



MTO 18.2 Examples: Leydon, Clean as a Whistle

(Note: audio, video, and other interactive examples are only available online)

<http://www.mtosmt.org/issues/mto.12.18.2/mto.12.18.2.leydon.php>

Example 9. Varèse, *Ecuatorial*, measures 240–45

Sheet music for Example 9 from Varèse's *Ecuatorial*. The score includes parts for Ondes Martenot, Organ, Trumpet 1, Trumpet 2, Trumpet 3, Trumpet 4, Trombone 1, Trombone 2, Trombone 3, Trombone 4, Piano, Timpani, S.D., T.D., S.D., B.D., T. Blks., and Cym. B.D. The music is in 3/4 time, with various key signatures and dynamic markings like *gliss.*, *mf*, *f*, *p*, *p subito*, *pp*, *fff*, *ten.*, *senza sord.*, and *wire brush*.

Measure 240 (Measures 1-2): Ondes Martenot play a glissando from *mf* to *p* with a dynamic line. Organ plays eighth-note chords. Trumpets 1-4, Trombones 1-4, and Piano play eighth-note patterns. Timpani play eighth-note patterns at *f*.

Measure 241 (Measures 3-4): Ondes Martenot play eighth-note patterns. Organ plays eighth-note chords. Trumpets 1-4, Trombones 1-4, and Piano play eighth-note patterns. Timpani play eighth-note patterns at *f*. S.D. and T.D. play eighth-note patterns at *f*.

Measure 242 (Measures 5-6): Ondes Martenot play eighth-note patterns. Organ plays eighth-note chords. Trumpets 1-4, Trombones 1-4, and Piano play eighth-note patterns. Timpani play eighth-note patterns at *f*. S.D. and T.D. play eighth-note patterns at *f*. S.D. and B.D. play eighth-note patterns at *f*. T. Blks. play eighth-note patterns at *f*. Cym. B.D. play eighth-note patterns at *f*.

Measure 243 (Measures 7-8): Ondes Martenot play eighth-note patterns. Organ plays eighth-note chords. Trumpets 1-4, Trombones 1-4, and Piano play eighth-note patterns. Timpani play eighth-note patterns at *f*. S.D. and T.D. play eighth-note patterns at *f*. S.D. and B.D. play eighth-note patterns at *f*. T. Blks. play eighth-note patterns at *f*. Cym. B.D. play eighth-note patterns at *f*.

Measure 244 (Measures 9-10): Ondes Martenot play eighth-note patterns. Organ plays eighth-note chords. Trumpets 1-4, Trombones 1-4, and Piano play eighth-note patterns. Timpani play eighth-note patterns at *f*. S.D. and T.D. play eighth-note patterns at *f*. S.D. and B.D. play eighth-note patterns at *f*. T. Blks. play eighth-note patterns at *f*. Cym. B.D. play eighth-note patterns at *f*.

Measure 245 (Measures 11-12): Ondes Martenot play eighth-note patterns. Organ plays eighth-note chords. Trumpets 1-4, Trombones 1-4, and Piano play eighth-note patterns. Timpani play eighth-note patterns at *f*. S.D. and T.D. play eighth-note patterns at *f*. S.D. and B.D. play eighth-note patterns at *f*. T. Blks. play eighth-note patterns at *f*. Cym. B.D. play eighth-note patterns at *f*.

Example 10. Messiaen, “Offertoire” from *Messe de la Pentecôte*, measures 124–32

Example 15. Crumb, *Black Angels*, i. “Threnody I: Night of the Electric Insects” (page 1, third system)

Example 16. Crumb, *Black Angels*, ii. “Sounds of Bones and Flutes,” measures 1–3

Delicate and somewhat mechanical [♩ = 88]

Electric Violin I

(quasi Tibetan Prayer Stones)
(semper sul G)

col legno tratto
(semper sul G)

whisper (stacc.)

Ka-to-ko to-ko to-ko to-ko to-ko to-ko!

col legno modo ord.
(sul G-D)

pp

Violin II

col legno battuto

(throw bow)

p

Electric Cello

tongue click poco fz

mp

mf tongue clicks

Example 17. “Sounds of Bones and Flutes,” second entrance of the “virtual flute” in violin I

sempre col legno tratto (sul G)

mp

Figure 1. Natural Harmonics

harmonics

7 8 9 10 11 13

fundamental

Example 19. *Black Angels*, iii. “Lost Bells” opening

Remote, transfigured

[bowed harmonic: cb. bow on rim]
(one long bow)

(E.Vln. II=) Tam-tam

pp (— mf)

lasc. vibr.

7

(E. Vln. II) arco 3 3 3

E. Vc. 3 3 3 7

3 3 3 7

Example 20. *Black Angels*, iv. “Devil-music,” opening

In romantic-phantastic style!
(con bravura)

E. Vln. I arco sul pont. *) pizz. l.h. + modo V ord. o arco sul pont.

*) Gradually increase bow pressure until pitch becomes pure noise.

Example 21. Subharmonics in “Devil-music”

sul pont.

Violin I

Electric Vln. II pedal tones!

Electric Vla. pedal tones!

(Vc.=) Tam-tam

strike center with a very hard beater ff (metallic)

3

(act. pitch)

ff (act. pitch)

bowed harmonic:
Cb. bow on rim
ff () (fff)

5

Example 22. *Black Angels*, v. “Danse Macabre,” whistling (measure 11)

arco sul pont

Violin 2 ff fffz 5

Viola pizz ffz

E. Vn I.

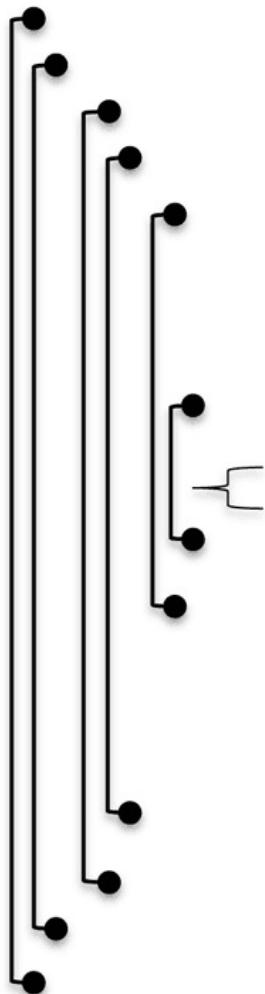
Maraca

Whistle

E. Vc.

Detailed description: The musical score consists of six staves. The top two staves are for 'Violin 2' and 'Viola'. 'Violin 2' starts with 'arco sul pont' and 'ff' dynamic, followed by a sixteenth-note pattern. 'Viola' has 'pizz' and 'ffz' dynamics. The third staff is for 'E. Vn I.' with eighth-note patterns. The fourth staff is for 'Maraca' with sixteenth-note patterns. The fifth staff is for 'Whistle' with sustained notes. The bottom staff is for 'E. Vc.' with sixteenth-note patterns. Measure 11 concludes with a dynamic 'fffz' and a fermata over the 'Whistle' and 'E. Vc.' staves.

Table 1. The symmetrical arrangement of the thirteen movements of *Black Angels*



I. Departure

1. Threnody I: Night of the Electric Insects
2. Sounds of Bones and Flutes
3. Lost Bells
4. Devil-music
5. Danse Macabre

II. Absence

6. Pavana Lachrymae
7. Threnody II: Black Angels!
8. Sarabanda de la Muerte Oscura
9. Lost Bells (Echo)

III. Return

10. God-music
11. Ancient Voices
12. Ancient Voices (echo)
13. Threnody III: Night of the Electric Insects

Example 23. *Black Angels*, “obbligato insect sounds” at the end of the seventh movement

sul pont. e glissando sempre

tr

E.Vc.

4 *4* *4* *4* *4*

pppp sempre (gossamer, wafting)

13

Example 24. *Black Angels*, x. "God-music," opening

Vox Dei

Violoncello

col arco,
legatiss.

pp *molto cantabile* *mp*
(sempre sim.)

(Vn I =)
7 crystal
glasses

(Vn II =)
7 crystal
glasses

(Vla =)
3 crystal
glasses

Example 25. Messiaen, *Quatuor pour la fin du temps*, v. "Louange à l'Éternité de Jésus," opening

Infiniment lent, extatique

Violoncelle

p (*majestueux, recueilli, très expressif*)

Infiniment lent, extatique ($\text{♩} = 44$ env.)

Piano

p

Ped.

*

Example 26. *Black Angels*, xii. "Ancient Voices (echo)," opening

Grazioso, flessibile [$\text{♩} = \text{ca. } 60$]
(glissando sempre)

Sul E

Violin I

Violin II

Viola

Sul A

Sul D

Sul E sempre

p

pp *5* *pp*

Example 27. *Black Angels*, xiii. "Sarabanda de la muerta oscura (echo)," opening

$\text{♩} = 60$

*a very rapid tremolo with two thimble-capped fingers
(gliss. sempre)

E. Vln. I

at bridge 3
middle of string
fingering

E. Vln. II

at bridge 4
middle of string
fingering

E. Vla.

at bridge 2
middle of string
fingering

E. Vc.

$\text{♩} = 40$

ppp (ma distinto) as from afar 5

Example 30. *Black Angels*, final sounds

fragile [$\text{♩} = 45$]

(Vln. I =)

(Vln. II =)

(Vla. =) Crystal glasses (strike gently with glass rods)

$\text{♩} = 40$

pppp
whisper
Shi chi

pppp
whisper
ju san

pppp
whisper
Shi chi

Example 31. Tectonic tritones in “God-music”

(Vn. I =)
7 crystal
glasses

(Vn. II =)
7 crystal
glasses

(Vla. =)
3 crystal
glasses

