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The 'harpe organisée', 1720-1840 : rediscovering the lost pedal techniques on harps with a single-action pedal mechanism

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with a single-action pedal mechanism

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Maria Christina Cleary

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Dit proefschrift is geschreven als een gedeeltelijke vervulling van de vereisten voor het doctoraatsprogramma docARTES. De overblijvende vereiste bestaat uit een demonstratie van de onderzoeksresultaten in de vorm van een artistieke presentatie.

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The “*harpe organisée*”, 1720-1840

Rediscovering the lost pedal techniques on harps with a single-action pedal mechanism

Maria Christina Cleary

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"Wollen wir so fürs Leben miteinander musizieren?" (Louis Spohr)

Abbreviations

Table 1: List of abbreviations used in the text.

Abbrev	Explanation
A-Wgm	Vienna, Gesellschaft der Musikfreunde, Bibliothek
AMZ	<i>Allgemeine musikalische Zeitung</i>
b.	Bar or bars.
BSB	Bayerische Staatsbibliothek, Munich.
C ↑	Fold C pedal up, or C pedal is folded away.
C ↓	Unfold C pedal, or C pedal is folded down.
c.	Century.
ca.	Circa, around.
D-B	Berlin, Staatsbibliothek zu Berlin Preußischer Kulturbesitz, Musikabteilung
D-Ksp	Cassel, Louis Spohr-Archiv
D-LEmh	Leipzig, Hochschule für Musik, Bibliothek
DK-Kk	Copenhagen, Det Kongelige Bibliotek Slotsholmen
D.P.	Double-pedalling. See Glossary for explanation.
Ed.	Edition
E-Mn	Madrid, Biblioteca Nacional
EWV.	<i>Louis Spohr, Eigenhändiges Werkverzeichnis</i> , or <i>Verzeichniß sämtlicher Compositionen von Louis Spohr</i> (after 1822) by Wulfhorst.
Ex.	Example
Fig.	Figure, figures
F-Pn	Paris, Bibliothèque nationale de France, Département de la Musique
G ↑	Fold G pedal up, or G pedal is folded away.
G ↓	Unfold G pedal, or G pedal is folded down.
GB-Lbl	London, The British Library
GMO	Grove Music Online
I-Mc	Milan, Conservatorio di Musica Giuseppe Verdi, Biblioteca
indep.	independently
l.h.	left hand
LFoot	Left foot on E pedal. See Glossary for explanation.
maj.	major
min.	minor

Abbrev	Explanation
movt.	movement
Ms	manuscript
Op.	opus
Opp.	opuses
opt.	optional
ped.	pedal, pedals
Pl.	Plate number(s)
r.h.	right hand
RCM	Royal College of Music
RISM	Répertoire International des Sources Musicales. www.rism.info
SAM	<i>Sammlung Alter Musikinstrumente</i> , Kunsthistorisches Museum Vienna
sep.	separately
sig.	signa, signature
Tab.	Table
trans.	translated, translation
T.P.	Triple-pedalling. See Glossary for explanation.
Var.	variation
WoO.	Werk ohne Opusnummer (Work without opus number by Louis Spohr).
Wq.	Wotquenne number for the works of C. P. E. Bach

System of pitch notation

Helmholtz pitch notation system is used throughout: capital and small letters, super- and subscript-numbers, in place of dashes (middle c = c1): C2, C1, C, c, c1, c2, c3.

Translations

Quoted passages in German and French are included in the main text and translated into English in the footnotes. All translations are mine, unless otherwise stated.

Harp

The word “harp” is used throughout this thesis to refer exclusively to a harp with a single-action pedal mechanism.

Glossary

Accroché: To fix a pedal.

“Base” key: This is the key in which a harp is tuned, before playing a piece, where all the pedals are in the upper position. The strings are then said to be in an “open” position. The most usual key is E-flat major, giving the harpist the possibility of playing in keys with three flats and four sharps. However, B-flat, A-flat and D-flat are also sometimes required. The “base” key determines what fourteen semitones per octave are available to the harpist for an entire piece, or a movement of a piece.

Béquilles: A mechanism to shorten the vibrating length of a string. They are a pair “of small metal levers, one on each side of the string, which pinched the string from opposite sides when the pedal was depressed.”¹ This mechanism was mostly used by the Cousineau luthiers.

Contrebasse ou Clavicorde à marteau: A pedal board (range F1-G) that was placed under the harp and played with the feet. It was one of the inventions that Krumpholtz presented to the *l’Academie Royale de Sciences* in November 1787. Krumpholtz’s *Amante abandonnée*, *Air Parodié sur l’Adagio de Œuvre XIV* for violin, voice, harp or piano and contrebasse could have been the written for this instrument.

Crochets: A mechanism to shorten the vibrating length of a string. Small hooks are screwed on to a spindle which juts out from the neck through the front-action plate. When the pedal is pressed, the *crochet* pushes the string against the semitone nut which results in the shortening of the vibrating length of the string by a semitone.

Decroché: To unfix a pedal.

Double-pedal technique/Double-pedalling (D.P.): is the act of moving two adjacent pedals or two non-adjacent pedals on one side of the harp using one foot. This is achieved by placing the foot perpendicular to the harp, across the pedals. The pedals can be pressed down together or separately by pivoting the foot. The heel moves an inner pedal and the toe moves an outer pedal. When the pedals are not adjacent to each other, double-pedalling is achieved by folding away a pedal, usually the C pedal on the left side or the F or G pedal on the right side of

¹Robert Adelson, Alain Roudier, and Francis Duvernay, “Rediscovering Cousineau’s Fourteen-Pedal Harp,” *The Galpin Society Journal* 63 (2010): 159-231: 160.

the base of the harp. The remaining D and B pedals on the left-hand side of the harp and the F and A pedals on the right can be then operated with one foot.

Double-action pedal harp: See *Harpe à double mouvement*

Fixé: To fix a pedal in the lower notch.

Fourchettes: A mechanism to shorten the vibrating length of a string. They are forked discs, with two small pins and when the disc rotates, the pins pinch the strings. This mechanism was patented in 1794. This mechanism became the standard mechanism and is still used in modern pedal harps.

Harpe à crochets: A system to shorten the vibrating length of each string. A *crochet* or crutch presses against the string to alter the pitch. It was first made by Hochbrucker.

Harpe à double mouvement: Harp with one row of strings and seven pedals which can alter each string by two semitones. Sebastien Erard patented this mechanism between 1800-1810. This pedal mechanism is still used and is used in the standard pedal harp today.

Harpe à simple mouvement: A harp with a single-action pedal mechanism.

Harpe ordinaire: A harp with a single-action pedal mechanism.

Harpe organisée: harp with one row of strings and seven pedals which can alter the pitch of each string by one semitone. This term was used by Diderot to describe the pedal harp of the eighteenth century.

Harpe simple: term used in the eighteenth century to describe any harp without a pedal mechanism to alter the pitch of the strings.

Jeu des pédales: This refers is the historical term which encompasses any sort of pedal move.

Left foot on E pedal (LFoot): This is a technique of using the left foot to move the E pedal, which is the first pedal on the right-hand side of the harp. This is first raised by Backofen in 1827.

Krumpholtz rule: Krumpholtz writes on the frontispiece of his *Deux Symphonies*, Op. 11, Naderman edition:

“Pour faciliter l’exécution dans le maniement des Pédales pour toute Musique quelconque composée pour la Harpe: l’Auteur indique quelque fois dans son Œuvre XI^e le Sol[#] en place du La^b pour ne pas décrochez le La qui se trouve naturel à la Clef, ou bien Ut[#] en place de Re^b ainsi que le Re[#] au-lieu de Mi^b...En observant généralement cette méthode, on trouvera bien moins de difficultés dans cet instrument.”

“To facilitate the execution in moving the pedals for all music composed for the harp: the author indicates sometimes in his Op. XI that the G[#] replaces the A^b in order not to release the A which is found in the key signature, or the C[#] replaces the D^b and the D[#] replaces the E^b...

Observing this method in general, one will find fewer problems on this instrument.”

Multi-peddalling: refers to either double- or triple-peddalling without specifying one in particular.

Open strings: The pitches of the strings of the harp when the pedals are in the upper position and not in use.

Pedal notch: This is the place where a pedal can be fixed, when a pedal is depressed. It is shown in fig. 2.2.

Pédale à renforcement: The *pédale à renforcement* is an eighth pedal located on the left-hand side of the base of harp. When the pedal is pressed down, the mechanism of the pedal opens five shutters which are found at the back of the resonance box of a pedal harp. While playing, the movements of this pedal, pressing down, fixing and releasing (opening, fixing the shutters open and closing the shutters), alter the dynamics and quality of the sound produced. It is operated by the left foot. It was invented by Krumpholtz and Naderman in 1785 and subsequently imitated by most harp makers in France and England.

Pedal *glissando*: If a string is plucked and then the pedal is pressed down or released, the pedal movement produces another sounding note, either a semitone higher or lower, where no intermediary pitches between one semitone and another are audible.

Pedal rod: Pedal rods usually run inside the column of the harp and link the pedal mechanism on the bottom of the harp to the mechanism in the neck of the harp. Each harp has seven pedal rods.

Single-action pedal harp: See *Harpe à simple mouvement*

***Sourdine* pedal:** This produces an echo effect from the vibrations of resonating strings. Krumpholtz and Cousineau invented two different types.

***Soupape* pedal:** See *Pédale à renforcement*

Spring of support: Bochsa’s invention to fix the harp at a certain angle when playing. Erat claimed it as his invention.

Swell pedal: See *Pédale à renforcement*

Triple-pedal technique/triple-peddalling (T.P.): three pedals are pressed down together with one foot. This is usually carried out on the right-hand side of the harp, involving the F, G and A pedals, but can also be performed with the D, C, and B pedals on the left-hand side of the harp.

