Title
Synesthésie

Permalink
https://escholarship.org/uc/item/6js7f89f

Author
Lopez, Javier Jimmy

Publication Date
2012

Supplemental Material
https://escholarship.org/uc/item/6js7f89f#supplemental

Peer reviewed|Thesis/dissertation
Synesthésie

By
Javier Jimmy Lopez

A dissertation submitted in partial satisfaction of the
requirements for the degree of
Doctor of Philosophy
in
Music
in the
Graduate Division
of the
University of California, Berkeley

Committee in charge:
Professor Edmund Campion, Chair
Professor Cindy Cox
Professor Franck Bedrossian

Spring 2012
Abstract

Synesthésie

by

Javier Jimmy Lopez

Doctor of Philosophy in Music

“Synesthésie” (Synesthesia) is a ten-minute long, orchestral piece divided into five movements of equal duration. In terms of proportion, I had never written a piece whose individual movements had the exact same duration. I usually let musical ideas speak for themselves and this generally results in movements of varying length. This challenge, therefore, calls for a very concise way of thinking.

I wanted to infuse each movement with a different flavor so I went on to think about concepts or structures that are made up of five individual, but nevertheless interdependent, parts. This, in turn, led to the realization that our five senses fit perfectly into this category. Each sense is a different universe, yet they all coexist within the same being. The only aspect that needed to be addressed was their interdependence. We might not be able to completely isolate our senses (they work simultaneously most of the time) but we can concentrate on one if we wish to. On the other hand there are those who simply can’t avoid the constant interaction of their senses, a condition called Synesthesia.

Synesthesia has been studied extensively but is still little understood. In short, synesthetes develop strong neurological associations across their sense organs. A sound may evoke a particular color, or a taste might evoke a geometrical shape. The possibilities are immense. Most people with Synesthesia have only two or three senses involved, but some have developed Synesthesia across all their senses. This element of interaction is what makes this work not only a collection of pieces but a single organism where all parts interact with one another. This piece is an attempt to express our five senses through music.

My initial idea was to be as precise as possible from a medical point of view. But these efforts met with a sudden end when I learned that each synesthete develops different associations. In other words, D is not red for everyone and B flat is not always yellow. There can be coincidences, but each synesthete has his own set of parameters. There is simply no universal set of synesthetic associations. This discovery was, to a certain extent, liberating because from that moment onwards I decided to deliver a musical representation of each sense from my very own perspective. I am not a synesthete myself so I had to think as if I were one. Each movement is named after a sense and within each movement many sensations are being represented musically. To emphasize this, an instrumental group is more predominant than the others depending on the movement.

In Touch (drums) I try to depict a range of sensations all they way from numbness to pressure and vibration. In Smell (strings) I try to convey floral, pungent and other types of smells. In Taste (woodwinds) I try to portray my own perception of how a sweet or a sour flavor would sound. At this point I would like to say that I prefer not to indicate exactly where in the score I each sensation is represented because I want each person to create his or her own associations. Synesthesia is all about individual sensations. Audition (brass and metal percussions) is a peculiar movement; here we have sound depicting sound, so, strictly speaking, there are no synesthetic associations going on. My approach was to create a wide range of auditory sensations in a very compressed span of time. Nevertheless, this movement does interact with the others in terms of its harmonic, intervallic and melodic content, leading us to the fifth and final movement, Vision (full orchestra). I chose the word vision instead of sight because it also suggests a state of revelation, which is the effect that I seek to generate when all instrumental groups finally play together. Furthermore, this movement reveals the harmonic structure of the piece in a very transparent way.

More than anything, “Synesthésie” is an exercise in imagination, an invitation to enter the world of interconnectedness that a few blessed human beings experience on a daily basis.
# Table of Contents

Acknowledgements ........................................................................ ii
Instrumentation ........................................................................ iii

Synesthésie ............................................................................... 1
  I.  Toucher ............................................................................. 1
  II. Odorat ............................................................................... 12
  III. Goût ................................................................................... 20
  IV.  Audition ............................................................................. 31
  III. Vision ............................................................................... 46
This dissertation would not be possible without the support of many people. I wish to express my gratitude to my Chair, Professor Edmund Campion who has offered invaluable help and guidance throughout my years of study at the University of California at Berkeley and during the preparation of my dissertation. My deepest gratitude is also due to the members of the committee, Professor Cindy Cox and Professor Franck Bedrossian for their assistance. Special thanks are due to my graduate fellows for their encouragement and friendship. Finally, I want to express my love and gratitude to my loved ones, for their understanding and support during the duration of my studies.
Instrumentation

3 Flutes (3rd doubling Piccolo)
3 Oboes (3rd doubling English Horn)
3 Clarinets in Bb (3rd doubling Bass Clarinet)
3 Bassoons (3rd doubling Contrabassoon)

4 French Horns in F
3 Trumpets in Bb
3 Trombones

Tuba

Timpani

Percussion I:
Tom-toms
Xylophone
Suspended Cymbal
Glockenspiel
Gran Cassa

Percussion II:
Bongos
Marimba
Tam tam
Vibraphone

Percussion III:
Congas
Temple Blocks
Crash Cymbals
Tubular Bells

Harp

Strings
Synesthésie - I. Toucher
Synesthésie - II. Odorat
III. Goût

Flute I
Flute II
Flute III
Oboe I
Oboe II
Clarinet in B
Cello
Horn in F I
Horn in F II
Horn in F III
English Horn
Clarinet in B
Clarinet in B II
Clarinet in B III
Bassoon I
Bassoon II
Bassoon III
Horn in F I
Horn in F II
Horn in F III
Horn in F IV
Trumpet in B
Trumpet in B II
Trumpet in B III
Trumpet in B IV
Trombone
Suspended Cymbal
Timpani
Violin I
Violin II
Viola
Violoncello
Double Bass

\( \frac{q}{=} \) 90

\( \frac{q}{=} \) 90
Synesthésie - III. Goût
IV. Audition
Synesthésie - IV. Audition
Synesthésie - IV. Audition
Synesthésie - IV. Audition
Synesthésie - V. Vision

14

fl.

fl. s.

pos.

ob.

ob. s.

eng. hn.

b-cl.

b-cl. s.

b-cl.

b-cl. s.

tuba

bn. II

vn. II

cb.

f hrn.

f hrn. s.

b-tpt.

b-tpt. s.

tnb.

tnb. s.

tb.

tuba

timp.

g.c

tar.

t. bell

harp

14

vn.

vn. s.

va

vo.

do.
Synesthésie - V. Vision