

RICHARD BEAUDOIN
MICROTIMINGS

Mark Knoop & Kreutzer Quartet



Études d'un prélude I, II, IV, VI, VII, VIII, X & XI
The Artist and his Model I & II
nach Webern, nach Pollini



MICROTIMINGS

The eleven works recorded here, composed in 2009–2010, were part of the first group of my pieces involving microtiming. They resulted from a fruitful interaction with Olivier Senn, the Swiss researcher and musicologist who developed a refined methodology for measuring micro-temporal properties of a recorded performance using the Lucerne Audio Recording Analyzer (LARA, designed by Lorenz Kilchenmann). Together we laid the groundwork for transcribing timing and loudness data into standard notation—the process that forms the basis for these works.

Études d'un prélude

Each piece in this series is based on a precise transcription of Martha Argerich's 1975 recording of Chopin's *Prélude* in E minor, Op. 28, no. 4, recorded on 22–25 October 1975 in Munich and issued on Deutsche Grammophon 415 836-2. The duration of Argerich's original recording is 1'51". All of the works in this series are written *à la mémoire de Frédéric Chopin, d'après Martha Argerich*.

The Artist and his Model

Each piece in this series is based on a precise transcription of Alfred Cortot's 1931 recording of "La fille aux cheveux de lin," No. 8 from Book 1 of Debussy's *Préludes* of 1910, recorded on 2 July 1931 and issued as Biddulph LHW 006. Debussy's piece has a multi-layered history: Robert Burns' poem "Lassie wi' the Lint-White Locks" inspired Charles Marie René Leconte de Lisle's poem "La fille aux cheveux de lin," (written 'imités de Burns') which Debussy set to music in 1882; the song remains unpublished. In 1910, Debussy borrowed the title of Leconte de Lisle's poem (and the key of his early song) in composing his piano *prélude*. The duration of Cortot's original recording is 1'51". All of the works in this series are written *à la mémoire de Claude Debussy, d'après Alfred Cortot*.

nach Webern, nach Pollini

Each of the three movements of this solo piano work are based on a precise transcription of Maurizio Pollini's 1976 recording of the second movement of Webern's *Variationen für Klavier*, Op. 27, recorded on 30 June–5 July 1976 at the Herkulessaal in Munich and issued on Deutsche Grammophon 419 202-2. The duration of the original recording is 34".

WRITINGS

Writings about this compositional approach, sometimes called 'temporalism,' began in 2009 with the composer's "Some Account of the Practice of Microtiming and Musical Photorealism" (Harvard DASH Archive). Olivier Senn's work on Argerich's 1975 Chopin recording can be found in Senn, Kichenmann and Camp's paper "Expressive timing—Martha Argerich plays Chopin's *Prelude* op. 28/4 in E minor," published in the *Proceedings of the International Symposium on Performance Science 2009* (Utrecht: AEC). Further writings, by the composer and others, can be found in Volume 54/1 of *The Journal of Music Theory* and Volume 70/1 of *The Journal of Aesthetics and Art Criticism*.

PREMIERES

Mark Knoop premiered *Étude d'un prélude VII* at Kings Place, London, on 17 May 2010.

The Kreutzer Quartet premiered *Études d'un prélude II, VI, VIII* at Wilton's Music Hall, London, on 15 March 2010, and played the whole of *Étude d'un prélude X*, interleaved with commentary by the composer, during an event at York University, York, on 16 March 2010.

Marilyn Nonken premiered *Études d'un prélude I and IV* at the Center for New Music and Audio Technologies (CNMAT) at the University of California, Berkeley, on 8 November 2009.

The Chiara Quartet premiered *Étude d'un prélude X* at Sanders Theater, Cambridge, Massachusetts, on 30 September 2011.

DEDICATIONS

Études d'un prélude I, II, VI, VII, VIII and XI are dedicated to Olivier Senn.

Étude d'un prélude IV is dedicated to Lorenz Kilchenmann.

Étude d'un prélude X is dedicated to my father, on the occasion of his 65th birthday; an eight-bar passage near the center of the third movement—*Kertész Distortion*—is dedicated 'In memoriam Charles Ives.'

nach Webern, nach Pollini is dedicated to Anne C. Shreffler.

The Artist and his Model I is dedicated to Mark Knoop.

The Artist and his Model II is dedicated to my wife, Lea.

a mon ami Olivier Saut

étude d'un prélude I

CHOPIN DÉSÉCHÉ

à la mémoire de Frédéric CHOPIN
d'après Martha ARGERICH

Tempo giusto $\text{♩} = 60$ *

Richard BEAUDOIN
2009

*** The bar lines are only as guidelines, they do not convey the rhythmic structure of the music.
** The reference measure (mezzo, mezzo 1, etc.) indicates positions in the score of up to 28 measures and are given to facilitate phrasing.
**** The dynamics are given separately for each hand throughout.

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Étude d'un prélude I—Chopin desséché (for solo piano) leaves things rather intact: all of Chopin's pitches are preserved, and placed in accordance with Argerich's original timing and dynamics. The 'dessication' results from the removal of all resonance; for each sound event, only the initial attack is preserved. The time-axis of the source is expanded to 7½ minutes. The title is a play on Satie's *Embryons desséchés*. *Chopin desséché* was made on 16–17 May 2009.

a mon ami Olivier Saut

étude d'un prélude II

FLUTTER ECHOES

for string quartet

in imitation Frédéric CHOPIN
d'après Martha ARGERICH

Tempo giusto* $\text{♩} = 108$
"mezzo 1"

Richard BEAUDOIN
2009

*** The bar lines and meter are only as guidelines; they do not indicate any metric structure. All of the mezzo terms, 4-108 in Violin I & Viola and mezzo, 112-112 in Violin II & Cello/Double Bass, should resemble each other in shape and effect, regardless of their individual metric placement. The mezzo terms, 1-108 in Violin II and mezzo, 112-112 in Violin I & Viola, should resemble each other in shape and effect, regardless of their individual metric placement. These bar lines should be perceptible, with one sound emerging clearly from the other.

**** The measure numbers that appear above the score (mezzo, mezzo 1, etc.) indicate positions in the score of up to 28 measures, 4, and are given to facilitate phrasing.

***** "Flutter" refers to a performing style made of wood or rubber. "Flutter" refers to a performing style made of wood or metal.

***** All crescendo that terminates in *mezzo*, including all of the *Flutter* echoes, must be to *mezzo*.

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Étude d'un prélude II—Flutter echoes (for string quartet) overlays the Chopin-Argerich material with echo patterns. The title refers to an acoustic phenomenon in which a rapid series of echoes is created by reflection between two parallel surfaces. *Flutter echoes* was completed on 20 May 2009.

to Lorez Kilbmann, with appreciation

étude d'un prélude IV BLACK WIRES

in memoriam Frédéric CHOPIN
after Martha ARGERICH

"The door of the [train] compartment was open and I could see the corridor window, where the wires—six thin black wires—were doing their best to slant up, to ascend skyward, despite the lightning blows dealt them by one telegraph pole after another; but just as all six, in a triumphant swoop of pathetic elation, were about to reach the top of the window, a particularly vicious blow would bring them down, as low as they had ever been, and they would have to start all over again.

—Vladimir Nabokov, from "First Love" (1948)

Richard BEAUDOIN
2009

Vivacissimo molto ritmico, elettrico $\text{♩} = 88^*$



*The bar lines are only as a guideline; the dynamic structure of the piece is conveyed through the slurs and accent marks, which should be emphasized throughout. For the sake of visual coordination, the right hand has been rotated throughout at 45° intervals; the rhythm in each hand should be governed by its respective markings.

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Étude d'un prélude IV—Black Wires (for solo piano) transforms the material significantly. The score includes the following epigraph, taken from Vladimir Nabokov's 1948 short story "First Love," describing a child's perspective of looking out the window of a moving train:

The door of the compartment was open and I could see the corridor window, where the wires—six thin black wires—were doing their best to slant up, to ascend skyward, despite the lightning blows dealt them by one telegraph pole after another; but just as all six, in a triumphant swoop of pathetic elation, were about to reach the top of the window, a particularly vicious blow would bring them down, as low as they had ever been, and they would have to start all over again.

Black Wires was completed on 6 June 2009.



Il en est des plaisirs comme des photographies.

Ce qu'on prend en présence de l'être aimé, n'est qu'un cliché négatif, on le développe plus tard, une fois chez soi, quand on a retrouvé à sa disposition cette chambre noire intérieure dont l'entrée est «condamnée» tant qu'on voit du monde.

— Marcel Proust, À l'ombre des jeunes filles en fleurs

There were about a dozen watches in the window, a dozen different hours and each with the same assertive and contradictory assurance that mine had, without any hands at all. Contradicting one another. I could hear mine, ticking away inside my pocket, even though nobody could see it, even though it could tell nothing if anyone could. And so I told myself to take that one. Because Father said clocks slay time. He said time is dead as long as it is being clicked off by little wheels; only when the clock stops does time come to life.

— William Faulkner, The Sound and the Fury

ὁ δὲ λέγουσί τινες τῶν περὶ τὰς συμφωνίας, ὅτι οὐχ ἅμα μὲν ἀφικνοῦνται οἱ ψόφοι, φαίνονται δέ, καὶ λανθάνει, ὅταν ὁ χρόνος ἢ ἀναίσθητος, πότερον ὀρθῶς λέγεται ἢ οὐ; τάχα γὰρ ἂν φαίη τις καὶ νῦν παρὰ τοῦτο δοκεῖν ἅμα ὄραν καὶ ἀκοῦειν, ὅτι οἱ μεταξὺ χρόνοι λανθάνουσιν. ἢ τοῦτ' οὐκ ἀληθές, οὐδ' ἐνδέχεται χρόνον εἶναι ἀναίσθητον οὐδένα οὐδὲ λανθάνειν, ἀλλὰ παντὸς ἐνδέχεται αἰσθάνεσθαι;

— Aristotle, De Sensu et Sensibilibus

Zutreffend aber heißt es hier »wieder und weiter«; denn mit unserer Forscherangelegentlichkeit treibt das Unerforschliche eine Art von foppendem Spiel: es bietet ihr Scheininhalte und Wegesziele, hinter denen, wenn sie erreicht sind, neue Vergangenheitsstrecken sich auftun, wie es dem Küstenjäger ergeht, der des Wanderns kein Ende findet, weil hinter jeder lehmigen Dünenkulisse, die er erstrebte, neue Weiten zu neuen Vorgebirgen vorwärtslocken.

— Thomas Mann, Joseph und seine Brüder

The most transitory of things – a shadow – the proverbial emblem of all that is fleeting and momentary – may be fettered by the spells of our “natural magic,” & may be fixed for ever in the position which it seemed only destined for a single instant to occupy. . . . Such is the fact, that we may receive on paper the fleeting shadow; arrest it there; & in the space of a single minute fix it there so firmly as to be no more capable of change, even if thrown back into the sunbeam from which it derived its origin.

— William Henry Fox Talbot, Some Account of the Art of Photogenic Drawing

Mais, quand d'un passé ancien rien ne subsiste, après la mort des êtres, après la destruction des choses seules, plus frères mais plus vivaces, plus immatérielles, plus persistantes, plus fidèles, l'odeur et la saveur restent encore longtemps, comme des âmes, à se rappeler, à attendre, à espérer, sur la ruine de tout le reste, à porter sans fléchir, sur leur gouttelette presque impalpable, l'édifice immense du souvenir.

— Marcel Proust, Du côté de chez Swann

étude d'un prélude VI

in memoriam Frédéric CHOPIN
d'après Martha ARGERICH

Richard BLAU/DOE
2009

Grazioso [♩ = 138]

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J. L. ROBERTSON AND OTHERS

Étude d'un prélude VI—The Real Thing (for string quartet) was composed directly in response to Glenn Brown's 2000 painting "The Real Thing," a detail of which can be seen on the cover of this booklet. There are strong similarities between Brown's techniques and the use of microtiming as a compositional material. *The Real Thing* was completed on 25 August 2009.

Étude d'un prélude VII—Latticed Window (for solo piano) is the only work in the series to maintain the same duration as its source. It is, in effect, a musical photograph of the Argerich performance. The work is named after William Henry Fox Talbot's *Latticed Window (with the Camera Obscura)*, August 1835, the oldest photographic negative in existence. *Latticed Window* was completed on 31 August 2009.

a mon ami Olivier Saut

à la mémoire de Frédéric CHOPIN
d'après Martha ARGERICH

W. H. F. T.: Latticed Window (with the Camera Obscura)—August 1835

R. H.: Latticed Window (with LARA)—August 2009
When first measured the total events, initially about 225 in number, were found to include those ≥ 0.748 (th.) and ≥ 0.540 (h.)

Fast but very calm* [$\sigma = 120$]

right hand always sounding one octave higher than written (K^{H})

pp

mp

p

* The bar lines act only as guidelines, and do not convey the rhythmic structure of the music.

** The dynamics are given separately for each hand throughout.

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a man and (Oliver) Sam

étude d'un prélude VIII KERTÉSZ DISTORTION

for string quartet, after *Distortion* no. 172 (1933) by André Kertész

Richard BEAUDOIN
2009

Andantino, lontano, trasparente [$\text{♩} = 76$]

in movement *Tristesse* CHOPIN
d'après Martha ARGERICH

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Étude d'un prélude VIII—Kertész Distortion (for string quartet) was composed as an analogue to André Kertész's photograph, "Distortion No. 172," made in Paris in 1933. The photograph is of a nude as seen in a curved mirror. The composition treats the Chopin-Argerich material in an analogous fashion, curving the time (and the pitch) just as Kertész's mirror curved the light. In both cases, one central area of the image remains in focus. Like *The Real Thing*, *Kertész Distortion* was completed on 25 August 2009.



Étude d'un prélude X—Second String Quartet is comprised of *Flutter echoes*, *The Real Thing*, *Kertész Distortion* and *28^{four}*. The first three movements of the quartet may be performed separately, as individual works. However, *28^{four}* may only be performed as the finale of the complete quartet. This last movement is made entirely from the sounds of Argerich's recording, reorganized according to duration. *Second String Quartet* was completed on 10 October 2009.

Étude d'un prélude XI—four²⁸ (for solo piano) is a sister of *28^{four}*. Like the quartet work, it is made from a reordering of the sounds of Argerich's recording according to their duration. The title refers to the late pieces by John Cage. The work was completed on 4 November 2009.

The Artist and his Model I—La fille floutée (for solo piano) develops the material in many ways, all based on the principle of ‘blurring.’ The piece owes a debt to Gerhard Richter’s 1994 painting “Lesende.” *La fille floutée* was completed on 7 November 2010.

The Artist and his Model II—La durée sans contacts s’affaiblit (for string quartet) elongates the Debussy-Cortot material tenfold. It uses modulations to flatten the tonal space, and transcribes the white-noise cycles heard in the original recording. The epigraph is drawn from Paul Valéry’s *Eupalinos ou l’architecte* (1921):

Écoute, Phèdre (me disait-il encore), ce petit temple que j’ai bâti pour Hermès, à quelques pas d’ici, si tu savais ce qu’il est pour moi!—Où le passant ne voit qu’une élégante chapelle,—c’est peu de chose: quatre colonnes, un style très simple,—j’ai mis le souvenir d’un clair jour de ma vie. O douce métamorphose! Ce temple délicat, nul ne le sait, est l’image mathématique d’une fille de Corinthe, que j’ai heureusement aimée. Il en reproduit fidèlement les proportions particulières.

La durée sans contacts s’affaiblit was completed on 21 December 2010.

a Mark Knapp
The Artist and his Model I
La fille floutée
d’après Alfred CORTOT, à la mémoire de Claude DEBUSSY

Richard BEAUDOIN

Très calme [$\text{♩} = 104$]

Cédez Mouvé

16

The specific caesura/pedal markings [~>] must be followed wherever notated; however, this pedal may naturally be employed elsewhere.
The wavy marks [~] in this work do not effect the length of the note; rather, they indicate a slight dynamic emphasis (as *p* or *sf* or *dim*).

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NACH WEBERN, NACH POLLINI
des Stücke für Klavier

Richard BEAUDOIN (2010)

I. Neuordnung nach Dauern
Sehr schwungvoll [$\text{♩} = \text{ca. } 88$]

5

10

12

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nach Webern, nach Pollini (for solo piano)

Movement I—Neuordnung nach Dauern reorganizes all of Webern’s pitches according to their duration in Pollini’s recorded performance (from longest to shortest), then recasts this new pitch ordering into Webern’s original notated rhythm and dynamics.

Movement II—Bewegungen in Zeitlupe is organized according to a Renaissance formal plan, with a *prima pars* in triple meter ($\frac{3}{4}$) and a *secunda pars* in duple meter ($\frac{2}{2}$).

Movement III—Neuordnung nach Lautstärken reorganizes all of Webern’s pitches according to their volume in Pollini’s recorded performance, then recasts this new pitch ordering into Webern’s original notated rhythm. The first half of the Webern-Pollini material is reordered from softest to loudest, the second half from loudest to softest.

nach Webern, nach Pollini was composed between 29 October 2009 and 5 July 2010.

THE ARTISTS

MARK KNOOP

Mark Knoop is a pianist and conductor living in London, UK. He performs with many ensembles including Plus-Minus (London/Brussels), Ensemble Exposé (London), musikFabrik (Köln) and Apartment House (London). Mr. Knoop has worked closely with many respected composers including Peter Ablinger, Richard Barrett, Chris Dench, James Dillon, Michael Finnissy, and Helmut Lachenmann. His recordings of music by John Cage and David Lumsdaine have been critically acclaimed. Current commissions include new solo works by Finnissy, Trond Reinholdtsen, Stefan Prins, Newton Armstrong, Joanna Bailie and Adam de la Cour.

www.markknoop.com

KREUTZER QUARTET

The Kreutzer Quartet is the dedicatee of hundreds of new works, both collectively and as soloists. Composers that have composed for them include Judith Weir, Hans Werner Henze, George Rochberg, Jörg Widmann, Gloria Coates, David Matthews, Halldór Guðgrímsson, Elliott Schwartz, Michael Finnissy, Nicola LeFanu, Peter Dickinson, Luca Mosca, Evis Sammouris, Thomas Simaku, Nigel Clarke, David Gorton, Paul Pellay, Judith Bingham, Poul Ruders, Jeremy Dale Roberts, Michael Alec Rose, Jim Aitchison, Roger Steptoe, Howard Skempton, Dmitri Smirnov and Robert Saxton. They are quartet in residence at Wilton's Music Hall in London.

www.kreutzer-quartet.com

RICHARD BEAUDOIN

The music of Richard Beaudoin has been heard at the Amsterdam Concertgebouw, Wiener Konzerthaus, Hamburg's Laeiszhalle, Linz' Brucknerhaus, New York's Weill Recital Hall and London's Royal Festival Hall. He has received opera and vocal music commissions from the Konzerthaus Dortmund, the Staatstheater Kassel and the Boston Lyric Opera. Performers of his work include the soprano Annette Dasch, tenor Joseph Kaiser, bass Kevin Burdette, the Kreutzer, Lydian and Chiara String Quartets, and pianists Mark Knoop, Marilyn Nonken, Constantine Finehouse and Wolfram Rieger. Mr. Beaudoin is a member of the Faculty of Music at Harvard University.

www.richardbeaudoin.com

RECORDING DETAILS

DISC ONE

Mark Knoop, piano (Steinway model D 587462)

Producer, Engineer, Editor: David Lefebber

Recorded 16 December 2010 at Potton Hall, Saxmundham, Suffolk, UK.

Special thanks to Olivier Senn, Stanislas Nanchen and the Royal Academy of Music, London.

DISC TWO

Kreutzer Quartet

Peter Sheppard Skærved (Violin: Stradivari 'Joachim' 1698)

Mihailo Trandafilovski (Violin: Honoré Derazey 1855)

Morgan Goff (Viola: Daniel Parker 1715)

Neil Heyde (Violoncello: Bartolomeo Cristofori, Florence, c. 1700)

Engineer: Jonathan Haskell (Astounding Sounds)

Producer: Neil Heyde

Musical Supervision: Richard Beaudoin

Recorded 17–18 May 2011 at the Church of St John the Baptist, Aldbury, Hertfordshire, UK.

Special thanks to Olivier Senn, Stanislas Nanchen and the Harvard University Department of Music.

CREDITS

Cover: Glenn Brown, *The Real Thing*, 2000, Oil on panel, 82 x 66.5 cm, © 2012 Glenn Brown

Photos: Mark Knoop (p. 2, *Potton Hall*), Yatzek (p. 8, *Mark Knoop*), Richard Bram (p. 14, *Kreutzer Quartet*)

Design: Max Vtiourin

Text: Richard Beaudoin

Lucerne Audio Recording Analyzer (LARA) available as free download at www.hslu.ch/lara.

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RICHARD BEAUDOIN

MICROTIMINGS

Mark Knoop & Kreutzer Quartet

DISC ONE

58'37

MARK KNOOP, PIANO

- | | |
|---|-------|
| 1. Étude d'un prélude I—Chopin desséché | 7'16 |
| 2. Étude d'un prélude IV—Black Wires | 6'30 |
| 3. Étude d'un prélude VII—Latticed Window. | 1'55 |
| 4. Étude d'un prélude XI—four ²⁸ | 24'40 |
| 5. The Artist and his Model I—La fille floutée. | 9'05 |
| 6-8. nach Webern, nach Pollini | |
| i. Neuordnung nach Dauern | 1'12 |
| ii. Bewegungen in Zeitlupe | 5'21 |
| iii. Neuordnung nach Lautstärken | 1'50 |

DISC TWO

60'08

KREUTZER QUARTET

- | | |
|---|-------|
| 1-4. Étude d'un prélude X—Second String Quartet | |
| i. Flutter echoes (Étude d'un prélude II) | 9'39 |
| ii. The Real Thing (Étude d'un prélude VI) | 5'40 |
| iii. Kertész Distortion (Étude d'un prélude VIII) | 10'35 |
| iv. 28 ^{four} | 11'59 |
| 5. The Artist and his Model II—La durée sans contacts s'affaiblit | 22'16 |

PETER SHEPPARD SKÆRVED & MIHAÏLO TRANDAFILOVSKI, VIOLINS

MORGAN GOFF, VIOLA; NEIL HEYDE, VIOLONCELLO