Table 1
Corpus

| Composer | Concerti |
| :---: | :---: |
| $\begin{aligned} & \text { Dussek } \\ & (1760-1812) \end{aligned}$ | $\begin{aligned} & 12 \text { concerti: opp. } 14,15,17,22,27,29,30, \text { C. } 158,40,49,63 \text {, } \\ & 70 \end{aligned}$ |
| Steibelt (1765-1823) | 7 concerti: nos 1-7 |
| Beethoven (1770-1827) | 5 concerti: opp. 19, 15, 37, 58, 73 |
| $\begin{aligned} & \text { Cramer } \\ & (1771-1858) \end{aligned}$ | 8 concerti: opp. 10, 16, 26, 38, 48, 51, 56, 70 |
| $\begin{aligned} & \text { Hummel } \\ & (1778-1837) \end{aligned}$ | 4 concerti: opp. 85, 89, 110, 113; 1 concertino Op. 73 |
| Field (1782-1837) | 7 concerti: nos 1-7 |
| Ries (1784-1838) | 8 concerti: opp. $42,55,115,120,123,132,151,177$ |
| Kalkbrenner (1785-1849) | 4 concerti: opp. 61, 80, 107, 127 |
| Weber (1786-1826) | 2 concerti: opp. 11 and 32 |
| Pixis $(1788-1874)$ | Concertino Op. 68 |
| Kuhlau (1789-1832) | Concerto Op. 7 |
| Czerny $(1791-1857)$ | 3 concerti: opp. 28, 153, 214 |
| Potter $(1792-1871)$ | 3 concerti (unpublished; available in the British Library as BL RPS MS 172) |
| Moscheles (1794-1870) | 8 concerti: opp. 45, 56, 58, 64, 87, 90, 93, 96 |
| Herz (1803-1888) | 4 concerti: opp. 34, 74, 87, 131 |
| Chopin (1810-1849) | 2 concerti: opp. 11 and 21 |
| Hiller (1811-1885) | Concerto Op. 5 |
| Thalberg $(1812-1871)$ | Concerto Op. 5 |
| Henselt <br> (1814-1889) | Concerto Op. 16 |
| $\begin{aligned} & \text { Bennett } \\ & (1816-1875) \\ & \hline \end{aligned}$ | 4 concerti: opp. 1, 4, 9, 19 |
| Total: | 87 |

Table 2
Monotonal and Modulating Ritornelli in the Corpus

| Composer | Monotonal R1 | Modulating R1 | N/A |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Dussek } \\ & (1760-1812) \end{aligned}$ | 6 (opp. 22, 27, 29, 30, 40, 63) | 6 (opp. 14, 15, 17, 49, 70, C. 158) | - |
| $\begin{aligned} & \text { Steibelt } \\ & (1765-1823) \end{aligned}$ | - | 7 | - |
| $\begin{aligned} & \text { Beethoven } \\ & (1770-1827) \end{aligned}$ | 1 (Op. 73) | 4 (opp. 19, 15, 37, 58) | - |
| $\begin{aligned} & \text { Cramer } \\ & (1771-1858) \end{aligned}$ | 1 (Op. 56) | 7 (opp. 10, 16, 26, 38, 48, 51, 70) | - |
| $\begin{aligned} & \text { Hummel } \\ & (1778-1837) \end{aligned}$ | 2 (opp. 110, 113) | 3 (opp. 73, 85, 89) | - |
| $\begin{aligned} & \text { Field } \\ & (1782-1837) \end{aligned}$ | 2 | 5 | - |
| $\begin{aligned} & \text { Ries } \\ & (1784-1838) \end{aligned}$ | - | 8 | - |
| $\begin{aligned} & \text { Kalkbrenner } \\ & (1785-1849) \end{aligned}$ | - | 3 | 1 (Op. 127) |
| Weber (1786-1826) | 2 | - | - |
| $\begin{aligned} & \text { Pixis } \\ & (1788-1874) \end{aligned}$ | - | 1 | - |
| Kuhlau | - | 1 | - |
| $\begin{aligned} & \text { Czerny } \\ & (1791-1857) \end{aligned}$ | 1 (Op.28) | 2 (Op. 153, Op. 214) | - |
| Potter $(1792-1871)$ | 1 (No. 1) | 2 (Nos 2 and 3) | - |
| Moscheles $(1794-1870)$ | 1 (Op. 56) | 4 (opp. 45, 58 (60), 64, 87) | 3 (opp. 90, 93, 98) |
| Herz $(1803-1888)$ | - | 4 | - |
| $\begin{aligned} & \text { Chopin } \\ & \text { (1810-1849) } \end{aligned}$ | 1 | 1 | - |
| $\begin{aligned} & \text { Hiller } \\ & (1811-1885) \end{aligned}$ | - | 1 | - |
| $\begin{aligned} & \text { Thalberg } \\ & (1812-1871) \end{aligned}$ | - | 1 | - |
| $\begin{aligned} & \text { Henselt } \\ & (1814-1889) \end{aligned}$ | - | 1 | - |
| $\begin{aligned} & \text { Bennett } \\ & (1816-1875) \end{aligned}$ | 1 (Op. 19) | 3 | - |
| Total: | 19 | 64 | 4 |

Table 3
Modulating R1 Categories

| Categories | Sub-categories | Properties |
| :---: | :---: | :---: |
| 1 |  | 'Ternary' R1: non-tonic B closed with PAC; A reprised in the tonic |
|  | 1a | B closed with a non-tonic PAC |
|  | 1 b | B returns to $\mathrm{A}^{1}$ without non-tonic PAC |
| 2 |  | Non-tonic B closed with PAC; retransition leads to a tonic C . |
| 3 |  | Non-tonic B has no cadence; returns to tonic for C |
| 4 |  | Non-tonic B; return to tonic only completed with solo entry |
| 5 |  | B moves through various keys (often by sequence); tonic reaffirmed by C. |

Table 4
Distribution of Modulating R1 Categories in the Corpus

| Composer | Category 1 | Category 2 | Category 3 | Category 4 | Category 5 | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dussek | $\begin{aligned} & \text { Op. 14; Op. } 15 \text {; } \\ & \text { Op. } 49 \text {; Op. } 70 \end{aligned}$ | Op. 17; C. 158 | - | - | - |  |
| Steibelt | No. 6; No. 7 | No. 1; No. 3 (Op. 35); No. 4; No. 5 (Op. 64) | - | - | - | No. 2 |
| Beethoven | - |  | Op. 37 | - | $\begin{aligned} & \text { Op. } 15 \text {; Op. 19; } \\ & \text { Op. } 58 \end{aligned}$ |  |
| Cramer | $\begin{aligned} & \text { Op. 26; Op. 38; } \\ & \text { Op. } 70 \end{aligned}$ | Op. 10; Op. 51 | Op. 48; Op. 16 | - | - |  |
| Hummel | - | Op. 85 | Op. 89 | Op. 73 | - |  |
| Field | No. 1; No. 2; No. 4; No. 7 | No. 3 | - | - | - |  |
| Ries | , | Op. 55 | $\begin{aligned} & \text { Op. 115; Op. } \\ & \text { 132; Op. 120, } \\ & \text { Op. } 177 \end{aligned}$ | Op. 151 | Op. 42; Op. 123 |  |
| Kalkbrenner | - | Op. 61; Op. 80 | Op. 107 | - | - |  |
| Pixis | - | - | - | Op. 68 | - |  |
| Kuhlau | - | Op. 7 | - | - | - |  |
| Czerny | - | - | $\begin{aligned} & \text { Op. 153; Op. } \\ & 214 \end{aligned}$ | - | - |  |
| Potter | - | - | - | No. 2; No. 3 | - |  |
| Moscheles | Op. 45 | Op. 58 (60) | Op. 64 | Op. 87 | - |  |
| Herz | Op. 34 | Op. 74; Op. 131 | Op. 87 | - 21 | - |  |
| Chopin | - | - | - | Op. 21 | - |  |
| Hiller | - | - | Op. 5 |  | - |  |
| Thalberg | - | Op | - | Op. 5 | - |  |
| Henselt | - | Op. 16 | Op | O | - |  |
| Bennett | - | - | Op. 9 | Op. 1; Op. 4 | - |  |
| Total: | 15 | $18$ | 15 | 10 | 5 |  |

Table 5
Chronological Distribution of Categories

| Years: | 1789-94 | 1795-99 | 1800-04 | 1805-09 | 1810-14 | 1815-19 | 1820-24 | 1825-29 | 1830-34 | 1835-39 | 1840-45 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category 1 l |  |  |  |  |  |  |  |  |  |  |  |
| Dussek: | Op. 14; Op. 15 |  | Op. 49 |  | Op. 70 |  |  |  |  |  |  |
| Steibelt: |  |  |  |  |  | No. 6; No. 7 |  |  |  |  |  |
| Cramer: |  |  | Op. 26 | Op. 38 |  |  | Op. 70 |  |  |  |  |
| Field: |  | No. 1 |  |  | No. 2; No. 4 |  | No. 7 |  |  |  |  |
| Moscheles: |  |  |  |  |  | Op. 45 |  |  |  |  |  |
| Herz: |  |  |  |  |  |  |  | Op. 34 |  |  |  |
| Category 2 |  |  |  |  |  |  |  |  |  |  |  |
| Dussek: | Op. 17 | C. 158 |  |  |  |  |  |  |  |  |  |
| Steibelt: |  | No. 1; No. 3 | No. 4; <br> No. 5 |  |  |  |  |  |  |  |  |
| Cramer: |  | Op. 10 |  |  | Op. 51 |  |  |  |  |  |  |
| Hummel: |  |  |  |  |  | Op. 85 |  |  |  |  |  |
| Field: |  |  |  |  | No. 3 |  |  |  |  |  |  |
| Kalkbrenner: |  |  |  |  |  |  | Op. 61 | Op. 80 |  |  |  |
| Kuhlau: |  |  |  |  | Op. 7 |  |  |  |  |  |  |
| Moscheles: |  |  |  |  |  |  | Op. 58 |  |  |  |  |
| Herz: |  |  |  |  |  |  |  |  | Op. 74 |  | Op. 131 |
| Henselt: |  |  |  |  |  |  |  |  |  |  | Op. 16 |
| Ries: |  |  |  |  | Op. 55 |  |  |  |  |  |  |
| Category 3 ( ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |
| Beethoven: |  |  | Op. 37 |  |  |  |  |  |  |  |  |
| Cramer: |  | Op. 16 |  |  | Op. 48 |  |  |  |  |  |  |
| Hummel: |  |  |  |  |  | $\text { Op. } 89$ |  |  |  |  |  |
| Ries: |  |  |  | Op. 115 |  | $\text { Op. } 120$ | Op. 132 | Op. 177 |  |  |  |
| Kalkbrenner: |  |  |  |  |  |  |  | Op. 170 |  |  |  |
| Czerny: |  |  |  |  |  |  |  | Op. 153; Op. 214 |  |  |  |
| Moscheles: |  |  |  |  |  |  | Op. 64 |  |  |  |  |
| Herz: |  |  |  |  |  |  |  |  |  | Op . 87 |  |
| Hiller: |  |  |  |  |  |  |  |  |  | Op. 5 |  |
| Bennett: |  |  |  |  |  |  |  |  | Op. 9 |  |  |
| Category 4 |  |  |  |  |  |  |  |  |  |  |  |
| Hummel: |  |  |  |  |  | Op. 73** |  |  |  |  |  |
| Ries: |  |  |  |  |  |  |  |  |  |  |  |
| Pixis: |  |  |  |  |  |  |  |  | $\text { Op. } 68$ |  |  |
| Potter: |  |  |  |  |  |  |  |  | No. 2; No. 3 |  |  |
| Moscheles: |  |  |  |  |  |  |  | Op. 87 |  |  |  |
| Chopin: |  |  |  |  |  |  |  | Op. 21 |  |  |  |
| Thalberg: |  |  |  |  |  |  |  |  | Op. 5 |  |  |
| Bennett: |  |  |  |  |  |  |  |  | Op. 1; Op. 4 |  |  |
| Category 5 (e) |  |  |  |  |  |  |  |  |  |  |  |
| Beethoven: |  | Op. 15; Op. 19 |  | Op. 58 |  |  |  |  |  |  |  |
| Ries: |  |  |  | Op. 42; Op. 123 |  |  |  |  |  |  |  |

Table 6
Category totals by time period

| Years: | 1789-94 | 1795-99 | 1800-04 | 1805-09 | 1810-14 | 1815-19 | 1820-24 | 1825-29 | 1830-34 | 1835-39 | 1840-45 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category 1 | 2 | 1 | 2 | 1 | 3 | 3 | 2 | 1 | - | - | - |
| Category 2 | 1 | 4 | 2 | - | 4 | 1 | 2 | 1 | 1 | - | 2 |
| Category 3 | - | 1 | 1 | 1 | 1 | 2 | 2 | 4 | 1 | 2 | - |
| Category 4 | - | - | - | - | - | 1 | - | 2 | 7 | - | - |
| Category 5 | - | 2 | - | 3 | - | - | - | - | - | - | - |

## Table 7

Geographical Distribution of Categories

| Category: | 1 | 2 | 3 | 4 | 5 | Totals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bonn | - | - | - | - | Beethoven (Op. 19) | 1 |
| Copenhagen | - | $\begin{aligned} & \text { Kuhlau } \\ & \text { (Op. 7) } \end{aligned}$ | - | - | - | 1 |
| Frankfurt | - | - | - | Ries <br> (Op. 151) | - | 1 |
| Godesberg | - | - | Ries (Op. 177) | - | - | 1 |
| Hamburg | Dussek <br> (Op. 49) | - | - | - | - | 1 |
| London | Dussek <br> (Op. 14, 15) <br> Field <br> (No. 1) <br> Cramer <br> (Op. 26, Op. 38, Op. 70) | Dussek <br> (Op. 17, C.158) <br> Steibelt <br> (No. 3, No. 4, No. 5) <br> Cramer <br> (Op. 10, Op. 51) <br> Kalkbrenner <br> (Op. 61) | Cramer <br> (Op. 16, Op. 48) <br> Ries <br> (Op. 120, Op. 132) <br> Bennett <br> (Op. 9) | Potter <br> (No. 2, No. 3) <br> Moscheles <br> (Op.87) <br> Bennett <br> (Op. 1, Op. 4) | - | 24 |
| Moscow | Field <br> (No. 2, No. 7) | Field (No. 3) | - | - | - | 3 |
| Paris | Dussek <br> (Op. 70) <br> Herz <br> (Op. 34) | Steibelt <br> (No. 1) <br> Kalkbrenner <br> (Op. 80) <br> Herz <br> (Op. 74, Op. 131) | Kalkbrenner <br> (Op. 107) <br> Herz <br> (Op. 87) <br> Hiller <br> (Op. 5) | Pixis (Op. 68) | Ries (Op. 123)? | 12 |
| Stuttgart | - | Hummel (Op. 85)? | - | Hummel <br> (Op. 73)? | - | 2 |
| St Petersburg | Steibelt <br> (No. 6, No. 7) <br> Field <br> (No. 4) | Henselt <br> (Op. 16) <br> Ries <br> (Op. 55) |  | (0p | - | 5 |
| Vienna | Moscheles <br> (Op. 45) | Moscheles <br> (Op. 58)? | Beethoven <br> (Op. 37) <br> Ries <br> (Op. 115) <br> Czerny <br> (Op. 153, Op. 214) <br> Moscheles <br> (Op. 64)? | Thalberg (Op. 5) | Beethoven <br> (Op. 15, Op. 19, Op. 58) <br> Ries <br> (Op. 42) | 12 |
| Warsaw | - | - | - | Chopin <br> (Op. 21) | - | 1 |
| Weimar | - | - | Hummel (Op. 89) | - | - | 1 |

Table 8
Dussek, Op. 14/i, R1

| Bars: | 1 | 24 | 38 | 46 | 73 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Inter-thematic functions: | A | TR | B | RT | $\mathrm{A}^{1}$ |
| Intra-thematic functions: | antecedent + consequent | statement+response + continuation $+\mathrm{HC}+$ standing on V | antecedent+ consequent | statement + response + continuation $+\mathrm{HC}+$ standing on $\mathrm{V}+$ fill | statement+response+ continuation+cadence+ codetta |
| Key: | I |  | V | $\rightarrow$ | I |
| Cadence: | I:HC; I:PAC | I:HC MC | V:HC; V: PAC | I:HC (MC effect) | I:PAC |

Table 9
Dussek, Op. 15/i, R1

| Bars: | 1 | 12 | 24 | 40 | 50 | 57 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inter-thematic functions: | A | TR | B | RT | $\mathrm{A}^{1}$ | C |
| Intra-thematic functions: | $\begin{aligned} & \text { b.i. }+ \text { c.i. (DC)+c.i. } \\ & \text { (PAC) } \end{aligned}$ | statement + response + continuation + fragmentation + cadence | c.b.i. + continuation +HC ; statement+response + continuation + PAC | statement + response ${ }^{+}$ continuation + standing on V | b.i.+c.i. | cadence of limited scope $+\%$; codetta |
| Key: | I |  | V | $\rightarrow$ | I |  |
| Cadence: | I:DC; I:PAC | I:HC MC | V:HC; V:PAC | I:HC (MC effect) | I:PAC |  |

Table 10
Dussek, Op. 49/i, R1

| Bars: | 1 | 25 | 60 | 74 | 97 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Inter-thematic functions: | A | TR | B | RT | $\mathrm{A}^{1}$ |
| Intrathematic functions: | antecedent + consequent + extension | Model-sequencefragmentation+standing on V+fill | b.i.+c.i.+extension | Model-sequence (loose)fragmentation $+\mathrm{HC}+$ standing on $\mathrm{V}+$ fill | consequent+extension |
| Key: | i | $\rightarrow$ | III | $\rightarrow$ | I |
| Cadence: | i:PAC | III:HC MC | III:PAC | i:HC (MC effect) | i:PAC (elided with solo entry) |

Table 11
Cramer, Op. 26/i, R1

| Bars: | 1 | 17 | 41 | 60 | 64 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Inter-thematic functions: | A | TR | B | RT | A |
| Intra-thematic functions: | statement+response | $\begin{aligned} & \text { presentation+model-sequence } \\ & \text { +standing on V } \\ & + \text { HC }+ \text { fill } \end{aligned}$ | antecedent + consequent + expansion | standing on V | Statement + response + continuation+HC+ standing on V |
| Key: | I | $\rightarrow$ | V | $\rightarrow$ | I |
| Cadence: | no cadence! | V:HC MC | evaded $\times 2$ |  | no cadence! <br> (solo entry resolves V with I) |

Table 12
Steibelt, Concerto No. 1/i, R1

| Bars: | 1 | 16 | 50 | 65 | 69 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Inter-thematic functions: | A | TR | B | RT | C |
| Intra-thematic functions: | antecedent+consequent | statement+repetition; <br> standing on I; <br> model-sequence +HC ; <br> standing on $\mathrm{V}+$ digression +HC | antecedent+consequent | standing on V | ECP+extension |
| Key: | I | $\rightarrow$ | V | $\rightarrow$ | I |
| Cadence: | I:HC; I:PAC | V :HC MC | V:HC; V:PAC |  | I:PAC |

Table 13
Kuhlau, Concerto Op. 7/i, R1

| Bars: | 1 | 33 | 58 | 73 | 80 | 92 | 100 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inter-thematic functions: | A | TR | B | RT | C1 | C2 | C3 |
| Intra-thematic functions: | sentence $+\%$ | model+sequence+ <br> fragmentation + digression $+\mathrm{HC}+$ standing on V | c.b.i.+consequent +continuation+ cadence | standing on V | model+sequence + fragmentation + cadence | c.b.i. + continuation+ cadence | b.i.+continuation+ cadence (A-based) |
| Key: | I | $\rightarrow$ | V | $\rightarrow$ | I |  |  |
| Cadence: | I:PAC | V :HC MC | V :PAC |  | I:PAC | I:PAC | I:PAC |

Table 14
Hummel, Op. 85/i, R1

| Bars: | 1 | 20 | 48 | 72 | 99 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Interthematic functions: | A | TR | B | RT | C |
| Intrathematic functions: | statement(c.b.i.)+response + <br> continuation ('x') <br> +cadence | statement+response + continuation+ cadence+ standing on V | $\begin{aligned} & \text { statement (c.b.i.)+ } \\ & \text { response; } \\ & \text { statement(c.b.i.)+ } \\ & \text { response }+ \\ & \text { continuation ('x') } \\ & \text { +cadence } \end{aligned}$ | statement $+\%$ +cadence + <br> standing on V ; <br> statement $+\%+$ <br> continuation + <br> cadence | cadence of limited scope $+\%+$ codetta (overlapped with S1 solo entry) |
| Key: | i | $\rightarrow$ | III | $\rightarrow$ | i |
| Cadence: | i:PAC | III:HC MC | III:PAC | i:HC; i:PAC |  |

Table 15
Thalberg, Op. 5/i, R1

| Bars: | 1 | 15 | 27 | 42 | 46 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Interthematic functions: | A | TR | B | RT (TR-based) |  |
| Intrathematic functions: | antecedent + consequent + standing on V | statement+response + caesura fill | c.b.i. + consequent+continuation+cadence | model+sequence+halfcadence | Standing on V |
| Key: | i | $\rightarrow$ | III | $\rightarrow$ | V/i |
| Cadence: | i:PAC | III:HC MC | III:PAC | i:HC |  |

Table 16
Steibelt, Concerto No. 2/i, R1

| Bars: | 1 | 14 | 27 | 35 | 54 | 66 | 76 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interthematic functions: | A | TR | B1 | RT | B2 | C |  |
| Intrathematic functions: | antecedent + continuation + cadence | statement $+\%+$ <br> continuation+ <br> cadence+standing on V | antecedent+consequent | model+sequence+ continuation+cadence + standing on V | c.b.i. + continuation + cadence | statement $+\%$ + continuation + cadence+ | codetta |
| Key: | i |  | III | $\rightarrow$ | I | i |  |
| Cadence: | i:PAC | i:HC MC | III:PAC | i:HC MC | I:PAC (EEC?) | i:PAC |  |

Table 17
Beethoven, Piano Concerto No. 4/i, R1


Table 18
Beethoven, Piano Concerto No. 4/i, S1 and R2

| Bars: | 74-89 ${ }^{1}$ | 89-118 | 119-134 ${ }^{1}$ | 134-156 | 157-169 | 170-173 | 174-187 ${ }^{1}$ | 188-192 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Large-scale function 1: | S1 |  |  |  |  |  | R2 |  |
| Large-scale function 2: | Exposition 2 |  |  |  |  |  |  |  |
| Inter-thematic grouping 1: | A | TR | B |  |  |  |  | C |
| Inter-thematic grouping 2: |  |  | B1 | B2 (R1 B) | $\mathrm{B}^{\text {C }}$ | $\%$ |  |  |
| Tonal plot: | I | $\rightarrow$ | V | v | V |  |  |  |
| Cadence: | I:PAC | V : HC MC | V :PAC |  | $\mathrm{V}^{4-2} / \mathrm{V}$ |  | V :IAC (EEC) |  |

