 4A Group A

Ex 4-30) sunset, *Le Traquet stapazin*, 22/5/1-23/2/1

Lent (♩ = 72)

(entouré de sang et d'or; le soleil descend derrière la montagne)

ff

f

ff

f

(majestueux, sonore, coloré-laissez résonner toutes les notes)

Leg.

8-----

(Péd. sempre)

CTI 1A

Group A

TC 8A - C

f

f

f

mf

Leg.

8-----

(Péd. sempre)

CTI 10A

Group B

TC 10A - C

Ex 4-31) colour of sunset, *Le Traquet stapazin*, 25/3/2

(rouge, orange, et violet du ciel,
au dessus de la montagne)

Très lent (♩ = 40)

p

mf (rêveur, contemplatif)

* Lea. Lea. Lea. Lea. Lea.

Ex 4-32) ① colour of sunset, *Le Traquet stapazin*, 26/3/1

Très lent (♩ = 40)

mf

* Lea. Lea. Lea. Lea. Lea. Lea. Lea.

C# G D# A B^b G# D

Lea. Lea. Lea. Lea. Lea. Lea. Lea. Lea.

B F C# G G# F# C G#

② *Cantéyodjayâ*, p.11

caressant

mf

③ *Jardin du sommeil d'amour* from *Turangalîla*, p.243

clarinette

Ex 4-33) sunrise, *La Rousserolle effarvate*, 11/3/1-2

Lever de soleil rose et mauve
(sur l'étang des nénuphars) (6^k du matin)

Lent (♩ = 50)

(révuer) *pp* (orangé) *pp*

p *pp* *p* *pp*

p (rose et mauve) *p*

Reo. Reo. Reo.

Très modéré (♩ = 72)

mf (m.g. dessus)

* Reo. Reo.

Merle noir

Modéré (♩ = 116)

f (gai)

mf (g. dessus)

Pie-grièche

Mode 2 Mode 3 1st CCR 9

Ex 4-36) sunsuet, *La Rousserolle effarvatte*, 38/3/1-2 : descending chords

pp
p
pp
p
pp
p
Lento

Ex 4-37) sunrise, *La Rousserolle effarvatte*, 13/4/2

(Lever de soleil)
Lent (♩ = 50)

8-----

(doré) p
pp

mf (mauve)
pp

mf
Lento

Ex 4-38) sun at 6 o'clock in the evening, *La Rousserolle effarvatte*, 34/ 5/1- 2

Lent (♩ = 80)
petites notes: brèves

pp

8-----

(comme un tam-tam lointain)
Lento

Ex 4-39) sunset, *La Rousserolle effarvatte*, 39/1/2

Plus lent (♩ = 42)

The image shows two systems of musical notation for a piece titled 'sunset, La Rousserolle effarvatte'. The tempo is marked 'Plus lent' with a quarter note equal to 42 beats per minute. The first system is labeled 'Mode 4' and includes a 'violet' part in the treble clef and a 'doré' part in the treble clef of the second system. The second system is labeled 'Mode 6'. Dynamics include *mf* and *pp*. The score features piano accompaniment with chords and a vocal line with notes and rests. A dashed line with the number '8' is positioned above the vocal line in both systems. The key signature has two sharps (F# and C#).

(violet)

mf Mode 4

pp (doré)

mf *pp*

8

8

mf Mode 6

Ex 4-41) sunset, *La Rousserolle effarvate*, 41/1/2- 3

Coucher de soleil
Lent (♩ = 42)

pp *dim.* *pppp*

p *pp* *dim.* *pppp*

p *Péd.* *Péd.* *Péd.* *Péd.*

(le disque rouge du soleil rejoint son reflet et s'enfonce dans l'eau) (Péd. sempre)

Ex 4-42) memory of sunset, *La Rousserolle effarvate*, 42/1/1- 2/1,

Lent (♩ = 42)
(violet sombre)

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

(souvenir du coucher de soleil)

f *cresc. molto* *ff*

f *Péd.* *ff*

(Péd. par croche)

Ex 4-43) memory of sunset, *La Rousserolle effarvatte*, 45/2/2

Lent (♩ = 42)
(violet sombre)

mf (sourvenir)

(Péd. par croche)

This musical score is for a piece in 45/2/2 time, marked 'Lent' with a tempo of 42 quarter notes per minute. The key signature has two sharps (F# and C#). The score is written for two bass staves. The upper staff features a series of chords, some with a fermata, and is marked with a mezzo-forte (*mf*) dynamic and the instruction '(sourvenir)'. The lower staff contains a rhythmic accompaniment of eighth notes. A pedaling instruction '(Péd. par croche)' is located below the lower staff.

Ex 4-44) *L'Alouette calandrelle*, 2/2/2

Vif (♩ = 160)

mf

Péd.

This musical score is for a piece in 2/2/2 time, marked 'Vif' with a tempo of 160 quarter notes per minute. The key signature has two sharps (F# and C#). The score is written for two bass staves. The upper staff contains chords with a fermata, marked with a mezzo-forte (*mf*) dynamic. The lower staff features a rhythmic accompaniment of eighth notes. A pedaling instruction 'Péd.' is located below the lower staff.

Ex 4-45) vineyard, *Le Traquet stapazin*, 1/1/1

Bien modéré (♩ = 66)
(vignobles en terrasses)

p

Péd. Péd. Péd. Péd.

This musical score is for a piece in 1/1/1 time, marked 'Bien modéré' with a tempo of 66 quarter notes per minute. The key signature has two sharps (F# and C#). The score is written for two treble staves. The upper staff contains chords with a fermata, marked with a piano (*p*) dynamic. The lower staff features a rhythmic accompaniment of eighth notes. Four pedaling instructions 'Péd.' are located below the lower staff.

Ex 4-46) *Le Traquet rieur*, 18/2/1-4/2

○ 7th □ 9th

(poudroiement argenté du soleil sur la mer)

Un peu vif (♩ = 126)

mf

Péd.

rall.

16- 8- 8-

(*Péd. sempre*)

rall.

rall. molto

Un peu lent (♩ = 92) *rall. molto*

f *ff*

8- 8-

Ex 4-47) water ripples dying out, *Le Merle bleu*, 14/5/2

Vif (♩ = 144)
(clapotis de l'eau)

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

Ped. * Ped. 8- - - - *

Ex 4-48) water (a-1), *Le Merle bleu*, 1/3/1

Vif (♩ = 152)

mf (l'eau)

Ped.

Ex 4-49) expanded gesture of water (a-2), 2/1/1

Vif (♩ = 152)
(l'eau)

mf

Ped.

Ex 4-50) ① water (b-1), *Le Merle bleu*, 1/4/1

Vif (♩ = 152)

mf (*l'eau*)

f *pp*

Leo. *

preparation natural sounds

② Water (b-2), 2/2/1-2

Vif (♩ = 152)

p (*l'eau*)

f *ff*

Leo. * Leo.

(dessus) (dessus)

8- 8-

Long gesture

Ex 4-51) waves, *Le Coulis centre*, 13/1/1

(*les vagues de la mer*)
Très vif (♩ = 176)

mf *f* *ff* *f* *mf*

Leo.

Ex 4-52) water (c), *Le Merle bleu*

① 2/4/2-5/1,

Vif (♩ = 152)
(l'eau)

ppp

Leg.

② 23/3/1-3

Vif (♩ = 152)

ppp (l'eau)

Leg.

Ex 4-53) water (d), *Le Merle bleu*, 5/3/1-4/1

Vif (♩ = 152)

ff (l'eau)

mf

mf

pp

f

mf

Leg. *

(clapotis de l'eau)

Leg. *

Leg. *

pp

Ex 4-54) lapping water, *Le Merle bleu*, 24/4/1-4

Très lent (♩ = 50) Vif (♩ = 144)

p (souvenir du Merle bleu) *ppp* (clapotis de l'eau)

(Péd. à chaque accord)
(très pur; comme un chœur de voix de femmes au loin)

Très lent (♩ = 50)

p (souvenir du Merle bleu)

(Péd. à chaque accord)

Ex 4-55) blue sea, *Le Merle bleu*, 5/4/2-5/5/3,

Très lent (♩ = 46) (doux, harmonieux et contemplatif)
(la mer bleue)

mf *p* *mf* *p*

mf *p* *mf* *p*

(pouce couché)

Typical mode 2

Ex 4-56) waves, *Le Merle bleu*, 6/2/1-3

Très vif (♩ = 160)
(les vagues)

(furieux)

Vif (♩ = 144)

mf *pp* *mf* *ff* *ff* *fff*

8-
Lea

*

(m.g. dessus)
Lea

(comme un tam-tam)
Lea

Ex 4-57) *Jeux d'eau* by Maurice Ravel, 21/1/1-2/1

Ex 4-58) blue sea, *Le Merle bleu*, 4/1/3-2/2

Très Modéré (♩ = 80)

Vif (♩ = 138)

Un peu vif (♩ = 76)

f *p* *mf* *ff* *ff*

(m.g. dessus)

pp Lea Lea Lea Lea

Tides

Crash

Ex 4-59) echoes from the rock walls, *Le Merle bleu*, 8/4/1-5/4

Vif (♩ = 144)

ff *fff* (résonance des parois rocheuses)

Merle bleu
Un peu vif (♩ = 132)

mf *p*

(Ex 4-60) rocks and sea wave, *Le Merle bleu*, 22/4/1- 5/2

Vif (♩ = 144)

ff *ff* *ff* *ff* *f* *fff* (dr.: sif)

(m.d. dessus) g. (Péd. sempre) (résonance des parois rocheuses) (Péd. sempre)

16 (Péd. sempre)

Ex 4-61) sea, *Le Traquet stapazin*, 24/3/1-4/2

Cochevis de Thékla
Un peu vif (♩ = 126)

Lent (♩ = 48)
(la mer) 8-----

The image shows two systems of musical notation for a piano piece. Each system consists of three staves: a treble clef staff, a grand staff (treble and bass clefs), and a bass clef staff. The first system is for 'Cochevis de Thékla' and 'Un peu vif' (♩ = 126). The tempo is marked 'Lent' (♩ = 48) with a '8' and a dashed line. The first part of the system is marked '(la mer)' and features dynamics like *pp* and *m.g. pp*. The second part is marked 'Un peu vif' and features dynamics like *mf*, *f*, and *mf* with accents. It includes the instruction '(cri d'appel)' and '(avec 2^e Péd)'. The second system is for 'Un peu vif' (♩ = 126) and follows a similar structure with dynamics like *pp*, *mf*, and *f*. Both systems end with a boxed instruction: *mf* + *ℒ*ed. III.

m.g. dessus *pp* *m.g. pp* *mf* < *f* > *mf* < *f* > *mf*

m.d. *mf* (tendre et chantant) *m.d.* *mf* < *f* > *mf* < *f* > *mf* < *f* > *mf*

m.g. *p* *m.g. pp* *m.g.* *mf* (avec 2^e Péd) *m.g.* *mf* (avec 2^e Péd)

mf + *ℒ*ed. III

Un peu vif (♩ = 126)

m.d. *mf* < *f* > *mf* < *f* > *mf* < *f* > *mf*

m.g. *mf* (avec 2^e Péd) *m.g.* *mf* (avec 2^e Péd)

mf + *ℒ*ed. III

Ex 4-64) river (a), *La Bouscarle*, 4/2/1-2

Très lent (♩ = 60) Un peu vif (♩ = 138)

(la rivière)

mf (*calme, chantant, bien timbré*) *mf* *f* *p*

(*joyeux et clair*)

Octave intervals F#7 resolution

Ex 4-65) river (b), *La Bouscarle*, 4/4/1

Très lent (♩ = 60)

mf

Added sixth chord

Ex 4-66) river (c), *La Bouscarle*, 5/5/1-6/1/2

(la rivière)

Très lent (♩ = 60)

mf

pp

(comme un tam-tam lointain)

Ex 4-67) Love theme from *Turangalila*

Ex 4-68) music of the pond, *La Rousserolle effarvatte*, 1/1/1/-3/1

Bien Modéré (♩ = 100)

16

16

16

16

Ex 4-69) pond, *La Rousserolle effarvatte*, 50/4/1-5/2

Musique des étangs (3^h du matin)

Bien Modéré (♩ = 100)

16

(les notes accentuées de main droite: comme un xylophone)

p (mystérieux) *Lea*

16

p *

51/2/2

16

p *

51/3/1

51/3/3

51/4/2

*

*

*

Ex 4-70) noises in the swamp, *La Rousserolle effarvate*, 10/1/1/-3

(bruits dans le marais)
Vif (♩ = 160) (*mystérieux et confus*)

ppp

8^a b

pp

ppp 16.^a b

♩

Ex 4-71) noises in the swamp, *La Rousserolle effarvate*, 10/4/1

p sfz p

8-

(Péd. sempre)

♩

Ex 4-72) joy of blue sea, *Le Traquet rieur*, 1/1/1-2/1

(joie de la mer bleue)

Modéré (♩ = 100) **Très vif** (♩ = 160) **Un peu vif** (♩ = 120)

f

8^a bassa

f

ff

fff

(Péd. sempre)

(éclatant)
(Péd. sempre)

♩

Ex 4-73) gust of wind on the sea, *Le Traquet rieur*, 17/4/2

(coup de vent sur la mer)
Extrêmement vif (♩ = 132)

f (staccato) *cresc.* *ff*

Péd. (Péd. sempre)

Ex 4-74) silver glistening of the sun on the sea, *Le Traquet rieur*, 18/2/1-4/2

(poudroiem argenté du soleil la mer)
Un peu vif (♩ = 126)

mf *rall.* *rall.*

Péd. (Péd. sempre)

Un peu lent (♩ = 92) *f* *rall. molto* *ff*

(Péd. sempre)

Ex 4-75) waves of the sea (a), *Le Coulis cendré*, 5/1/1-3

(les vagues de la mer)
Très vif (♩ = 176)

(fouetté) *(brusque)*

mf *ff* *dessus* *dessus*

p *f* *p*

scd. * *scd.* *

Ex 4-76) wave shape of herring gull, *Le Coulis cendré*, 7/1/3

Un peu lent (♩ = 72)

Un peu vif (♩ = 132)

ff (*cuivré, comme des cors*)

mf *ff* *f* *p*

sans péd *scd.* *scd.* *

Ex 4-77) the waves of the sea (b), *Le Coulis cendré*, 7/2/1-4/1

(les vagues de la mer)
Très vif (♩ = 176) **pressez** *dessus*

a Tempo **pressez** *dessus*

a Tempo **16** *dessus*

a Tempo **mf** **fff** **last gesture**

Ex 4-78) *Jeux d'eau* by Maurice Ravel, 11/1/1

très rapide

ppp **fff**

3 cordes

Ex 4-79) the waves of the sea (c), *Le Coulis cendré*, 13/1/1-4/2

(les vagues de la mer)
Très vif (♩ = 176)

Musical score for the first section, labeled "(1) traditional wave". It features a grand staff with treble and bass clefs. The piece is in 13/16 time. Dynamics include *mf*, *f*, *ff*, *f*, *mf*, and *p*. Performance markings include *Reo.* (pedal) and *dessus*. A large slur covers the first two measures, and a smaller slur covers the last two measures. Asterisks are placed under the first and last notes of the piece.

(1) traditional wave

Musical score for the second section, labeled "added tricks". It features a grand staff with treble and bass clefs. Dynamics include *mf* and *cresc.* (crescendo). Performance markings include *Reo.* (pedal). A large slur covers the first two measures, and a smaller slur covers the last two measures.

Musical score for the third section, labeled "(2) bigger wave". It features a grand staff with treble and bass clefs. Dynamics include *fff sfz*, *dim.*, and *8-* (octave shift). Performance markings include *d. dessus* (pedal), *g. dessous* (pedal), and *(Péd. sempre)*. A large slur covers the first two measures, and a smaller slur covers the last two measures.

(2) bigger wave

Musical score for the fourth section, labeled "(3) ripples after wave". It features a grand staff with treble and bass clefs. Dynamics include *p* and *ppp*. Performance markings include *8-* (octave shift). A large slur covers the first two measures, and a smaller slur covers the last two measures.

(3) ripples after wave

Ex 4-80) ① waves (a), *Le Coulis cendré*, 6/2/2

Très vif (♩ = 176) *ff* Un peu lent (♩ = 72)

mf *mf* *f* *sans péd.*

Lea. *

② waves (b), 8/2/2-3/2

Très vif (♩ = 176)

mf *ff* *mf* *pp* *mf*

Lea. * (sans péd.) Lea.

Ex 4-81) water, *Le Coulis cendré*, 14/1/1-2/2

Modéré, un peu vif (♩ = 120)

p *cresc.*

(avec sourdine) Lea. Lea. Lea. Lea. Lea. Lea. Lea. Lea.

G Major **G Major**

mf *cresc.*

Lea. Lea. Lea. Lea. Lea. (enlèves la sourdine) Lea. Lea.

Ex 4-82) siren of the lighthouse after foggy night, *Le Coulis cendré*, 17/4/1-3

(sirène du phare, dans la nuit)
Très lent (♩ = 54)

rall. rall. molto *pppp* *ffff*

8-----
(noir et indistinct)

8-----
Reo. ffff *

Ex 4-83) Glassier, *Le Chocard des Alpes*, 1/1/1-2/4

(en montant vers le glacier de la Meidje)
Modéré (♩ = 120)

f (implacable et massif) **hold longer**

4		4		4		3	6			4		6		
2	2	2	3		8			3	3		4		2	2

hold longest **hold**

	2		1	12					2	3	3	3		3
3		3			3	1	2	3	4		8		3	

Ex 4-84) long rest, *Le Chocard des Alpes*, 2/3/1

Chocard des Alpes
Bien Modéré (♩ = 112)

The musical score for 'Chocard des Alpes' is written for piano in 2/3 time. It begins with a 'long rest' in both hands, indicated by a large 'C' symbol. The first system shows the initial chords in the right hand and bass line in the left hand. The second system features a series of chords with a 'long rest' in the left hand, marked with an '8' and a dashed line. The third system contains three measures of chords, each marked with a 'long rest' in the left hand and a 'ff' dynamic marking. The piece concludes with a final chord and a 'long rest' in both hands.

(un Chocard traverse le précipice en criant)
(cri tragique dans la solitude)

Ex 4-85) Bonne Pierre, *Le Chocard des Alps*, 11/2/1

(Cirque fontomatique de Bonne Pierre)
(gigantesque et surnaturel)
Modéré (♩ = 120)

The musical score for 'Bonne Pierre' is written for piano in 11/2 time. It starts with a forte 'f' dynamic. The first system consists of two staves with chords and bass notes. The second system has three measures, each with a 'long rest' in the left hand marked with an '8' and a dashed line. The third system also has three measures with 'long rest' markings in the left hand. The piece ends with a final chord and a 'long rest' in both hands.

Ex 4-86) chaos of woods, *Le Chocard des Alps*, 4/4/2-5/3/3

Modéré (♩ = 120)

ff (*énorme et puissant*)

added note

added value

V

V

The image shows a musical score for 'Le Chocard des Alps' by 'chaos of woods'. The score is in 4/4 time with a tempo of 120. It features a complex, chaotic texture with multiple staves and dynamic markings like 'ff' and 'Reo.'. Annotations in black and blue boxes highlight specific notes and values, labeled as 'added note' and 'added value'. The score includes a 'Modéré' tempo marking and a dynamic marking of 'ff' with the instruction '(énorme et puissant)'. There are also 'Reo.' markings under some notes. The score is divided into three systems, each with two staves. The first system has a tempo marking of 120. The second system has a 'V' marking above a measure. The third system has a 'V' marking above a measure. The annotations are: 'added note' (black box) and 'added value' (blue box) in the first system; 'added note' (black box) and 'added value' (blue box) in the second system; 'added note' (black box) and 'added value' (blue box) in the third system. There are also 'V' markings above some measures in the second and third systems.

* Vs mean finishing phrases

Ex 4-88) cliffs, *Le Merle bleu* 3/1/1-3/3

(c)

Merle bleu
Presque lent (♩ = 63)

Modéré (♩ = 116)

p *f* *ff* (*rude*)

p *ff*

leo. *leo.* *leo.*

(*les falaises*) *leo.*

leo. *leo.* *leo.* *leo.* *leo.* *leo.* *leo.* *leo.*

(b) (a)'

Ex 4-89) echo of rocks, *Le Merle bleu*, 14/3/2

Merle bleu
Très Modéré (♩ = 80)

ff *f* *mf* (*m.d. dessus*)

leo. * *leo.* (*m.g. dessus*) (*écho des rochers, résonance tournoyante*) *p*

Ex 4-90) rocks of the cliffs, *Le Traquet stapazin* 1/4/3-4

Grand Corbeau
(sur les rochers de la falaises)
Modéré (♩ = 80)

Ex 4-91) *Le Traquet stapazin* 20/4/1-21/1/1

Grand Corbeau
(sur les rochers de la falaises)
Un peu vif (♩ = 132)

Modéré (♩ = 80)

(râpeux, rauque)

Ex 4-92) vineyard, *Le Traquet stapazin* 1/1/1-3

Bien Modéré (♩ = 66)
(vignobles en terrasses)

Vif (♩ = 160)

(sans péd.)

Ex 4-93) *La Rousserole effarvatte*, 25/3/1-2

Foulque
Bien Modéré (♩ = 100)

(comme si l'on choquait des pierres)
 (sans péd.)

Ex 4-94) hand stone motif (*la main de pierre*), *Le Merle de roche*, 2/4/4- 5/1

(*la main de pierre*)

(Péd. sempre)

Ex 4-95) Stegosaurus stone (*stégosaure de pierre*), *Le Merle de roche*, 5/4/2- 6/2/1

(*Stégosaure de pierre*)
Vif (♩ = 160)

Modéré (♩ = 152)

(Péd. sempre)

Ex 4-98) Stegosaurus, Diplodocus and diverse monsters – all stone motif, *Le Merle de roche*, 19/5/1- 4

(Stégosaure, Diplodocus, et divers monstres_ tous de pierre)
Un peu vif (♩ = 120)
mf

Ped. *cresc.* *Ped.* *Ped.* *Ped.*

Ex 4-99) chorus frogs, *La Rousserolle effarvatte*, 3/1-3

(chœur des grenouilles)
Un peu vif (♩ = 126)
pp

cresc. *ff* *dim.* *mf* *pp*

Péd. sempre *Péd. sempre* *

Ex 4-100) ① a frog, *La Rousserolle effarvate*, 10/4/2- 6/3

Vif (♩ = 168)
(grenouille)

(sec et flasque)

Vif (♩ = 144)

16

(bruits dans le marais)

② the frogs answer in the pond, *La Rousserolle effarvate*, 37/1/1- 2/6

(les grenouille répondent dans l'étang)

Vif (♩ = 144)

(m.d. dessus)

(grenouille)

Un peu vif (♩ = 120)

Ex 4-101) chorus of grasshoppers, *L'alouette Calandrelle*, 1/3/2-4/1

(chœur des cigales)
 Presque vif (♩ = 138)

mf (sec et monotone) *f* *pp* *ff* *mf*

8 (sans péd.) 8 (sans péd.) 8 (sans péd.)

Ex 4-102) water lily pond (*l'étang des nénuphars*), *La Rousserolle effarvate*, 11/3/1-2

Lever de soleil rose et mauve
 (sur l'étang des nénuphars) (6^h. du matin)
 Lent (♩ = 50)

Merle noir
 Modéré (♩ = 116)

Très Modéré (♩ = 72)

(rêveur) *pp* (orangé) *pp* *p* *pp* *mf* *f* *mf*

(rose et mauve) (gai) (g. dessus)

8 Rec. Rec. * Rec. Rec. Pie-grièche

Ex 4-103) the first yellow iris, *La Rousserolle effarvate*, 15/4/1- 3

Lent (♩ = 80)

p *mf* *pp* *pp*

(iris jaunes) (8^h. du matin) (m.g. dessus)

8 Rec. Rec. CTI 1A CTI 1B *

Ex 4-104) theme of *Turangaîla-Symphonie*

Presque lent, tendre

mf
p

Ex 4-105) *Cantéyodjayâ*, 5/1/1- 3

p *f* *f* *ff*

Ex 4-106) *Le merle noir*, 1/5/1- 3

Presque lent, tendre

mf
p

Ex 4-107) the second yellow iris, *La Rousserolle effarvate*, 18/2/1- 4

p (*iris jaunes*) *mf* *mf* *pp*
p
8
8
(comme un tam-tam lointain)

Ex 4-110) purple foxglove, *La Rousserolle effarvatte*, 21/5/1- 22/1/3

(digitale pourprée)
Lent (♩ = 80)

p (chantant, très lié) *mf*

p *p* *pp*

8 10

Lea. Lea. Lea. Lea. Lea. Lea. Lea.

Lea. Lea. Lea. Lea. Lea. Lea. *

Ex 4-111) *Cantéyodjayâ*

(2^e refrain) (mousikâ)
Modéré

pp *f*

8 10

Lea. *

Ex 4-112) *Le Merle noir*

2

Ex 4-115) Cantéyodjayâ, 12/2/1- 4/3

Modéré, presque vif (globouladjhamapâ)

ff (gajajhampa)

fff 8-

A

(simhavikrama)

(gajajhampa)

ff

fff 8-

A **B**

(simhavikrama)

A **B**

Ex 4-116) buzzard glides in circle, *La Buse variable*, 1/3/3-4/2

(la Buse plane en cercles _ les orbes de son vol em.
plissent tout le paysage)

Lent (♩ = 48)

pp (le plus lié possible)

The musical score consists of two staves. The upper staff is in treble clef and the lower staff is in bass clef. The key signature has one sharp (F#). The time signature is 1/3/3-4/2. The piece is marked 'Lent' with a quarter note equal to 48 beats. The dynamic is 'pp' (pianissimo) and the instruction is '(le plus lié possible)'. The score features a series of eighth notes in the upper staff and a corresponding bass line in the lower staff. There are three measures of eighth notes, followed by a measure with a fermata over the eighth note, and then another measure of eighth notes. The piece ends with a double bar line. Below the bass staff, there are markings for the left hand: '8^a h^a' followed by a sequence of notes and rests, and then '(simile Péd. à chaque croche pendant tout ce passage)'. There are also '8' markings above the first and third measures of the eighth-note passages.

8^a h^a (simile Péd. à chaque croche pendant tout ce passage)

Chapter 5

The Role of Landscape

in Messiaen's Birdsong Works

Ex 5-1) *La Grive musicienne, Petites esquisses d'oiseaux*, 28/1/1-3/3

Un peu vif (♩ = 112)

Modère (♩ = 80)

Vif (♩ = 160)

ff g.dessus

p

Ex 5-4) *Le Merle noir, Le Lorient* from *Catalogue*, 2/3/1

Merle noir
 Vif (♩ = 144)

f sans sourd. (avec 2^e péd.)
 (brillant et gai) (Ped. III sempre)

ff *f* *ff*

Ex 5-5) *Night, La Fauvette des Jardins*, 1/1/1-5

Modéré (♩ = 66) Très modéré (♩ = 60) Modéré (♩ = 66) Très modéré (♩ = 60)

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

p *p*

g a b a *g a b a*

Ped. Ped. Ped. *

Ex 5-6) *Ripple of water, La Fauvette des jardins*, 1/2/1-4

Modéré (♩ = 92)
 (ondulations de l'eau)

pp *p* *mf*

rall. rall. molto

g a b a

Ped. Ped. Ped. Ped.

(fendu, les notes à peine perceptibles)

Ex 5-7) Mountain, *La Fauvette des jardins*, 1/3/1-5

Un peu vif (♩ = 120)

8

ff

(la montagne chauve du Grand Serre)

Lent (♩ = 60)

pp

Ex 5-8) purple mint and green herb, *La Fauvette des jardins*, 12/2/2-4/1

rall.

Modéré (♩ = 80)

rall.

rall. molto

Un peu lent (♩ = 40)

Très modéré (♩ = 80)

cresc.

f

ff

ff

(la menthe mauve et l'herbe verte)

Ex 5-9) Purple willow and green reed (*épilobes mauves et roseaux verts*), *La Fauvette des jardins*, 14/2/4-3/3

Modéré (♩ = 80)

rall.

Très modéré (♩ = 60) rall.

rall. molto

Un peu lent (♩ = 40)

mf

f

più f

ff

(épilobes mauves et roseaux verts)

Ex 5-10) Orphean warbler, *La Traquet stapazin*, 11/1/2-3/3

Fauvette Orphée (*dans les chênes-lièges*)
 Modéré (♩ = 88)

f (flûté, gros, an peu grincé) *f*

Xeo * Xeo * Xeo * Xeo * Xeo * Xeo *

più f *mf* *più f* *mf* *più f* *mf*

Xeo * Xeo * Xeo *

Ex 5-11) Orphean warbler, *La Fauvette passerinette*, 4/1/2-3/1

Fauvette orphée
 Modéré

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

Xeo [Xeo] Xeo * Xeo * [Xeo] *

Un peu vif Modéré Un peu lent

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

[col péd.] Xeo * Xeo *

Ex 5-12) woodlark, *La Fauvette passerinette*, 3/3/2

Alouette lulu (*haut dans le ciel*)

Un peu vif rall. Modéré

16-----

ppp *pp* *p* *mp*

8-----

Ex 5-13) garden warbler, *La Fauvette des jardins*, 22/3/1-24

Fauvette des jardins

Un peu vif (♩ = 132)

8-----

f *f* *mf* *f* *ff*

p *f* *ff* *p* *mf* *f*

(laissez résonner)

Ex 5-14) garden warbler, *Catalogue*, 5/1/1-2/1

1^{re} Fauvette des jardins

Très vif (♩ = 160)

mf

(avec volubilité)

2^e Fauvette des jardins (*mettre très peu de pédale*)

mf

mf

EX 5-15) golden oriole, *La Fauvette des jardins*, 22/2/1-3

Loriot
 Très modéré (♩ = 84)

(coulé, doré)
 sans sourd
 (laissez résonner)
 sans sourd

Ex 5-16) golden oriole, *Catalogue*, 1/2/1-3/2

Loriot
 Bien modéré (♩ = 100)

sans sourd
 sans sourd
 sans sourd

Chapter 6

Effects of Analysis on the Performance

Ex 6-1) II *Rouge gorge* from *Petites esquisses d'oiseaux*, 16/3/1-2

Très lent (♩ = 40)

The musical score is written for piano in two staves. The tempo is marked 'Très lent' with a quarter note equal to 40 beats per minute. The piece is in 3/4 time. The first staff is the treble clef, and the second is the bass clef. The music begins with a piano (*p*) dynamic. The first measure of the bass staff contains an asterisk (*). The piece consists of seven measures. The first three measures feature a complex, multi-note chordal texture in the bass staff, with the notes marked as 'Led.' (likely indicating ledger lines). The final two measures show a more simplified texture, with the bass staff notes also marked as 'Led.'. The piece concludes with a double bar line and a fermata over the final chord.