

**AN EXPLORATION OF THE KEY CHARACTERISTICS IN  
BEETHOVEN'S PIANO SONATAS  
AND SELECTED INSTRUMENTAL REPERTOIRE**

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## Table of contents

List of musical examples	iii
List of tables	xi
Abstract	xii
Preface	xiii
Acknowledgments	xv
Chapter one: Overview of the key characteristics	1
1.0 Introduction	1
1.1 Historical tracing	2
1.2 Beethoven and the key characteristics	6
1.3 Relevant literature	13
1.4 Summary	16
Chapter two: Methodology	18
2.1 Multiple components	18
2.2 Tuning	22
2.3 Texture	24
2.4 Context	29
2.5 Predicaments	30
2.6 Praxes	33
2.7 Examination process	36
2.8 Summary	40
Chapter three: Beethoven's key characteristics	41
3.1 The keys	41
C major	41
<i>a</i> minor	51
D major	56
E <sup>b</sup> major	64
<i>c</i> minor	73
E major	80



c# minor	86
F major	90
d minor	98
F# major	106
G major	108
e minor	113
A <sup>b</sup> major	117
f minor	123
A major	130
f# minor	137
B <sup>b</sup> major	139
g minor	149
B major	154
D <sup>b</sup> major	156
b <sup>b</sup> minor	158
a <sup>b</sup> minor	160
Chapter four: Critical findings	162
Conclusion	168
Appendices	170
Bibliography	172

## List of musical examples

### Chapter Two

Example 2.1	Symphony no.5 in c minor op.67, fourth movement, bars 1-9	25
Example 2.2	Piano sonata op.31 no.2 in d minor, third movement, bars 43-47	26
Example 2.3	Piano sonata op.27 no.2 in c# minor, second movement, bars 1-8	26
Example 2.4	Piano sonata op.57 in C major, first movement, bars 109-113	26
Example 2.5	Piano sonata op.101 in A major, first movement, bars 1-4	27
Example 2.6	Piano sonata op.111 in c minor, first movement, bars 1-9	27
Example 2.7	Piano sonata op.27 no.2 in E $\flat$ major, second movement, bars 1-8	28
Example 2.8	32 Variations in C minor WoO 80, bars 1-8	28
Example 2.9	String quartet op.59 no.3 in C major, fourth movement, bars 1-32	29
Example 2.10	Piano sonata op.22 in B $\flat$ major, first movement, bars 1-3	31
Example 2.11	Piano sonata op.106 in B $\flat$ major, first movement, bars 1-4	31
Example 2.12	Violin sonata op.24 in F major, second movement, bars 1-8	31
Example 2.13	Piano sonata op.106 in B $\flat$ major, third movement, bars 14-15	32
Example 2.14	Piano sonata op.31 no.1 in G major, first movement, bars 1-11	32
Example 2.15	Piano sonata op.10 no.3 in D major, bars 1-4	37
Example 2.16	Piano sonata op.31 no.2 in d minor, bars 1-6	37

### Chapter Three

Example 3.1	Piano sonata op.2 no.3 in C major, first movement, bars 1-4	42
Example 3.2	Piano concerto op.15 in C major, first movement, bars 1-8	42
Example 3.3	Symphony no.1 in C major op.21, first movement, bars 13-22	43
Example 3.4	Triple concerto op.56 in C major, first movement, bars 1-10	43
Example 3.5	Piano sonata op.53 in C major, first movement, bars 1-7	43
Example 3.6	Piano sonata op.14 no.2 in G major, second movement, bars 1-4	44
Example 3.7	String quartet op.18 no.4 in c minor, second movement, bars 1-10	45
Example 3.8	Diabelli variations op.120, theme, bars 1-12	45
Example 3.9	Piano sonata op.2 no.3 in C major, fourth movement, bars 1-11	46
Example 3.10	Symphony no.1 in C major op.21, fourth movement, bars 6-14	46

Example 3.11	Piano concerto op.15 in C major, third movement, bars 1-6	46
Example 3.12	String quartet op.59 no.3, fourth movement, bars 1-8	46
Example 3.13	Piano sonata op.7 in E $\flat$ major, second movement, bars 1-8	47
Example 3.14	Violin sonata op.12 no.3 in E $\flat$ major, second movement, bars 1-8	47
Example 3.15	String quartet op.18 no.2 in G major, second movement, bars 1-10	47
Example 3.16	Piano sonata op.111 in c minor, second movement, bars 1-8	48
Example 3.17	Violin sonata no.4 in <i>a</i> minor op.23, first movement, bars 1-12	51
Example 3.18	Violin sonata no.9 in <i>a</i> minor op.47, first movement, bars 19-27	52
Example 3.19	Cello sonata no.3 in <i>a</i> minor op.69, second movement, bars 1-8	52
Example 3.20	Cello sonata no.4 in <i>a</i> minor op.102 no.1, first movement, bars 29-33	52
Example 3.21	Piano sonata op.101 in <i>a</i> minor, third movement, bars 1-4	53
Example 3.22	Symphony no.7 in A major op.92, second movement, bars 1-13	53
Example 3.23	String quartet op.59 no.3 in C major, second movement, bars 1-5	54
Example 3.24	Piano sonata op.31 no.2 in d minor, first movement, bars 41-45	54
Example 3.25	String quartet op.132 in <i>a</i> minor, fifth movement, bars 1-9	54
Example 3.26	Piano sonata op.10 no.3 in D major, first movement, bars 1-4	56
Example 3.27	Violin sonata op.12 no.1 in D major, first movement, bars 1-5	57
Example 3.28	Piano trio op.70 no.1 in D major, first movement, bars 1-5	57
Example 3.29	Cello sonata no.5 in D major op.102 no.2, first movement, bars 1-2	57
Example 3.30	Piano sonata op.10 no.3 in D major, fourth movement, bars 1-4	58
Example 3.31	String quartet op.18 no.3 in D major, fourth movement, bars 1-8	58
Example 3.32	Symphony no.2 in D major op.36, fourth movement, bars 1-6	58
Example 3.33	Cello sonata no.5 in D major op.102 no.2, fourth movement, bars 1-4	58
Example 3.34	Piano sonata op.28 in D major, first movement, bars 1-10	59
Example 3.35	Violin sonata no.8 in G major op.30 no.3, first movement, bars 67-75	59
Example 3.36	Piano concerto no.4 in G major op.58, third movement, bars 72-82	59
Example 3.37	Symphony no.7 in A major op.92, third movement, bars 149-156	60
Example 3.38	Violin concerto in D major op.61, first movement, bars 2-9	60
Example 3.39	String quartet op.18 no.3 in D major, first movement, bars 1-10	60
Example 3.40	Violin sonata op.30 no.1 in A major, second movement, bars 1-8	61
Example 3.41	String quartet op.95 in f minor, second movement, bars 5-10	61
Example 3.42	Piano sonata op.2 no.2 in A major, second movement, bars 1-3	61
Example 3.43	Piano trio op.97 in B $\flat$ major, third movement, bars 1-8	61

Example 3.44	Piano sonata op.7 in E $\flat$ major, first movement, bars 1-6	65
Example 3.45	'Eroica' variations op.35 in E $\flat$ major, bars 1-9 & 66-73	65
Example 3.46	Symphony no.3 in E $\flat$ major op.55, first movement, bars 1-6	65
Example 3.47	Piano sonata op.110 in A $\flat$ major, first movement, bars 20-21 & 28-30	66
Example 3.48	Piano concerto no.5 in E $\flat$ major op.73, third movement, bars 1-4	66
Example 3.49	Piano trio op.70 no.2 in E $\flat$ major, fourth movement, bars 1-2	67
Example 3.50	Piano trio op.70 no.2 in E $\flat$ major, first movement, bars 1-2	67
Example 3.51	Piano sonata op.27 no.1 in E $\flat$ major, fourth movement, bars 1-2	67
Example 3.52	Violin sonata op.12 no.3 in E $\flat$ major, third movement, bars 1-4	67
Example 3.53	Piano sonata op.31 no.3 in E $\flat$ major, fourth movement, bars 1-4	68
Example 3.54	Symphony no.3 in E $\flat$ major op.55, first movement, bars 3-6	68
Example 3.55	Piano trio op.1 no.1 in E $\flat$ major, first movement, bar 1	68
Example 3.56	Piano trio op.1 no.1 in E $\flat$ major, fourth movement, bars 1-4	68
Example 3.57	Violin sonata op.12 no.3 in E $\flat$ major, first movement, bars 1-2	69
Example 3.58	String quartet op.74 in E $\flat$ major, first movement, bars 1-2	69
Example 3.59	Piano concerto no.5 in E $\flat$ major op.73, third movement, bars 1-4	69
Example 3.60	Piano sonata op.81a in E $\flat$ major, third movement, bars 11-12	69
Example 3.61	String quartet op.18 no.6 in B $\flat$ major, second movement, bars 1-2	69
Example 3.62	Violin sonata no.10 in G major op.96, second movement, bars 1-4	70
Example 3.63	Piano trio op.1 no.3 in c minor, second movement, bars 1-8	70
Example 3.64	Piano trio op.1 no.3 in c minor, first movement, bars 1-10	74
Example 3.65	Piano sonata op.10 no.1 in c minor, third movement, bars 14-16	74
Example 3.66	Piano sonata op.13 in c minor, first movement, bar 10	74
Example 3.67	String quartet op.18 no.4 in c minor, fourth movement, bars 9-12	75
Example 3.68	Piano concerto no.3 in c minor op.37, third movement, bars 24-26	75
Example 3.69	Symphony no.5 in c minor op.67, first movement, bars 1-5	75
Example 3.70	Piano sonata op.111 in c minor, first movement, bars 19-20	75
Example 3.71	Piano sonata op.10 no.1 in c minor, third movement, bar 1	75
Example 3.72	Violin sonata op.30 no.2 in c minor, fourth movement, bars 1-3	76
Example 3.73	Piano concerto no.3 in c minor op.37, first movement, bars 1-4	76
Example 3.74	Symphony no.3 in E $\flat$ major op.55, second movement, bars 1-2	76

Example 3.75	Symphony no.5 in c minor op.67, first movement, bars 1-2	76
Example 3.76	Piano sonata op.111 in c minor, first movement, bars 19-20	76
Example 3.77	Piano sonata op.10 no.1 in c minor, third movement, bar 1	77
Example 3.78	String quartet op.18 no.4 in c minor, fourth movement, bars 1-4	77
Example 3.79	Violin sonata op.30 no.2 in c minor, fourth movement, bars 1-3	77
Example 3.80	Piano concerto no.3 in c minor op.37, third movement, bars 1-3	77
Example 3.81	Piano trio op.1 no.3 in c minor, first movement, bars 7-10	78
Example 3.82	Piano concerto no.3 in c minor op.37, first movement, bars 1-4	78
Example 3.83	Piano sonata op.81a in E $\flat$ major, second movement, bars 1-4	78
Example 3.84	Piano sonata op.37 in c minor, second movement, bars 1-4	81
Example 3.85	Piano sonata op.109 in E major, second movement, bars 1-4	81
Example 3.86	Piano sonata op.2 no.3 in C major, second movement, bars 1-2	82
Example 3.87	Piano sonata op.14 no.1 in E major, first movement, bars 1-3	82
Example 3.88	Piano sonata op.14 no.1 in E major, third movement, bars 1-3	83
Example 3.89	Piano sonata op.53 in C major, first movement, bars 35-38	84
Example 3.90	Violin sonata op.47 in A, first movement, bars 91-94	84
Example 3.91	Piano sonata op.27 no.2 in c $\sharp$ minor, first movement, bars 5-7	86
Example 3.92	Piano sonata op.27 no.2 in c $\sharp$ minor, third movement, bars 1-2	87
Example 3.93	String quartet op.131 in c $\sharp$ minor, first movement, bars 1-4	88
Example 3.94	String quartet op.131 in c $\sharp$ minor, seventh movement, bars 1-8	88
Example 3.95	Piano sonata op.10 no.1 in F major, first movement, bars 1-8	91
Example 3.96	String quartet op.18 no.1 in F major, first movement, bars 1-8	91
Example 3.97	String quartet op.135 in F major, first movement, bars 1-7	91
Example 3.98	Violin sonata op.24 in F major, third movement, bars 9-12	91
Example 3.99	String quartet op.18 no.1 in F major, fourth movement, bars 9-18	92
Example 3.100	Piano sonata op.54 in F major, first movement, bars 1-4	92
Example 3.101	Symphony no.8 in F major op.93, fourth movement, bars 1-6	92
Example 3.102	String quartet op.135 in F major, first movement, bars 1-2	93
Example 3.103	Symphony no.8 in F major op.93, fourth movement, bars 1-6	93
Example 3.104	Symphony no.6 in F major op.68, third movement, bars 75-79 & 91-98	93
Example 3.105	Cello sonata no.1 in F major op.5 no.1, first movement, bars 1-4	94
Example 3.106	Violin sonata no.5 in F major op.24, first movement, bars 1-4	94

Example 3.107	Symphony no.6 in F major op.68, first movement, bars 1-4	95
Example 3.108	String quartet op.59 no.1 in F major, first movement, bars 1-4	95
Example 3.109	Piano sonata op.10 no.3 in D major, second movement, bars 1-10	98
Example 3.110	Piano sonata op.10 no.3 in D major, second movement, bars 81-87	99
Example 3.111	String quartet op.18 no.1 in F major, second movement, bars 1-5	99
Example 3.112	Piano trio op.70 no.1 in D major, second movement, bars 1-5	99
Example 3.113	Cello sonata no.5 in D major op.102 no.2, second movement, bars 1-10	100
Example 3.114	Piano sonata op.10 no.3 in D major, second movement, bars 75-87	101
Example 3.115	String quartet op.18 no.1 in F major, second movement, bars 101-109	101
Example 3.116	Piano sonata op.28 in D major, second movement, bars 89-99	102
Example 3.117	Piano trio op.70 no.1 in D major, second movement, bars 91-96	102
Example 3.118	Piano sonata op.31 no.2 in d minor, first movement, bars 21-24	103
Example 3.119	Violin sonata no. 8 in G major op.30 no.3, first movement, bars 50-53	104
Example 3.120	Piano sonata op.28 in D major, third movement, bars 95-100	104
Example 3.121	Piano sonata op.78 in F# major, first movement, bars 1-8	107
Example 3.122	Piano sonata op.78 in F# major, second movement, bars 1-14	107
Example 3.123	Piano sonata op.31 no.1 in G major, first movement, bars 1-11	109
Example 3.124	Piano trio op.1 no.2 in G major, fourth movement, bars 1-8	109
Example 3.125	Piano sonata op.14 no.2 in G major, first movement, bars 1-8	110
Example 3.126	Piano sonata op.14 no.2 in G major, second movement, bars 1-4	110
Example 3.127	Piano concerto no.4 in G major op.58, second movement, bars 1-9	113
Example 3.128	Piano concerto no.4 in G major op.58, second movement, bars 64-72	114
Example 3.129	Piano sonata op.90 in e minor, first movement, bars 1-15	114
Example 3.130	String quartet op.59 no.2 in e minor, first movement, bars 1-8	115
Example 3.131	Piano sonata op.13 in c minor op.13, second movement, bars 1-4	118
Example 3.132	Piano sonata op.27 no.1 in E $\flat$ major, third movement, bars 1-4	118
Example 3.133	Triple concerto op.56 in C major, second movement, bars 1-4	119
Example 3.134	Piano concerto no.1 in C major op.15, second movement, bars 1-4	119
Example 3.135	Violin sonata op.30 no.2 in c minor, second movement, bars 1-5	119

Example 3.136	Piano sonata op.110 in A $\flat$ major, first movement, bars 1-4	119
Example 3.137	Piano sonata op.13 in c minor op.13, second movement, bars 51-54	120
Example 3.138	Piano sonata op.27 no.1 in E $\flat$ major, third movement, bars 17-18	120
Example 3.139	Triple concerto op.56 in C major, second movement, bars 25-27	120
Example 3.140	Piano concerto no.1 in C major op.15, second movement, bars 67-69	120
Example 3.141	Violin sonata op.30 no.2 in c minor, second movement, bars 61-63	120
Example 3.142	Piano sonata op.110 in A $\flat$ major, first movement, bars 56-57	121
Example 3.143	Piano sonata op.2 no.1 in f minor, first movement, bars 20-22	124
Example 3.144	Piano sonata op.57 in f minor, first movement, bars 1-8	124
Example 3.145	String quartet op.95 in f minor, first movement, bars 1-9	125
Example 3.146	Piano sonata op.2 no.1 in f minor, first movement, bars 1-2 & 21-22	125
Example 3.147	Piano sonata op.57 in f minor, first movement, bars 1-2 & 36	125
Example 3.148	Piano sonata op.57 in f minor, third movement, bars 1-4	126
Example 3.149	String quartet op.95 in f minor, fourth movement, bars 8-9	126
Example 3.150	String quartet op.59 no.1 in F major, third movement, bars 1-4	127
Example 3.151	Symphony no.3 in E $\flat$ major op.55, second movement, bars 115-118	127
Example 3.152	String quartet op.95 in f minor, first movement, bars 140-142	127
Example 3.153	Violin sonata op.12 no.1 in D major, second movement, bars 1-8	130
Example 3.154	Piano sonata op.2 no.2 in A major, third movement, bar 1-2	130
Example 3.155	Violin sonata op.12 no.2 in A major, first movement, bars 1-4	131
Example 3.156	Violin sonata op.23 in A major, second movement, bars 1-4	131
Example 3.157	Cello sonata no.3 in A major op.69, fourth movement, bars 1-4	131
Example 3.158	String quartet op.18 no.5 in A major, fourth movement, bars 1-6	131
Example 3.159	Violin sonata no.6 in A major op.30 no.1, third movement, bars 1-8	131
Example 3.160	Piano sonata op.2 no.2 in A major, first movement, bars 1-8	132
Example 3.161	String quartet op.18 no.5 in A major, first movement, bars 1-11	133
Example 3.162	Symphony no.7 in A major op.92, first movement, bars 67-70	133
Example 3.163	Violin sonata op.12 no.1 in D major, second movement, bars 1-2	134

Example 3.164	Violin sonata no.6 in A major op.30 no.1, third movement, bars 1-2	134
Example 3.165	Symphony no.2 in D major op.36, second movement, bars 1-2	134
Example 3.166	Violin sonata op.12 no.2 in A major, third movement, bar 1	134
Example 3.167	Piano sonata op.106 in B $\flat$ major, third movement, bars 1-9	137
Example 3.168	Piano sonata op.106 in B $\flat$ major, third movement, bars 14-16	138
Example 3.169	Piano sonata op.106 in B $\flat$ major, third movement, bar 165	138
Example 3.170	Piano sonata op.2 no.2 in A major, second movement, bars 22-28	138
Example 3.171	Piano sonata op.106 in B $\flat$ major, first movement, bars 1-8	140
Example 3.172	Piano concerto no.2 in B $\flat$ major op.19, first movement, bars 1-4	141
Example 3.173	Piano sonata op.22 in B $\flat$ major, first movement, bars 1-6	141
Example 3.174	Piano sonata op.7 in E $\flat$ major, first movement, bars 59-67 & 101-104	141
Example 3.175	Piano sonata op.81a in E $\flat$ major, first movement, bars 53-56 & 57-60	142
Example 3.176	Symphony no.9 in d minor op.125, first movement, bars 74-76 & 102-103	142
Example 3.177	Piano sonata op.22 in B $\flat$ major, first movement, bar 1	143
Example 3.178	String quartet op.18 no.6 in B $\flat$ major, first movement, bars 1-3	143
Example 3.179	Symphony no.4 in B $\flat$ major op.60, first movement, bars 43-47	143
Example 3.180	String quartet op.18 no.6 in B $\flat$ major, fourth movement, bars 1-2	143
Example 3.181	Piano concerto no.2 in B $\flat$ major op.19, third movement, bars 1-2	144
Example 3.182	Piano trio op.97 in B $\flat$ major, fourth movement, bars 1-6	144
Example 3.183	Symphony no.4 in B $\flat$ major op.60, fourth movement, bars 1-4	144
Example 3.184	Piano trio op.97 in B $\flat$ major, first movement, bars 1-4	145
Example 3.185	Symphony no.9 in d minor op.125, second movement, bars 3-4	145
Example 3.186	String quartet op.18 no.3 in D major, second movement, bars 1-4	146
Example 3.187	Piano sonata op.22 in B $\flat$ major, fourth movement, bars 1-4	146
Example 3.188	Symphony no.6 in F major op.68, second movement, bars 1-4	146
Example 3.189	Piano sonata op.31 no.2 in d minor, second movement, bars 1-5	147
Example 3.190	Violin sonata no. 5 in F major op.24, second movement, bars 1-8	147



Example 3.191	Piano sonata op.49 no.1 in g minor, first movement, bars 1-8	149
Example 3.192	Piano sonata op.79 in G major, second movement, bars 1-4	150
Example 3.193	Cello sonata op.5 no.2 in g minor, first movement, bars 1-5	150
Example 3.194	Cello sonata op.5 no.2 in g minor, first movement, bars 45-52	151
Example 3.195	Violin concerto op.61 in D major, first movement, bars 330-334	151
Example 3.196	Piano sonata op.110 in A $\flat$ major, third movement - second arioso, bars 1-3	152
Example 3.197	Piano concerto no.5 in E $\flat$ major op.73, second movement, bars 16-17	154
Example 3.198	Piano trio op.1 no.2 in G major, second movement, bars 26-29	155
Example 3.199	Piano sonata op.14 no.1 in E major, first movement, bars 22-26	155
Example 3.200	Piano sonata op.90 in e minor, second movement, bars 58-63	155
Example 3.201	Piano sonata op.101 in A major, second movement, bars 30-34	156
Example 3.202	String quartet op.135 in F major, third movement, bars 1-6	157
Example 3.203	Piano sonata op.106 in B $\flat$ major, second movement, bars 47-50	158
Example 3.204	Symphony no.4 in B $\flat$ major, first movement, bars 1-6	159
Example 3.205	Piano sonata op.110 in A $\flat$ major, third movement, bar 1-2	159
Example 3.206	Piano sonata op.110 in A $\flat$ major, third movement, bars 4-5	160
Example 3.207	Piano sonata op.110 in A $\flat$ major, third movement, bars 7-14	161

## List of tables

### Chapter Three

Table 3.1: C major	49
Table 3.2: <i>a</i> minor	55
Table 3.3: D major	62
Table 3.4: E <sub>b</sub> major	71
Table 3.5: <i>c</i> minor	79
Table 3.6: E major	85
Table 3.7: <i>c</i> # minor	89
Table 3.8: F major	96
Table 3.9: <i>d</i> minor	105
Table 3.10: G major	111
Table 3.11: <i>e</i> minor	116
Table 3.12: A <sub>b</sub> major	122
Table 3.13: <i>f</i> minor	129
Table 3.14: A major	135
Table 3.15: B <sub>b</sub> major	148
Table 3.16: <i>g</i> minor	153

## **Abstract**

Associating Beethoven and tonal affect has been an attractive scholarly practice for many generations. Although there seems to be a widespread acknowledgment about Beethoven's key symbolism, rarely do historians examine how his music reflects the several verbal characterisations attached to certain keys. The primary objective of this study will be an attempt to depict Beethoven's tonal ethos by focusing mostly on his piano sonatas, without excluding other important instrumental works. Prior to identifying tonal archetypes upon which he was composing, an exploration of the concept of key characteristics will be undertaken in order to build a framework which will be applied to the sonata cycle. Texture will be established as the only objective means of conveying the character of a key when dealing with untexted music. The importance of introducing multiple praxes for each key and distinguishing structural from affective thematic material will also be stressed. During the examination process, the categorisation of the sonatas according to the choice of key and their praxes will result in specific excerpts, which will be then compared with the intention to create groups based on textural signature behaviours. Finally, this study will also address how the knowledge of Beethoven's tonal approach can affect several interpretation decisions.

## Preface

This study has incorporated selected musical examples throughout, which have been taken from the digitalised version of Beethoven's Gesamtausgabe published by Breitkopf and Härtel; however, for a thorough understanding of the concept, it is advised that the musical scores be used in their entirety.

One of the biggest challenges of this study was to create summarising tables at the end of each section treating individual keys, in order to visually condense all of the material that had been previously examined. The reason for their creation was to invite the reader to personally experience Beethoven's tonal ethos by using the tables as a listening guide. The tables are constructed according to the following approach:

- The first row contains works composed in the key examined.
- The second row contains movements written in that key and shows how those movements are distributed according to their textural orientation/praxes.
- An occasional extra row contains specific excerpts within a movement.
- Finally, the last section takes the movements exemplified in the second row and presents them in a detailed manner by providing information about their tempo indication, time signature and primary keys used within that movement. Furthermore, the movements are grouped according to several signature behaviours identified during the examination process.

Additional information that will facilitate the understanding of the tables:

- A bold font is employed to indicate agreement between the home key of a work/movement and the key being examined. If the tonic key of the movement is different to the home key of the entire work, a regular font will be used. This

approach is also used for the list of works presented at the beginning of each key examination, which acts as a reference guide for each tonality.

- When a regular font is employed, the home key of the entire work is indicated in parentheses ( ).

- Square brackets [ ] are used to indicate a movement. However, in the main body of the thesis, a movement is symbolised by lower case roman numerals following the forward slash mark: for example, the first movement of op.10 no.3 will be referred to as op.10 no.3/i.

- Curly brackets { } are mostly utilised when referring to an excerpt of a movement and contain the structural orientation, as well as the exact bar numbering of that section

Some other abbreviations include:

vc	Cello
conc.	Concerto
dev.	Development
eps.	Episode
pf trio	Piano trio
str.qt.	String quartet
sbj.	Subject
sym.	Symphony
var.	Variations
vn	Violin

## Acknowledgments

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A massive thanks to my supervisor Dr. Denise Neary for her support and guidance during the preparation of this dissertation, to Dr. Philip Graydon, who as an interim supervisor provided great inspiration, to Philip Shields and Laoise Doherty in the Royal Irish Academy of Music library for their special assistance, and to Claudio Martinez Mehner whose educational approach to Beethoven’s op.110 implanted the idea for this study in the Autumn of 2007.

Most of all, I want to thank my family and especially my mother for her constant support and belief in me, and Katie, who has been there every step of the way with love and encouragement.

To my family

# CHAPTER ONE

## OVERVIEW OF THE KEY CHARACTERISTICS

### 1.0 INTRODUCTION

The concept of key characteristics has been synonymous with one of the longest lasting controversies in music history. Scholars have called it ‘incomprehensible’,<sup>1</sup> ‘an important yet inevitably vexing topic’,<sup>2</sup> ‘highly subjective’,<sup>3</sup> an ‘unceasable problem’,<sup>4</sup> and ‘the obscurest in the whole of musicography’;<sup>5</sup> over the course of history numerous people have expressed their opinions about it. While the ‘believers’, in their attempt to explain the cause of the phenomenon, attributed its existence to several physical and psychological factors, the ‘doubters’ dismissed the whole concept as being fictional.<sup>6</sup> Géza Révész states: ‘we must rid ourselves of this illusion and trace key identification, or the perception of transposition, within broad limits and without absolute pitch, to musical memory only’,<sup>7</sup> whereas Donald Tovey declares: ‘the first thing the general reader needs to know about tonality is that the names of keys do not represent important aesthetic facts’.<sup>8</sup> The fact, however, that it has

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<sup>1</sup> Karol Berger, Review: ‘A History of Key Characteristics in the Eighteenth and Early Nineteenth Centuries by Rita Steblin’, *Music & Letters* 66 (1985), 391.

<sup>2</sup> John D. Arnn, Review: ‘A History of Key Characteristics in the Eighteenth and Early Nineteenth Centuries by Rita Steblin’, *Notes* 40 (1983), 287.

<sup>3</sup> Géza Révész, *Introduction to the Psychology of Music* (New York: Dover Publications, 2001), 114.

<sup>4</sup> Franck Wolf, Review: ‘Der Charakter der Tonarten. Eine Untersuchung by Paul Mies’, *Journal of the American Musicological Society* 2 (1949), 116.

<sup>5</sup> Hans Keller, ‘Key Characteristics’, *Tempo* 40 (1956), 5.

<sup>6</sup> Rita Steblin, in reference to the development of tonal symbolism, distinguishes the ‘believers’ from the ‘doubters’ in her book *A History of Key Characteristics in the Eighteenth and early Nineteenth centuries* (Ann Arbor, Mich.: UMI Research Press, 1983), 9-10.

<sup>7</sup> Révész, *Introduction to the Psychology of Music*, 122.

<sup>8</sup> Donald F. Tovey, *Beethoven* (London: Oxford University Press, 1945), 8.



occupied some of the brightest minds in the history of the humanities for almost two and a half thousand years, undoubtedly classifies the subject as scholarly credible.

What is it that makes tonal affectionism so controversial? Do keys have certain characters embedded in them, regardless of the context in which they are presented? How can the knowledge of tonal symbolism affect music interpretations? What was Beethoven's view of the concept? These will be some of the questions that this study will be addressing.

## 1.1 HISTORICAL TRACING

The general belief in individual key meanings was a continuation of one of the oldest musical traditions, which amazingly survived the most drastic changes from the ancient system of *tonoi*, through the medieval system of modes to the modern system of keys.<sup>9</sup>

It was only relatively recently that Rita Steblin became the first person to categorise all of the vast material related to the key characteristics with her exhaustive and greatly informative research, which now serves as a major reference.<sup>10</sup> Prior to Steblin's book, the writings of Mattheson and Schubart in the eighteenth century, along with other studies connecting tonality and meaning to the music of Mozart,<sup>11</sup>

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<sup>9</sup> Karol Berger, Review: *A History of Key Characteristics*, 390.

<sup>10</sup> Rita Steblin, *A History of Key Characteristics in the Eighteenth and early Nineteenth centuries* (Ann Arbor, Mich.: UMI Research Press, 1983).

<sup>11</sup> An analytical list of material connecting Mozart and tonal affect can be found in Mark Anson-Cartwright, 'Chromatic Features of E $\flat$ -Major Works of the Classical Period', *Music Theory Spectrum* 22 (2000), 177.

had led even eminent scholars to misplace the emergence of tonal symbolism during the Baroque period and the doctrine of affections.<sup>12</sup>

However, it is now clear that the concept of key characteristics can be traced back to the ancient Greeks and their doctrine of ethos, according to which music could affect a person's general being: the mind, soul and body. Aristotle in the 'Politics' highlights:

But melodies themselves do contain imitations of character. This is perfectly clear, for the *harmoniai* [melodic style/key] have quite distinct natures from one another, so that those who hear them are differently affected and do not respond in the same way to each. To some, such as the one called Mixolydian, they respond with more grief and anxiety, to others, such as the relaxed *harmoniai*, with more mellowness of mind, and to one another with a special degree of moderation and firmness, Dorian being apparently the only one of the *harmoniai* to have this effect, while Phrygian creates ecstatic excitement ... it is clear that music is capable of creating a particular quality of character in the soul, and if it can do that, it is plain that it should be made use of, and that the young should be educated in it.<sup>13</sup>

So strong was the belief in the power of music, that Plato had forbidden certain *harmoniai* from being a part of what was thought to be a good education: 'These [Mixolydian and Lydian], then ... we must do away with. For they are useless even to women who are to make the best of themselves, let to men'.<sup>14</sup> It is worth noting that even then, there were conflicting interpretations.<sup>15</sup>

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<sup>12</sup> Barry Cooper mistakenly traced the roots of key characteristics back to Johann Mattheson. *The Beethoven Compendium: a Guide to Beethoven's Life and Music* (New York: Thames and Hudson, 1992), 81.

<sup>13</sup> Andrew Barker, *Greek Musical Writings: The musician and his Art* (Cambridge: Cambridge University Press, 1984) i, 175-176.

<sup>14</sup> Steblin, *A History of Key Characteristics*, 13.

<sup>15</sup> With regard to the Phrygian key, Plato associates it with the work of peace and the prayer heard by the gods, whereas Aristotle describes it as violently exciting and emotional. Steblin, *A History of Key Characteristics*, 16-17.

According to Otto Gombosi, contrary to popular belief, ‘the Greeks knew no *modes*’, but instead had species that derived from their keys ‘from the transpositions of one and the same tonal organization to different pitch levels’, pointing out the primary importance that pitch had on the character of a key.<sup>16</sup> The Greek didactics influenced generations of scholars over the years and managed to survive the transition from modality to tonality, despite the fact that they underwent a series of misinterpretations, leading to the unfortunate merging of their species with the church modes.<sup>17</sup>

The doctrine of ethos found a strong supporter in the writings of one of the most prominent ‘believers’ of tonal symbolism, Johann Mattheson.<sup>18</sup> Mattheson became notorious for his views on the key characters through his treatises *Das neu-eröffnete Orchestre* in 1713 and *Exemplarische Organisten-Probe* in 1719.<sup>19</sup> In spite of his decisiveness on the topic, he finishes his first treatise by admitting its subjective nature: ‘The opinions on this subject are almost countless and I do not know of any other reason for this than the difference in human temperaments’, which could perhaps justify some contradictory comments apparent in his second treatise.<sup>20</sup>

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<sup>16</sup> Species, or octave species, are defined as ‘the different octave segments of a diatonic system ... or rather ... the different intervallic sequences of an octave’. Otto Gombosi, ‘Key, Mode, Species’, *Journal of the American Musicological Society* 4 (1951), 20-24.

<sup>17</sup> Steblin, *A History of Key Characteristics*, 19.

<sup>18</sup> Johann Mattheson (1681-1764) was a German critic, theorist and composer, mostly known for his books and treatises which offered valuable information on the state of German music at the time. Wendy Thompson, Lalage Cochrane, ‘Mattheson, Johann’ in *The Oxford Companion to Music*. *Oxford Music Online*. <<http://www.oxfordmusiconline.com/subscriber/article/opr/t114/e4286>> [accessed 9 May 2013].

<sup>19</sup> Johann Mattheson, *Das neu-eröffnete Orchestre* (Hamburg: der Autor und Benjamin Schillers Wittwe, 1713); *Exemplarische Organisten-Probe* (Hamburg: Schiller & Kießner, 1719).

<sup>20</sup> For instance, E $\flat$  was transformed from ‘pathetique’, ‘serious’ and ‘plaintive’ in 1713, to ‘beautiful’, ‘majestic’ and ‘honest’ in 1719; similarly B minor and A major were viewed differently in 1719 than they were in 1713. Steblin, *A History of Key Characteristics*, 51.

Perhaps the most influential treatise on tonal affect was written by Christian F. D. Schubart<sup>21</sup> and was published by his son in 1806.<sup>22</sup> His analytical, vivid, and at times romantic depictions of the keys did not go unnoticed by Beethoven, and allegedly had a crucial effect on Schumann's development as a composer.<sup>23</sup> Similarly to Mattheson, Schubart had strong views about the topic: 'In short, the musical expression is so precisely determined by means of all keys that, although philosophical critics have not yet given it much importance, it nevertheless far surpasses poetical and pictorial expression in its [capacity for] precision'.<sup>24</sup> Nevertheless, he also allowed for a certain amount of freedom: 'it is the duty for every composer to study closely the characteristics of his keys and only adopt those which are sympathetic to him'.<sup>25</sup>

Schubart marks the epitome of the increased awareness in key symbolism during the eighteenth century. After his *Ideen zu einer Ästhetik der Tonkunst* no other contribution managed to surpass Schubart's influential power; quoting the past was rather fashionable, possibly suggesting that the highest point in tonal affect had come, and passed. Perhaps that was an inevitable outcome from the increasing adoption of equal temperament, which by the mid-nineteenth century had become a standardised practice.<sup>26</sup>

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<sup>21</sup> Christian Friedrich Daniel Schubart (1739-1791) was a German organist, composer and poet. He spent ten years in prison, from 1777 until 1787, ostensibly for insulting a duke's mistress but most likely for 'free-thinking' writings. 'Schubart, Christian Friedrich Daniel' in *The Oxford Dictionary of Music*. *Oxford Music Online*.  
<<http://www.oxfordmusiconline.com/subscriber/article/opr/t237/e9141>> [accessed 9 May 2013].

<sup>22</sup> Christian Friedrich Daniel Schubart, *Ideen zu einer Ästhetik der Tonkunst*, ed. Ludwig Schubart (Vienna: Degen, 1806).

<sup>23</sup> Julia Perrey Beate, *Schumann's Dichterliebe and Early Romantic Poetics: Fragmentation of Desire* (Cambridge: Cambridge University Press, 2002), 53.

<sup>24</sup> Steblin, *A History of Key Characteristics*, 126.

<sup>25</sup> *Ibid.*, 125.

<sup>26</sup> How unequal temperament affected the characters of the keys will be examined in detail in chapter two.

In the more recent past, Leonard Ratkin's innovative theory of musical topics categorised the music of the classic period not through its techniques of musical construction, but through ideas and figures of expression.<sup>27</sup> This influential approach reinforces the concept of key characteristics, given that tonal affectionism advocates the suitability of certain keys for particular expressive associations.<sup>28</sup>

## 1.2 BEETHOVEN AND THE KEY CHARACTERISTICS

The fact that Ludwig van Beethoven believed in the individuality of the keys can be firmly established via several routes. Apart from the numerous anecdotal stories, the plausibility of which is at times questionable, there is also factual evidence proving directly, or indirectly, Beethoven's belief on the affective powers of the keys. Furthermore, a nexus between Beethoven and most of the relevant contemporary theoretical treatises can be drawn, illustrating his deep knowledge of the subject.

### Factual evidence

In a letter to George Thompson, his Scottish publisher, Beethoven wrote:

The last two songs in your letter of December 21, pleased me very much. For this reason I composed them con amore, particularly the second one. You noted it in [four flats] but this key seems a little too natural and so little in harmony with the direction Amoroso that it might rather become Barbaresco, I have set it in a more appropriate key.<sup>29</sup>

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<sup>27</sup> Some of the styles included as topics of expressions include the 'pastoral', the 'dance', the 'brilliant', the 'heroic', the 'hunt', the 'military', the 'fantasia', the 'singing', the 'strict' and the 'free'. Leonard G. Ratner, *Classic Music: Expression, Form, and Style* (New York: Schirmer Books, 1980).

<sup>28</sup> For example, in the music of Beethoven the 'pastoral' topic is best exhibited in the keys of D and F major (see ch.3, 56, 90), the 'military' in the keys of C and B $\flat$  major (see ch.3, 41, 139) and the 'heroic' in E $\flat$  major and c minor (see ch.3, 64, 73).

<sup>29</sup> Letter of 19 February 1813 from Beethoven to George Thompson in Emily Anderson (ed. and trans.), *The Letters of Beethoven* (3 vols, London: Macmillan, 1961), i, 405-406.

This letter demonstrates Beethoven's preference of another key over A $\flat$  major for works with *con amore* indications, while suggesting A $\flat$  to be barbaric.<sup>30</sup> According to Martin Paul Ellison, Barry Cooper has identified the song that Beethoven was referring to as 'Judy, Lovely, Matchless Creature' from Twenty Irish Songs, WoO 53, marked *Andantino amoroso*, and written in B $\flat$  major.<sup>31</sup> This development clearly indicates B $\flat$  major to be a loving key for Beethoven.

Beethoven was also unequivocal when it came to instrumental arrangements, possibly due to the transpositional process they can incur:

The unnatural mania, now so prevalent, for transferring even pianoforte compositions to stringed instruments, instruments which in all respects are so utterly different from one another, should really be checked. I firmly maintain that only *Mozart* could arrange for other instruments the works he composed for the pianoforte; ... one must either be the composer himself or at any rate possess the same skill and inventiveness – I have arranged only one of my sonatas for string quartet, because I was so earnestly implored to do so; and I am quite convinced that nobody else could do the same thing with ease.<sup>32</sup>

Perhaps the strongest indication of Beethoven's tonal ethos comes from the back of a sketch for his cello sonata op.102 no.2, where he marked: 'h moll schwarze tonart',<sup>33</sup>

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<sup>30</sup> Today the word 'barbaric' is mostly associated with 'savagely cruel', or 'exceedingly brutal'.

However, when looking at Beethoven's A $\flat$  works, it is more likely that 'barbaresco' was used by the composer to indicate a 'foreign entity', which is how the word was used in ancient Greece and how the Oxford English Dictionary defines it. 'Barbaric', in *Oxford English Dictionary Online*. <<http://www.oed.com/view/Entry/15384>> [accessed 9 May 2013].

<sup>31</sup> Barry Cooper, *Beethoven's Folksong Settings* (Oxford: Clarendon Press, 1994), 20-21. Quoted in Paul Martin Ellison, 'The Key to Beethoven: Connecting Tonality and Meaning in his Music' (PhD dissertation, Cardiff University, 2010), 49.

<sup>32</sup> Letter of 13 July 1802 from Beethoven to Breitkopf & Härtel in Emily Anderson, *The Letters of Beethoven*, i, 74-75. The string quartet in question is listed under Hess 34, a listing published by Willy Hess that includes pieces not under the nineteenth century Beethoven Gesamtausgabe (Complete Edition). Note that the quartet derived from the piano sonata op.14 no.1 in E major, but it was transposed to F major, a detail which will be examined further in chapter two.

<sup>33</sup> 'h moll schwarze tonart': 'B minor black or dark key'. Leo Treitler, *Music and the Historical Imagination* (Cambridge, Mass.: Harvard University Press, 1989), 65.

justifying the clear absence of B minor in his compositional output.<sup>34</sup> Similarly, ‘crucifixus in # Ton’<sup>35</sup> appears in another sketch, this time for *Missa Solemnis*, which implies ‘if not tonal affect, tonal symbolism’.<sup>36</sup> Warren Kirkendale associates a similar interest in notation symbolism in the ‘Egmont’ overture where Beethoven wrote ‘death could be expressed by a rest’ in relation to the death of Clärchen.<sup>37</sup> Thereby, it is no coincidence that his ‘Pastoral’ Symphony marks: ‘Mehr Ausdruck der Empfindung als Malerei’.<sup>38</sup>

The study of Beethoven’s sketchbooks can lead to further useful conclusions regarding his compositional process. Barry Cooper points out that very often thematic elements were subsidised by words indicating the key in which they should be written, for example ‘erster Theil in B’.<sup>39</sup> Furthermore, Cooper, in relation to the key choice of a slow sonata movement, highlights:

Beethoven thought of subsidiary keys in terms of the work as a whole, and so the keys of middle movements were liable to be interchanged with each other or with subsidiary keys in the first movement. Thus in the sonata in D minor, Op. 31 No. 2, B flat was originally considered as a key for the second subject of the first movement, but was eventually used for the slow movement instead.<sup>40</sup>

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<sup>34</sup> The sole exception is the B minor Bagatelle op.126 no.4 and the ‘Agnus Dei’ from *Missa Solemnis* op.123.

<sup>35</sup> Warren Kirkendale, ‘New Roads to Old Ideas in Beethoven’s “Missa Solemnis”’, *The Musical Quarterly* 56 (1970), 680.

<sup>36</sup> Bruce E. Clausen, ‘Beethoven and the Psyches of the Keys’ (PhD dissertation, University of Southern California, 1988), 17.

<sup>37</sup> Kirkendale, ‘New Roads to Old Ideas in Beethoven’s “Missa Solemnis”’, 681.

<sup>38</sup> ‘Mehr Ausdruck der Empfindung als Malerei’ translates as ‘more an expression of feeling than tone painting’.

<sup>39</sup> This was an indication of the exposition having to end in B♭. Barry Cooper, *Beethoven and the Creative Process* (Oxford: Clarendon Press, 1990), 125.

<sup>40</sup> *Ibid.*, 123.

Beethoven's frequent indecisiveness is also reflected in his own words: 'I must accustom myself to think out at once the whole, as soon as it shows itself, with all the voices, in my head'.<sup>41</sup>

Finally, as will be seen in chapter three, Beethoven treated certain keys with a signature textural behaviour and particular tonal schemes. For example, D major works very often start with unison octaves and frequently feature a harmonic polarity between D major and d minor.

### Anecdotal stories

Most of the anecdotal stories regarding Beethoven's tonal affectionism come from Anton Schindler, whose viewpoints have to be treated with certain scepticism. However, the frequent references to the topic add some validity to his descriptions. As William S. Newman states: 'Because Schindler explored the whole man and explored much deeper, his must be adjudged the most important contribution by the three contemporaries ... No discussion of Beethoven performance practices is likely to be complete without reference to Schindler.'<sup>42</sup>

Johann Baptiste Schenk, who aided Beethoven in 1793 with his counterpoint and composition exercises, describes a meeting with the maestro in 1792:<sup>43</sup>

Having struck a few chords and tossed off a few figures as if they were of no significance, the creative genius gradually unveiled his profoundly psychological pictures. My ear was continually charmed by the beauty of the many and varied motives which he wove with

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<sup>41</sup> Friedrich Kerst, *Beethoven, the Man and the Artist, as revealed in his own words* (New York: Dover Publications, 1964), 39.

<sup>42</sup> William S. Newman, *Performance Practices in Beethoven's Piano Sonatas* (London: J. M. Dent & Sons Ltd., 1972), 30.

<sup>43</sup> Schenk's narration of events contain a possible amount of exaggeration according to Elliot Forbes. Alexander Thayer, *The life of Beethoven*, rev. Elliot Forbes, ed. Ian Curteis (London: The Folio Society, 2001), 55.



wonderful clarity and loveliness into each other, and I surrendered my heart to the impressions made upon it while he gave himself wholly up to his creative imagination, and anon, leaving the field of mere tonal charm, boldly stormed the most distant keys in order to give expression to violent passions.<sup>44</sup>

An interesting association between D $\flat$  and *maestoso* can be drawn from Beethoven's conversations with Friedrich Johann Rochlitz, an eminent musical *littérateur* of the time: 'He [Klopstock] hops about so from pillar to post; and he always begins altogether too much from top to bottom. Always *maestoso* and in D-flat major! Is it not so? Yet he is lofty and uplifts the soul'.<sup>45</sup> Although Beethoven does not explicitly make this connection, he implies that the character of D $\flat$  is majestic and that it 'uplifts the soul'.<sup>46</sup> In another anecdotal story, Michael Tusa describes how Beethoven, in his encounter with a flattened *fortepiano*, instantly transposed a semi-tone higher the piano part of his F major Horn sonata op.17 while playing with Friedrich Starke, so that he would not ruin the effect of the piece.<sup>47</sup>

Schindler devotes an entire chapter advocating Beethoven's belief on the power of keys. He begins by arguing that Beethoven 'was in awe of what the genius of his great predecessors, Gluck, Haydn, and Mozart, had accomplished in the use of tonal colouring to characterise their works'.<sup>48</sup> Later on, he describes the infamous arguments Beethoven had with Friedrich August Kanne on the subject:

You say it doesn't matter whether a song is in F minor, E minor, or G minor; I call that as nonsensical as saying that two times two are five. When I make Pizarro sing in harsh keys

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<sup>44</sup> Ibid., 56.

<sup>45</sup> Ibid., 439.

<sup>46</sup> A more detailed examination of the connection between D $\flat$  and *maestoso* will be seen in chapter three.

<sup>47</sup> Michael C. Tusa, 'Beethoven's C-minor mood: Some Thoughts on the Structural Implications of Key Choice', *Beethoven Forum* 2 (1993), 4.

<sup>48</sup> Anton Schindler, *Beethoven as I knew him* (Chapel Hill: University of North Carolina Press, 1966), 367.

(even in G sharp major) when he makes his heinous accusations of Florestan to the jailer, I do it to convey the nature of this individual, which is fully revealed in his duet with Rocco. These keys give me the best colours with which to express his character.<sup>49</sup>

Intriguingly, a few years later, Robert Schumann in his *Neue Zeitschrift für Musik*<sup>50</sup> commented: ‘Simple feelings require simple keys. Complex ones require those that rarely meet the ear’.<sup>51</sup>

Schindler also claimed that Beethoven’s hearing was so well developed that he could distinguish C sharp major from its enharmonic D flat major through the difference between the hard and soft soundings in retrospective.<sup>52</sup> This comment finds Beethoven congruent with the contemporary popular sharp/flat principle affiliated with the key characteristics, according to which:

the strength, brightness, gaiety, liveliness, wildness, brilliance and even harshness of a key increased with the growing number of sharps in the key signature, and the reverse, its weakness, somberness, sadness, heaviness, tenderness, melancholy, softness and expressiveness, grew with the number of flats.<sup>53</sup>

Interestingly, Schindler also reveals Beethoven’s thought towards Schubart:

He would, however, applaud loudly the learned Schubart for his observations on the characters of the various keys, even though he was not always in full agreement ... he held Schubart’s book in such high regard that he recommended its careful study to those already far advanced in their musical training.<sup>54</sup>

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<sup>49</sup> Ibid., 369.

<sup>50</sup> *Neue Zeitschrift für Musik* was a music magazine published in Leipzig, co-founded by Robert Schumann, his teacher and future father-in-law Friedrich Wieck and his close friend Ludwig Schuncke. Its first issue appeared on 3 April 1834.

<sup>51</sup> Robert Schumann, ‘Charakteristik der Tonleitern und Tonarten’, *Neue Zeitschrift für Musik* 2 (1835), 43-44. Quoted in Perrey, *Schumann’s Dichterliebe*, 145.

<sup>52</sup> Schindler, *Beethoven as I knew him*, 368.

<sup>53</sup> Berger, Review: ‘A History of Key Characteristics’, 388.

<sup>54</sup> Schindler, *Beethoven as I knew him*, 367.

Finally, he concludes with a rather vivid statement: ‘To deny without reason the special character of the different keys was to Beethoven like denying the effect of the sun and the moon on the ebb and flow of the tides.’<sup>55</sup>

### Beethoven and treatises<sup>56</sup>

It has been established that Beethoven owned a copy of Mattheson’s *Der vollkommene Capellmeister*.<sup>57</sup> Although in this treatise Mattheson only makes occasional references to the qualities of the keys ‘each of which exhibits its special and unique nature’,<sup>58</sup> he does refer to his earlier works and therefore, considering his reputation, it is safe to infer that Beethoven was knowledgeable of his previous publications. Richard Kramer also highlights Beethoven’s awareness of Johann Philipp Kirnberger’s ‘Die Kunst des reinen Satzes in der Musik’.<sup>59</sup> In that document, Kirnberger, a former student of J. S. Bach, defended unequal temperament and its potential towards the character of the keys in a long controversy with Friedrich Wilhelm Marpurg, which continued well into the nineteenth century by their loyal supporters.<sup>60</sup> Unfortunately, as seen earlier with regard to Schubart, the only direct reference relating his treatise to Beethoven, comes from Schindler. However, regardless of what Beethoven’s personal opinion was towards it, it is unlikely that Schindler would have fabricated the composer’s acquaintance with ‘Ideen zu einer Ästhetik der Tonkunst’.

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<sup>55</sup> Ibid., 369.

<sup>56</sup> A list with several treatises relevant to key symbolism can be found in Appendix A, 170.

<sup>57</sup> Richard Kramer, ‘Notes to Beethoven’s Education’, *Journal of the American Musicology Society* 28 (1975), 92; Johann Mattheson, *Der vollkommene Capellmeister* (Hamburg: Christian Herold, 1739).

<sup>58</sup> Johann Mattheson, *Der vollkommene Capellmeister*, rev. and tran. Ernest Charles Harriss (Ann Arbor, Mich.: UMI Research Press, 1981), 187.

<sup>59</sup> Kramer, ‘Notes to Beethoven’s Education’, 97.

<sup>60</sup> Steblin, *A History of Key Characteristics*, 79. A similar argument took place in France a few years earlier between Jean Rousseau and Jean-Philippe Rameau, with the latter passionately advocating equal temperament and the former defending it, in order to preserve the individual qualities of the keys.

Kirkendale reveals how Beethoven consulted Gioseffo Zarlino's *Istitutioni Harmoniche* of 1558 while composing his *Missa Solemnis*.<sup>61</sup> Ellison also draws a connection between composer Justus Johannes Heinrich Ribock and Beethoven, through Carl Friedrich Cramer's *Magazin der Musik*.<sup>62</sup> Finally, after Beethoven's death, books of Justin Heinrich Knecht, Georg Joseph Vogler, Heinrich Christoph Koch, Danial Gottlob Türk and Josepsh Riepel were discovered in his modest library, all of whom wrote with varying degrees of enthusiasm about the affective qualities of the keys.<sup>63</sup>

Tusa observes that if there was one list of key characteristics that would effectively represent Beethoven's tonal perception, it would be the one of Francesco Galeazzi.<sup>64</sup> Nevertheless, a pursuit of that nature would be unfair to Beethoven's ingenuity. Although he did state that 'there is hardly a treatise which could be too learned for me',<sup>65</sup> it is unlikely that those treatises provided more than an initial incentive.

### 1.3 RELEVANT LITERATURE

The majority of literature specialising in Beethoven's music often draws connections between key and meaning.<sup>66</sup> Joseph Kerman seems intrigued by Beethoven's tonal ethos:

[Beethoven's] affection for this tonality in the early years amounted to a mania, one that was not really played out until the Sonata in C minor Op.111, in 1822 ... that has dated most decisively

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<sup>61</sup> Kirkendale, 'New Roads to Old Ideas in Beethoven's "Missa Solemnis"', 676-677.

<sup>62</sup> Ellison, 'The Key to Beethoven', 62-63, 65-66.

<sup>63</sup> Clausen, 'Beethoven and the Psyches of the Keys', 12.

<sup>64</sup> Tusa, 'Beethoven's C-minor mood', 4.

<sup>65</sup> Letter of 2 November 1809 from Beethoven to Breitkopf & Härtel in Emily Anderson, *The Letters of Beethoven*, i, 245-246.

<sup>66</sup> For example, Cooper sees a funeral nature to Beethoven's c minor, while Maynard Solomon sees a 'pathetic sentiment' that unravels later on into heroism. Barry Cooper, *Beethoven*, (Oxford: Oxford University Press, 2000), 7; Maynard Solomon, *Beethoven* (London: Cassell, 1978), 136, 262.

and dishearteningly over the years. Even Tovey saw through it, reluctantly. In this familiar emotional posture, Beethoven seems to be an unknowing prisoner of some conventional image of passion, rather his own passion's master.<sup>67</sup>

Moreover, Leo Treitler highlights that 'Beethoven composes with keys, as a playwright with characters and plots', which perhaps constitutes the most explicit relevant comment made by a musicologist.<sup>68</sup> However, any similar suggestions are rarely combined with an exploration of how their comment is reflected through the music. In fact, none of Beethoven's recent biographies exploit the fact that the composer had his own tonal perception.<sup>69</sup> Nonetheless, there seems to be a widespread acknowledgement about Beethoven's key symbolism, with a few exceptions such as Donald Tovey, who somehow chose to disregard it.<sup>70</sup>

Two attempts to examine Beethoven's music in relation to key affectionism were made by Michael C. Tusa and Mark Anson-Cartwright.<sup>71</sup> Tusa examined all of Beethoven's early C minor works, drew connections to the C minor ones of Mozart, and through a traditional analytical approach, demonstrated how the key in question was 'not just a "mood" but also a well-defined complex of compositional devices'.<sup>72</sup> Similarly, Anson-Cartwright highlights how Haydn, Mozart and Beethoven were all using E $\flat$  major as a compositional device to incorporate chromatic features into their works.

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<sup>67</sup> Joseph Kerman, *The Beethoven Quartets* (New York: W. W. Norton & Company, 1979), 70.

<sup>68</sup> Treitler, *Music and the Historical Imagination*, 66.

<sup>69</sup> William Kinderman, *Beethoven* (Oxford: Oxford University Press, 2<sup>nd</sup> edn 2009); Barry Cooper, *Beethoven* (Oxford: Oxford University Press, 2000); Lewis Lockwood, *Beethoven: the Music and the Life* (New York: W. W. Norton & Company, 2003); Maynard Solomon, *Beethoven* (London: Cassell, 1978).

<sup>70</sup> See 1, fn. 8.

<sup>71</sup> Michael C. Tusa, 'Beethoven's C-minor mood: Some Thoughts on the Structural Implications of Key Choice', *Beethoven Forum* 2 (1993), 1-27; Mark Anson-Cartwright, 'Chromatic Features of E $\flat$ -Major Works of the Classical Period', *Music Theory Spectrum* 22 (2000), 177-204.

<sup>72</sup> Tusa, 'Beethoven's C-minor mood', 6.

Barry Cooper is another musicologist who acknowledged the importance of key to Beethoven.<sup>73</sup> Although he does not make explicit references to the music, through his deep, analytical study of Beethoven's sketchbooks, he authoritatively proves his key fixation.

Eleven of the first twelve piano sonatas published were in different keys; the first seven symphonies were all in different keys, and the first to reuse a key, the Eighth, had begun as a piano concerto (in a different key from each of the five previous piano concertos) ... Beethoven frequently produced instrumental works in a group of three, all in the same genre. In these cases not only did he customarily compose the three in different keys, but he also tried to maximize the contrast between the keys: no two pieces in the group should have either the same keynote or the same key signature; there should be at least one flat key and at least one sharp key; and one of the three should be in a minor key.<sup>74</sup>

One of the first attempts to incorporate specific musical excerpts music into the concept of key characteristics was made by Paul Mies.<sup>75</sup> Mies was the first to talk about a 'consistent, safe and objective' body of research material,<sup>76</sup> an approach which will be partly adopted by the present study. Although Mies acknowledges that previous researchers based their findings on a vast body of material coming from all composers, he himself ended up with a plethora of compositions and styles by Bach, Clementi, Hummel, Beethoven, Chopin and Brahms. Furthermore, although he declares that 'universal [key] characters' do not exist, he attempts to produce key definitions applicable to more than one composer.<sup>77</sup> His decision to deal with cyclical works organised by key seems appropriate at first, but proves to be fallacious since he assumes that the presence of a piece in a key rarely used qualifies as an accurate

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<sup>73</sup> Cooper, *Beethoven and the Creative Process* (Oxford: Clarendon Press, 1990).

<sup>74</sup> *Ibid.*, 121-122.

<sup>75</sup> Paul Mies, *Der Charakter der Tonarten: Eine Untersuchung* (Cologne and Krefeld: Staufien, 1948).

<sup>76</sup> Steblin, *A History of Key Characteristics*, 8.

<sup>77</sup> *Ibid.*, 9.

representation of its qualities. As seen earlier, a conscious choice not to compose in a certain key can sometimes be an even more powerful means of communication.<sup>78</sup>

Martin Paul Ellison has recently written one of the most thorough studies on the subject with his detailed approach to Beethoven's vocal music, combined with an effective use of literary resources.<sup>79</sup> During his musical analysis, he introduces useful principles such as 'praxes', 'affective' and 'structural' modulations but he solely relies on the text of the vocal repertoire to establish congruency between key and meaning, without considering the textural, or structural orientation of the section he is examining. Furthermore, he feels the necessity to justify Beethoven's key choices by matching them to contemporary lists of key characteristics instead of using the texture to discover Beethoven's inner personal thoughts towards tonal affectionism.

#### 1.4 SUMMARY

The eighteenth century marks an unquestionable increase of interest in the concept of key characteristics, a practice that originated in ancient Greece. The influential treatises of Mattheson and Schubart direct the musical focus at the beginning of the nineteenth century, making Beethoven, who wrote 'what he wanted and when he wanted',<sup>80</sup> as the ideal composer to explore how the music was affected by the numerous contemporary opinions at a time when unequal temperament was still predominant.<sup>81</sup> Most Beethoven scholars silently concur that the composer believed in the affective powers of the keys, something that can be reaffirmed through factual

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<sup>78</sup> With regard to Beethoven and B minor, see 7.

<sup>79</sup> Paul Martin Ellison, 'The Key to Beethoven: Connecting Tonality and Meaning in his Music' (PhD dissertation, Cardiff University, 2010).

<sup>80</sup> Cooper, *Beethoven and the Creative Process*, 28.

<sup>81</sup> The tuning system of Beethoven's time will be examined in detail in chapter two.

evidence, numerous anecdotal stories, and his deep knowledge of the subject. However, the examination of his music with relevance to tonal affect is somehow infrequent. The few attempts made in the recent past focused mainly on his vocal music, where text was used as a guide to decodify his tonal intentions.

Through a systemised framework, this study will attempt to provide a journey through Beethoven's instrumental repertoire, less vulnerable to pitfalls than its predecessors, in order to define his tonal archetypes. During this journey, works for the pianoforte will be given preference as they are the safest to examine, due to the instrument's non-existent physical limitations,<sup>82</sup> and the sonata cycle will be designated as the ideal composition, considering the sophistication of the genre and the fact that it spread over his entire lifetime.

Clearly in no form of instrumental music is there better opportunity than in the sonata to depict feelings without words. The sonata ... assumes all characters and every [kind of] expression. By [means of] the sonata the composer can hope to produce a monologue through tones of melancholy, grief, sorrow, tenderness, or delight and joy; or maintain a sensitive dialogue solely through impassionate tones of similar or different qualities; or simply depict emotions [that are] violent, impetuous, and [sharply] contrasted, or light, gentle, fluent, and pleasing.<sup>83</sup>

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<sup>82</sup> More details about instrumental limitations will be presented in chapter two.

<sup>83</sup> Johann Georg Sulzer, *Allgemeine Theorie der schonen Kunste* (Leipzig: Weidmann, 1773-1775); quoted in William S. Newmann, *The Sonata in the Classical Era* (New York: W. W. Norton & Company, 3<sup>rd</sup> edn 1983), 23.



## CHAPTER TWO

### METHODOLOGY

#### Introduction

This chapter will establish the framework upon which Beethoven's *oeuvre* will be examined while providing an overall approach to the concept of key characteristics.

#### 2.1 MULTIPLE COMPONENTS

When trying to identify the character of a key, several components that constitute the formation of its nature should be acknowledged. This fusion of elements is comprised of several layers ranging from the simple aspects of historical background, familiarity, instrumental properties, timbre and orchestration to the complex concepts of tuning, texture, context, and distinguishing the affective from the structural material.

#### Historical background

With varying degrees of importance, there are numerous extramusical factors that can influence the conception of a composer. In the case of Beethoven, he is seen as the first composer to promote the life style of an independent creative artist, free from patronage. Although he rarely composed under commission, according to Barry Cooper, Beethoven felt that 'his artistic goals would have been better served if he had not had to bear in mind financial constraints'.<sup>1</sup> On one occasion, probable

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<sup>1</sup> Barry Cooper, *Beethoven and the Creative Process* (Oxford: Clarendon Press, 1990), 40.

financial burdens forced him to go against his instincts and arrange his op.14 no.1 piano sonata for a string quartet.<sup>2</sup>

There were times, albeit not often, when certain works were written to suit the needs and style of a particular performer. In a letter to Archduke Rudolph regarding his last violin sonata, Beethoven wrote: ‘in view of Rode’s playing I have had to give more thought to the composition of this movement. In our Finales we like to have fairly noisy passages, but R [Pierre Rode] does not care for them – and so I have been rather hampered’.<sup>3</sup> Agreeably, the whole sonata has rather a gentle, lyrical character, which was perhaps intended to suit Pierre Rode’s style of playing.<sup>4</sup>

Beethoven’s love for nature and literature seem to have had a direct influence on at least two of his string quartets. Carl Czerny argues that the slow movement from op.59 no.2 is associated with starry skies and Karl Amenda has drawn a link between that of op.18 no.1 and Shakespeare’s *Romeo and Juliet*.<sup>5</sup> Other landmarks that had a significant impact on Beethoven’s output, at least on a subconscious level, include the acceptance of his loss of hearing, after which he allegedly entered his second/heroic period, and the custody of his nephew Karl, which resulted in more serene qualities and occasionally childlike naivety in his works.

Nonetheless, with regard to all of these life encounters, Cooper argues: ‘in many cases the extramusical idea probably provided no more than an initial stimulus for

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<sup>2</sup> See ch.1, 7, fn. 32.

<sup>3</sup> Letter of 29 December 1812 from Beethoven to the Archduke Rudolph in Emily Anderson (ed. and trans.), *The Letters of Beethoven* (3 vols, London: Macmillan, 1961), i, 391.

<sup>4</sup> Cooper, *Beethoven and the Creative Process*, 32.

<sup>5</sup> Alexander Thayer, *The Life of Beethoven*, rev. Elliot Forbes, ed. Ian Curteis (London: The Folio Society, 2001), 408-409; Lewis Lockwood, *Inside Beethoven’s Quartets: History, Interpretation, Performance* (Cambridge, Mass.: Harvard University Press, 2008) 23.

one musical idea rather than a definite programme for a whole work',<sup>6</sup> a statement congruent with Beethoven's 'Mehr Ausdruck der Empfindung als Malerei'.<sup>7</sup>

### Familiarity

Very often theorists, in their attempts to assign specific characteristics to a key, have tried to philosophise to a great extent, but as Géza Révész points out, their decisions could have been guided by conventional motives.<sup>8</sup> As Michael Tusa highlights:

How composers learned such affective associations is a matter for speculation, but I think it's probable that (in the nineteenth century at least) associations were developed more through familiarity with growing repertory of "classical" works than through the recommendations of theoretical treatises ... it seems clear enough that a priori associations of key with character were part of background of expectations, conventions, traditions, and individual works that informed the creation and reception of the new works in the nineteenth century.<sup>9</sup>

Mark Anson-Cartwright also argues:

Certain attributes of a key become recognizable only through repeated use by successive generations of composers. The darkness-to-light tradition in C-minor/major works, from the Depiction of Chaos in Haydn's *Creation* to Beethoven's Fifth Symphony and Brahms's First Symphony, is not an inherent aspect of C minor, but a characteristic we come to associate with that key as a result of its recurrence.<sup>10</sup>

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<sup>6</sup> Cooper, *Beethoven and the Creative Process*, 43

<sup>7</sup> Beethoven's subtitle to the 'Pastoral' Symphony marks 'Mehr Ausdruck der Empfindung als Malerei' translates as 'more an expression of feeling than tone painting'.

<sup>8</sup> Géza Révész, *Introduction to the Psychology of Music* (New York: Courier Dover Publications, 2001), 117.

<sup>9</sup> Michael C. Tusa, 'Beethoven's C-minor mood: Some Thoughts on the Structural Implications of Key Choice', *Beethoven Forum* 2 (1993), 2-3.

<sup>10</sup> Mark Anson-Cartwright, 'Chromatic Features of E<sub>b</sub>-Major Works of the Classical Period', *Music Theory Spectrum* 22 (2000), 179.

### Instrumental properties

While conceiving an instrumental work, composers are aware of the range limitations of the instruments for which they are writing.<sup>11</sup> As a result, in the seventeenth and early eighteenth century at least, they tried to work with keys that would feel comfortable to most musicians and assigned appropriate textures, according to registers that the instruments sound at their best. For example, the writing for string instruments is more typically in sharp keys, because of their convenience and the number of open strings that can be used in a given key, resulting in a bright and powerful sound.<sup>12</sup> Likewise, wind instruments tend to sound more brilliant in flat keys, unless they are in C.<sup>13</sup>

### Timbre

Another layer of complexity in the psyches of the keys comes from the individual timbre of each instrument. Generally, the string section provides the richest palette of colours with a variety of expressions:

The top string on the violin (E) is brilliant in character, that of the viola (A) is more biting in quality and slightly nasal; the highest string on the 'cello (A) is bright and possesses a “chest-voice” timbre. The A and D strings on the violin and the D string on the violas and 'cellos are somewhat sweeter and weaker in tone than the others. Covered strings (G), on the violin (G

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<sup>11</sup> One possible explanation for Beethoven's change of key from E to F major when arranging his piano sonata op.14 no.1 for a string quartet, could be to avail himself of the low C string of the cello. As William Drabkin points out, 'in the key of F, the open C is a dominant and can exert its full dynamic power easily and frequently'. William Drabkin, 'Beethoven and the Open String', *Music Analysis* 4 (1985), 22.

<sup>12</sup> According to Drabkin, composers in the Classical era were not interested in exploiting the timbral possibilities of the open strings and generally accepted Leopold Mozart's discouragement of their use. However, Drabkin's essay highlights Beethoven's increasing awareness of the importance of the low C in the cello and pinpoints how the composer used it as a compositional resource for some of his late string quartets. Drabkin, 'Beethoven and the Open String', 15-28.

<sup>13</sup> Intriguingly, out of one hundred and sixty four symphonies written by Haydn, Mozart, Beethoven and Schubert – including D.936a – only three are written in a key with more than three accidentals: two by Haydn – no.12, Hob.I:12 and no. 29, Hob.I:29, both in E major – and one by Schubert – D.729, also in E major. As for F# minor, it has been used only on one occasion, when Haydn composed his Symphony no.45, Hob.I:45, the so called 'Farewell' Symphony.

and C), on the viola and 'cello are rather harsh. Speaking generally, the double bass is equally resonant throughout, slightly duller on the two lower strings (E and A), and more penetrating on the upper ones (D and G).<sup>14</sup>

Woodwinds, due to their limited expressive capabilities, tend to be used appropriately in special occasions:

Flute: Cold in quality, specially suitable, in the major key, to melodies of light and graceful character; in the minor key, to slight touches of transient sorrow; Oboe: Artless and gay in the major, pathetic and sad in the minor; Clarinet: Pliable and expressive, suitable, in the major, to melodies of a joyful or contemplative character, or outbursts of mirth; in the minor, to sad and reflective melodies or impassioned and dramatic passages; Bassoon: In the major, an atmosphere of senile mockery; a sad, ailing quality in the minor.<sup>15</sup>

### Orchestration

When applying certain orchestration rules such as the doubling of the trumpets with the timpani, the inevitable combination in a forte dynamic marking would be a brilliant and triumphal effect regardless of the key in which it is presented:<sup>16</sup> 'the sense of majesty ... depends not only on key, but also on factors such as genre, topic ... and instrumentation (especially the use of trumpets and timpani)'.<sup>17</sup>

## 2.2 TUNING

Indisputably, one of the most crucial factors affecting the characters of the keys is tuning. More apparent in the keyboard instruments than the rest, the many irregular

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<sup>14</sup> Nikolay Rimsky-Korsakov, *Principles of orchestration, with musical examples drawn from his own works* (New York: Dover Publications, new edn 1964), 9.

<sup>15</sup> *Ibid*, 19.

<sup>16</sup> For example, Beethoven's fourth movement from the c minor symphony.

<sup>17</sup> Mark Anson-Cartwright, 'Chromatic Features of E $\flat$ -Major Works of the Classical Period', 178.

temperaments used in the eighteenth century favoured certain keys over others, as a result of the diverse size of semitones.

Bach's Well-Tempered Clavier ... wasn't even written for ET [equal temperament] but for an irregular temperament that worked in a wide variety of keys ... it's irregularity also meant that the flavour of the chords was slightly different in each key, and the character of each key was thus slightly different. It is no accident that this was the era when descriptions of key characteristics really came into their own.<sup>18</sup>

Although there is proof that equal temperament was endorsed as early as 1737 by Rameau in his 'Génération Harmonique', its practice remained in the theoretical spheres until the beginning of the nineteenth century. In 1802, Haydn included the marking of 'l'istesso tuono'<sup>19</sup> between an E $\flat$  and a D $\sharp$  in the first movement of the op.77 no.2 string quartet, asking for the cellist to play the same note.<sup>20</sup> This unusual indication not only demonstrates Haydn's awareness of the equal temperament, but also his expectations of an unequal interpretation. However, it seems that equal temperament did not make it to the modern pianoforte until the 1840s when Alfred Hipkins persuaded the Broadwood firm to tune their pianos with equal semitones.<sup>21</sup> Therefore, considering that there is no documented evidence of Beethoven's tuning expectations, it is safe to assume that he did not compose with equal temperament in mind, attributing most of his key characterisations to the many tuning systems of the era: 'it's difficult to see how Beethoven, in his deafness, could have "evolved" away

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<sup>18</sup> Ross W. Duffin, *How equal temperament ruined harmony (and why you should care)* (New York: W. W. Norton & Company, 2007), 44.

<sup>19</sup> Ibid, 84.

<sup>20</sup> Haydn's marking was omitted in later editions for obvious reasons.

<sup>21</sup> M. Lindley, 'Temperaments' in *Grove Music Online. Oxford Music Online.*

<<http://www.oxfordmusiconline.com/subscriber/article/grove/music/27643>> [accessed 15 March 2013].

from the standard tuning system of his first thirty years toward a new arrangement of tones and semitones'.<sup>22</sup>

### 2.3 TEXTURE

Texture is defined as 'the way in which individual parts or voices are put together, or to attributes such as tone colour or rhythm, or to characteristics of performance such as articulation and dynamic level'.<sup>23</sup>

In order to conceive the power of texture in the tonal perception of a key, an imaginative example will be presented. The fourth movement from Beethoven's c minor symphony is the incarnation of triumphal writing. All of the winds, with the exception of the contra-bassoons and the trombones, are playing in unison in *ff*, have fanfare textures, with the blasting sound of the trumpets and horns being doubled by the timpani, with an *Allegro* tempo marking and detached articulation (example 2.1).

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<sup>22</sup> Duffin, *How equal temperament ruined harmony*, 85.

<sup>23</sup> 'Texture' in *Grove Music Online. Oxford Music Online.*

<<http://www.oxfordmusiconline.com/subscriber/article/grove/music/27758>> [accessed 16 March 2013].

Example 2.1: Symphony no.5 in c minor op.67, fourth movement, bars 1-9:

The image shows a page of musical notation for the first nine bars of the fourth movement of Beethoven's Symphony No. 5 in C minor, Op. 67. The score is in 4/4 time and marked 'Allegro. sf = ff.' The music features a powerful, driving melody in the first violin and a complex, rhythmic accompaniment in the piano and other instruments. The score is written for a full orchestra, including strings, woodwinds, brass, and percussion. The notation includes various musical symbols such as notes, rests, and dynamic markings.

Imagining the same thematic material in the same key, played by a flute, accompanied by a harp, with an *andante* tempo marking and legato phrasing, in a *piano* dynamic, would result in a completely different piece. Similarly, a different effect would be created by applying staccato articulation with a *presto* tempo marking.

In addition to the elements of articulation, tempo and dynamic levels that are highlighted above, this study when referring to texture, will also incorporate other contributing factors to the tonal aestheticism of a section:



- 1) phrasing: a repetitive two note legato phrasing like the one of op.31 no.2/iii, creates greater unsettlement than would a large legato line of the same material (example 2.2).

Example 2.2: Piano sonata op.31 no.2 in d minor, third movement, bars 43-47:



- 2) register: material on the upper register generates a more ethereal feeling compared to the majestic one of the lower register (example 2.3 versus 2.4).

Example 2.3: Piano sonata op.27 no.2 in c# minor, second movement, bars 1-8:



Example 2.4: Piano sonata op.57 in C major, first movement, bars 109-113:



- 3) expression markings: a long descriptive title like ‘Etwas lebhaft, und mit der innigsten Empfindung’ in op.101/i, gives a strong indication of the content that is to follow (example 2.5).<sup>24</sup>

Example 2.5: Piano sonata op.101 in A major, first movement, bars 1-4:

*Etwas lebhaft, und mit der innigsten Empfindung.  
Allegretto, ma non troppo.*

Sonate N°28.

- 4) harmonic language: the use of a series of diminished intervals and chords in the opening of op.111 certainly creates an immediate sense of drama (example 2.6).

Example 2.6: Piano sonata op.111 in c minor, first movement, bars 1-9:

Componirt im Januar 1822.

Sonate N° 32.

Maestoso.

<sup>24</sup> ‘Etwas lebhaft, und mit der innigsten Empfindung’ translates as ‘Somewhat lively, and with innermost sensibility’.

- 5) melodic structure: the richness of non chord tones and melodic leaps of op.27 no.1/iii transform what would be a simple melody into an immensely expressive eight-bar phrase (example 2.7).

Example 2.7: Piano sonata op.27 no.2 in E $\flat$  major, second movement, bars 1-8:

**Adagio con espressione.**

- 6) rhythmic structure: taking out the dotted rhythms from the c minor variations theme would reduce the drama and the authoritative intensity would disappear (example 2.8).

Example 2.8: 32 Variations in c minor WoO 80, bars 1-8:

**TEMA.**  
**Allegretto.**

For all of the above reasons, this study will consider texture as the most reliable element to provide objective grounds to the study of key characteristics and one of the most fundamental factors that shapes the character of a key.

## 2.4 CONTEXT

### Preceding/Succeeding material

Looking back at example 2.1, the brilliance and effectiveness of the fourth movement is intensified by the presence of c minor beforehand. If the symphony's third movement was replaced by a similar texture to the one of the C major string quartet op.59 no.3/iv, then the symphony's triumphal arrival would not be as effective (example 2.9).

Example 2.9: String quartet op.59 no.3 in C major, fourth movement, bars 1-32:

Allegro molto.

*p*

*p*

*cre - scen - do poco a poco*

*cre - scen - do poco a poco*

*sempre più crescendo*

*sempre più crescendo*

*cresc poco a poco*

Therefore, in order to unravel the character of a key, very often the preceding and/or succeeding material has to be taken into consideration: 'It is important to determine whether a given passage is a complement to or a contrast with what goes before and

comes after, whether it forms a climax or merely a step in the general march of musical thought'.<sup>25</sup>

### Genre

Genre can also give a different dimension to the character of a key since our ears are tuned differently when listening to material that belongs to substantial genres like sonatas and symphonies, considering the amount of time and knowledge involved with the writing of it. Therefore this study will consider thematic material presented in a sonata/symphony of greater importance than that presented in miniature genres, like in a bagatelle, for instance, where the form can be more flexible and where the harmonic rules are not as strict.

## 2.5 PREDICAMENTS

### Multiple identities

As seen in chapter one,<sup>26</sup> one of the indications hinting at Beethoven's tonal affectionism, is his indirect characterisation of B $\flat$  as the key of *con amore*. However, when looking at the first movements in B $\flat$  of op.22 or op.106, the writing is far from affectionate (examples 2.10-2.11).

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<sup>25</sup> Rimsky-Korsakov, *Principles of Orchestration*, 98.

<sup>26</sup> See ch.1, 6.

Example 2.10: Piano sonata op.22 in B♭ major, first movement, bars 1-3:

**Sonate N°11.**

*Allegro con brio.*



Example 2.11: Piano sonata op.106 in B♭ major, first movement, bars 1-4:

**Sonate N° 29.**

*Allegro.*



Yet in other instances such as op.24/ii, B♭ does project strong amorous feelings (example 2.12).

Example 2.12: Violin sonata op.24 in F major, second movement, bars 1-8:

*Adagio molto espressivo.* (93)11



Incomparable material

Listening to bars 14-15 in op.106/iii, G major provides hope and liberates the ear from the preceding intensity of f# minor (example 2.13).

Example 2.13: Piano sonata op.106 in B $\flat$  major, third movement, bars 14-15:



However, op.31 no.1/i, also in G major, projects nothing but playfulness (example 2.14).

Example 2.14: Piano sonata op.31 no.1 in G major, first movement, bars 1-11:



Therefore, an important distinction has to be made as to whether a key will be examined locally within its movement, or overall within the entire sonata: ‘we need to make the distinction between the meaning of the key of a work as a whole and the

meaning of a key within a work or within a cycle of movements such as a sonata or opera'.<sup>27</sup>

## 2.6 PRAXES

The use of multiple key identities, along with the requisite to compare similar thematic material introduces the necessity to assign different praxes for each key.<sup>28</sup>

As a term, praxis (plural: praxes) comes from ancient Greece and is defined as 'the practice or exercise of a technical subject or art, as distinct from the theory of it'.<sup>29</sup>

For the purpose of this study, praxis will be used as a means of categorising the different textural orientations of a given key; for example the first praxis of C major, symbolised as C<sub>1</sub>, will include the slow and legato C major thematic material, whereas the second praxis, or C<sub>2</sub>, will include the fast and detached material.

### Affective vs. structural material<sup>30</sup>

The sonata, or any large scale work, contains a vast amount of thematic material in numerous keys that need to be hierarchised. Before trying to identify the character of a certain section, an important distinction has to be made as to whether that section contains affective or structural qualities. By nature, bridging and transitional

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<sup>27</sup> Karol Berger, Review: 'A History of Key Characteristics in the Eighteenth and Early Nineteenth Centuries by Rita Steblin', *Music & Letters* 66 (1985), 390.

<sup>28</sup> Paul M. Ellison was the first to introduce the concept of praxes in his thesis, but under a different context compared to the one of this study: his praxes result purely from the tonal aestheticism of the section examined, without being associated to the textural orientation. Paul Martin Ellison, 'The Key to Beethoven: Connecting Tonality and Meaning in his Music' (PhD dissertation, Cardiff University, 2010)

<sup>29</sup> 'Praxis' in *Oxford English Dictionary Online*. <<http://www.oed.com/view/Entry/149425>> [accessed 9 May 2013]

<sup>30</sup> As seen in chapter one, 16, Ellison makes a distinction between affective and structural modulations in chapter three of his dissertation, having to rely, however, on texted music in order to determine the type. This study focuses only on instrumental repertoire and therefore will assign affective material based purely on the textural and structural orientation of a given section.



sections, along with the coda, contain structural material. Similarly, the development is heavily modulated, usually with segments of material already presented in the exposition. Finally, the recapitulation is predictable, given that it obeys structural rules with regard to the choice of key. As a result, during this examination, all of the above sections will not be treated as primary sources for affective content.

This study will acknowledge thematic material as being affective, and therefore belonging to a praxis, only when it has no bonds to any structural rules. Without including any introductory material, the first subject/first strain from the opening thematic group of the first and slow movement,<sup>31</sup> will be considered as the most appropriate for affective examination, even if that would entail dealing with as few as four bars; as Tusa highlighted: ‘No part of a work plays a more important role in the establishment of a character than the main theme’.<sup>32</sup> Consequently, the predicament encountered in G major would be resolved, given that bars 14-15, seen in example 2.13, would not belong to a G major praxis.<sup>33</sup>

Due to its organic build, the sonata form, unlike the rondo, is meant to have no independent sections, making its second subject somehow dependent on the first one, even though its intention is to introduce new material in a new key. As a result, with a few exceptions such as the second subject of op.53/i, it will generally be seen as a reaction to what the first subject generates and will not always be examined for its

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<sup>31</sup> As pointed out by John Irving, it is worth noting that in the sonatas of Haydn and Mozart, the compositional centre of gravity resides in the first movement, whereas for Beethoven, the slow movement, which was mostly treated as a contrasting movement in the hands of the former two, becomes highly expressive. ‘Sonata’ in *Grove Music Online. Oxford Music Online.* <<http://www.oxfordmusiconline.com/subscriber/article/grove/music/26191>> [accessed 29 February 2013].

<sup>32</sup> Tusa, ‘Beethoven’s C-minor Mood’, 6.

<sup>33</sup> G major creates a great contrasting effect, only due to the unexpected modulation to the major key a semi-tone higher, not because of the G major key qualities.

affective qualities. Similarly, due to the fact that the finale is not entirely autonomous either, its content will be examined, but it will not be seen as influential as the content of the first movement. Given that the character and choice of key in the Minuets and Scherzos is, to a certain extent, predictable, they will not be considered during the examination process, unless they are written in a subsidiary key.

#### Associating texture and praxes

After locating the appropriate material, a suitable praxis needs to be assigned. In the imaginative example presented earlier, the elements that greatly transformed the triumphal character of op.67/iv were the modification of articulation, the change of tempo and the shift of dynamics. All of these parameters drastically affect the character when altering them as a group, but can also have an effect when modified individually. Therefore this study will acknowledge the texture as the only objective criteria according to which different praxes can be assigned; the emotional content at this stage will be consciously dismissed.

Representing the melodic/lyrical, or first praxis of any key, will be material in possession of some, or all of the following qualities, in hierarchical order: legato, slow, soft; for example, op.24/ii bars 1-8, would belong to  $Bb_1$ , with  $_1$  referring to the first praxis.<sup>34</sup> On the other hand, the motivic, or second praxis, will consist of loud, detached/staccato material, under a fast tempo; for example, op.106/i, bars 1-4 would belong to  $Bb_2$ , with  $_2$  being the second praxis of  $Bb$ .<sup>35</sup> By nature,  $Bb_1$  and  $Bb_2$ , or any

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<sup>34</sup> See 31, example 2.12.

<sup>35</sup> See 31, example 2.11.

X<sub>1</sub> and X<sub>2</sub> material, although in the same key, are contrasting and not comparable. As a result, the predicament in B $\flat$  will be resolved since the first movement of op.106 and the second of op.24 will belong to different praxes.

## 2.7 EXAMINATION PROCESS

After assigning the different praxes, thematic material is appropriately categorised and suitable for comparison. During the examination process, texture, with all of its components mentioned in 2.3, will serve as the basic foundation upon which the different excerpts will be compared. The main objective will be to locate similar textural behaviours within the content of a praxis in order to identify certain tonal archetypes in Beethoven's instrumental music; for example, the incorporation of grace notes in G<sub>2</sub>, or the operatic writing of d<sub>1</sub>. In certain cases, behaviours that characterise both praxes will be evident: for example, the harmonic simplicity of G major (G<sub>1</sub> and G<sub>2</sub>), or the obsessive usage of scale degree V in the melodic content of E $\flat$  major (E $\flat$ <sub>1</sub> and E $\flat$ <sub>2</sub>). Sometimes, Beethoven's tonal perception was so strong that only the presence of one praxis is evident: c minor is only exhibited as c<sub>2</sub>, E major and A $\flat$  major only as E<sub>1</sub> and A $\flat$ <sub>1</sub> respectively. On some other occasions, textural similarities will be overpowered by the emotional content of the excerpts with their clear depiction of character; such are the cases of the humorous F<sub>2</sub> and pastoral D<sub>1</sub>. Although a praxis is designed mainly to reflect the textural orientation of the tonic key in its first presentation, sometimes a consistent, structurally independent behaviour of a key, such as the appearances of *a* minor sections within a C major movement, will also constitute part of a praxis.

An attempt to decodify certain textural behaviours will also be made. For example, an opening in unison octaves exhibits a celebratory setting; dotted rhythms, a typical feature of c minor, add intensity; melodic leaps and suspensions in a melodic line reveal *espressivo*; ascending patterns similar to op.10 no.3/i convey excitement, whereas descending patterns similar to op.31 no.2/i, portray the reverse (examples 2.15-2.16).

Example 2.15: Piano sonata op.10 no.3 in D major, bars 1-4:



Example 2.16: Piano sonata op.31 no.2 in d minor, bars 1-6:



In order to strengthen certain conclusive arguments about Beethoven's tonal perception, a reverse thought process, similar to the reverse mathematics axiom, will be occasionally employed, designated to describe what Beethoven did not do with

certain keys in his piano sonatas.<sup>36</sup> For example, stressing that E major is never thematically presented under a motivic context enhances its serene features. Similarly, the fact that g minor is never used as an intense means of expression emphasises Beethoven's gentle approach to that key.

This study will also show how the knowledge of Beethoven's tonal perception can affect interpretational decisions with regard to tempo, articulation, pedalling and phrasing, in ambiguous situations where the texture can be misleading. For example, a wrong tempo choice could result in making op.2 no.1/i sound *maestoso* rather than dramatic, a crisp articulation in the A major op.2 no.2/i would make it sound similar to one of C major op.2 no.3, or the absence of pedalling in op.14 no.1/i could take away the serene qualities of E major.

Alongside the textural comparison, opinions of eminent historians and musicologists will be considered and Carl Czerny's remarks will be presented.<sup>37</sup> Given Beethoven's relationship with Czerny, it would be safe to assume that the latter's descriptions of Beethoven's piano music could be treated as a valuable source to Beethoven's emotional state.<sup>38</sup> William S. Newman however, expresses some concern regarding Czerny's descriptions of Beethoven's late works: 'Czerny's skimpy, superficial remarks on the late sonatas other than op.106 reveal his disinclination, or perhaps inability, to follow Beethoven in the composer's later

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<sup>36</sup> Reverse mathematics: going backwards from the theorems to the axiom; this method of reverse logic was also used by Ellison.

<sup>37</sup> Czerny's remarks will be taken from his op.500: Carl Czerny, *On the Proper Performance of all Beethoven's Works for the Piano* ed. Paul Badura-Skoda (Vienna: Universal Edition, 1970).

<sup>38</sup> Czerny was a student of Beethoven and a crucial figure in transmitting the latter's legacy. Beethoven entrusted him on a professional level to proofread all of his newly published works, but also on a personal level by assigning his nephew Karl to him for piano tuition. Czerny became a dedicated Beethoven interpreter by performing regular concerts exclusively with works of his, and by producing one of the first editions of all the Beethoven piano sonatas.

years'. However he also acknowledges the importance of his remarks for the sonatas he 'evidently learned or at least played under Beethoven's own eye - Opp.13, 14/1, 14/2, 27, 27/2, 31/2, 31/3, 53, 81a, 101 and 106.'<sup>39</sup>

Finally individual tables at the end of each key examination will summarise all factual and textural features presented in each tonality and will read as follows, with X representing a given key:

<b>X</b>	<i>PIANO</i>		<i>ORCHESTRAL</i>		<i>CHAMBER</i>	
	$X_1$ (lyrical)			$X_2$ (motivic)		
	(excerpts)			(excerpts)		
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
$X_1$						
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
$X_2$						

<sup>39</sup> William S. Newman, *Performance Practices in Beethoven's Piano Sonatas* (London: J. M. Dent & Sons Ltd., 1972), 29.

## 2.8 SUMMARY

This chapter described how the character of a key is closely related to its textural orientation and how altering any of its contributing factors could affect the tonal perception of a work. In the search to define tonal archetypes in Beethoven's instrumental works, the necessity of introducing different praxes is vital so that the various thematic material is arranged homogeneously. According to the textural behaviour, a lyrical, or motivic praxis will be assigned accordingly, only to affective thematic material that is structurally independent of the rest of the sonata. Finally any implications derived from incorporating Beethoven's tonal perception into a performance interpretation, will be addressed.

To summarise, when examining Beethoven's instrumental music, the following framework will be applied, in hierarchical order: the location of the appropriate affective material; the assignment of an appropriate praxis according to the textural orientation; the comparison of the various excerpts in a praxis; the addressing of any performance implications and the summary of the findings for each key.<sup>40</sup>

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<sup>40</sup> A diagram that summarises chapter two can be found in Appendix B, 171.

# CHAPTER THREE

## BEETHOVEN'S KEY CHARACTERISTICS

### Introduction

This examination will mainly focus on Beethoven's piano sonata cycle. However, due to the nature of the topic, the primary thematic material of other substantial instrumental genres such as concertos, symphonies, violin and cello sonatas, piano trios and string quartets will also be considered.<sup>1</sup>

### 3.1 THE KEYS

#### C Major

**op.2 no.3 - Piano sonata no.3**

op.7 - Piano sonata no.7 (E $\flat$ )

op.12 no.3 - Violin sonata no.3 (E $\flat$ )

op.14 no.2 - Piano sonata no.10 (G)

**op.15 - Piano concerto no.1**

op.18 no.2 - String quartet no.2 (G)

op.18 no.4 - String quartet no.4 (c)

**op.21 - Symphony no.1**

op.31 no.1 - Piano sonata no.16 (G)

op.37 - Piano concerto no.3 (c)

**op.53 - Piano sonata no.21**

**op.56 - Triple concerto**

**op.59 no.3 - String quartet no.9**

op.67 - Symphony no.5 (c)

op.70 no.2 - Piano trio (E $\flat$ )

**op.102 no.1 - Cello sonata no.4**

op.111 - Piano sonata no.32 (c)

**op.120 - Diabelli variations**

C major is one of the most popular keys in Beethoven's output. It is exhibited in various ways: as profound and expressive, as humourously simple, but mostly as a vigorous expression of relentless energy. With the exception of the C major cello

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<sup>1</sup> With regard to the late string quartets, this study will examine the tonal affectionism of only selective movements due to the quartets' unconventional movement structure. As Lewis Lockwood stated: 'The tonal and expressive range of the late works – especially the late quartets – moves beyond the classical key associations'. Lewis Lockwood, *Beethoven: the Music and the Life* (New York: W. W. Norton & Company, 2003), 328.



sonata op.102 no.1, the rest of the works written in C major contain mostly motivic thematic material when in the home key.

The opening of op.2 no.3 creates a highly martial effect with its rhythmic pattern and articulation: a long value on the downbeat, followed by shorter ones, leading to the downbeat of the next bar (example 3.1).

Example 3.1: Piano sonata op.2 no.3 in C major, first movement, bars 1-4:



The *staccato* of the quavers and crotchets provides a freshness to the sound, whereas the rest enhances the rhythmic intensity. Beethoven here establishes a compositional pattern which will be repeated, albeit slightly varied, in the first movements of opp. 15, 21 and 56: an opening movement in duple time, usually marked *Allegro con brio*, with soft thematic material of highly motivic orientation, combined with a strong rhythmical figuration similar to the one of op.2 no.3/i, that will be manipulated in later sections (examples 3.2-3.4).

Example 3.2: Piano concerto op.15 in C major, first movement, bars 1-8:



Example 3.3: Symphony no.1 in C major op.21, first movement, bars 13-22:



Example 3.4: Triple concerto op.56 in C major, first movement, bars 1-10:



Also marked *Allegro con brio*, but with a slightly different textural treatment, is the first movement of the ‘Waldstein’ sonata, op.53. The same major third as in op.2 no.3/i is presented in repeated *piano* figurations but at a lower register this time, supported by left hand repeated quavers of fixed intervals, which provide power to the thematic material awaiting to be unleashed (example 3.5).<sup>2</sup>

Example 3.5: Piano sonata op.53 in C major, first movement, bars 1-7:



This pulsating energy, common in all of Beethoven’s C<sub>2</sub> sonata-allegro movements, is exhibited clearly in the transitional episodes, which are characterised by *bravura*,

<sup>2</sup> As Barry Cooper highlights, ‘with Beethoven, an initial *p* is generally associated with a sense of suppressed energy and latent power.’ Barry Cooper, *Beethoven* (Oxford: Oxford University Press, 2000), 70.

loud dynamics and martial textures through a motoric accompaniment of either repeated Cs, or broken patterns related to the tonic.<sup>3</sup>

Structurally, in C<sub>2</sub> first movements, Beethoven religiously repeats the first segment of the thematic material a whole tone higher, resulting in either dominant (V), or supertonic (II) tonicisations (examples 3.1-3.4);<sup>4</sup> op.53/i constitutes the only exception, with the repetition taking place a whole tone lower, in the remote key of B $\flat$  major (example 3.5).<sup>5</sup> Harmonically, most of the C<sub>2</sub> movements can be best described as conventional, especially when compared to the more adventurous ones of C<sub>1</sub>, given that G major is usually the main subsidiary key.<sup>6</sup> On certain occasions, such as the slow movements of op.14 no.2, op.18 no.4 and the theme of the ‘Diabelli’ variations, this simplicity translates into a humourous approach (examples 3.6-3.8). However, Beethoven’s playful intentions were not always appreciated by contemporary critics, one of which was provoked into describing op.14 no.2/ii as ‘stupid’.<sup>7</sup>

Example 3.6: Piano sonata op.14 no.2 in G major, second movement, bars 1-4:



<sup>3</sup> Refer to first movements of opp.2 no.3, 15, 21, 53, 56 and 59 no.3.

<sup>4</sup> Basil Lam, points out with regard to the first subject in op.59 no.3/i: ‘For the counter-statement the theme moves up a tone to the supertonic as in two earlier C major works, the First Symphony and the String Quintet. The use of the same structural device in the first movement of the ‘Waldstein’ sonata completes this interesting evidence of Beethoven’s key associations.’ Basil Lam, *Beethoven String Quartets* (London: British Broadcasting Corp., 1979), 58.

<sup>5</sup> Charles Rosen also draws a structural similarity between the piano sonatas op.2 no.3 and op.53 by grouping them under the ‘concertante’ style. Charles Rosen, *The Classical Style* (London: Faber and Faber, 2<sup>nd</sup> edn 2005), 458.

<sup>6</sup> Refer to the C major table, 49-50, for a detailed description of the main subsidiary keys used in each movement.

<sup>7</sup> William Kinderman, *Beethoven* (Oxford: Oxford University Press, 2<sup>nd</sup> edn 2009), 65.

Example 3.7: String quartet op.18 no.4 in c minor, second movement, bars 1-10:



Example 3.8: Diabelli variations op.120, theme, bars 1-12:



The last movements of the C major compositions also feature the same relentless energy as the first movements, but with a more light-hearted context: textures are not as thick and dynamic markings less vehement. The fast scalar passages of op.2 no.3/iv and op.21/iv (examples 3.9-3.10), or the non-stop, highly articulated figurations of op.15/iii and op.59 no.3/iv (examples 3.11-3.12) create an intense rhythmic drive and a forward momentum. All these foregoing features are reflected by Beethoven's marking 'La gaité' on a character piece in C major, which was evidently planned at one point to serve as the second movement of the op.127 string quartet.<sup>8</sup>

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<sup>8</sup> Kinderman, *Beethoven*, 309.

Example 3.9: Piano sonata op.2 no.3 in C major, fourth movement, bars 1-11:

Allegro assai.  
*p*

Example 3.10: Symphony no.1 in C major op.21, fourth movement, bars 6-14:

Allegro molto e vivace. *d: ss.*  
*p*

Example 3.11: Piano concerto op.15 in C major, third movement, bars 1-6:

Allegro.  
SOLO.

Example 3.12: String quartet op.59 no.3, fourth movement, bars 1-8:

*p*

Interestingly, the first praxis of C major is never used within the context of a sonata-allegro movement. Most of the slow C<sub>1</sub> movements, such as those of opp.7, 12 no.3, 18 no.2 and 111, are in triple time, marked *cantabile*, or *molto/grand espressione* and have a particularly slow tempo indication: *Largo* or *Adagio*. Evidently, their melodic structure displays an initial, slightly descending tendency, followed by a big

ascending leap which, in combination with the presence of melodic suspensions, make the content highly expressive (examples 3.13-3.16).<sup>9</sup>

Example 3.13: Piano sonata op.7 in E $\flat$  major, second movement, bars 1-8:



Example 3.14: Violin sonata op.12 no.3 in E $\flat$  major, second movement, bars 1-8:



B.94.

Example 3.15: String quartet op.18 no.2 in G major, second movement, bars 1-10:



<sup>9</sup> Lockwood also groups together op.12 no.3/ii and op.7/ii in relation to their content. Lockwood, *Beethoven*, 105.

Example 3.16: Piano sonata op.111 in c minor, second movement, bars 1-8:

**ARIETTA.**  
Adagio molto semplice e cantabile.

Although the first presentation of the main thematic material is harmonically simple, carrying lots of I-V-I progressions, the overall harmonic scheme of the movement explores more adventurous territories, as portrayed in the C major table.

William Kinderman observes a tendency in Beethoven to ‘resolve his c minor music into a lively concluding C major’.<sup>10</sup> In fact, depending on the intensity of the preceding c minor, this resolution can vary from being a few concluding bars as in string quartet op.18 no.4/iv, to a coda in the third piano concerto op.37/iii, or even to an entire movement such as the finale of the fifth symphony, op.67. The c/C polarity, quite prominent in Beethoven’s music, translates as the progression from ‘darkness’ to ‘light’ according to Cooper,<sup>11</sup> which is certainly the case in opp.67 and 111, but also in the finale of ‘Waldstein, even though the preceding movement is not in c minor.’<sup>12</sup>

<sup>10</sup> Kinderman, *Beethoven*, 21.

<sup>11</sup> Cooper, *Beethoven*, 127, 204. Lockwood also echoes that opinion. Lockwood, *Beethoven*, 224.

<sup>12</sup> With reference to op.67, a similar observation is highlighted by Lewis Lockwood, according to whom ‘the Fifth [symphony] ... provides a first symphonic presentation of a darkened world that is at last relieved by triumph’. Lockwood, *Beethoven*, 224.

Table 3.1: C major table

C	<i>PIANO</i>			<i>ORCHESTRAL</i>		<i>CHAMBER</i>	
	<b>op.2 no.3</b> <b>conc. no.1, op.15</b>	<b>op.53</b> <b>triple conc. op.56</b>	<b>Diabelli var.</b> <b>op.120</b>	<b>sym. no.1, op.21</b>		<b>str.qt. op.59 no.3</b> <b>vc op.102 no.1</b>	
	$C_1$ (lyrical)			$C_2$ (motivic)			
	op.7 [2 <sup>nd</sup> ] (E $\flat$ ) vn op.12 no.3 [2 <sup>nd</sup> ] (E $\flat$ ) str.qt. op.18 no.2 [2 <sup>nd</sup> ] (G) op.31 no.1 [2 <sup>nd</sup> ] (G)			<b>op.53 [3<sup>rd</sup>]</b> <b>triple conc. op.56 [3<sup>rd</sup>]</b> pf trio op.70 no.2 [2 <sup>nd</sup> ] (E $\flat$ ) op.111 [2 <sup>nd</sup> ] (c)		<b>op.2 no.3 [1<sup>st</sup>, 4<sup>th</sup>]</b> op.14 no.2 [2 <sup>nd</sup> ] (G) <b>conc. no.1, op.15 [1<sup>st</sup>, 3<sup>rd</sup>]</b> str.qt. op.18 no.4 [2 <sup>nd</sup> ] (c) <b>sym. no.1, op.21 [1<sup>st</sup>, 4<sup>th</sup>]</b>	
<i>(excerpts)</i>							
			op.27 no.2 [1 <sup>st</sup> ] {Allegro 37 - 62} (E $\flat$ )		conc. no.3, op.37 [3 <sup>rd</sup> ] {coda 407-463} (c)		
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>	
$C_1$	op.7 [2 <sup>nd</sup> ]	Largo, con grande espressione	3/4	elevated and profound	C-A $\flat$	profound	
	op.12 no.3 [2 <sup>nd</sup> ]	Adagio con molt' espressione	3/4	great expression, fine touch and tone	C-f		
	op.18 no.2 [2 <sup>nd</sup> ]	Adagio cantabile	3/4	-	C-G		
	op.111 [2 <sup>nd</sup> ]	Adagio molto semplice e cantabile	9/16	beautiful, touching, simple	C-a (variations)		
	op.31 no.1 [2 <sup>nd</sup> ]	Adagio grazioso	9/8	graceful romance or nocturno	C-A $\flat$	gracious	
	<b>op.53 [3<sup>rd</sup>]</b>	Allegretto moderato	2/4	pastoral	C-a		
	<b>op.56 [3<sup>rd</sup>]</b>	Rondo alla Polacca	3/4	serene, pleasing, lively Polonaise	C-G-a		
	op.70 no.2 [2 <sup>nd</sup> ]	Allegretto	2/4	tenderness, capricious humour	C-c		



Table 3.1: C major (cont.)

<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
C <sub>2</sub>	op.2 no.3 [1 <sup>st</sup> ]	Allegro con brio	C	fire and energy	C-G	soft opening, rhythmic pattern, bravura transitions, tonicisation patterns
	op.15 [1 <sup>st</sup> ]	Allegro con brio	C	rapid, fiery, bravura	C-G	
	op.21 [1 <sup>st</sup> ]	Allegro con brio	♩	-	C-G	
	op.56 [1 <sup>st</sup> ]	Allegro	C	grand, brilliant, highly expressive	C-A	
	op.59 no.3 [1 <sup>st</sup> ]	Allegro vivace	C	-	C-G	
	op.2 no.3 [4 <sup>th</sup> ]	Allegro assai	6/8	quick and sprightly	C-G-F	driving rhythms, martial, momentum
	op.15 [3 <sup>rd</sup> ]	Allegro	2/4	gay, lively, sportive	C-G-a	
	op.21 [4 <sup>th</sup> ]	Allegro molto e vivace	2/4	-	C-G-B $\flat$	
	op.53 [1 <sup>st</sup> ]	Allegro con brio	C	brilliant, full of fire and animation	C-E	
	op.59 no.3 [4 <sup>th</sup> ]	Allegro molto	♩	-	C (fugato)	
	op.67 [4 <sup>th</sup> ]	Allegro	C	-	C-G	martial, triumphal
	op.14 no.2 [2 <sup>nd</sup> ]	Andante	♩	tolerably lively	C (variations)	humourous
	op.18 no.4 [2 <sup>nd</sup> ]	Andante scherzoso quasi Allegretto	3/8	-	C-G	
	op.120 [theme]	Vivace	3/4	simple	C-G (variations)	

## *a* minor

op.2 no.3 - Piano sonata no.3 (C)

op.15 - Piano concerto no.1 (C)

**op.23 - Violin sonata no.4**

**op.47 - Violin sonata no.9, 'Kreutzer'**

op.53 - Piano sonata no.21 (C), 'Waldstein'

op.56 - Triple concerto (C)

op.59 no.3 - String quartet (C)

op.69 - Cello sonata no.3 (A)

op.92 - Symphony no.7 (A)

op.101 - Piano sonata no.28 (A)

op.102 no.1 - Cello sonata no.4 (C)

**op.132 - String quartet no.15**

Considering the simplicity of its key signature, there are surprisingly very few works written in *a* minor.<sup>13</sup> The key either features as a slow movement of a sonata structure, or mostly as autonomous episodes integrated within C<sub>2</sub> finale movements. Although these episodes do not contain primary thematic material, their texture, independence and consistency in the way they are presented justifies their incorporation into the second praxis of *a* minor.<sup>14</sup> Their character coincides with that found in the rest of the *a*<sub>2</sub> material, which exemplifies a determined and slightly angry tone emanating from the frequent usage of *sf* and highly detached articulation in a loud and fast context (examples 3.17-3.20).

Example 3.17: Violin sonata no.4 in *a* minor op.23, first movement, bars 1-12:

The image shows a musical score for the first movement of the Violin Sonata No. 4 in A minor, Op. 23, by Ludwig van Beethoven. The score is for Violino (Violin) and Pianoforte (Piano). The tempo is marked 'Presto'. The key signature is one flat (B-flat). The time signature is 3/8. The score shows the first 12 bars of the piece. The Violino part starts with a forte (f) dynamic and a crescendo. The Pianoforte part starts with a fortissimo (ff) dynamic and a crescendo. The score is written in a single system with two staves for each instrument.

<sup>13</sup> Only the op.23 violin sonata and op.132 string quartet are clearly written in *a* minor. The 'Kreutzer' sonata op.47 is entitled 'Violin Sonata in A' without specifying whether it is in major or in minor, making it ambiguous in that matter: the opening movement has a short introduction in A major, followed by a lengthy *a* minor sonata-allegro, whereas the *finale* is again in A major.

<sup>14</sup> See 'Excerpts' box under *a*<sub>2</sub> in the *a* minor table, 55.

Example 3.18: Violin sonata no.9 in *a* minor op.47, first movement, bars 19-27:

Example 3.19: Cello sonata no.3 in *a* minor op.69, second movement, bars 1-8:

Example 3.20: Cello sonata no.4 in *a* minor op.102 no.1, first movement, bars 29-33:

The foregoing polarity of *a/C* is also seen in all of the  $a_1$  movements where C major is used as a first tonicisation, regardless of the main subsidiary key that follows later on.<sup>15</sup> Texturally, the first praxis of *a* minor is not as consistent as the second. However, an overall aesthetic examination of the movements reveals a general melancholia and a feeling of unsettlement:<sup>16</sup> the slow movement of op.101 has a

<sup>15</sup> Another polarity quite prominently featured in most *a* minor works is the one of *a/A*: apart from the ambiguity of the 'Kreutzer' sonata, in opp.12 no.2, 69, 92 and 101, A major is the home key with the parallel minor constituting the slow movement, whereas in opp.23 and 132 the roles are reversed.

<sup>16</sup> On two occasions, with reference to op.12 no.2/ii and op.23, Lockwood refers to *a* minor as 'bleak'. Lockwood, *Beethoven*, 104, 142.

sense of longing created by the impression of a non-existent rhythm (example 3.21);<sup>17</sup> the persistence of the rhythmic motive throughout op.92/ii (example 3.22) resembles a funeral march; the incorporation of the augmented second in the main theme of op.59 no.3/ii (example 3.23) evokes a gentle ‘lament’;<sup>18</sup> the ‘underlying turbulent rocking motion’<sup>19</sup> present in the second subject of op.31 no.2/i and throughout op.132/v, creates great unsettlement (examples 3.24-3.25).

Example 3.21: Piano sonata op.101 in *a* minor, third movement, bars 1-4:

Example 3.22: Symphony no.7 in A major op.92, second movement, bars 1-13:

<sup>17</sup> The opening of the movement marks ‘Langsam und sehnsuchtsvoll’ which translates as ‘slow and longingly’.

<sup>18</sup> Characterisation given by Vincent D’Indy with reference to the second movement of op.132. Quoted in Melvin Berger, *Guide to Chamber Music* (Mineola, NY: Dover Publications, 3<sup>rd</sup> edn 2001), 51.

<sup>19</sup> Berger, *Guide to Chamber Music*, 71.

Example 3.23: String quartet op.59 no.3 in C major, second movement, bars 1-5:



Example 3.24: Piano sonata op.31 no.2 in d minor, first movement, bars 41-45:



Example 3.25: String quartet op.132 in a minor, fifth movement, bars 1-9:



Beethoven consciously keeps the thematic material mostly to quiet levels and employs several other devices to maintain a lightness in the character: the considerably lengthy usage of C major partly releases the brooding intensity created at the beginning of op.101/iii;<sup>20</sup> the constant drop to *piano* frustrates the *crescendo* of the quaver motion throughout op.59 no.3/ii;<sup>21</sup> the avoidance of a tempo marking slower than the chosen *Allegretto* in op.92/ii.<sup>22</sup>

<sup>20</sup> Nine out of the twenty bars in the movement are in C major.

<sup>21</sup> Lam, *Beethoven String Quartets*, 60.

<sup>22</sup> Any other tempo choice slower than *Allegretto* would have intensified the character of the movement.

Table 3.2: *a* minor

		<i>PIANO</i>	<i>ORCHESTRAL</i>	<i>CHAMBER</i>		
		N/A	N/A	<b>vn no.4, op.23</b> <b>vn no.9, op.47</b>	<b>str.qt. op.132</b>	
		<i>a</i> <sub>1</sub> (lyrical)		<i>a</i> <sub>2</sub> (motivic)		
<i>a</i>		vn no.2, op.12 no.2 [2 <sup>nd</sup> ] (A) <b>vn no.4, op.23 [3<sup>rd</sup>]</b> str.qt. op.59 no.3 [2 <sup>nd</sup> ] (C)	sym. no.7, op.92 [2 <sup>nd</sup> ] (A) op.101 [3 <sup>rd</sup> ] (A) <b>str.qt. op.132 [5<sup>th</sup>]</b>	<b>vn no.4, op.23 [1<sup>st</sup>]</b> <b>vn no.9, op.47 [1<sup>st</sup>]</b>	vc no.3, op.69 [2 <sup>nd</sup> ] (A) vc no.4, op.102 no.1 [1 <sup>st</sup> ] (C)	
		<u>(excerpts)</u> op.31 no.2 [1 <sup>st</sup> ] {2 <sup>nd</sup> subj. 41-55} (d)		<u>(excerpts)</u> op.2 no.3 [3 <sup>rd</sup> ] {trio 65-104} (C) conc. no.1, op.15 [3 <sup>rd</sup> ] {2 <sup>nd</sup> eps. 192-273} (C) op.53 [3 <sup>rd</sup> ] {1 <sup>st</sup> eps. 70-101} (C) triple conc. op.56 [3 <sup>rd</sup> ] {2 <sup>nd</sup> eps. 169-200} (C)		
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
<i>a</i> <sub>1</sub>	op.12 no.2 [2 <sup>nd</sup> ]	Andante piu tosto allegretto	2/4	plaintive, with great expression	<i>a</i> -F	melancholic
	op.59 no.3 [2 <sup>nd</sup> ]	Andante con moto quasi allegretto	6/8	-	<i>a</i> -C	
	op.92 [2 <sup>nd</sup> ]	Allegretto	2/4	-	<i>a</i> -A	
	op.101 [3 <sup>rd</sup> ]	‘Langsam und sehnsuchtvoll’ Adagio, ma non troppo, con affetto	2/4	very legato with intense feeling	<i>a</i> -C	
	<b>op.23 [3<sup>rd</sup>]</b>	Allegro molto	♩	light, quick, impassionate	<i>a</i> -F	unsettled
	<b>op.132 [5<sup>th</sup>]</b>	Allegro appassionato	3/4	-	<i>a</i> -A	
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
<i>a</i> <sub>2</sub>	<b>op.23 [1<sup>st</sup>]</b>	Presto	6/8	earnest, light, quick	<i>a</i> -e	anger
	<b>op.47 [1<sup>st</sup>]</b>	Presto	♩	brilliant, turbulent	<i>a</i> -E/e	
	op.69 [2 <sup>nd</sup> ]	Allegro molto	3/4	humourous	<i>a</i> -A	
	op.102 no.2 [1 <sup>st</sup> ]	Allegro vivace	♩	earnest, powerful, tragic	<i>a</i> -e	

## D major

op.2 no.2 - Piano sonata no.2 (A)

**op.10 no.3 - Piano sonata no.7**

**op.12 no.1 - Violin sonata no.1**

**op.18 no.3 - String quartet no.3**

**op.28 - Piano sonata no.15, 'Pastoral'**

op.30 no.1 - Violin sonata no.6 (A)

op.30 no.3 - Violin sonata no.8 (G)

**op.36 - Symphony no.2**

op.58 - Piano concerto no.4 (G)

**op.61 - Violin concerto**

**op.70 no.1 - Piano trio, 'Ghost'**

op.92 - Symphony no.7 (A)

op.95 - String quartet no.11, 'Serioso' (f)

op.97 - Piano trio, 'Archduke' (B $\flat$ )

**op.102 no.2 - Cello sonata no.5**

D major is unquestionably a key that favours the physiology of the string instruments, something that is reflected in Beethoven's output: six major works and four slow movements in D for the strings, compared with only two works and one slow movement for the piano. Regardless of the praxis, the frequency in which A major is used as the main subsidiary key in a D major movement is quite remarkable;<sup>23</sup> it possibly constitutes one of the most consistent tonal behaviours of any major or minor key. Another striking consistency concerns the unison, *forte*, *con brio* openings of opp.10 no.3, 12 no.1, 70 no.1 and 102 no.2, all belonging to the second praxis of D major (examples 3.26-3.29).<sup>24</sup>

Example 3.26: Piano sonata op.10 no.3 in D major, first movement, bars 1-4:

The image shows a musical score for the first four bars of the first movement of Beethoven's Piano Sonata Op. 10 No. 3 in D major. The tempo is marked 'Presto.' and the dynamics are piano (p) and forte (f). The score is written for piano, with a treble and bass clef. The first four bars show a strong, assertive opening figure in the right hand, followed by a contrasting cantabile line in the left hand.

<sup>23</sup> See D major table, 62-63.

<sup>24</sup> In all four cases, the assertive opening figure gives way to a contrasting *cantabile* line.

Example 3.27: Violin sonata op.12 no.1 in D major, first movement, bars 1-5:



Example 3.28: Piano trio op.70 no.1 in D major, first movement, bars 1-5:

Example 3.29: Cello sonata no.5 in D major op.102 no.2, first movement, bars 1-2:

This practice, combined with the repeated use of the dominant, can be interpreted as a sign of stability and reassurance of D<sub>2</sub>'s strength and joy exhibited in the foregoing first movements.<sup>25</sup> On the other hand, the D<sub>2</sub> fourth movements of opp.10 no.3, 18 no.3, 36 and 102 no.2, illustrate a more playful side through a harmonic ambiguity, by slightly delaying the appearance of the tonal centre (examples 3.30-3.33).

<sup>25</sup> Other notable joyful works in D major include J. S. Bach's *Christmas Oratorio*, G. F. Handel's 'Hallelujah' from *Messiah* and the 'Ode to Joy' from Symphony no.9 by Beethoven.



Example 3.30: Piano sonata op.10 no.3 in D major, fourth movement, bars 1-4:

Musical score for Example 3.30: Piano sonata op.10 no.3 in D major, fourth movement, bars 1-4. The score is for piano and features a 'RONDO. Allegro.' tempo marking. It shows the first four bars of the piece, with dynamics ranging from piano (*p*) to fortissimo (*f*). The music is in D major and 2/4 time. The first two bars are marked *p*, followed by a *cresc.* marking leading to a fortissimo (*f*) section in the third and fourth bars.

Example 3.31: String quartet op.18 no.3 in D major, fourth movement, bars 1-8:

Musical score for Example 3.31: String quartet op.18 no.3 in D major, fourth movement, bars 1-8. The score is for string quartet and features a 'Presto.' tempo marking. It shows the first eight bars of the piece, with dynamics ranging from piano (*p*). The music is in D major and 2/4 time, characterized by rapid sixteenth-note passages.

Example 3.32: Symphony no.2 in D major op.36, fourth movement, bars 1-6:

Musical score for Example 3.32: Symphony no.2 in D major op.36, fourth movement, bars 1-6. The score is for symphony and features a 'Presto.' tempo marking. It shows the first six bars of the piece, with dynamics ranging from piano (*p*) to fortissimo (*f*). The music is in D major and 2/4 time, featuring a prominent melodic line in the upper register.

Example 3.33: Cello sonata no.5 in D major op.102 no.2, fourth movement, bars 1-4:

Musical score for Example 3.33: Cello sonata no.5 in D major op.102 no.2, fourth movement, bars 1-4. The score is for cello and piano and features an 'Allegro.' tempo marking. It shows the first four bars of the piece, with dynamics ranging from piano (*p*) to fortissimo (*f*). The music is in D major and 3/4 time, with the piano part marked *leggiermente*.

In the first praxis of D there seem to be three trends, the first of which is exhibited in op.28, the second in the violin concerto op.61, and the third in the slow movements of op.2 no.2 and op.97. The homogenous, pastoral character of op.28 is attributed to the relaxed atmosphere, created by the drone-like accompaniment, soft dynamics, long *legato* lines and simple harmonic language, which is not disturbed throughout all four movements (example 3.34).

Example 3.34: Piano sonata op.28 in D major, first movement, bars 1-10:



In fact, this sonata, apart from being homotonal,<sup>26</sup> constitutes the only work of the entire piano sonata cycle in which the main thematic material of all the movements belongs only to the lyrical praxis of the key. Although the depiction of D<sub>1</sub> in op.28 is quite vivid, the unexpected appearances of pastoral-like moments in op.30 no.3/i, op.58/iii, and op.92/iii, where the home key is not D major, reinforce those qualities (examples 3.35-3.37).<sup>27</sup>

Example 3.35: Violin sonata no.8 in G major op.30 no.3, first movement, bars 67-75:



Example 3.36: Piano concerto no.4 in G major op.58, third movement, bars 72-82:



<sup>26</sup> Hans Keller coined the term 'homotonal' to describe multi-movement works that have the same keynote. In the Beethoven piano sonatas this tonal scheme appears to be a common practice for the composer: op.2 no.1 (f-F), op.10 no.2 (F-f), op.10 no.3 (D-d), op.14 no.1 (E-e), op.26, (A<sup>b</sup>-a<sup>b</sup>), op.27 no.2 (c<sup>#</sup>-D<sup>b</sup>), op.28 (D-d), op.78 (F<sup>#</sup>), op.79 (G-g), op.90 (e-E), op.109 (E-e) and op.111 (c-C). Hans Keller, *The Great Haydn Quartets: Their Interpretation* (London: J. M. Dent, 1993), 39.

<sup>27</sup> Beethoven also indicated 'pastoral' in the sketch of the theme and variations of op.18 no.5/iii. Berger, *Guide to Chamber Music*, 40.

Example 3.37: Symphony no.7 in A major op.92, third movement, bars 149-156:



The violin concerto op.61, alongside opp. 18 no.3/i,<sup>28</sup> 30 no.1/ii and op.95/ii, demonstrates a more melodious side of  $D_1$ , emphasised by the use of long values in the melodic line of the violin and the occasional characteristic markings of *cantabile* or *dolce* (examples 3.38-3.41).

Example 3.38: Violin concerto in D major op.61, first movement, bars 2-9:



Example 3.39: String quartet op.18 no.3 in D major, first movement, bars 1-10:



<sup>28</sup> Lockwood points out that op.18 no.3 'prizes legato linear motion in its first movement beyond all else', with reference to the rest of the string quartets in the op.18 group. Lockwood, *Beethoven*, 165-166.

Example 3.40: Violin sonata op.30 no.1 in A major, second movement, bars 1-8:



Example 3.41: String quartet op.95 in f minor, second movement, bars 5-10:



Finally, according to Czerny, op.2 no.2/ii and op.97/iii reveal a holy/religious conception with soft, chordal, static, hymn-like texture in the low register (examples 3.42-3.43).

Example 3.42: Piano sonata op.2 no.2 in A major, second movement, bars 1-3:



Example 3.43: Piano trio op.97 in B $\flat$  major, third movement, bars 1-8:



Table 3.3: D major

D	PIANO		ORCHESTRAL		CHAMBER		
	op.10 no.3 op.28		sym. no.2, op.36 vn conc. op.61		vn no.1, op.12 no.1 str.qt. op.18 no.3	pf trio op.70 no.1 vc no.5, op.102 no.2	
	D <sub>1</sub> (lyrical)				D <sub>2</sub> (motivic)		
	op.2 no.2 [2 <sup>nd</sup> ] (A) str.qt. op.18 no.3 [1 <sup>st</sup> ] str.qt. op.18 no.5 [3 <sup>rd</sup> ] (A) op.28 [1 <sup>st</sup> , 4 <sup>th</sup> ]		vn no.6, op.30 no.1 [2 <sup>nd</sup> ] (A) vn conc. op.61 [1 <sup>st</sup> ] str.qt. op.95 [2 <sup>nd</sup> ] (f) pf trio op.97 [3 <sup>rd</sup> ] (B <sup>b</sup> )		op.10 no.3 [1 <sup>st</sup> , 4 <sup>th</sup> ] vn no.1, op.12 no.1 [1 <sup>st</sup> , 3 <sup>rd</sup> ] str.qt. op.18 no.3 [4 <sup>th</sup> ]		sym. no.2, op.36 [1 <sup>st</sup> , 4 <sup>th</sup> ] pf trio op.70 no.1 [1 <sup>st</sup> , 3 <sup>rd</sup> ] vc no.5, op.102 no.2 [1 <sup>st</sup> , 4 <sup>th</sup> ]
	(excerpts) vn no.8, op.30 no.3 [1 <sup>st</sup> ] {2 <sup>nd</sup> sbj. 67-77} (G) conc. no.4, op.58 [3 <sup>rd</sup> ] {1 <sup>st</sup> eps. 71-83} (G) sym. no.7, op.92 [3 <sup>rd</sup> ] {trio 149-180} (F)						
PRAXIS	WORK	TEMPO	TIME SIGNATURE	REMARKS by Czerny	PRIMARY KEYS	SIGNATURE FEATURES	
D <sub>1</sub>	op.28 [1 <sup>st</sup> ]	Allegro	3/4	tranquil, kindly fervent	D-A	pastoral	
	op.28 [4 <sup>th</sup> ]	Allegro ma non troppo	6/8	pastoral, sportive, agreeable	D-A		
	op.18 no.5 [3 <sup>rd</sup> ]	Andante cantabile	2/4	-	D (variations)		
	op.2 no.2 [2 <sup>nd</sup> ]	Largo Appassionato	3/4	religious character	D-A-f#	religious	
	op.97 [3 <sup>rd</sup> ]	Andante cantabile ma però con moto	3/4	holy, religious	D (variations)		
	op.18 no.3 [1 <sup>st</sup> ]	Allegro	C	-	D-A	melodious	
	op.30 no.1 [2 <sup>nd</sup> ]	Adagio molto espressivo	2/4	cantabile, gentle like a ballad	D-B <sup>b</sup>		
	op.61 [1 <sup>st</sup> ]	Allegro ma non troppo	C	-	D-A/a		
	op.95 [2 <sup>nd</sup> ]	Allegretto ma non troppo	2/4	-	D (fugal)		

Table 3.3: D major (cont.)

<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
D <sub>2</sub>	op.10 no.3 [1 <sup>st</sup> ]	Presto	♩	decided, vigorous, brilliant, fiery	D-A	unison opening
	op.12 no.1 [1 <sup>st</sup> ]	Allegro con brio	C	energetic, decided	D-A	
	op.36 [1 <sup>st</sup> ]	Allegro con brio	C	-	D-A	
	op.70 no.1 [1 <sup>st</sup> ]	Allegro vivace e con brio	3/4	lively, decided, powerful	D-A	
	op.102 no.2 [1 <sup>st</sup> ]	Allegro con brio	C	lively, majestic, powerful, decided	D-A	
	op.10 no.3 [4 <sup>th</sup> ]	Allegro	C	humorous, serene, capricious	D-A	playful harmonic ambiguity
	op.18 no.3 [4 <sup>th</sup> ]	Presto	6/8	-	D-A	
	op.36 [4 <sup>th</sup> ]	Allegro molto	♩	-	D-A	
	op.70 no.1 [3 <sup>rd</sup> ]	Presto	C	brilliant, gay, humourous	D-A	
	op.102 no.2 [4 <sup>th</sup> ]	Allegro - Allegro fugato	3/4	-	D (fugato)	

## E $\flat$ major

**op.1 no.1 - Piano trio**

**op.7 - Piano sonata no.4**

op.10 no.1 - Piano sonata no.5 (c)

**op.12 no.3 - Violin sonata no.3**

op.13 - Piano sonata no.8, 'Pathetique' (c)

op.18 no.6 - String quartet no.6 (B $\flat$ )

op.19 - Piano concerto no.2 (B $\flat$ )

op.22 - Piano sonata no.11 (B $\flat$ )

**op.27 no.1 - Piano sonata no.13**

op.30 no.3 - Violin sonata no.8 (G)

**op.31 no.3 - Piano sonata no.18**

**op.35 - Piano variations, 'Eroica'**

**op.55 - Symphony no.3, 'Eroica'**

op.60 - Symphony no.4 (B $\flat$ )

**op.70 no.2 - Piano trio**

**op.73 - Piano concerto no.5, 'Emperor'**

**op.74 - String quartet no.10, 'Harp'**

**op.81a - Piano sonata no.26, 'Les Adieux'**

op.96 - Violin sonata no.10 (G)

op.110 - Piano sonata no.31 (A $\flat$ )

**op.127 - String quartet no.12**

E $\flat$  major and heroism in Beethoven is an inevitable association attributed to the 'Eroica' symphony and the 'Emperor' concerto; this implication can be found in almost every major literary source dedicated to Beethoven and his music.<sup>29</sup> However, this examination will look beyond such verbal labels and focus on the textural similarities of the E $\flat$  works in the composer's output.

Unquestionably, E $\flat$  was one of Beethoven's favourite keys which becomes apparent even by glancing at the E $\flat$  major table: twelve major instrumental works in all genres, of which nine incorporate the piano. The key features some of his most virtuosic and broad conceptions: opp.7, 35, 55 and 73 are technically challenging for almost any performer and certainly quite lengthy for their respective genres. One of the reasons for this extensive length is the coexistence of both lyrical and motivic

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<sup>29</sup> E $\flat$  major is widely accepted as Beethoven's primary key for heroic expressions. However, Beethoven's heroic period is a very broad topic that includes several tonalities and is often framed, coincidentally, by two E $\flat$  compositions: the 'Eroica' symphony and the 'Emperor' piano concerto. Latest scholarly contributions include John David Wilson's 'Of Hunting, Horns, and Heroes: A Brief History of E $\flat$  major before the *Eroica*'. In his study, Wilson discusses the gap between eighteenth century composers' desires to portray heroism and the symbols and means used to depict it, and how Beethoven managed to bridge that gap in the 'Eroica' symphony. John David Wilson, 'Of Hunting, Horns, and Heroes: A Brief History of E $\flat$  major before the *Eroica*', *Journal of Musicological Research* 32 (2013), 163-182.

components at the opening of the movement, an approach that provides extra material for thematic manipulation in later stages (examples 3.44-3.46).

Example 3.44: Piano sonata op.7 in E $\flat$  major, first movement, bars 1-6:

**Allegro molto e con brio.**

Example 3.45: 'Eroica' variations op.35 in E $\flat$  major, bars 1-9 & 66-73:

**Allegretto vivace.**

Example 3.46: Symphony no.3 in E $\flat$  major op.55, first movement, bars 1-6:



This independent, multiple-component construction of the first thematic group is a frequent behaviour of the key when in a sonata-allegro context, that can also be seen in opp.1 no.1/i, 12 no.3/i, 70 no.2/iv, 74/i and 127/i. Beethoven's E $\flat$  expansive tendencies are also noticeable even in secondary group areas (examples 3.47).

Example 3.47: Piano sonata op.110 in A $\flat$  major, first movement, bars 20-21 & 28-30:

Regardless of the praxis, there seems to be some sort of a 'B $\flat$ -mania' affiliated with E $\flat$  major. The compositional devices that exhibit this fixation are numerous: first note of the melodic line (opp.27 no.1/i, 31 no.3/iv and 81a/iii), emphasised melodic note through an accent or long value (opp.7/i, 12 no.3/i, 22/ii, 74/i and 127/i), leaping octaves (opp. 35 and 81a/i), rhythmic motif (opp.31 no.3/iii, 60/ii and 73/i), arpeggio arrival (opp.1 no.1/i, 73/i and 74/i), and an upbeat at the beginning of the movement (examples 3.48-3.53).

Example 3.48: Piano concerto no.5 in E $\flat$  major op.73, third movement, bars 1-4:

Example 3.49: Piano trio op.70 no.2 in E $\flat$  major, fourth movement, bars 1-2:

**FINALE.**  
Allegro.



Example 3.50: Piano trio op.70 no.2 in E $\flat$  major, first movement, bars 1-2:

Allegro ma non troppo.



Example 3.51: Piano sonata op.27 no.1 in E $\flat$  major, fourth movement, bars 1-2:

Allegro vivace.

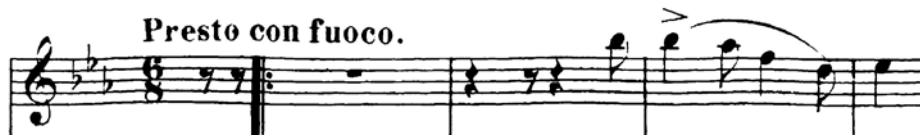


Example 3.52: Violin sonata op.12 no.3 in E $\flat$  major, third movement, bars 1-4:

**RONDO.**  
Allegro molto.



Example 3.53: Piano sonata op.31 no.3 in E $\flat$  major, fourth movement, bars 1-4:



Moreover, E $\flat_2$  in particular, often exhibits *f* chordal openings and thematic material based on the triadic scale degrees I-III-V (examples 3.54-3.61).<sup>30</sup>

Example 3.54: Symphony no.3 in E $\flat$  major op.55, first movement, bars 3-6:



Example 3.55: Piano trio op.1 no.1 in E $\flat$  major, first movement, bar 1:



Example 3.56: Piano trio op.1 no.1 in E $\flat$  major, fourth movement, bars 1-4:



<sup>30</sup> Wilson describes how melodies based on the tonic triadic motion are very often associated with the topic of hunting. Wilson, 'Of Hunting, Horns, and Heroes', 172.

Example 3.57: Violin sonata op.12 no.3 in E $\flat$  major, first movement, bars 1-2:



Allegro con spirito.


Allegro con spirito.

Example 3.58: String quartet op.74 in E $\flat$  major, first movement, bars 1-2:



Allegro.

Example 3.59: Piano concerto no.5 in E $\flat$  major op.73, third movement, bars 1-4:



*ff* *f* *p*

Example 3.60: Piano sonata op.81a in E $\flat$  major, third movement, bars 11-12:



*p*

Example 3.61: String quartet op.18 no.6 in B $\flat$  major, second movement, bars 1-2:



Adagio ma non troppo.

*p* *p* *p* *p*

Out of twelve substantial works written in E $\flat$ , eight have used scale degree VI for subsidiary movements: opp.7, 12 no.3, 27 no.1, 31 no.3, 70 no.2 feature C major and opp.55, 81a feature c minor in their slow movements, whereas op.74 uses c minor in its scherzo. Similarly to D $_1$ , the first praxis of E $\flat$  does not present a notable consistency. Several trends constitute its content, with opp.7, 18 no.6/ii and 30 no.3/ii depicting a charming, ornate and gracious quality that ‘plumbs no depths’,<sup>31</sup> opp.22/ii and 27 no.1/i a tranquil feeling, and the three *Adagios* from opp.19, 60 and 130 a songful setting. Finally, the slow movements from the c minor piano trio and last violin sonata share an identical opening on scale degree III, a similar melodic accompaniment figuration and a corresponding tonal structural of the first phrase: a midway half cadence followed by a perfect authentic cadence on the dominant (examples 3.62-3.63).

Example 3.62: Violin sonata no.10 in G major op.96, second movement, bars 1-4:

Example 3.63: Piano trio op.1 no.3 in c minor, second movement, bars 1-8:

<sup>31</sup> With reference to the slow movement of op.18 no.6. Lam, *Beethoven String Quartets*, 32.

Table 3.4: E<sub>b</sub> major

E <sub>b</sub>		PIANO		ORCHESTRAL		CHAMBER			
		op.7 op.27 no.1 op.31 no.3		'Eroica' Var. op.35 conc. no.5, op.73 op.81a		sym. no.3, op.55 'Eroica'		pf trio op.1 no.1 vn no.3, op.12 no.3 pf trio op.70 no.2	str.qt. op.74 str.qt. op.127
		E <sub>b1</sub> (lyrical)				E <sub>b2</sub> (motivic)			
		pf trio op.1 no.3 [2 <sup>nd</sup> ] (c) op.7 [4 <sup>th</sup> ] str.qt. op.18 no.6 [2 <sup>nd</sup> ] (B <sub>b</sub> ) conc. no.2, op.19 [2 <sup>nd</sup> ] (B <sub>b</sub> ) op.22 [2 <sup>nd</sup> ] (B <sub>b</sub> )		op.27 no.1 [1 <sup>st</sup> ] vn no.8, op.30 no.3 [2 <sup>nd</sup> ] (G) sym. no.4, op.60 [2 <sup>nd</sup> ] (B <sub>b</sub> ) vn no.10, op.96 [2 <sup>nd</sup> ] (G) str.qt. op.130 [5 <sup>th</sup> ] (B <sub>b</sub> )		pf trio op.1 no.1 [1 <sup>st</sup> , 4 <sup>th</sup> ] op.7 [1 <sup>st</sup> ] vn no.3, op.12 no.3 [1 <sup>st</sup> , 3 <sup>rd</sup> ] op.27 no.1 [4 <sup>th</sup> ] op.31 no.3 [1 <sup>st</sup> , 4 <sup>th</sup> ] 'Eroica' Var. op.35		sym. no.3, op.55 [1 <sup>st</sup> , 4 <sup>th</sup> ] pf trio op.70 no.2 [1 <sup>st</sup> , 4 <sup>th</sup> ] conc. no.5, op.73 [1 <sup>st</sup> , 3 <sup>rd</sup> ] str.qt. op.74 [1 <sup>st</sup> ] op.81a [1 <sup>st</sup> , 3 <sup>rd</sup> ]	
		(excerpts) op.110 [1 <sup>st</sup> ] {2 <sup>nd</sup> subj. 20-23} (A <sub>b</sub> )				(excerpts) op.110 [1 <sup>st</sup> ] {2 <sup>nd</sup> subj. 28-31} (A <sub>b</sub> )			
PRAXIS	WORK	TEMPO		TIME SIGNATURE	REMARKS by Czerny	PRIMARY KEYS	SIGNATURE FEATURES		
E <sub>b1</sub>	op.7 [4 <sup>th</sup> ]	Poco allegretto e grazioso		2/4	charming, intense feeling	E <sub>b</sub> -B <sub>b</sub> -c	gracious		
	op.18 no.6 [2 <sup>nd</sup> ]	Adagio ma non troppo		2/4	-	E <sub>b</sub> -b <sub>b</sub> /e <sub>b</sub>			
	op.30 no.3 [2 <sup>nd</sup> ]	Tempo di minuetto ma molto grazioso		3/4	artless grace, tender	E <sub>b</sub> -g			
	op.22 [2 <sup>nd</sup> ]	Adagio con molto espressione		9/8	extremely cantabile, tranquil	E <sub>b</sub> -B <sub>b</sub>	tranquil		
	op.27 no.1 [1 <sup>st</sup> ]	Andante		C	tranquil, with expression	E <sub>b</sub> -C			
	op.96 [2 <sup>nd</sup> ]	Adagio espressivo		2/4	tranquil, earnest	E <sub>b</sub> -A <sub>b</sub>			
	op.1 no.3 [2 <sup>nd</sup> ]	Andante cantabile con Variazioni		2/4	cantabile	E <sub>b</sub> -B <sub>b</sub> (variations)	songful		
	op.19 [2 <sup>nd</sup> ]	Adagio		3/4	dramatic vocal scene	E <sub>b</sub> -B <sub>b</sub>			
	op.60 [2 <sup>nd</sup> ]	Adagio		3/4	-	E <sub>b</sub> -B <sub>b</sub>			
op.130 [5 <sup>th</sup> ]	Cavatina: Adagio molto espressivo		3/4	-	E <sub>b</sub> -C <sub>b</sub> -a <sub>b</sub>				

Table 3.4: E<sub>b</sub> major (cont.)

PRAXIS	WORK	TEMPO	TIME SIGNATURE	REMARKS by Czerny	PRIMARY KEYS	SIGNATURE FEATURES
E <sub>b</sub> <sub>2</sub>	op.31 no.3 [1 <sup>st</sup> ]	Allegro	3/4	intellectual serenity	E <sub>b</sub> -B <sub>b</sub>	falling 5 <sup>ths</sup> & 6 <sup>ths</sup>
	op.7 [1 <sup>st</sup> ]	Allegro molto e con brio	6/8	vehement	E <sub>b</sub> -B <sub>b</sub>	lengthy, both praxes, f chordal openings (except op.7/i)
	op.35	Allegretto vivace	2/4	-	E <sub>b</sub> -B <sub>b</sub> (variations)	
	op.55 [1 <sup>st</sup> ]	Allegro con brio	3/4	-	E <sub>b</sub> -B <sub>b</sub>	
	op.73 [1 <sup>st</sup> ]	Allegro	C	grand, noble	E <sub>b</sub> -b/B-B <sub>b</sub>	
	op.1 no.1 [1 <sup>st</sup> ] <sup>*</sup>	Allegro	C	lively lightness, decided, energetic	E <sub>b</sub> -B <sub>b</sub>	I-III-V thematic material
	op.1 no.1 [4 <sup>th</sup> ]	Presto	2/4	lively, playful, humourously	E <sub>b</sub> -B <sub>b</sub>	
	op.12 no.3 [1 <sup>st</sup> ]	Allegro con spirit	C	noble, brilliant, majestic	E <sub>b</sub> -B <sub>b</sub>	
	op.74 [1 <sup>st</sup> ]	Allegro	C	-	E <sub>b</sub> -B <sub>b</sub>	
	op.81a [3 <sup>rd</sup> ]	‘Das Wiedersehen’, vivacissimamente	6/8	extremely lively, unrestrainedly merry	E <sub>b</sub> -B <sub>b</sub>	horn call <sup>†</sup>
	op.81a [1 <sup>st</sup> ]	‘Das Lebewohl’, Allegro	♩	a spirit deeply affected, lively	E <sub>b</sub> -B <sub>b</sub>	
	op.12 no.3 [3 <sup>rd</sup> ]	Allegro molto	2/4	lively, fiery, decided	E <sub>b</sub> -B <sub>b</sub>	B <sub>b</sub> upbeat
	op.27 no.1 [4 <sup>th</sup> ]	Allegro vivace	2/4	very animated, brilliant, bravura	E <sub>b</sub> -B <sub>b</sub>	
	op.31 no.3 [4 <sup>th</sup> ]	Presto con fuoco	6/8	hunting, power, bravura, vivacity	E <sub>b</sub> -B <sub>b</sub>	
	op.70 no.2 [1 <sup>st</sup> ]	Allegro ma non troppo	6/8	grand, less earnest than op.70 no.1	E <sub>b</sub> -B <sub>b</sub>	
	op.70 no.2 [4 <sup>th</sup> ]	Allegro	2/4	brisk, powerful, brilliant	E <sub>b</sub> -G	
op.73 [3 <sup>rd</sup> ]	Allegro ma non troppo	6/8	lively, fiery, brilliant	E <sub>b</sub> -C-A <sub>b</sub> -E (falling 3 <sup>rds</sup> )		

<sup>\*</sup> Melvin Berger associates the opening upward-rushing broken chord of op.1 no.1/i with the ‘Mannheim Rockets’, a gesture named so because it was frequently used by composers connected with the Mannheim court in the mid-eighteenth century to add a special virtuosic brilliance to their music. Berger, *Guide to Chamber Music*, 24.

<sup>†</sup> Rosen describes the horn call as a symbol in poetry well established by 1810 of distance, isolation, and memory. Charles Rosen, *Beethoven’s Piano Sonatas: A Short Companion* (New Haven: Yale University Press, 2002), 202.

c minor

**op.1 no.3 - Piano trio no.3**

**op.10 no.1 - Piano sonata no.5**

**op.13 - Piano sonata no.8, 'Pathétique'**

**op.37 - Piano concerto no.3**

op.55 - Symphony no.3, 'Eroica' (E $\flat$ )

**op.67 - Symphony no.5**

**op.18 no.4 - String quartet no.4**

**op.30 no.2 - Violin sonata no.7**

op.81a - Piano sonata no.26, 'Les Adieux' (E $\flat$ )

**op.111 - Piano sonata no.32**

**WoO 80 - 32 Piano variations**

Lewis Lockwood highlights c minor as 'a key to which he [Beethoven] returned over a lifetime in a long series of works that share certain thematic contours and aesthetic affinities'.<sup>32</sup> Indeed, c minor perhaps constitutes the most iconic key for Beethoven. His feelings about its character were so strong that the key is only represented by one praxis, the second one. It is rarely seen as a subsidiary key, due to its authoritative nature which would have inevitably overpowered the one of the home key,<sup>33</sup> however, occasionally it does appear in a more lyrical context.<sup>34</sup> C minor is also the key that is mostly quoted in the literary sources in relation to the subject of key characteristics, with most scholars agreeing on its recurring qualities.<sup>35</sup>

A quick look at the c minor table reveals a preference in the *Allegro con brio* tempo marking, with seven out of the eight first c minor movements carrying that

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<sup>32</sup> Lockwood, *Beethoven*, 100; as seen in chapter one, 14, Michael Tusa also provides great insight to Beethoven's tonal perception by revealing several structural tendencies that are attached to the key, in an explicit study involving the composer's early c minor works. Michael C. Tusa, 'Beethoven's C-minor mood: Some Thoughts on the Structural Implications of Key Choice', *Beethoven Forum* 2 (1993), 1-27.

<sup>33</sup> C minor appears as a subsidiary key only in the third movement of the 'Appassionata'. Even though the movement is in sonata form, the perpetual semiquaver figuration creates a monothematic context, in which c minor feels like a temporary tonicisation of f minor, rather than an affectively new key area. The only substantial thematic material of a subsidiary c minor movement is found in opp.55 and op.81a.

<sup>34</sup> An unusually large portion of the c minor material in the second movement of op.27 no.1 is marked *legato*. However, because it only constitutes the scherzo of the sonata it will not be considered substantial enough to be included in c<sub>1</sub>. See ch.2, 35.

<sup>35</sup> See ch. 1, fns.65-66. Kinderman acknowledges Beethoven's 'c minor mood' by calling it 'celebrated', while attributing its existence to 'artistic context reaching back to Mozart, Haydn, and Bach'. Cooper ascribes c as being emblematic to Beethoven and Solomon refers to it as 'the key of pathetic sentiments'. Kinderman, *Beethoven*, 41; Cooper, *Beethoven*, 84; Maynard Solomon, *Beethoven* (London: Cassell, 1978), 136.



indication, a frequent *alla breve* time signature, usually kept for quick and fiery content, and a c/E $\flat$  inner movement polarity which is as consistent as the presence of A in D major encountered earlier.<sup>36</sup> Another feature that quickly becomes evident in Beethoven's c minor compositions is the key's fragmented orientation through the employment of fermatas, in the cases of opp.1 no.3/i, 10 no.1/iii, 13/i, op.18 no.4/iv, op.37/iii, 67/i and 111/i (examples 3.64-3.70), or the affective usage of rests, exemplified in opp.10 no.1/i, 13/i, 30 no.2/i, 37/i, 55/ii and 111/i.<sup>37</sup>

Example 3.64: Piano trio op.1 no.3 in c minor, first movement, bars 1-10:



Example 3.65: Piano sonata op.10 no.1 in c minor, third movement, bars 14-16:



Example 3.66: Piano sonata op.13 in c minor, first movement, bar 10:



<sup>36</sup> See D major, 56.

<sup>37</sup> As seen in the first chapter, Beethoven truly believed in the power of rests: see ch.1, 8. Kinderman to that extent stresses their importance in op.10 no.1: 'the pauses are no less important than the notes: the rapport of sound with silence imparts tension to the end of the opening thematic period'. Kinderman, *Beethoven*, 42.

Example 3.67: String quartet op.18 no.4 in c minor, fourth movement, bars 9-12:



Example 3.68: Piano concerto no.3 in c minor op.37, third movement, bars 24-26:



Example 3.69: Symphony no.5 in c minor op.67, first movement, bars 1-5:



Example 3.70: Piano sonata op.111 in c minor, first movement, bars 19-20:



Intriguingly, the texture is so motivically fragmented that very often a given work can be recognised purely by its opening rhythmic figuration (examples 3.71-3.76).

Example 3.71: Piano sonata op.10 no.1 in c minor, third movement, bar 1:



Example 3.72: Violin sonata op.30 no.2 in c minor, fourth movement, bars 1-3:



Example 3.73: Piano concerto no.3 in c minor op.37, first movement, bars 1-4:



Example 3.74: Symphony no.3 in E $\flat$  major op.55, second movement, bars 1-2:



Example 3.75: Symphony no.5 in c minor op.67, first movement, bars 1-2:



Example 3.76: Piano sonata op.111 in c minor, first movement, bars 19-20:



The prevailing dramatic ambiance in all c minor works is also created through the customary employment of dotted rhythms and diminished harmonies. In fact, all of the c minor movements exhibit some sort of diminished chord, mostly a  $f\#^{07}$ , that usually resolves on the dominant. Another element that contributes to the overall agitation is the repeated melodic notes, reflected intensively in opp.10 no.1/iii, 18 no.4/iv, 30 no.2/iv, 37/iii and 67/i (examples 3.77-3.80).

Example 3.77: Piano sonata op.10 no.1 in c minor, third movement, bar 1:



Example 3.78: String quartet op.18 no.4 in c minor, fourth movement, bars 1-4:



Example 3.79: Violin sonata op.30 no.2 in c minor, fourth movement, bars 1-3



Example 3.80: Piano concerto no.3 in c minor op.37, third movement, bars 1-3:



Finally, the loud, authoritative opening statements are quite frequent, whereas the soft openings are conspicuously unsettling: for example, in a *prestissimo* context, op.10 no.1/iii starts on an upbeat and stresses the leading tone by placing it on a strong beat (example 3.77); op.1 no.3/i uses a strong dissonance with the violin's elongated F# at the end of the first phrase (example 3.81);

Example 3.81: Piano trio op.1 no.3 in c minor, first movement, bars 7-10:



op.37/i has a unison, slightly muted, detached phrase in the low register, followed by rests that enhance the mysterious atmosphere (example 3.82);

Example 3.82: Piano concerto no.3 in c minor op.37, first movement, bars 1-4:



op.55/ii is by nature a funeral march; op.81/ii is marked 'Die abwesenheit'<sup>38</sup> and opens with diminished dotted harmonies, before even establishing the tonal centre (example 3.83).<sup>39</sup>

Example 3.83: Piano sonata op.81a in E $\flat$  major, second movement, bars 1-4:



<sup>38</sup> 'Die abwesenheit' translates as 'The absence'.

<sup>39</sup> Rosen, with reference to op.81a/ii, states: 'Beginning with a phrase which turns out not be on the tonic brings a sense of uncertainty, even to listeners who do not analyse the harmony'. Rosen, *Beethoven's Piano Sonatas*, 204.

Table 3.5: c minor

<b>C</b>	<i>PIANO</i>		<i>ORCHESTRAL</i>		<i>CHAMBER</i>	
	op.10 no.1 op.13 op.111		conc. no.3, op.37 32 Var. WoO 80		sym. no.5 op.67	
	pf trio op.1 no.3		str.qt. op.18 no.4		vn no.7, op.30 no.2	
	op.10 no.1 [1 <sup>st</sup> , 3 <sup>rd</sup> ] op.13 [1 <sup>st</sup> , 3 <sup>rd</sup> ]		conc. no.3, op.37 [1 <sup>st</sup> , 3 <sup>rd</sup> ]		sym. no.5, op.67 [1 <sup>st</sup> ] op.81a [2 <sup>nd</sup> ] (E <sub>b</sub> )	
C <sub>2</sub> (motivic)						
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
C <sub>2</sub>	op.1 no.3 [4 <sup>th</sup> ]	Prestissimo	♩	boisterous, impassioned spirit	c-E <sub>b</sub>	loud, shocking opening
	op.10 no.1 [1 <sup>st</sup> ]	Allegro molto e con brio	3/4	fiery, manly, earnest spirit	c- E <sub>b</sub>	
	op.13 [1 <sup>st</sup> ]	Grave - Allegro molto e con brio	C - ♩	pathetic, extremely impetuous	c- e <sub>b</sub> /E <sub>b</sub>	
	op.67 [1 <sup>st</sup> ]	Allegro con brio	2/4	-	c-E <sub>b</sub>	
	op.111 [1 <sup>st</sup> ]	Maestoso - Allegro con brio ed appassionato	C	power, tragic impassioned,	c-A <sub>b</sub>	
	Wo80	Allegretto	3/4	energetic, genial, earnest, brilliant	c	
	op.55 [2 <sup>nd</sup> ]	‘Marcia funebre’, Adagio assai	2/4	-	c-C-f	soft, heavily dotted
	op.81a [2 <sup>nd</sup> ]	‘Die abwesenheit’, Andante espressivo, ‘In gehender Bewegung, doch mit Ausdruck’	2/4	deepest sorrow	c	
	op.10 no.1 [3 <sup>rd</sup> ]	Prestissimo	♩	fantastical humor	c- E <sub>b</sub>	repeated melodic notes
	op.18 no.4 [4 <sup>th</sup> ]	Allegro	♩	-	c-A <sub>b</sub>	
	op.30 no.2 [4 <sup>th</sup> ]	Allegro	♩	wild, impetuously excited humour	c-E <sub>b</sub>	
	op.37 [3 <sup>rd</sup> ]	Allegro	2/4	plaintive, simplicity	c-E <sub>b</sub>	
	op.1 no.3 [1 <sup>st</sup> ]	Allegro con brio	3/4	impassionately excited	c-E <sub>b</sub>	diminished harmonies
	op.13 [3 <sup>rd</sup> ]	Allegro	♩	lively, pathetic but not impetuous	c- E <sub>b</sub> -A <sub>b</sub>	
	op.18 no.4 [1 <sup>st</sup> ]	Allegro ma non tanto	C	-	c-E <sub>b</sub>	
op.30 no.2 [1 <sup>st</sup> ]	Allegro con brio	C	military, noble, heroic	c-E <sub>b</sub>	affective rests	
op.37 [1 <sup>st</sup> ]	Allegro con brio	♩	grand, fervent, energy, decision	c-E <sub>b</sub>		

## E major

op.1 no.2 - Piano trio no.2 (G)  
op.2 no.3 - Piano sonata no.3 (C)

### **op.14 no.1 - Piano sonata no.9**

op.37 - Piano concerto no.3 (c)  
op.47 - Violin sonata no.9, 'Kreutzer' (A)  
op.53 - Piano sonata no.21, 'Waldstein'(C)

op.59 no.2 - String Quartet no. 8 (e)

op.69 - Cello sonata no.3 (A)

op.90 - Piano sonata no.27 (e)

### **op.109 - Piano sonata no.29**

op.127 - String quartet no.12 (E $\flat$ )

E major must have been a very special key for Beethoven and is represented only by its first praxis. In describing the several musical excerpts in E, scholars have used expressions such as 'magical',<sup>40</sup> 'sublime lyricism',<sup>41</sup> 'profoundly moving',<sup>42</sup> 'exhibits a majestic calm that rises severely above human concerns and interests',<sup>43</sup> 'sheer lyrical beauty',<sup>44</sup> and 'devoted to the utmost luxuriance of lyric melodies'.<sup>45</sup> Its extramusical associations are also compelling. Czerny claims to have been told by Beethoven that the idea for the slow movement of op.59 no.2 came to him while he was contemplating the starry sky and thinking of the music of the spheres,<sup>46</sup> while Basil Lam with reference to the same movement, draws a connection to Shakespeare's 'There's not the smallest orb which thou behold'st. But in his motion like an angel sings'.<sup>47</sup> Moreover, the assignment of explicit tempo markings by Beethoven, such as 'Nicht zu geschwind und sehr singbar vorzutragen',<sup>48</sup>

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<sup>40</sup> Describing op. 37/ii. Kinderman, *Beethoven*, 76.

<sup>41</sup> Describing op.109/ii. Kinderman, *Beethoven*, 243.

<sup>42</sup> Describing op.1 no.2/ii. Berger, *Guide to Chamber Music*, 25.

<sup>43</sup> Describing op.59 no.2/ii. Berger *Guide to Chamber Music*, 50.

<sup>44</sup> Describing op.2 no.1/ii. Lockwood, *Beethoven*, 100.

<sup>45</sup> Describing op.90/ii. Donald Tovey, *A Companion to Beethoven's Pianoforte Sonatas: (bar to bar analysis)* (London: Associated Board of the Royal Schools of Music, 1931), 198.

<sup>46</sup> Beethoven also allegedly said to J. A. Stumpff: 'When I contemplate ... the host of ... suns or earths my soul rises to the source of all creation'. Lam, *Beethoven String Quartets*, 55.

<sup>47</sup> Lam, *Beethoven String Quartets*, 56.

<sup>48</sup> 'Nicht zu geschwind und sehr singbar vorzutragen' translates as 'Not too swiftly and conveyed in a singing manner'.

‘Gesangvoll, mit innigster Empfindung’<sup>49</sup> and ‘Si tratta questo pezzo con molto di sentimento’,<sup>50</sup> further denote its uniqueness.

A hymn-like, non-pulsating texture is prevalent in most E major slow movements, best exhibited in op.37/ii, where complex, improvisatory-like ornaments fill the emptiness between the beats (example 3.84).

Example 3.84: Piano sonata op.37 in c minor, second movement, bars 1-4:



By 1820, the year when op.109 was completed, Beethoven had drastically changed his treatment of the sonata form. However, his view of E major seems to have remained remarkably consistent: when placing op.109/ii next to op.2 no.3/ii, composed in 1795, the aesthetic similarity is striking (examples 3.85-3.86).

Example 3.85: Piano sonata op.109 in E major, second movement, bars 1-4:



<sup>49</sup> ‘Gesangvoll, mit innigster Empfindung’ translates as ‘Songlike, with the greatest inwardness of feeling’.

<sup>50</sup> ‘Si tratta questo pezzo con molto di sentimento’ translates as ‘With a lot of feeling’.



Example 3.86: Piano sonata op.2 no.3 in C major, second movement, bars 1-2:



In fact, all ten instrumental movements written in E, open in the same octave, with a dynamic range of *pp-p* and predominant *legato* lines marking the main thematic material.<sup>51</sup> The prevailing gentle dynamics and lyrical textures generate a sense of euphoria and serenity that ought to be preserved even in the few E major movements that indicate *Allegro* in their tempo, such as op.14.

The fact that op.14 belongs to Beethoven's first compositional period can lead to a misinterpretation of the repeated left hand semiquavers in the opening of the sonata by articulating them in a dry and *staccato* manner, a touch which would best suit a composition in C major, for example, op.2 no.3. Such execution would disturb the qualities of E major and therefore must be avoided; on the contrary, in order to maintain its peaceful character, employing the pedal would be necessary (example 3.87).<sup>52</sup>

Example 3.87: Piano sonata op.14 no.1 in E major, first movement, bars 1-3:



<sup>51</sup> Hence E major has only one praxis.

<sup>52</sup> In describing op.14 no.1, Edwin Fischer mentions: 'the masses ... are inclined to label composers and, needless to say, the label they attach to Beethoven is 'the heroic'. They refuse to believe that there can be gentle heroes, heroes of goodness and long-suffering. Let us not forget Beethoven's gentle side'. Edwin Fischer, *Beethoven's Pianoforte Sonatas: A Guide for Students and Amateurs* trans. Stanley Godman (London: Faber and Faber, 1959), 48-49.

Similarly, the third movement of the same sonata is marked *Allegro comodo*,<sup>53</sup> with ‘*comodo*’ being very often overlooked. The result is a fast tempo which inevitably makes the left hand triplets sound agitated, almost in an ‘out of breath’ manner (example 3.88); perhaps to counteract such habits Beethoven indicated ‘Nicht zu geschwind und sehr singbar vorzutragen’ in op.90/ii.

Example 3.88: Piano sonata op.14 no.1 in E major, third movement, bars 1-3:



Intriguingly, a closer look at Beethoven’s use of E major reveals its placement after works of dramatic power: op.14 no.1 comes after the ‘Pathétique’ and op.109 after the ‘Hammeklavier’. In the context of a slow movement, it usually appears after intense and vigorous statements in the minor mode, creating therefore a sharp contrast and a very special effect: for example, opp.37, 59 no.2, 69 and 90. Similarly, when used as a subsidiary key within a movement, as in the cases of opp.47 and 53, everything comes to a standstill: time ‘freezes’, as its long values create an illusion of a slower tempo, even in *allegro* settings like the ones of ‘Waldstein’ and ‘Kreutzer’, where a great momentum is built by powerful textures and a highly subdivided beat (examples 3.89-3.90).

<sup>53</sup> *Comodo* translates as ‘comfortable’.

Example 3.89: Piano sonata op.53 in C major, first movement, bars 35-38:



Example 3.90: Violin sonata op.47 in A, first movement, bars 91-94:



Finally, Beethoven very often emphasises scale degree III, by opening most of the E major movements with a G# in the melody (examples 3.84-3.86); on occasion, G# also appears as the lowest note, providing a I<sup>6</sup> harmonic foundation, as in opp.1 no.2/ii and 14 no.1/iii.

Table 3.6: E major

E	<i>PIANO</i>		<i>ORCHESTRAL</i>		<i>CHAMBER</i>	
	<b>op.14 no.1</b>	<b>op.109</b>	N/A		N/A	
	$E_1$ (lyrical)					
	pf trio op.1 no.2 [2 <sup>nd</sup> ] (G) op.2 no.3 [2 <sup>nd</sup> ] (C) <b>op.14 no.1</b> [1 <sup>st</sup> , 3 <sup>rd</sup> ] conc. no.3, op.37 [2 <sup>nd</sup> ] (c)		str.qt. op.59 no.2 [2 <sup>nd</sup> ] (e) vc no.3, op.69 [3 <sup>rd</sup> ] (A) op.90 [2 <sup>nd</sup> ] (e) <b>op.109</b> [1 <sup>st</sup> , 2 <sup>nd</sup> ]		( <u>excerpts</u> ) op.53 [1 <sup>st</sup> ] {2 <sup>nd</sup> subj. 35-38} (C) vn no.9, op.47 [1 <sup>st</sup> ] {2 <sup>nd</sup> subj. 91-107} (A) str.qt. op.127 [2 <sup>nd</sup> ] {var. 59-76} (Ab)	
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
$E_1$	<b>op.14 no.1</b> [1 <sup>st</sup> ]	Allegro	C	serene, noble, lively but agreeably	E-B	serenity, euphoria
	<b>op.14 no.1</b> [3 <sup>rd</sup> ]	Allegro comodo	C	very gay, lively, playful	E-G	
	op.2 no.3 [2 <sup>nd</sup> ]	Adagio	2/4	poetry & painting, great sentiment	E-e	melody starts on III
	op.37 [2 <sup>nd</sup> ]	Largo	3/8	holy, distant, celestial harmony	E-G	
	op.90 [2 <sup>nd</sup> ]	‘Nicht zu geschwind und sehr singbar vorzutragen’	2/4	utmost sweetness, cantabile	E-B	
	<b>op.109</b> [1 <sup>st</sup> ]	Vivace, ma non troppo – Adagio espressivo	2/4	very noble, calm, dreamy	E-B	
	<b>op.109</b> [2 <sup>nd</sup> ]	‘Gesangvoll, mit innigster Empfindung’ Andante molto cantabile ed espressivo	3/4	with expression, very legato	E (variations)	
	op.1 no.2 [2 <sup>nd</sup> ]	Largo con espressione	6/8	noble, highly feeling, melodious	E-B	
	op.59 no.2 [2 <sup>nd</sup> ]	Molto adagio, ‘Si tratta questo pezzo con molto di sentimento’	C	starry skies, music of the spheres	E-B	sublime melody
	op.69 [3 <sup>rd</sup> ]	Adagio cantabile	2/4	very melodious, replete with feeling	E	

c# minor

**op.27 no.2 - Piano sonata no.14, 'Moonlight'**

**op.131 - String quartet no.14**

Although the key of c# minor was quite uncommon at the time, Beethoven used it twice in composing the op.27 no.2 piano sonata, nicknamed 'Moonlight',<sup>54</sup> and the string quartet op.131.<sup>55</sup>

The first movement of op.27 no.2 is described by Berlioz as 'one of those poems that human language does not know how to qualify'.<sup>56</sup> It is comprised of hypnotically soft, non-stop quaver triplets that often create disturbing dissonances in conjunction with the melodic line, and of a repeated, dotted rhythmic motive that becomes tormenting towards the end (example 3.91).

Example 3.91: Piano sonata op.27 no.2 in c# minor, first movement, bars 5-7:



The disturbed notion is also witnessed in the few major bars of the movement: the texture remains unaltered, which makes the effect of the major mode almost non-

<sup>54</sup> Both Tovey and Kinderman characterise the nickname 'Moonlight' as being inappropriate with relation to the content of the sonata. Tovey, *A Companion to Beethoven's Pianoforte Sonatas*, 169; Kinderman, *Beethoven*, 81.

<sup>55</sup> Lockwood, with regard to the key of c# minor highlights: 'That he now chose the odd key of C-sharp minor [for op.131] was a vital condition for the new quartet, a mark of its special sound image. He had not used this key for any work other than the "Moonlight" Sonata, Opus 27 No. 1; nor had Haydn used it more than once ... while Mozart avoided it entirely.' Lockwood, *Beethoven*, 469.

<sup>56</sup> Wilhelm von Lenz, *Beethoven et ses trois styles*, (Paris: Lavinée, 1855), 159; quoted in Rosen, *Beethoven's Piano Sonatas*, 156.

audible. The finale, one of the very few truly tragic finales by Beethoven,<sup>57</sup> is an exhilarating, yet dark movement whose ‘ferocity is astonishing even today’.<sup>58</sup> It opens with detached, sequential ascending arpeggios accompanied by an austere left hand *staccato* figuration in the low register; as in the case of op.131, the thematic material of the finale relates to the one of the opening movement (example 3.92).<sup>59</sup>

Example 3.92: Piano sonata op.27 no.2 in c# minor, third movement, bars 1-2:



Anger and agitation is reflected throughout the movement by the plethora of *sf*, and *subito* dynamics, as well as the rejection of the conventional major mode for the secondary harmonic group.<sup>60</sup>

The fugal first movement of op.131, in the words of Richard Wagner ‘reveals the most melancholy sentiment in music’<sup>61</sup> with its painful melodic construction: an ascending augmented second which stresses the leading tone on a strong beat, followed by a resolution to C#, a falling major third emphasised by a *sf*, and a

<sup>57</sup> Tovey argues that the finales of the c minor trio, of the ‘Appassionata’, of the c# minor piano sonata and of the c# minor string quartet, are Beethoven’s ‘only tragic finales’. Tovey, *A Companion to Beethoven’s Pianoforte Sonatas*, 169.

<sup>58</sup> Rosen, *Beethoven’s Piano Sonatas*, 159.

<sup>59</sup> Kindermann draws a connection between op.27 no.2 and op.131 as compositional conceptions: ‘in op.131, as in op.27 no.2, the clear return of thematic material from the opening movement helps to confirm the role of the finale as a culmination to the entire work’. Kinderman, *Beethoven*, 82.

<sup>60</sup> This insistence on the minor mode makes the arrival on C# major in bars 65-66, the only two major bars in the entire movement, sound quite sarcastic.

<sup>61</sup> Quoted in Berger, *Guide to Chamber Music*, 67.

further melodic descent that completes the subject (example 3.93);<sup>62</sup> overall, the music exemplifies a disturbed serenity that resembles the first movement of op.27 no.2.

Example 3.93: String quartet op.131 in c# minor, first movement, bars 1-4:



The finale constitutes a combination of ‘fierce pleasure, agony, ecstasy of love, joy, anger, passion, and suffering’,<sup>63</sup> with its forceful, *ff* unison opening and seemingly dotted rhythms (example 3.94).

Example 3.94: String quartet op.131 in c# minor, seventh movement, bars 1-8:



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<sup>62</sup> An almost identical theme was presented in the f minor fugato section of the second movement in the ‘Eroica’ symphony. See f minor, 127, example 3.151.

<sup>63</sup> These words belong to Wagner when describing the finale of op.131. Quoted in Berger, *Guide to Chamber Music*, 69.

Table 3.7: c# minor

<b>C#</b>		<i>PIANO</i>		<i>ORCHESTRAL</i>		<i>CHAMBER</i>	
		<b>op.27 no.2</b>		N/A		<b>str.qt. op.131</b>	
		C# <sub>1</sub> (lyrical)			C# <sub>2</sub> (motivic)		
		<b>op.27 no.2 [1<sup>st</sup>] str.qt. op.131 [1<sup>st</sup>]</b>			<b>op.27 no.2 [3<sup>rd</sup>] str.qt. op.131 [7<sup>th</sup>]</b>		
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>	
C# <sub>1</sub>	<b>op.27 no.2 [1<sup>st</sup>]</b>	Adagio sostenuto	♩	night scene in which the voice of a complaining spirit is heard at a distance	c#	disturbed serenity	
	<b>op.131 [1<sup>st</sup>]</b>	Adagio ma non troppo e molto espressivo	♩	-	c# (fugue)		
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>	
C# <sub>2</sub>	<b>op.27 no.2 [3<sup>rd</sup>]</b>	Allegro	C	extremely impetuous	c#-g#	agitation	
	<b>op.131 [7<sup>th</sup>]</b>	Presto agitato	♩	-	c#-E		



## F major

op.2 no.1 - Piano sonata no.1 (f)	op.53 - Piano sonata no.21, 'Waldstein' (C)
<b>op.5 no.1 - Cello sonata no.1</b>	<b>op.54 - Piano sonata no.22</b>
<b>op.10 no.2 - Piano sonata no.6</b>	<b>op.59 no.1 - String quartet no.7</b>
<b>op.18 no.1 - String quartet no.1</b>	<b>op.68 - Symphony no.6, 'Pastoral'</b>
op.21 - Symphony no.1 (C)	op.92 - Symphony no.7 (A)
<b>op.24 - Violin sonata no.5, 'Spring'</b>	<b>op.93 - Symphony no.8</b>
op.47 - Violin sonata no.9, 'Kreutzer' (A)	op.101 - Piano sonata no.28 (A)
	<b>op.135 - String quartet no.16</b>

F major is perhaps the key with the most diverse personalities, something that is reflected by the entirely different nature of opp. 68 and 93, the only two Beethoven symphonies written in the same key.

F<sub>2</sub> consists mostly of humorous material. Nevertheless, counterpoint is also frequently featured in variable degrees of intensity: from the simple 'conversational tone'<sup>64</sup> of opp.5 no.1/ii and 135/i, to the imitative and canonic techniques in opp.21/ii, 54/i, 59 no.1/iv, and the mock fugal finales of opp.10<sup>65</sup> and 54.<sup>66</sup> Occasionally, march-like F movements appear, as in opp.92 and 101, with full, *f* textures and dotted rhythmic uniformity. However, as Kinderman states, 'F major is the tonality of several of his [Beethoven's] most comic pieces'.<sup>67</sup> The ways Beethoven expresses humour in music is rather compelling: in opp.10 no.2/i, 18/i and 135/i a short *p* statement is interrupted by rests and answered by a longer counter-statement, contrasting in register and articulation (examples 3.95-3.97);

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<sup>64</sup> Berger, *Guide to Chamber Music*, 73.

<sup>65</sup> Kinderman describes the last movement of op.10 no.2 as a 'comic fugal burlesque'. Kinderman, *Beethoven*, 44.

<sup>66</sup> Tovey refers to op.54 as being 'deeply humorous'. Tovey, *A Companion to Beethoven's Pianoforte Sonatas*, 161.

<sup>67</sup> Kinderman, *Beethoven*, 147.

Example 3.95: Piano sonata op.10 no.1 in F major, first movement, bars 1-8:

Allegro.

Example 3.96: String quartet op.18 no.1 in F major, first movement, bars 1-8:

Allegro con brio.

Example 3.97: String quartet op.135 in F major, first movement, bars 1-7:

Allegretto.

op.24/iii displays a juxtaposition of *staccato* beats between the two instruments (example 3.98);

Example 3.98: Violin sonata op.24 in F major, third movement, bars 9-12:

in opp.18 no.1/iv, 54/i, 93/iv, 135/i the thematic material is tossed from one octave to another (examples 3.99-3.102);

Example 3.99: String quartet op.18 no.1 in F major, fourth movement, bars 9-18:

A musical score for a string quartet, showing four staves (Violin I, Violin II, Viola, and Cello/Double Bass). The music is in F major and 3/4 time. The first two staves (Violin I and II) play a melodic line that moves up and down the scale, while the lower staves (Viola and Cello/Double Bass) play a rhythmic accompaniment. The score includes dynamic markings such as *cresc.* and *f*.

Example 3.100: Piano sonata op.54 in F major, first movement, bars 1-4:

A musical score for a piano sonata, showing two staves (Right Hand and Left Hand). The music is in F major and 3/4 time. The tempo is marked *In tempo d'un Menuetto.* and the dynamics are *p*. The right hand plays a melodic line, and the left hand plays a rhythmic accompaniment.

Example 3.101: Symphony no.8 in F major op.93, fourth movement, bars 1-6:

A musical score for a symphony, showing multiple staves (Violins I and II, Violas, Cellos, and Double Basses). The music is in F major and 3/4 time. The tempo is marked *Allegro vivace. op.93.* and the dynamics are *pp*. The score includes various musical notations such as slurs, accents, and dynamic markings.

Example 3.102: String quartet op.135 in F major, first movement, bars 1-2:



the opening triplet figuration of op.93/iv depicts a giggling effect, while the unexpected, loud appearance of the non-chord C# in bar 18, is rather comic (example 3.103);

Example 3.103: Symphony no.8 in F major op.93, fourth movement, bars 1-6:



the choice of instrumentation in op.68/iii conveys vivid images with the ‘laughing’ french horns and the parody of a village bassoonist, who is only able to produce two notes and at his own convenience (example 3.104).<sup>68</sup>

Example 3.104: Symphony no.6 in F major op.68, third movement, bars 75-79 & 91-98:



<sup>68</sup> In describing that particular section, Tovey argues that the bassoonist never seems to know just how many notes to put in. Quoted in Lockwood, *Beethoven*, 229.

The first praxis of F major reflects Beethoven's most vocalised textures. In fact, as portrayed in the F major table, F<sub>1</sub> is the only first praxis of a key that contains so many *Allegro* movements: those of opp.5 no.1, 24, 59 no.1 and 68. Whether through a long *dolce* melody, a *cantabile* line, an operatic or pastoral setting, a sense of undisturbed beauty and calmness is predominant (examples 3.105-3.108), reflected in the nature inspired nicknames of 'Spring' and 'Pastoral'<sup>69</sup> for opp.24 and 68 respectively.<sup>70</sup>

Example 3.105: Cello sonata no.1 in F major op.5 no.1, first movement, bars 1-4:

Example 3.106: Violin sonata no.5 in F major op.24, first movement, bars 1-4:

<sup>69</sup> As seen earlier, with regard to his sixth symphony, Beethoven indicated: 'Mehr Ausdruck der Empfindung als Malerei' which translates as 'more an expression of feeling rather than tone painting'. See ch.1, 8.

<sup>70</sup> Although 'Pastoral' is an original title given by the composer, the nickname 'Spring' for op.24 did not originate with Beethoven. Lockwood affiliates this metaphor with the special features of this work: 'consistent melodic elegance and ingratiating musical qualities'. Lewis Lockwood, '“On the Beautiful in Music”: Beethoven's "Spring" Sonata for Violin and Piano, Opus 24' in Lewis Lockwood and Mark Kroll (eds.), *The Beethoven Violin Sonatas: History, Criticism and Performance* (Urbana: University of Illinois Press, 2004), 24.

Example 3.107: Symphony no.6 in F major op.68, first movement, bars 1-4:

Musical score for Example 3.107, showing four staves of music in 3/4 time, F major, bars 1-4. The score includes piano (*p*) dynamics.

Example 3.108: String quartet op.59 no.1 in F major, first movement, bars 1-4:

**Allegro.**

Musical score for Example 3.108, showing four staves of music in 3/4 time, F major, bars 1-4. The score includes piano (*p*) and mezzo-forte (*mf*) dynamics, and the instruction *mf e dolce.*

Table 3.8: F major

F	<i>PIANO</i>		<i>ORCHESTRAL</i>		<i>CHAMBER</i>		
	<b>op.10 no.2 op.54</b>		<b>sym. no.6, op.68 sym. no.8, op.93</b>		<b>vc no.1, op.5 no.1 str.qt. op.18 no.1</b>	<b>vn no.5, op.24 str.qt. op.59 no.1 str.qt. op.135</b>	
	$F_1$ (lyrical)			$F_2$ (motivic)			
	op.2 no.1 [2 <sup>nd</sup> ] (f) <b>vn no.5, op.24 [1<sup>st</sup>, 4<sup>th</sup>] vn no.9, op.47 [2<sup>nd</sup>]</b>		op.53 [2 <sup>nd</sup> ] (C) <b>str.qt. op.59 no.1 [1<sup>st</sup>] sym. no.6, op.68 [1<sup>st</sup>, 5<sup>th</sup>]</b>		<b>vc no.1, op.5 [1<sup>st</sup>, 2<sup>nd</sup>] op.10 no.2 [1<sup>st</sup>, 3<sup>rd</sup>] str.qt. op.18 no.1 [1<sup>st</sup>, 3<sup>rd</sup>, 4<sup>th</sup>] sym. no.1, op.21 [2<sup>nd</sup>] (C) vn no.5, op.24 [3<sup>rd</sup>] op.54 [1<sup>st</sup>, 2<sup>nd</sup>]</b>		<b>str.qt. op.59 no.1 [4<sup>th</sup>] sym. no.6, op.68 [3<sup>rd</sup>] sym. no.7, op.92 [3<sup>rd</sup>] (A) sym. no.8, op.93 [1<sup>st</sup>, 4<sup>th</sup>] op.101 [2<sup>nd</sup>] (A) str.qt. op.135 [1<sup>st</sup>]</b>
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>		<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
$F_1$	<b>op.5 no.1 [1<sup>st</sup>]</b>	Allegro		C	lively, brilliant	F-C	pastoral
	<b>op.68 [1<sup>st</sup>]</b>	Allegro ma non troppo 'Erwachen heitere Empfindungen bei der Ankunft auf dem Lande' <sup>*</sup>		2/4	-	F-C	
	<b>op.68 [5<sup>th</sup>]</b>	Allegretto 'Hirtengesang. Frohe und dankbare Gefühle nach dem Sturm' <sup>†</sup>		6/8	-	F-C	
	<b>op.24 [1<sup>st</sup>]</b>	Allegro		C	most beautiful and melodious	F-C	beautiful melodic lines
	<b>op.24 [4<sup>th</sup>]</b>	Allegro ma non troppo		C	melodious	F-c/C	
	<b>op.59 [1<sup>st</sup>]</b>	Allegro		C	-	F-C	operatic
	op.2 no.1 [2 <sup>nd</sup> ]	Adagio		3/4	soft, tranquil, cantabile	F-C	
op.53 [2 <sup>nd</sup> ]	'Introduzione' - Adagio molto		6/8	calm, earnest, expressive	F		

<sup>\*</sup> 'Erwachen heitere Empfindungen bei der Ankunft auf dem Lande' translates as 'The awakening of joyous feelings on getting out into the countryside'.

<sup>†</sup> 'Hirtengesang. Frohe und dankbare Gefühle nach dem Sturm' translates as 'Shepherd's song. Happy and thankful feelings after the storm'.

Table 3.8: F major (cont.)

<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
F <sub>2</sub>	op.10 no.2 [1 <sup>st</sup> ]	Allegro	2/4	gay and lively	F-C	humorous
	op.18 no.1 [1 <sup>st</sup> ]	Allegro con brio	3/4	-	F-C	
	op.18 no.1 [4 <sup>th</sup> ]	Allegro	2/4	-	F-C/c	
	op.24 [3 <sup>rd</sup> ]	Allegro molto	3/4	with the merriest humour	F	
	op.47 [2 <sup>nd</sup> ]	Andante con variazioni	2/4	highly melodious and expressive	F/C (variations)	
	op.54 [1 <sup>st</sup> ]	In tempo d'un Menuetto	3/4	tolerably earnest, spirited	F-C	
	op.68 [3 <sup>rd</sup> ]	Allegro, 'Lustiges Zusammensein der Landleute' <sup>‡</sup>	3/4	-	F	
	op.93 [1 <sup>st</sup> ]	Allegro vivace e con brio	3/4	-	F-C	
	op.93 [4 <sup>th</sup> ]	Allegro vivace	C	-	F-C	
	op.135 [1 <sup>st</sup> ]	Allegretto	2/4	-	F-C	contrapuntal
	op.5 no.1 [2 <sup>nd</sup> ]	Allegro vivace	6/8	fiery, lively, brilliant	F-C	
	op.10 no.2 [3 <sup>rd</sup> ]	Presto	2/4	brilliant	F	
	op.21 [2 <sup>nd</sup> ]	Andante cantabile con moto	3/8	-	F-C	
	op.54 [2 <sup>nd</sup> ]	Allegretto	2/4	brilliant	F	
	op.59 no.1 [4 <sup>th</sup> ]	'Theme russe'' - Allegro	2/4	-	F-c/C	
	op.92 [3 <sup>rd</sup> ]	Presto	3/4	-	F-D	march
op.101 [2 <sup>nd</sup> ]	Lebhaft. Marschmäßig, Vivace alla Marcia	C	lively, vehement, energetic	F-B $\flat$		

<sup>‡</sup> 'Lustiges Zusammensein der Landleute' translates as 'Merry gathering of country people'.



d minor

op.10 no.3 - Piano sonata no.7 (D)  
op.18 no.1 - String quartet no.1 (F)  
op.28 - Piano sonata no.15 (D)  
op.30 no.3 - Violin sonata no.8 (G)

**op.31 no.2 - Piano sonata no.17, 'Tempest'**  
op.70 no.1 - Piano trio, 'Ghost' (D)  
op.102 no.2 - Cello sonata no.5 (D)  
**op.125 - Symphony no.9**

Lockwood observes a hesitation in Beethoven's use of d minor, which he attributes, along with the key's character, to the powerful meaning it had for Mozart.<sup>71</sup> However, considering that Beethoven has only written two works and five slow movements in d, his depiction of the key is remarkably powerful and vivid.

Beethoven exploited dark feelings from the very first movement in d minor that he conceived, the *Largo e mesto* from op.10 no.3. Paul Bekker remarks: 'At that time everyone recognised that the *largo* of the third sonata (Op. 10. iii) expressed a melancholic state of mind, that it portrayed every subtle shade, every phase of melancholy without the need of a title to give a clue to the meaning'.<sup>72</sup> The dense sonorities of the low register combined with an exceptionally slow pace, immediately gives the opening a tragic character that prevails throughout this *quasi* operatic *scena* (example 3.109).<sup>73</sup>

Example 3.109: Piano sonata op.10 no.3 in D major, second movement, bars 1-10:



<sup>71</sup> Lockwood, *Beethoven*, 427.

<sup>72</sup> Paul Bekker, *Beethoven*, trans. M. M. Bozman (J. M. Dent & Sons, Ltd, 1925), 64.

<sup>73</sup> This opinion is also echoed by Rosen, *Beethoven's Piano Sonatas*, 140.

A sense of despair is expressed through a plethora of intensively marked diminished harmonies and multiple *rinforzando* indications during the *arioso* moments. However, its most vivid representation is depicted at the coda, where the movement takes the dimension of a *parlando* accompanied recitative, with the two note legaturas evoking sobbing sighs (example 3.110).<sup>74</sup>

Example 3.110: Piano sonata op.10 no.3 in D major, second movement, bars 81-87:



A similar operatic, mournful ambiance is also portrayed in the slow movements of opp.18 no.1, 70 no.2 and 102 no.2, all of which also open with a hushed introduction and carry unusually revealing tempo markings (examples 3.111-3.113).

Example 3.111: String quartet op.18 no.1 in F major, second movement, bars 1-5:



Example 3.112: Piano trio op.70 no.1 in D major, second movement, bars 1-5:



<sup>74</sup> Even op.28/ii, which is governed by a *staccato* broken chord accompaniment throughout its presentation, switches to a similar *parlando* accompanied recitative at the coda (example 3.114); the emphasis that both movements give on the leading tone at the very end is worth noting.

Example 3.113: Cello sonata no.5 in D major op.102 no.2, second movement, bars 1-10:

The image shows a musical score for the second movement of Cello Sonata No. 5 in D major, Op. 102 No. 2, by Ludwig van Beethoven. The score is in 3/4 time and consists of four staves. The first two staves are for the cello and the second two for the piano. The tempo is 'Adagio con molto sentimento d'affetto'. The first two staves are marked 'mezza voce'. The last two staves are marked 'espressivo'.

The *Adagio affettuoso ed appassionato* of op.18 no.1 is widely known to be associated with the tomb scene from *Romeo and Juliet*, through the writings of Karl Amenda, a contemporary violinist and friend of Beethoven;<sup>75</sup> a rejected sketch with the inscription ‘les derniers soupirs’,<sup>76</sup> seems to confirm this anecdotal story.<sup>77</sup> In another Shakespearian association, the *Largo assai ed espressivo* of op.70 no.2, is related to the witches’ scene from an opera based on *Macbeth* that Beethoven was planning at the time.<sup>78</sup> Czerny, on the other hand, after ascribing the unusual description of ‘ghastly awful’ to it, links the movement to the first appearance of the ghost in *Hamlet*.<sup>79</sup> Finally, the incredibly subdued *Adagio con molto sentimento d’affetto* of op.102 no.2 does not exhibit dynamic markings that exceed the *p* range for the entire eleven minutes that is needed to perform it. Overall, in the  $d_1$  slow movements, the gravitation centre is placed towards the end, with the climax being followed by a declamatory statement where the movement dies away in *pp*, along

<sup>75</sup> Kinderman draws an evidential connection between op.10 no.3/ii and op.18 no.1/ii through Beethoven’s sketches and refers to the former as a ‘companion piece’ to the latter. Kinderman, *Beethoven*, 106.

<sup>76</sup> ‘Les derniers soupirs’ translates as ‘the last sighs’.

<sup>77</sup> Lam, *Beethoven String Quartets*, 15.

<sup>78</sup> Berger, *Guide to Chamber Music*, 53.

<sup>79</sup> Carl Czerny, *On the Proper Performance of all Beethoven’s Works for the Piano* ed. Paul Badura-Skoda (Vienna: Universal Edition, 1970), 97.

with the last signs of hope exemplified in brief *crescendo* moments (examples 3.114-3.117).<sup>80</sup>

Example 3.114: Piano sonata op.10 no.3 in D major, second movement, bars 75-87:

The musical score for Example 3.114 consists of two systems of piano music. The first system shows the right hand with a series of sixteenth-note patterns and the left hand with a steady accompaniment. Dynamics include *pp* and *cresc.*. The second system continues the piece, with the right hand playing more complex rhythmic figures and the left hand providing harmonic support. Dynamics include *pp*, *f*, and *pp*.

Example 3.115: String quartet op.18 no.1 in F major, second movement, bars 101-109:

The musical score for Example 3.115 is a string quartet score with four staves. It features intricate rhythmic patterns and dynamic markings such as *f*, *sf*, and *pp*. The score is divided into two systems, with the first system showing the initial rhythmic development and the second system showing a more complex texture with *pp* dynamics.

<sup>80</sup> The only exception is op.102 no.2/ii which ends with an *attacca* to the *finale*.

Example 3.116: Piano sonata op.28 in D major, second movement, bars 89-99:



Example 3.117: Piano trio op.70 no.1 in D major, second movement, bars 91-96:



Although there are only two works where the home key is d minor, both were of groundbreaking proportions. The volatile qualities of the key become quickly apparent in the 'Tempest',<sup>81</sup> through the frequent alternation of *tempi*, and in the

<sup>81</sup> Allegedly when Schindler asked Beethoven about the content of op.31 no.2 he replied 'Just read Shakespeare's *Tempest*'. Rosen dismisses this suggestion by stating 'if so, he [Beethoven] cannot have read anything beyond the title', but Tovey recognises 'a mood that is common to both'. Anton Schindler, *Beethoven as I knew him* (Chapel Hill: University of North Carolina Press, 1966), 406; Rosen, *Beethoven's Piano Sonatas*, 169; Tovey, *A Companion to Beethoven's Pianoforte Sonatas*, 121.

ninth symphony through the highly contrasting dynamics of the opening.<sup>82</sup> Both works open with a harmonic ambiguity by starting on the dominant without demonstrating a clear beat pattern, and once the tonic is established, they emphatically accentuate every element of the d minor triad. In describing the nature of the ninth symphony, Lockwood refers to *Don Giovanni* and how ‘its demonic power clearly anticipates the first movement of the Ninth’.<sup>83</sup> Undoubtedly, the terrifying scene of the Commendatore arrival near the end of the second act is closely related to the startling climax of unprecedented power at the moment of recapitulation in op.125/i.<sup>84</sup>

The unexpected dramatic appearances of d<sub>2</sub> material in other works such as op.30 no.3/i and op.28/iii, reinforce its turbulent character: the playfulness of the first thematic material in the G major violin sonata is disturbed by the arrival of the dominant minor with its violent, persistent *sf* (example 3.119);

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<sup>82</sup> Op.31 no.2/i also generates extreme contrasts at the moment of establishing the tonic by employing different registers of the piano: a boisterous detached *f* in the bass is answered by a *legato, p* gesture of more complaining nature by the engagement of both semitones surrounding the note A (example 3.118).

Example 3.118: Piano sonata op.31 no.2 in d minor, first movement, bars 21-24:



<sup>83</sup> Lockwood later on becomes more explicit about this connection: ‘The portentous opening of the *Don Giovanni* overture, with its restless syncopated opening chords over steady half notes, with its falling fourth from D to A, with its opening focus on the tonic D minor and on the dominant A major with a C# in the bass, all leading to chromaticism and to E-flat minor – all these factors distantly foreshadow the expressive world brought forth by the first movement of the Ninth’. Lockwood, *Beethoven*, 427.

<sup>84</sup> This connection between *Don Giovanni* and the ninth symphony confirms Schindler’s description of Beethoven being in awe of the accomplishments of his predecessors with regard to their tonal colouring. See ch.1, 10.

Example 3.119: Violin sonata no. 8 in G major op.30 no.3, first movement, bars 50-53:



as seen earlier, op.28 constitutes the most relaxed piano sonata of the entire cycle,<sup>85</sup> yet when d minor briefly appears in the third movement, Beethoven marks it with the only *ff* of the entire work (example 3.120).

Example 3.120: Piano sonata op.28 in D major, third movement, bars 95-100:



Finally, the overall harmonic scheme for d minor seems to be quite clear for Beethoven: with the exception of op.18 no.1, when d is exhibited as a slow movement, the outer counterparts will be in D; when d is the home key of the entire work, then the slow movement will be in B $\flat$ .

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<sup>85</sup> See D major, 58-59.

Table 3.9: d minor

<b>d</b>		<i>PIANO</i>		<i>ORCHESTRAL</i>		<i>CHAMBER</i>		
		<b>op.31 no.2</b>		<b>sym. no.9, op.125</b>		<b>N/A</b>		
		<b>d<sub>1</sub></b> (lyrical)			<b>d<sub>2</sub></b> (motivic)			
		op.10 no.3 [2 <sup>nd</sup> ] (D) op.28 [2 <sup>nd</sup> ] (D)		str.qt. op.18 no.1 [2 <sup>nd</sup> ] (F) pf trio op.70 no.1 [2 <sup>nd</sup> ] (D) vc no.5, op.102 no.2 [2 <sup>nd</sup> ] (D)		<b>op.31 no.2 [1<sup>st</sup>, 3<sup>rd</sup>]</b>		<b>sym. no.9, op.125 [1<sup>st</sup>]</b>
				(excerpts)				
				vn no.8, op.30 no.3 [1 <sup>st</sup> ] {2 <sup>nd</sup> subj. 50-57} (G)		op.28 [3 <sup>rd</sup> ] {2 <sup>nd</sup> eps. 95-113} (D)		
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>		<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>	
<b>d<sub>1</sub></b>	op.28 [2 <sup>nd</sup> ]	Andante		2/4	simple narration, ballad of former times	d-D	staccato broken chords	
	op.10 no.3 [2 <sup>nd</sup> ]	Largo e mesto		6/8	melancholy, attentive expression	d-a	depressed, desperate	
	op.18 no.1 [2 <sup>nd</sup> ]	Adagio affettuoso ed appassionato		9/8	-	d-F		
	op.70 no.1 [2 <sup>nd</sup> ]	Largo assai ed espressivo		2/4	ghastly awful	d-C		
	op.102 no.2 [2 <sup>nd</sup> ]	Adagio con molto sentimento d'affetto		2/4	deep, pathetic	d-D		
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>		<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>	
<b>d<sub>2</sub></b>	<b>op.31 no.2 [1<sup>st</sup>]</b>	Allegro		C	tragic, romantic and picturesque	d-a	volatile, turbulent	
	<b>op.125 [1<sup>st</sup>]</b>	Allegro ma non troppo, un poco maestoso		2/4	-	d-B $\flat$		
	<b>op.31 no.2 [3<sup>rd</sup>]</b>	Allegretto		3/8	charm, unity of sentiment	d-a	succession of unrelieved semiquavers	



## F# Major

### **op.78 - Piano sonata no.24: [1<sup>st</sup>] Adagio cantabile - Allegro ma non troppo [2<sup>nd</sup>] Allegro vivace**

Pinpointing the character of F# major is a difficult task, due to the scarce and contradicting samples presented in that key. Op.78 is the only piano sonata that exhibits this 'obscure' key,<sup>86</sup> and the only work in his entire output that has a key signature of six accidentals. It has been suggested by Jürgen Uhde that this unusual choice of key may have had a pedagogical purpose, and that the intimately lyrical character of the music was influenced by Bach's works in this key in 'The Well-Tempered Clavier'.<sup>87</sup>

The opening of op.78/i features an introduction with hymn-like chords, over a long, F# pedal point, which generate a spiritual setting that is not affected by the arrival of the *Allegro* (example 3.121).<sup>88</sup> The beginning of the *Allegro* illustrates a lyrical, ascending major third in the melody, over a left hand flowing accompaniment,<sup>89</sup> demonstrating an intimate, loving character that is preserved throughout the entire movement (example 3.121);

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<sup>86</sup> Lockwood, *Beethoven*, 299.

<sup>87</sup> Jürgen Uhde, *Beethovens Klaviermusik* (3 vols., Stuttgart: Reclam, 1968-1974) iii, 225-227; quoted in Kinderman, *Beethoven*, 159.

<sup>88</sup> For example, in opp.21/i, 60/i and 81a/i, the arrival of the *Allegro* signifies a change in the character. To this extent, Rosen states that the opening of op.78/i is 'like no other introduction', whereas Kinderman describes it as a 'declamatory, yet tender and heartfelt' statement. Rosen, *Beethoven's Piano Sonatas*, 197; Kinderman, *Beethoven*, 159.

<sup>89</sup> This gesture will be imitated in later piano sonatas: opp.90/ii, 101/i and 109/i all begin with a similar, major ascending third.

Example 3.121: Piano sonata op.78 in F# major, first movement, bars 1-8:



in the words of Rosen, 'it is one of Beethoven's rare works that depend entirely on lyrical charm',<sup>90</sup> the other one being the 'Pastoral' sonata, op.28.<sup>91</sup> The second movement is more capricious, with sudden alternations between *p* and *f*, combined with juxtapositions of chordal textures and brilliant semiquaver figurations (example 3.122).

Example 3.122: Piano sonata op.78 in F# major, second movement, bars 1-14:



<sup>90</sup> Rosen, *Beethoven's Piano Sonatas*, 197.

<sup>91</sup> See D major, 59.

## G Major

### **op.1 no.2 - Piano trio no.2**

op.2 no.3 - Piano sonata no.3 (C)

op.5 no.2 - Cello sonata no.2 (C)

### **op.14 no.2 - Piano sonata no.10**

**op.18 no.2 - String quartet no.2**

**op.30 no.3 - Violin sonata no.8**

### **op.31 no.1 - Piano sonata no.16**

op.49 no.1 - Piano sonata no.19 (g)

### **op.49 no.2 - Piano sonata no.20**

**op.58 - Piano concerto no.4**

**op.79 - Piano sonata no.25**

**op.96 - Violin sonata no.10**

G major is a key that distinguishes itself with its light and playful content, and with its simple harmonic schemes, where the dominant usually serves as the main subsidiary key.<sup>92</sup> The only works that slightly separate themselves from the rest of the G major group is opp.31 no.1, 58 and 96 with their more mature style, reflected in their harmonic language and extensive length. Considering Beethoven's fixation about how the keys should be distributed within an opus, or between the opuses,<sup>93</sup> it is also worth noting that G major exemplifies the first time that a key is consecutively used between two opuses: op.30 no.3 and op.31 no.1.<sup>94</sup>

Most of the lyrical G<sub>1</sub> movements are technically not as challenging, exhibit consistently simple expressive qualities, and a gentle, at times pastoral, character. The thematic material opens melodiously in the same register, marked *p*, at times *dolce*, and portrays a child-like naivety. It is no coincidence that Beethoven chose the key of G to write his opp.49 and 79 which were intended for children, or in the words of Czerny, 'for less accomplished players'.<sup>95</sup>

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<sup>92</sup> An opinion also echoed by Lockwood: 'G major is a key he [Beethoven] often associated with lightness and grace, as in the Piano Sonatas Opus 14 No. 2 and Opus 79, the Quartet Opus 18 No. 2, and the Violin Sonata Opus 31 [sic.] No.3. He never used it as primary key for a symphony, a later quartet, or a later piano sonata, and the only important middle-to-late work in this key is the idyllic Violin Sonata Opus 96 of 1812.' Lockwood, *Beethoven*, 241.

<sup>93</sup> See ch.1, 15.

<sup>94</sup> B $\flat$  also appears consecutively between op.18 no.6 and op.19. However, op.19 was conceived five years previous to its publication date.

<sup>95</sup> It is probably of no coincidence either that Beethoven chose the key of G major to accommodate Pierre Rode's musical taste in the violin sonata op.96, a work of predominantly lyrical character. See ch.2, 19.

The second praxis of G major contains works that display a subtle playfulness, which is not always as obvious as the more direct humorous qualities of F<sub>2</sub>. Beethoven expresses this playfulness in numerous ways: op.31 no.1/i is a mockery of pianists that cannot play hands together (example 3.123);

Example 3.123: Piano sonata op.31 no.1 in G major, first movement, bars 1-11:



in op.1 no.2/iv the repetition of the note G in the violin, along the *secco* accompanying chords of the piano, resembles the *finale* from the famous *William Tell* overture by Rossini (example 3.124);

Example 3.124: Piano trio op.1 no.2 in G major, fourth movement, bars 1-8:



finally, almost every G<sub>2</sub> movement makes use of grace notes, trills, and some sort of ornamentation, or scalic passage in their main thematic material. As for op.14 no.2, it seems to be a ‘glorious little comedy’<sup>96</sup> by itself: the first movement opens with a

<sup>96</sup> Steven Ledbetter, liner note to *Beethoven Piano Sonatas Op.14 Nos. 1 & 2, Op.49 Nos. 1 & 2, Op.54, Op.79, Op.79, John O’Conor*, vol. 8. 1992. Compact disc. Telarc. 80293.

false impression of the downbeat that only gets normalised five bars later (example 3.125), and presents a false recapitulation in E $\flat$  major; as seen earlier, with regard to the second movement, Beethoven decided to incorporate a provocatively simple conception, that made contemporary critics refer to it as ‘stupid’ (example 3.126);<sup>97</sup>

Example 3.125: Piano sonata op.14 no.2 in G major, first movement, bars 1-8:

Op. 14. N<sup>o</sup> 2.

**Allegro.**

Sonate N<sup>o</sup> 10.

Example 3.126: Piano sonata op.14 no.2 in G major, second movement, bars 1-4:

**Andante.**  
La prima parte senza replica.

lastly, apart from its cross rhythms, which create another rhythmic ambiguity, the finale is entitled ‘Scherzo’ but is presented in a rondo form.

<sup>97</sup> Kinderman, *Beethoven*, 65. See C major, 44.

Table 3.10: G major

G	<i>PIANO</i>			<i>ORCHESTRAL</i>		<i>CHAMBER</i>		
	<b>op.14 no.2</b> <b>op.31 no.1</b>	<b>op.49 no.2</b> <b>conc. no.4, op.58</b>	<b>op.79</b>	N/A		<b>pf trio op.1 no.2</b> <b>str.qt. op.18 no.2</b>	<b>vn no.8, op.30 no.3</b> <b>vn no.10, op.96</b>	
	<b>G<sub>1</sub></b> (lyrical)				<b>G<sub>2</sub></b> (motivic)			
	<b>op.14 no.2 [1<sup>st</sup>]</b> <b>op.31 no.1 [3<sup>rd</sup>]</b>		<b>op.49 no.2 [2<sup>nd</sup>]</b> <b>conc. no.4, op.58 [1<sup>st</sup>]</b> <b>vn no.10, op.96 [1<sup>st</sup>, 4<sup>th</sup>]</b>		<b>pf trio op.1 no.2 [1<sup>st</sup>, 4<sup>th</sup>]</b> <b>vc no.2, op.5 no.2 [2<sup>nd</sup>] (C)</b> <b>op.14 no.2 [3<sup>rd</sup>]</b> <b>str.qt. op.18 no.2 [1<sup>st</sup>, 4<sup>th</sup>]</b> <b>vn no.8, op.30 no.3 [1<sup>st</sup>, 3<sup>rd</sup>]</b>		<b>op.31 no.1 [1<sup>st</sup>]</b> <b>op.49 no.1 [2<sup>nd</sup>] (g)</b> <b>op.49 no.2 [1<sup>st</sup>]</b> <b>conc. no.4, op.58 [3<sup>rd</sup>]</b> <b>op.79 [1<sup>st</sup>, 3<sup>rd</sup>]</b>	
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>		<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>	
G <sub>1</sub>	<b>op.14 no.2 [1<sup>st</sup>]</b>	Allegro	2/4	lovely, agreeable delicate, tender		G-D	naive	
	<b>op.31 no.1 [3<sup>rd</sup>]</b>	Allegretto	C	beautiful, melodious		G-D		
	<b>op.49 no.2 [2<sup>nd</sup>]</b>	Tempo di Menuetto	3/4	for less accomplished		G-C		
	<b>op.58 [1<sup>st</sup>]</b>	Allegro moderato	C	simple, almost pastoral		G-D	sophisticated simplicity	
	<b>op.96 [1<sup>st</sup>]</b>	Allegro moderato	3/4	calm, noble, melodious, tender		G-D		
	<b>op.96 [4<sup>th</sup>]</b>	Poco Allegretto	2/4	extreme delicacy and taste		G (variations)		

Table 3.10: G major (cont.)

<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
G <sub>2</sub>	op.1 no.2 [1 <sup>st</sup> ]	Allegro vivace	2/4	lively, dandling pleasantry	G-D	simple, playful, ornate
	op.1 no.2 [4 <sup>th</sup> ]	Presto	2/4	light, brilliant	G-D	
	op.5 no.2 [2 <sup>nd</sup> ]	Allegro	2/4	serene, lively and brilliant	G-D	
	op.14 no.2 [3 <sup>rd</sup> ]	Allegro assai	3/8	humorous, serenely gay	G-C	
	op.18 no.2 [1 <sup>st</sup> ]	Allegro	2/4	-	G-D	
	op.18 no.2 [4 <sup>th</sup> ]	Allegro molto quasi Presto	2/4	-	G-D	
	op.30 [1 <sup>st</sup> ]	Allegro assai	6/8	most lively, merry and brilliant	G-d	
	op.30 [3 <sup>rd</sup> ]	Allegro vivace	2/4	liveliness, humor, brilliancy	G-e-C	
	op.31 no.1 [1 <sup>st</sup> ]	Allegro vivace	2/4	energetic, humorous, lively	G-B	
	op.49 no.2 [1 <sup>st</sup> ]	Allegro ma non troppo	♩	for less accomplished	G-D	
	op.49 no.1 [2 <sup>nd</sup> ]	Allegro	6/8	for less accomplished	G-B $\flat$	
	op.58 [3 <sup>rd</sup> ]	Vivace	2/4	very lively, humorous	G-D	
	op.79 [1 <sup>st</sup> ]	Presto alla tedesca	3/4	for less accomplished	G-D	
	op.79 [3 <sup>rd</sup> ]	Vivace	2/4	for less accomplished	G-e-C	

e minor

op.58 - Piano concerto no.4 (G)  
op.59 no.2 - String quartet no.8

op.90 - Piano sonata no.27  
op.109 - Piano sonata no.30 (E)

The rare key of e minor<sup>98</sup> constitutes a unique case in this examination of Beethoven's tonal ethos in that it represents a hybrid of two worlds:<sup>99</sup> austerity versus lament. This unusual portrayal becomes apparent when encountering the second movement of the fourth piano concerto, frequently linked to Gluck's *Orfeo ed Euridice*.<sup>100</sup> The strings open the movement with an emphatic, unison and detached statement in the low register, followed by a *molto cantabile* phrase in the piano which briefly cadences on the relative major to entice what appears to be an evil spirit; however, despair leads back to the tonic (example 3.127).

Example 3.127: Piano concerto no.4 in G major op.58, second movement, bars 1-9:

The image displays a musical score for the second movement of Beethoven's Piano Concerto No. 4 in G major, Op. 58, bars 1-9. The score is divided into two systems. The first system features the piano part (right hand) in G major, 4/4 time, with a tempo marking of 'Andante con moto.' and a 'TUTTI.' marking above the staff. The piano part begins with a 'molto cantabile' phrase. The second system shows the string quartet (violin I, violin II, viola, and cello) with a tempo marking of 'Andante con moto.' and 'sempre stacc.' markings below each staff, indicating a staccato playing style.

<sup>98</sup> With reference to the lack of e minor material in Beethoven's output, Lockwood highlights: 'E minor is a bleak and distant key in the tonal system of the period ... In Mozart it is rare as a primary key ... Beethoven also keeps it at a distance, using it as a main tonic only in this quartet [op.59 no.2] and the Piano Sonata Opus 90 of 1814'. Lockwood, *Beethoven*, 322.

<sup>99</sup> In view of that approach, there is no praxis assigned to e minor.

<sup>100</sup> During the second act of Gluck's opera, Orfeo attempts to enter the underworld, but the Furies emphatically deny him access with *f* statements declaring 'No', until they are eventually conquered by Orfeo's melodious voice, and grant him access to the abyss. Lockwood and Rosen make reference to that connection. Lockwood, *Beethoven*, 243; Rosen, *Beethoven's Piano Sonatas*, 235.



The lament intensifies in bars 28-35 with the incorporation of multiple diminished chords, leading to a brief *arioso* and an agitated *cadenza*, after which the evil spirit calms down and ends the movement in *pp* (example 3.128).

Example 3.128: Piano concerto no.4 in G major op.58, second movement, bars 64-72:

In a similar, albeit not as vivid manner, opp.59 no.2 and 90, the only two works written in e minor, open their first movements with austere, chordal gestures that are answered by lyrical statements containing several semitones and diminished intervals (examples 3.129-3.130).

Example 3.129: Piano sonata op.90 in e minor, first movement, bars 1-15:

Example 3.130: String quartet op.59 no.2 in e minor, first movement, bars 1-8:

Texturally, another feature that distinguishes e minor from its counterparts, is the affective use of silence: apart from adding intensity to the musical content, the rests constitute the most important element that separates the two personalities of the key (examples 3.127, 3.129-130).<sup>101</sup> Finally, with the exception of op.58/ii, the presence of e minor seems to guarantee an appearance of its parallel major. The e/E polarity is explored extensively by Beethoven: in opp.14, 59 no.2, 90 and 109 between movements, whereas in opp.2 no.3/ii, 47/i and 53/i within the movement.

<sup>101</sup> Kinderman draws attention to Beethoven's use of rests in op.59 no.2/i: 'The introductory gesture of chords and silences is terse and arresting'. Kinderman, *Beethoven*, 134; Lockwood also refers to the 'eloquent silences' of this quartet. Lockwood, *Beethoven*, 322.

Table 3.11: e minor

<b>e</b>	<i>PIANO</i>		<i>ORCHESTRAL</i>		<i>CHAMBER</i>	
	<b>op.90</b>		N/A		<b>str.qt. op.59 no.2</b>	
	e					
	conc. no.4, op.58 [2 <sup>nd</sup> ] (G) <b>str.qt. op.59 no.2 [1<sup>st</sup>]</b>		<b>op.90 [1<sup>st</sup>]</b> op.109 [2 <sup>nd</sup> ] (E)		(excerpts) vn no.9, op.47 [1 <sup>st</sup> ] {2 <sup>nd</sup> subj.144-156} (A)	
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
<b>e</b>	op.58 [2 <sup>nd</sup> ]	Andante con moto	2/4	powerful & austere vs. intense & pathetic	e	austerity vs. lament
	<b>op.59 no.2 [1<sup>st</sup>]</b>	Allegro	6/8	-	e-G	
	<b>op.90 [1<sup>st</sup>]</b>	‘Mit Lebhaftigkeit und durchaus mit Empfindung und Ausdruck’*	3/4	with liveliness, feeling & expression	e-b	
	op.109 [2 <sup>nd</sup> ]	Prestissimo	6/8	passionately excited, melancholy coloring	e-b	austere

\* ‘Mit Lebhaftigkeit und durchaus mit Empfindung und Ausdruck’ translates as ‘with liveliness, feeling and expression’

## A $\flat$ major

op.1 no.1 - Piano trio no.1 (E $\flat$ )	op.30 no.2 - Violin sonata no.7 (c)
op.10 no.1 - Piano sonata no.5 (c)	op.56 - Triple concerto (C)
op.13 - Piano sonata no.8, 'Pathetique' (c)	op.67 - Symphony no.5 (c)
op.15 - Piano concerto no.1 (C)	op.74 - String quartet no.10, 'Harp' (E $\flat$ )
<b>op.26 - Piano sonata no.12</b>	<b>op.110 - Piano sonata no.31</b>
op.27 no.1 - Piano sonata no.13 (E $\flat$ )	op.127 - String quartet no.12 (E $\flat$ )

A $\flat$  major is one of the most popular subsidiary keys to constitute the slow movement of a large scale work. It features consistently throughout Beethoven's output and in all genres, from the very first opus, up to the late piano sonatas and string quartets. Surprisingly, no scholar makes reference to the uniformity of its appearances; the most relevant comments concern Beethoven's habitual incorporation of A $\flat$  within a c minor work.<sup>102</sup>

The predominantly slow *tempi*, with *Moderato* in op.110/i being the fastest indication of a movement with substantial thematic material, do not allow for the inclusion of a second praxis.<sup>103</sup> In fact, the lyricism of A $\flat$  is portrayed in almost every movement by a *cantabile* marking, either in the tempo, or through a notation in the score. Its usual representation appears through a soft, slightly chordal texture in the low, or middle register which, in conjunction with the slow tempos, gives a noble

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<sup>102</sup> In describing op.10 no.1, Kinderman states: 'As is usual in Beethoven's C minor works, the slow movement ... is in the key of the flat sixths, A $\flat$  major'. Kinderman, *Beethoven*, 42. Lockwood also makes a similar comment with reference to the fifth symphony: 'Choosing the key of A-flat major to follow a movement in C minor is a favorite scheme of Beethoven's, one he had used in such earlier C-minor works as the "Pathetique" Sonata and the Violin Sonata Opus 30 No. 1.' Lockwood, *Beethoven*, 222.

<sup>103</sup> Occasionally, A $\flat$  does appear in a faster context, but in movements that this study does not consider as primary sources of substantial thematic material (see ch.2, 34-35). As the tonic key in op.26, A $\flat$  is used in the scherzo under *Allegro molto* and in the finale under *Allegro*; in op.31 no.3 it appears in the scherzo under *Allegretto vivace*.

and spiritual character to the key.<sup>104</sup> The music has a slow harmonic rhythm and the accompaniment consists of long, non-pulsating figurations, which at times gives the illusion of a rhythm-free conception, at least for the first couple of bars (examples 3.133-3.136). Moreover, a corresponding harmonic device is encountered in the opening of opp.13/ii, 15/ii, 26/i, op.30 no.2/ii and 110/i, where the bass, either through the note of B $\flat$  or D $\flat$ , moves to C to produce a I<sup>6</sup> figuration (examples 3.131, 3.134-3.136).

In one of the most fascinating findings of this examination, Beethoven opens most of the A $\flat$  movements with scale degree III as the first note of the melodic line. A closer look reveals an identical tenth, chordal and hushed openings in opp.13/ii, 27 no.1/iii and 56/ii, along with the ones of opp.15/ii, 30 no.2/ii and 110, which demonstrate the same behaviour but at an octave higher (examples 3.131-3.136).

Example 3.131: Piano sonata op.13 in c minor op.13, second movement, bars 1-4:



Example 3.132: Piano sonata op.27 no.1 in E $\flat$  major, third movement, bars 1-4:

<sup>104</sup> Given the character of the music, Beethoven's description of A $\flat$  as 'barbaresco' becomes elusive. As seen earlier in ch.1, 6 and fn.29, the most plausible interpretation is the one of a 'foreign entity', which could have been a sound effect created by the temperament he was using.

Example 3.133: Triple concerto op.56 in C major, second movement, bars 1-4:

Musical score for Example 3.133: Triple concerto op.56 in C major, second movement, bars 1-4. The score is for piano and features three staves. The tempo is 'Largo.' and the dynamics are 'p' (piano) and 'con sordino' (with sostenuto pedal).

Example 3.134: Piano concerto no.1 in C major op.15, second movement, bars 1-4:

Musical score for Example 3.134: Piano concerto no.1 in C major op.15, second movement, bars 1-4. The score is for piano and features two staves. The tempo is 'Largo.' and the dynamics are 'p' (piano) and 'SOLO.'

Example 3.135: Violin sonata op.30 no.2 in c minor, second movement, bars 1-5:

Musical score for Example 3.135: Violin sonata op.30 no.2 in c minor, second movement, bars 1-5. The score is for piano and features two staves. The tempo is 'Adagio cantabile.' and the dynamics are 'p' (piano), 'cresc.' (crescendo), and 'sf' (sforzando).

Example 3.136: Piano sonata op.110 in A $\flat$  major, first movement, bars 1-4:

Musical score for Example 3.136: Piano sonata op.110 in A $\flat$  major, first movement, bars 1-4. The score is for piano and features two staves. The tempo is 'Moderato cantabile molto espressivo.' and the dynamics are 'p con amabilità (sanft)' (piano with amiability (soft)) and 'p' (piano). The score includes the annotation 'Componirt im Decbr. 1821.'

Furthermore, the frequent spacious arrangement of the beats in the opening results in a decorative version of the main theme in later sections of the movement, as exemplified in opp.1 no1/ii, 10 no.1/ii, 13/ii, 15/ii, 27 no.1/iii, 30 no.2/ii, 56/ii, 67/ii, 74/ii and 110/i (examples 3.137-3.142); opp.26 and 127 produce actual variations.

Example 3.137: Piano sonata op.13 in c minor op.13, second movement, bars 51-54:



Example 3.138: Piano sonata op.27 no.1 in E $\flat$  major, third movement, bars 17-18:



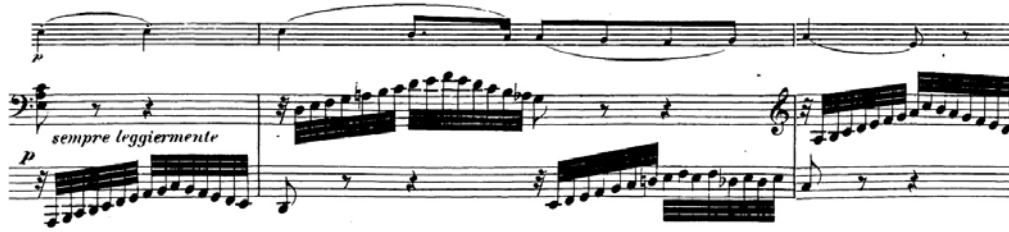
Example 3.139: Triple concerto op.56 in C major, second movement, bars 25-27:



Example 3.140: Piano concerto no.1 in C major op.15, second movement, bars 67-69:



Example 3.141: Violin sonata op.30 no.2 in c minor, second movement, bars 61-63:



Example 3.142: Piano sonata op.110 in A $\flat$  major, first movement, bars 56-57:



Finally, hinted at by both Kinderman and Lockwood, the c/A $\flat$  polarity is frequently employed by Beethoven. In a more detailed approach, opp.13, 30 no.2 and 67 use A $\flat$  for their slow movement; opp.13/iii, 18 no.4/iv, op.27 no.1/ii and 111/i, use A $\flat$  as a subsidiary key within the movement, whereas opp.27 no.1 and 74 exhibit a similar relationship between the slow movement and the scherzo, even though the tonic key is neither of those two. Not far behind, but rarely mentioned, is also the C/A $\flat$  duality: opp.7/ii, 31 no.1/ii and 67/ii have A $\flat$  sections within their movements, as opposed to opp.15 and 56, which illustrate the dichotomy between their movements.



Table 3.12: A<sub>b</sub> major

		<i>PIANO</i>	<i>ORCHESTRAL</i>	<i>CHAMBER</i>		
A <sub>b</sub>		<b>op.26</b> <b>op.110</b>	N/A	N/A		
		A <sub>b1</sub> (lyrical)				
		pf trio op.1 no.1 [2 <sup>nd</sup> ] (E <sub>b</sub> ) op.10 no.1 [2 <sup>nd</sup> ] (c) op.13 [2 <sup>nd</sup> ] (c)	conc. no.1, op.15 [2 <sup>nd</sup> ] (C) <b>op.26 [1<sup>st</sup>]</b> op.27 no.1 [3 <sup>rd</sup> ] (E <sub>b</sub> )	vn no.7, op.30 no.2 [2 <sup>nd</sup> ] (c) triple conc. op.56 [2 <sup>nd</sup> ] (C) sym. no.5, op.67 [2 <sup>nd</sup> ] (c)	str.qt op.74 [2 <sup>nd</sup> ] (E <sub>b</sub> ) <b>op.110 [1<sup>st</sup>]</b> str.qt op.127 [2 <sup>nd</sup> ] (E <sub>b</sub> )	
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
A <sub>b1</sub>	op.13 [2 <sup>nd</sup> ]	Adagio cantabile	2/4	legato with clear melody	A <sub>b</sub> -E <sub>b</sub>	soft, chordal, III on top, decorative versions of main theme
	op.15 [2 <sup>nd</sup> ]	Largo	C*	noble melody, <i>cantabile</i>	A <sub>b</sub> -E <sub>b</sub>	
	op.27 no.1 [3 <sup>rd</sup> ]	Adagio con espressione	3/4	tranquil, fervent, with sentiment	A <sub>b</sub> -E <sub>b</sub>	
	op.30 no.2 [2 <sup>nd</sup> ]	Adagio cantabile	C <sup>†</sup>	noble, beautiful melody	A <sub>b</sub> -a <sub>b</sub>	
	op.56 [2 <sup>nd</sup> ]	Largo	3/8	soft, light, harmonious	A <sub>b</sub>	
	<b>op.110 [1<sup>st</sup>]</b>	Moderato cantabile, molto espressivo	3/4	lovely, replete with feeling	A <sub>b</sub> -E <sub>b</sub>	
	op.1 no.1 [2 <sup>nd</sup> ]	Adagio cantabile	3/4	softness, delicacy, tenderness	A <sub>b</sub> -E <sub>b</sub>	decorative versions of the main theme
	op.10 no.1 [2 <sup>nd</sup> ]	Adagio molto	2/4	deepest sentiment and tenderness	A <sub>b</sub> -E <sub>b</sub>	
	op.67 [2 <sup>nd</sup> ]	Andante con moto	3/8	-	A <sub>b</sub> -C	
	op.74 [2 <sup>nd</sup> ]	Adagio ma non troppo	3/8	-	A <sub>b</sub> -C <sub>b</sub> -a <sub>b</sub>	
	<b>op.26 [1<sup>st</sup>]</b>	Andante con Variazioni	3/8	noble, religious	A <sub>b</sub> /E <sub>b</sub> (variations)	variations
op.127 [2 <sup>nd</sup> ]	Adagio ma non troppo e molto cantabile	12/8	-	A <sub>b</sub> -E-E <sub>b</sub> - D <sub>b</sub> /c#		

\* *Breitkopf and Härtel* has made a substantial error by producing the second movement of op.15 with a time signature of C, when Beethoven had clearly indicated C in the manuscript. Surprisingly, this error can still be found in editions today.

† *Ibid.*

## f minor

### **op.2 no.1 - Piano sonata no.1**

op.55 - Symphony no.3, 'Eroica'

### **op.57 - Piano sonata no.23, 'Appassionata'**

op.59 no.1 - String quartet no.7 (F)

op.68 - Symphony no.6, 'Pastoral' (F)

### **op.95 - String quartet no.11, 'Serioso'**

There is no better way of relating to the content of an f minor movement by Beethoven than through the composer's own, semi-programmatic<sup>105</sup> indication for the fourth movement of his 'Pastoral' symphony, which is marked 'Sturm'. Indeed, all of his f minor works contain stormy qualities similar to the ones of d minor; however, in f the intensity levels are electrifying. In the 'Sturm', the simultaneous use of the entire orchestra evoking thunders and torrential gusts, through chromatic scales, tremolos, brassy sounds and off-beat *sf*, produced unprecedented, frightening effects. As Hector Berlioz highlighted: 'It is no longer merely a wind and rainstorm ... it is a frightful cataclysm, the universal deluge, the end of the world'.<sup>106</sup> The tragic tone of this description is a feature which, according to the scholars, is prevalent in all of Beethoven's f minor works.<sup>107</sup>

In op.57 the tragedy is evident from the frequent use of low register for the main thematic material, the incredibly thick textures of the *ff* moments, the *subito* dynamics and *sf* that torment the first movement, and the scarce use of the major mode throughout the sonata.<sup>108</sup> A similar harmonic approach is also noticeable in

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<sup>105</sup> See ch.1, 8 and fn.38.

<sup>106</sup> Hector Berlioz, *À travers chants*, trans. Léon Guichard (Paris: Gründ, 1971); quoted in Kinderman, *Beethoven*, 147.

<sup>107</sup> Lockwood states: 'F minor, a key of tragic feeling, always evokes a strong emotional response'. Lockwood, *Beethoven*, 327. Cooper highlights the opening descending triad of op.57/i as being 'profoundly tragic, as if drawn from Florestan's dungeon scene, which Beethoven had just been sketching and which is in the same key'. Cooper, *Beethoven*, 144. In describing the 'Appassionata', both Tovey and Rosen have utilised the word 'tragic'. Tovey, *A Companion to Beethoven's Pianoforte Sonatas*, 169; Rosen, *Beethoven's Piano Sonatas*, 192.

<sup>108</sup> In fact, not even once does the third movement settle on a major key even though it is in sonata form, while the first movement exhibits brief moments in A $\flat$  and D $\flat$  that quickly switch to their parallel minors. Tovey, in relation to this, remarks: 'No other work by Beethoven maintains a tragic

op.2 no.1/i, where the second subject is presented over a dominant pedal that resolves to  $I^6_4$ , while the theme incorporates elements from  $a^b$  minor; the result is a minor sounding second subject, although being in  $A^b$  major (example 3.143).

Example 3.143: Piano sonata op.2 no.1 in f minor, first movement, bars 20-22:



A cadence in the dominant, followed by eloquent silences and a repetition of the opening material on the flat supertonic seems to be another common practice when in f (examples 3.144-3.145).<sup>109</sup>

Example 3.144: Piano sonata op.57 in f minor, first movement, bars 1-8:




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solemnity throughout all its movements'. Tovey, *A Companion to Beethoven's Pianoforte Sonatas*, 169.

<sup>109</sup> Rosen, with relation to the use of Neapolitan, states that it 'characterized Beethoven's conception of the tonality of F minor throughout his career'. Rosen, *Beethoven's Piano Sonatas*, 194. Kindermann also discusses the recurrence of the Neapolitan scale degree. Kindermann, *Beethoven*, 171.

Example 3.145: String quartet op.95 in f minor, first movement, bars 1-9:

Allegro con brio. Componiert im October 1810.

Furthermore, all works exhibit an extraordinary motivic cohesion: the two piano sonatas have subsidiary themes that originate from their primary thematic material (examples 3.146-3.147), whereas op.95 is a ‘highly concentrated and integrated composition’.<sup>110</sup>

Example 3.146: Piano sonata op.2 no.1 in f minor, first movement, bars 1-2 & 21-22:

Allegro.

Example 3.147: Piano sonata op.57 in f minor, first movement, bars 1-2 & 36:

Allegro assai.

Finally, the unusual diminished opening of op.57/iii, which Tovey refers to as ‘a final stroke of fate’,<sup>111</sup> is also resembled in op.95/iv at the *Allegretto agitato* (example 3.148-3.149).

<sup>110</sup> Berger, *Guide to Chamber Music*, 57.

<sup>111</sup> Tovey, *A Companion to Beethoven’s Pianoforte Sonatas*, 169.

Example 3.148: Piano sonata op.57 in f minor, third movement, bars 1-4:



Example 3.149: String quartet op.95 in f minor, fourth movement, bars 8-9:



Nevertheless, for all the similarities between the three f minor works, there is a significant difference: in a moment of true Beethovenian wit, op.95 unexpectedly switches to the major mode for the coda of its finale, described by Lam as ‘a comic-opera coda, absurdly and deliberately unrelated to this “quartet-serioso”, the Shakespearian touch that provides the final confirmation of the truth of the rest’.<sup>112</sup>

Although the foregoing  $f_2$  works constitute the core of f minor, the lyrical *Adagio molto e mesto*<sup>113</sup> from op.59 no.1 embodies qualities that are not dissimilar to those of the second praxis. A sense of tragedy and lament is reflected through the wide intervallic structure of the opening melody (example 3.150),<sup>114</sup> as well as through Beethoven’s own, elusive notes: ‘A weeping willow or acacia tree upon my brother’s grave’.<sup>115</sup>

<sup>112</sup> Lam, *Beethoven String Quartets*, 75.

<sup>113</sup> *Adagio molto e mesto* translates as ‘very slow lament’. ‘Mesto’ was also used in the desperate d minor *Largo* of op.10 no.3. See d minor, 98, example 3.109.

<sup>114</sup> This compositional device, according to Lam is equivalent to ‘histrionic gestures expressive of grief or astonishment’. Lam, *Beethoven String Quartets*, 42.

<sup>115</sup> These words were found at the back of one of Beethoven’s sketches for op.59 no.1/iii. Berger, *Guide to Chamber Music*, 49.

Example 3.150: String quartet op.59 no.1 in F major, third movement, bars 1-4:



The ‘Marcia funebre’ of the ‘Eroica’ symphony portrays another such lamenting moment in its middle episode at the beginning of the fugato section, where the strings present an  $f_1$  theme which incorporates the painful augmented second interval of the minor mode, by stressing the leading tone on a strong beat (example 3.151).<sup>116</sup>

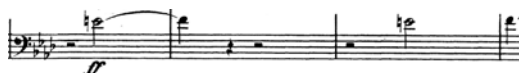
Example 3.151: Symphony no.3 in E $\flat$  major op.55, second movement, bars 115-118:



Of all the harmonic polarities exemplified in this study, the one between F major and f minor as seen in the ‘Pastoral’ symphony perhaps constitutes the most powerful, as they individually demonstrate two extremely contrasting worlds: beauty and serenity, against tragedy and electrifying intensity. Interestingly, after op.95 Beethoven does not use f minor again in a substantial composition.<sup>117</sup> Considering the turn to a more serene approach during his late period, the f minor absence could be interpreted as

<sup>116</sup> In the coda of op.95/i the cello also leans on the leading tone in a similar manner in bars 140-142 (example 3.152).

Example 3.152: String quartet op.95 in f minor, first movement, bars 140-142:



<sup>117</sup> Lockwood also highlights that fact. Lockwood, *Beethoven*, 328.

another sign of the great intensity levels that were required of him to complete a work in that key.<sup>118</sup>

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<sup>118</sup> Intriguingly, after op.57 he did not compose another piano sonata for four years.

Table 3.13: f minor

<b>f</b>	<i>PIANO</i>		<i>ORCHESTRAL</i>		<i>CHAMBER</i>	
	<b>op.2 no.1 op.57</b>		N/A		<b>str.qt. op.95</b>	
	$f_1$ (lyrical)			$f_2$ (motivic)		
	str.qt. op.59 no.1 [2 <sup>nd</sup> ] (F)			<b>op.2 no.1 [1<sup>st</sup>, 4<sup>th</sup>] op.57 [1<sup>st</sup>, 3<sup>rd</sup>] sym. no.6, op.68 [4<sup>th</sup>] (F) <b>str.qt. op.95 [1<sup>st</sup>, 4<sup>th</sup>]</b></b>		
	(excerpts) sym. no.3, op.55 [2 <sup>nd</sup> ] {fugato 115-145} (c)					
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
$f_1$	op.59 no.1 [3 <sup>rd</sup> ]	Adagio molto e mesto	2/4	-	f-c	lament
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
$f_2$	<b>op.2 no.1 [1<sup>st</sup>]</b>	Allegro	$\mathbb{C}$	fervent, impassioned	f-Ab	tragic
	<b>op.2 no.1 [4<sup>th</sup>]</b>	Prestissimo	$\mathbb{C}$	impetuously excited	f-c-Ab	
	<b>op.57 [1<sup>st</sup>]</b>	Allegro assai	12/8	powerful, colossal	f-Ab	
	<b>op.57 [3<sup>rd</sup>]</b>	Allegro ma non troppo	2/4	waves of the sea in a stormy night, whilst cries of distress are heard from afar	f-c	
	op.68 [4 <sup>th</sup> ]	Allegro	$\mathbb{C}$	-	f	
	<b>op.95 [1<sup>st</sup>]</b>	Allegro con brio	$\mathbb{C}$	-	f-D $\flat$	
	<b>op.95 [4<sup>th</sup>]</b>	Allegretto agitato	6/8	-	f-c	



## A major

**op.2 no.2 - Piano sonata no.2**  
op.12 no.1 - Violin sonata no.1 (D)  
**op.12 no.2 - Violin sonata no.2**  
**op.18 no.5 - String quartet no.5**  
op.23 - Violin sonata no.4 (*a*)  
**op.30 no.1 - Violin sonata no.6**

op.36 - Symphony no.2 (D)  
**op.47 - Violin sonata no.9, 'Kreutzer'**  
op.61 - Violin Concerto (D)  
**op.69 - Cello sonata no.3**  
**op.92 - Symphony no.7**  
**op.101 - Piano sonata no.28**

Most of the A major opening thematic material in Beethoven's output carries an elegance and tenderness, exemplifying a Mozartian flavour.<sup>119</sup> A two-note legatura is a prominent feature in the first thematic group of A movements, either as part of the main theme (examples 3.153, 3.155-3.156), or by incorporating it in a decorative *staccato* quaver figuration towards the end of the phrase (examples 3.157-3.159).<sup>120</sup>

Example 3.153: Violin sonata op.12 no.1 in D major, second movement, bars 1-8:

**TEMA con VARIAZIONI.**  
Andante con moto.



The image shows a musical score for the first eight bars of the second movement of Violin Sonata Op. 12 No. 1. The title is 'TEMA con VARIAZIONI.' and the tempo is 'Andante con moto.' The score is in D major (two sharps) and 3/4 time. It features a two-note legatura in the first measure, which is a prominent feature of the opening thematic material.

<sup>119</sup> Czerny describes an anecdotal story according to which Beethoven, referring to Mozart's K.464 A major string quartet, said: 'That's what I call a work! In it Mozart was telling the world: "Look what I could create if the time were right!"'. Quoted in Berger, *Guide to Chamber Music*, 40. In relation to this, Lockwood writes: 'No.5 [Beethoven's op.18 no.5] is often taken as the main inheritor of Mozart's K. 464, because it shares with Mozart's quartet its key, its movement plan (with the Minuetto second), its position in the cycle of six quartets, and certain other features.' Kinderman also acknowledges this connection. Lockwood, *Beethoven*, 166; Kinderman, *Beethoven*, 63, 66.

<sup>120</sup> Op.2 no.2/iv also has an incredibly elegant, and unusual two-note legatura that covers almost two entire octaves (example 3.154).

Example 3.154: Piano sonata op.2 no.2 in A major, third movement, bar 1-2:



The image shows a musical score for the first two bars of the third movement of Piano Sonata Op. 2 No. 2. The score is in A major (three sharps) and 3/4 time. It features a two-note legatura in the first measure, which is an incredibly elegant and unusual feature.

Example 3.155: Violin sonata op.12 no.2 in A major, first movement, bars 1-4:

Allegro vivace.  
Allegro vivace.  
*p*

Example 3.156: Violin sonata op.23 in A major, second movement, bars 1-4:

Andante scherzoso, più Allegretto.  
Andante scherzoso, più Allegretto.  
*p*

Example 3.157: Cello sonata no.3 in A major op.69, fourth movement, bars 1-4:

Allegro vivace.  
*pp*

Example 3.158: String quartet op.18 no.5 in A major, fourth movement, bars 1-6:

Allegro.  
*p*

Example 3.159: Violin sonata no.6 in A major op.30 no.1, third movement, bars 1-8:

Allegretto con Variazioni.  
*p dolce* *pppoc.* *sf* *sf*

Furthermore, dynamics beyond *f* and thick textures are rarely encountered when in A, even in the fast paced movements. In fact, almost every movement starts in *p* and very often inscribes tempo and expression markings that reflect the gentle tone of the movement: op.2 no.2/iv indicates *Grazioso*; op.12 no.2/iii *Allegro piacevole* and

*dolce*; <sup>121</sup> op.101 ‘Etwas lebhaft und mit der innigsten Empfindung’; <sup>122</sup> op.30 no.1/iii *Allegretto* and *dolce*; op.69/i *Allegro ma non tanto* and *dolce*.

The motivic thematic presentations in A are perhaps the most melodious of their kind in Beethoven’s music. The composer’s intentions become apparent from his very first A major composition, the piano sonata op.2 no.2. The first movement opens with falling intervallic motives that are marked *staccato*. However, the fact that most of the staccato signs belong to crotchet notes, entails a longer attack on the keys, which inevitably produces a rounder sound, attributing a more melodic quality to the theme (example 3.160).

Example 3.160: Piano sonata op.2 no.2 in A major, first movement, bars 1-8:



Similarly, considering Mozart’s influence on the quartet, the *staccatos* of the first movement of op.18 no.5 have to be interpreted with a certain melodic approach in order to match A major’s elegant character (example 3.161); any other interpretation will not portray the key’s tone colour.

<sup>121</sup> ‘Piacevole’ translates as ‘pleasant’.

<sup>122</sup> ‘Etwas lebhaft und mit der innigsten Empfindung’ translates as ‘somewhat lively and with innermost sensibility’.

Example 3.161: String quartet op.18 no.5 in A major, first movement, bars 1-11:

The only works that slightly separate themselves from the rest of the A major material is the seventh symphony op.92, and the finales of opp.47 and 101. Described by Wagner as the ‘apotheosis of the dance’,<sup>123</sup> op.92 certainly exhibits a more powerful side of A with its thick textures and obsessive rhythms. Even so, in its first appearance, the first subject of the first movement does not reveal dissimilar qualities with its A counterparts: the choice of instrumentation and the plethora of embellishments present the theme in an elegant manner (example 3.162).<sup>124</sup>

Example 3.162: Symphony no.7 in A major op.92, first movement, bars 67-70:

<sup>123</sup> Klaus Kropfnger, *Wagner and Beethoven: Richard Wagner's Reception of Beethoven* (Cambridge: Cambridge University Press, 1991), 16.

<sup>124</sup> When the *Vivace* starts, the theme is presented by the flute.

Harmonically, as pointed out by Lockwood, ‘Beethoven liked to intermingle minor and major when his tonic was A’.<sup>125</sup> Indeed, the polarity of A/a is one of the most intensively applied harmonic combinations in Beethoven’s output: opp.2 no.2/iv, 12 no.1/ii, op.61/i, 47/i, 69/i ,92/ii and 101/iv, display it within the movement, with the four latter opuses displaying it between movements as well, which is also the case with opp.12 no.2 and 23.<sup>126</sup> Finally, Beethoven also emphasises an E-A-C# motif for the openings of opp.12 no.1/ii, 12 no.2/iii, 30 no.1/iii and 36/ii (examples 3.163-3.166).

Example 3.163: Violin sonata op.12 no.1 in D major, second movement, bars 1-2:



Example 3.164: Violin sonata no.6 in A major op.30 no.1, third movement, bars 1-2:



Example 3.165: Symphony no.2 in D major op.36, second movement, bars 1-2:



Example 3.166: Violin sonata op.12 no.2 in A major, third movement, bar 1:



<sup>125</sup> Lockwood, *Beethoven*, 233.

<sup>126</sup> As seen earlier, A major appears consistently as a subsidiary key in D major compositions (see D major, 56), with the violin concerto in D featuring one of the most prominent A/a relationships.

Table 3.14: A major

A	PIANO		ORCHESTRAL		CHAMBER		
	op.2 no.2 op.101		sym. no.7, op.92		vn no.2, op.12 no.2 str.qt. op.18 no.5	vn no.6, op.30 no.1 vn no.9, op.47	vc no.3, op.69
	A <sub>1</sub> (lyrical)			A <sub>2</sub> (motivic)			
	vn no.1, op.12 no.1 [2 <sup>nd</sup> ] (D) vn no.6, op.30 no.1 [1 <sup>st</sup> , 3 <sup>rd</sup> ] sym. no.2, op.36 [2 <sup>nd</sup> ] (D)		vc no.3, op.69 [1 <sup>st</sup> ] op.101 [1 <sup>st</sup> ]	sym. no.7, op.92 [1 <sup>st</sup> , 4 <sup>th</sup> ] vn no.2, op.12 no.2 [1 <sup>st</sup> , 3 <sup>rd</sup> ] str.qt. op.18 no.5 [1 <sup>st</sup> , 4 <sup>th</sup> ]	vn no.4, op.23 [2 <sup>nd</sup> ] (A) vn no.9, op.47 [3 <sup>rd</sup> ] vc no.3, op.69 [3 <sup>rd</sup> ]	op.2 no.2 [1 <sup>st</sup> , 4 <sup>th</sup> ] op.101 [4 <sup>th</sup> ]	
PRAXIS	WORK	TEMPO		TIME SIGNATURE	REMARKS by Czerny	PRIMARY KEYS	SIGNATURE FEATURES
A <sub>1</sub>	op.30 no.1 [1 <sup>st</sup> ]	Allegro		3/4	tranquil, gently earnest	A-E	long <i>legato</i> lines in the first subject
	op.69 [1 <sup>st</sup> ]	Allegro, ma non tanto		♩	beauty of tone	A-E	
	op.101 [1 <sup>st</sup> ]	‘Etwas lebhaft und mit der innigsten Empfindung’ Allegretto ma non troppo		6/8	tranquil	A-E	
	op.12 no.1 [2 <sup>nd</sup> ]	Tema con Variazioni: Andante con motto		2/4	beautiful melody	A/E (variations)	E-A-C# motif
	op.30 no.1 [3 <sup>rd</sup> ]	Allegretto con Variazioni		♩	not precipitately	A (variations)	
	op.36 [2 <sup>nd</sup> ]	Larghetto		3/8	-	A-E	

Table 3.14: A major (cont.)

<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
A <sub>2</sub>	op.47 [3 <sup>rd</sup> ]	Presto	6/8	brilliant, fiery, lively	A-E	dance evocations
	op.92 [1 <sup>st</sup> ]	Vivace	6/8	-	A-E	
	op.92 [4 <sup>th</sup> ]	Allegro con brio	2/4	-	A-c#	
	op.18 no.5 [4 <sup>th</sup> ]	Allegro	♩	-	A-E	contrapuntal techniques
	op.101 [4 <sup>th</sup> ]	‘Geschwinde, doch nicht zu sehr, und mit Entschlossenheit’ Allegro	2/4	quick, resolute	A-E	
	op.2 no.2 [1 <sup>st</sup> ]	Allegro vivace	2/4	spirited, vivacious, energetic	A-E	elegant
	op.2 no.2 [4 <sup>th</sup> ]	Grazioso	C	tender, elegant	A-E	
	op.12 no.2 [1 <sup>st</sup> ]	Allegro vivace	6/8	gay, light	A-E	
	op.12 no.2 [3 <sup>rd</sup> ]	Allegro piacevole	3/4	pleasing tranquility, gentle	A-e/E	
	op.18 no.5 [1 <sup>st</sup> ]	Allegro	6/8	-	A-e/E	
	op.23 [2 <sup>nd</sup> ]	Andante scherzoso, piu Allegretto	2/4	serene, humour, delicacy	A-E	
	op.69 [3 <sup>rd</sup> ]	Allegro Vivace	♩	brilliant	A-E	

## f# minor

op.106 - Piano sonata no.29, 'Hammerklavier' (B $\flat$ ): [3<sup>rd</sup>] Adagio sostenuto,  
*Appassionato e molto sentimento*

Beethoven opens op.106/iii – his only f# minor movement<sup>127</sup> – with the directions *Una corda, mezza voce*, suggesting that the full outpouring of sentiment is to be partially repressed until instructed otherwise.<sup>128</sup> During the lengthy exposition, f# is presented in a gloomy way through the muted, chordal texture of limited melodic range (example 3.167).<sup>129</sup>

Example 3.167: Piano sonata op.106 in B $\flat$  major, third movement, bars 1-9:

Adagio sostenuto. (♩ = 92.)  
*Appassionato e con molto sentimento.*

*Una corda* *mezza voce*

*poco cresc.*

B. 152.

The hypnotic, multiple reinstatement of the tonic after brief exposures to the dominant reveals great pathos, whose only relief comes through the use of the

<sup>127</sup> Beethoven's obsessive perfectionism for this movement can be seen from Ries' reaction when he received a letter from the composer instructing him to add two introductory notes in the beginning of the *Adagio*, before presenting it to the publisher in London: 'I must admit that involuntarily I began to wonder if my dear old teacher had really gone daft ... To add another two notes to such a great work, which had been thoroughly reworked and completed half a year ago!! And yet I was amazed at the effect of these two notes. Never again could such effective, important notes be added to a completed work, not even if they had been intended from the very beginning'. Ferdinand Ries, *Remembering Beethoven: the biographical notes of Franz Wegeler and Ferdinand Ries*, trans. Frederick Noonan (London: Deutsch, 1988), 95.

<sup>128</sup> As Rosen states, *mezza voce* for Beethoven indicates a reserved and introvert tone. Rosen, *Beethoven's Piano Sonatas*, 225. Later on, at the beginning of the transition, Beethoven marks *tutte le corde, con grand' espressione*.

<sup>129</sup> The melodic range of the first theme is approximately one octave, which is justified by the *mezza voce* indication at the beginning.



Neapolitan;<sup>130</sup> at that point Beethoven moves to a higher register, providing ‘light’ in the midst of darkness (example 3.168).

Example 3.168: Piano sonata op.106 in B $\flat$  major, third movement, bars 14-16:



In later sections, Beethoven makes use of the entire *fortepiano* range, and turns to a more operatic approach with the incorporation of a *cantilena*, where he achieved ‘an intensity greater than any operatic composer has ever imagined’,<sup>131</sup> and the employment of sobbing effects through the ‘*bebung*’ technique (example 3.169).<sup>132</sup>

Example 3.169: Piano sonata op.106 in B $\flat$  major, third movement, bar 165:



<sup>130</sup> See ch.2, 32. A similar harmonic behaviour with a move to the Neapolitan scale degree can also be seen in the brief f# section of op.2 no.2/ii (example 3.170).

Example 3.170: Piano sonata op.2 no.2 in A major, second movement, bars 22-28:



<sup>131</sup> Rosen, *Beethoven's Piano Sonatas*, 225.

<sup>132</sup> ‘Bebung’ is a technique associated with the clavichord, where a vibrato can be obtained by alternately increasing and decreasing the pressure of the finger on the key. In the *fortepiano* it is achieved by repeating a note with a strong accent on a weak beat and the second playing on the strong beat a distant echo, like a syncopated vocal effect resembling a sob. Edwin M. Ripin and G. Moens-Haenen, ‘Bebung’ in *Grove Music Online. Oxford Music Online* <<http://www.oxfordmusiconline.com/subscriber/article/grove/music/02449>> [accessed 10 May 2013]; Rosen, *Beethoven's Piano Sonatas*, 226.

The *Adagio sostenuto* also carries an indication that had never been used before, especially in the context of a slow movement: ‘*Appassionato e con molto sentimento*’, marking the entire movement, and inevitably the key of f# minor, as very unique. Indeed, the movement constitutes one of the most poetic statements in the history of piano literature, whose sentiments had never been exploited in the past: ‘In the poignant intensity of this extraordinary piece, whose profundity is scarcely equalled even in Beethoven’s other masterpieces, all the anguished tension and brutal power which mark the first movement are sublimated in an exalted manner’.<sup>133</sup>

#### B $\flat$ major

op.7 - Piano sonata no.4 (E $\flat$ )	op.68 - Symphony no.6, ‘Pastoral’ (F)
op.18 no.3 - String quartet (D)	op.81a - Piano sonata no.26, ‘Les Adieux’ (E $\flat$ )
<b>op.18 no.6 - String quartet no.6</b>	op.93 - Symphony no.8 (F)
<b>op.19 - Piano concerto no.2</b>	<b>op.97 - Piano trio no.7, ‘Archduke’</b>
<b>op.22 - Piano sonata no.11</b>	<b>op.106 - Piano sonata no.29, ‘Hammerklavier’</b>
op.24 - Violin sonata no.5, ‘Spring’ (F)	op.125 - Symphony no.9 (d)
op.31 no.2 - Piano sonata, ‘Tempest’ (d)	<b>op.130 - String quartet no.13</b>
<b>op.60 - Symphony no.4</b>	

In describing the B $\flat$  major piano sonata op.22, Rosen states: ‘Beethoven uses material of a neutral character ... The first movement is not picturesque, and neither tragic nor humorous, and it lays no claim to lyricism’.<sup>134</sup> Indeed, the second praxis of B $\flat$  does not clearly depict a specific character. Overall, it mostly reveals a sense of

<sup>133</sup> Anon., liner note to *Ludwig van Beethoven: Sonaten opp.101, 106 ‘Hammerklavier’, Maurizio Pollini*, trans. John Coombs. Compact disc. 1990. Deutsche Grammophon. 429 569-2.

<sup>134</sup> Rosen, *Beethoven’s Piano Sonatas*, 147.

gaiety and often exhibits thematic material with a strong rhythmic drive similar to the one of C<sub>2</sub>,<sup>135</sup> but with a more generous amount of lyricism.

The opening of the ‘Hammerklavier’ displays two, clearly divided and highly contrasting thematic elements: a powerful and chordal motif, against a lyrical and polyphonic theme that proceeds immediately after (example 3.171).

Example 3.171: Piano sonata op.106 in B $\flat$  major, first movement, bars 1-8:

This multiple-component structural approach of the first subject is also employed, albeit in a more simplified way, for the openings of opp.19 and 22 (example 3.172-3.173).<sup>136</sup>

<sup>135</sup> One of the descriptions of B $\flat$  major as indicated by Ellison, is ‘the new C major’. Furthermore, Czerny, with reference to the first movement of the B $\flat$  major piano concerto op.19, notes: ‘to be played in the same manner as the previous concerto [in C major, op.15]. Paul M. Ellison, ‘The Key to Beethoven: Connecting Tonality and Meaning in his Music’ (PhD dissertation, Cardiff University, 2010), 142; Czerny, *On the Proper Performance of all Beethoven’s Works for the Piano*, 105.

<sup>136</sup> The multiple component structure of a primary thematic material is also noticeable in E $\flat$ <sub>2</sub>. See E $\flat$  major, 64-65, examples 3.44-3.46.

Example 3.172: Piano concerto no.2 in B $\flat$  major op.19, first movement, bars 1-4:



Example 3.173: Piano sonata op.22 in B $\flat$  major, first movement, bars 1-6:



In a similar manner, the second subjects of opp.7/i, 81a/iii and op.125/i, after presenting a lyrical statement at the arrival of B $\flat$ , transform into vigorous expressions (examples 3.174-3.176).

Example 3.174: Piano sonata op.7 in E $\flat$  major, first movement, bars 59-67 & 101-104:



Example 3.175: Piano sonata op.81a in E $\flat$  major, first movement, bars 53-56 & 57-60:

Example 3.176: Symphony no.9 in d minor op.125, first movement, bars 74-76 & 102-103:

Strong, driving rhythms are also apparent in opp.18 no.6/i, 19/iii, 97/iv and op.60, where the timpani has a prominent role.<sup>137</sup> Structurally, Rosen pinpoints a falling thirds scheme during the second subject of op.22/i, connecting it to the one in ‘Hammerklavier’, and states: ‘The correspondences of the two sonatas are striking. Opus 22, however, has none of the heroic ambitions of the ‘Hammerklavier’.<sup>138</sup> The gaiety aspect is exemplified through a light, detached thematic material (examples 3.177-3.179),

<sup>137</sup> When the first subject is reinstated at the beginning of the exposition, the timpani accentuates every beat of the bar ascribing a martial character to the key. Lockwood draws attention to Beethoven’s ‘military’ use of B $\flat$  major in the second part of the ‘Agnus Dei’ from *Missa Solemnis*. Lockwood, *Beethoven*, 410.

<sup>138</sup> Rosen, *Beethoven’s Piano Sonatas*, 147. Lam draws another B $\flat_2$  structural connection: ‘Like the first movement of Op. 22, this exhilarating piece [op.18 no.6/i] attains a satisfactory conclusion without benefit of coda’. Lam, *Beethoven String Quartets*, 32.

Example 3.177: Piano sonata op.22 in B $\flat$  major, first movement, bar 1:



Example 3.178: String quartet op.18 no.6 in B $\flat$  major, first movement, bars 1-3:

Example 3.179: Symphony no.4 in B $\flat$  major op.60, first movement, bars 43-47:

a playful emphasis on weak-beat notes (examples 3.180-3.182),

Example 3.180: String quartet op.18 no.6 in B $\flat$  major, fourth movement, bars 1-2:

Example 3.181: Piano concerto no.2 in B $\flat$  major op.19, third movement, bars 1-2:



Example 3.182: Piano trio op.97 in B $\flat$  major, fourth movement, bars 1-6:

or a series of fast semiquaver figuration (example 3.183).

Example 3.183: Symphony no.4 in B $\flat$  major op.60, fourth movement, bars 1-4:

The first praxis of B $\flat$  conveys more intimate settings without, however, applying a consistent textural approach.<sup>139</sup> The ‘Archduke’ trio opens with a beautiful, broad theme that marks *p* and *dolce*, followed by *cantabile* counterstatements in the violin

<sup>139</sup> As seen earlier, Beethoven did connect B $\flat$  and *amoroso* (see ch.1, 6). However, no scholar seems to have acknowledged this implication, possibly because it is not a consistent quality reflected in Beethoven’s B $\flat$  compositions. The most relevant comment is made by Lockwood, who refers to B $\flat$  as ‘a key that Beethoven favoured for subtlety’. Lockwood, *Beethoven*, 132.

and cello, resembling the nobility of the first subject in the op.59 no.1 ‘Razumovsky’ quartet (example 3.184).

Example 3.184: Piano trio op.97 in B $\flat$  major, first movement, bars 1-4:



In an odd, but possibly non-coincidental fashion, the first two bars of the main theme in op.125/iii, are marked *mezza voce*<sup>140</sup> and are an elongated version of op.97/i (example 3.185).

Example 3.185: Symphony no.9 in d minor op.125, second movement, bars 3-4:



Furthermore, opp.18 no.3/ii, 22/iv and op.68/ii,<sup>141</sup> all have a smooth and flowing content, with the former two rising in pitch in a sequential way before cadencing on the dominant (examples 3.186-3.188).

<sup>140</sup> See f# minor, fn. 128.

<sup>141</sup> Op.68/ii is entitled ‘Szene am Bach’ which translates as ‘Scene at the brook’; the opening triplet figurations in the strings clearly imitate flowing water.



Example 3.186: String quartet op.18 no.3 in D major, second movement, bars 1-4:



Example 3.187: Piano sonata op.22 in B♭ major, fourth movement, bars 1-4:



Example 3.188: Symphony no.6 in F major op.68, second movement, bars 1-4:



Finally, op.31 no.2/ii, although in the major mode, portrays a somber mood (example 3.189),<sup>142</sup> whereas the slow movement from the ‘Spring’ violin sonata displays a calm and affectionate quality through its songful melodic structure, and slow, conventional harmonic rhythm (example 3.190).

<sup>142</sup> ‘La malinconia’ from op.18 no.6 constitutes another example of this mood, where Beethoven marks ‘Questo pezzo si deve trattare colla più gran delicatezza’ which translates as ‘must be played with the greatest delicacy’. This semi-programmatic title, given by Beethoven himself, comes in contrast with his implication of B♭ being an *amoroso* key.

Example 3.189: Piano sonata op.31 no.2 in d minor, second movement, bars 1-5:

Adagio.

The score shows the first five bars of the second movement. It is in 3/4 time and D minor. The right hand begins with a half note chord (F4, A4, C5) followed by a half note chord (G4, B4, D5) and a half note chord (A4, C5, E5). The left hand plays a steady eighth-note accompaniment starting on F3.

Example 3.190: Violin sonata no. 5 in F major op.24, second movement, bars 1-8:

Adagio molto espressivo.

The score shows the first eight bars of the second movement. It is in 3/4 time and F major. The violin part (top staff) features a melodic line with a crescendo. The piano accompaniment (bottom two staves) consists of a steady eighth-note accompaniment in the left hand and a melodic line in the right hand. The tempo and mood are marked 'Adagio molto espressivo'.

Table 3.15: B $\flat$  major

<b>B<math>\flat</math></b>	<i>PIANO</i>		<i>ORCHESTRAL</i>		<i>CHAMBER</i>		
	<b>conc. no.2, op.19 op.22</b>	<b>op.106</b>	<b>sym. no.4, op.60</b>		<b>str.qt. op.18 no.6 pf trio op.97</b>	<b>str.qt. op.130</b>	
	<b>B<math>\flat_1</math></b> (lyrical)			<b>B<math>\flat_2</math></b> (motivic)			
	str.qt. op.18 no.3 [2 <sup>nd</sup> ] <b>op.22</b> [4 <sup>th</sup> ] vn no.5, op.24 [2 <sup>nd</sup> ] (F) op.31 no.2 [2 <sup>nd</sup> ] (E $\flat$ )	sym. no.6, op.68 [2 <sup>nd</sup> ] (F) <b>pf trio op.97</b> [1 <sup>st</sup> ] sym. no.9, op.125 [3 <sup>rd</sup> ] (d)	<b>conc. no.2, op.19</b> [1 <sup>st</sup> , 3 <sup>rd</sup> ] <b>str.qt. op.18 no.6</b> [1 <sup>st</sup> , 4 <sup>th</sup> ] <b>op.22</b> [1 <sup>st</sup> ] str.qt. op.59 no.1 [2 <sup>nd</sup> ] (F)		<b>sym. no.4, op.60</b> [1 <sup>st</sup> , 4 <sup>th</sup> ] sym. no.8, op.93 [2 <sup>nd</sup> ] (F) <b>op.106</b> [1 <sup>st</sup> , 4 <sup>th</sup> ]		
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>		<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
<b>B<math>\flat_1</math></b>	op.18 no.3 [2 <sup>nd</sup> ]	Andante con moto		2/4	-	B $\flat$ -F	intimate settings
	<b>op.22</b> [4 <sup>th</sup> ]	Allegretto		2/4	melodious, tender	B $\flat$ -F	
	op.24 [2 <sup>nd</sup> ]	Adagio molto espressivo		3/4	holy calm, delicate	B $\flat$	
	op.31 no.2 [2 <sup>nd</sup> ]	Adagio		3/4	elevated	B $\flat$ -F	
	op.68 [2 <sup>nd</sup> ]	'Szene am Bach', Andante molto moto		12/8	-	B $\flat$ -F	
	<b>op.97</b> [1 <sup>st</sup> ]	Allegro moderato		C	-	B $\flat$ -G	
	op.125 [3 <sup>rd</sup> ]	Adagio molto e cantabile		C	-	B $\flat$ -D-G- E $\flat$	
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>		<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>
<b>B<math>\flat_2</math></b>	<b>op.19</b> [1 <sup>st</sup> ]	Allegro con brio		C	gay, lively	B $\flat$ -F	contrasting elements in first subject
	<b>op.22</b> [1 <sup>st</sup> ]	Allegro con brio		C	energy, decision	B $\flat$ -F	
	<b>op.106</b> [1 <sup>st</sup> ]	Allegro		C	truly grand, symphony style	B $\flat$ -G	
	<b>op.18 no.6</b> [1 <sup>st</sup> ]	Allegro con brio		C	-	B $\flat$ -f/F	rhythmic drive
	<b>op.60</b> [1 <sup>st</sup> ]	Allegro vivace		C	-	B $\flat$ -F	
	<b>op.60</b> [4 <sup>th</sup> ]	Allegro ma non troppo		2/4	-	B $\flat$ -F	
	<b>op.18 no.6</b> [4 <sup>th</sup> ]	Allegretto quasi allegro		3/8	-	B $\flat$ -F	emphasis on off-beat notes
	<b>op.19</b> [3 <sup>rd</sup> ]	Molto allegro		6/8	gay, light, brilliant	B $\flat$ -F	
	<b>op.97</b> [4 <sup>th</sup> ]	Allegro moderato		2/4	animated, humorous	B $\flat$ -F	
	op.59 no.1 [2 <sup>nd</sup> ]	Allegretto vivace e sempre scherzando		3/8	-	B $\flat$ -d-f	repeated B $\flat$ s
op.93 [2 <sup>nd</sup> ]	Allegretto scherzando		2/4	-	B $\flat$ -F		

g minor

op.5 no.2 - Cello sonata no.2

op.79 - Piano sonata no.25 (G)

op.49 no.1 - Piano sonata no.19

op.110 - Piano sonata no.31 (A $\flat$ )

op.61 - Violin concerto (D)

G minor is rarely presented in a motivic context<sup>143</sup> and never as an intense means of expression which justifies the existence of only one praxis. Although a rare key in Beethoven's output, it is presented in a consistent way that mostly involves vocalised textures.

The first movement of op.49 is comprised of a simple, symmetrical melody of self-growing expression, through the sequential repetition of growing intervals (example 3.191).

Example 3.191: Piano sonata op.49 no.1 in g minor, first movement, bars 1-8:

The stressing of non-chord tones by a two-note, off-beat legatura, gives a gentle melancholic tone to the first subject which is completed by a natural *diminuendo* created by a drop in the pitch; the *legato* texture and simple accompaniment evoke a songful content. The slow movement of op.79 is a melodious *barcarolle*, portrayed

<sup>143</sup> The only time g minor is presented in a motivic way is in the scherzo of op.96; however, as with the c minor scherzo from op.27 no.1, this does not constitute substantial material in order to be included in the second praxis of the key.

as a duet for two sopranos (example 3.192); as Rosen points out ‘the style of Italian opera is very much in evidence’.<sup>144</sup>

Example 3.192: Piano sonata op.79 in G major, second movement, bars 1-4:



The lengthy introduction of the cello sonata op.5 no.2, which almost takes on the weight of a slow movement, also illustrates long,  $g_1$  vocalised textures. Beethoven puts emphasis on the dotted rhythms, which generate a slightly more tragic character, without, however, exceeding the  $p$  range (example 3.193).

Example 3.193: Cello sonata op.5 no.2 in g minor, first movement, bars 1-5:



Intriguingly, in the *Allegro* of the sonata, the primary thematic material is presented through long values without a pulsating accompaniment (example 3.194).

<sup>144</sup> Rosen, *Beethoven's Piano Sonatas*, 202.

Example 3.194: Cello sonata op.5 no.2 in g minor, first movement, bars 45-52:



Once the transition begins, a throbbing triplet figuration seizes control, governs the rest of the exposition and most of the development, until the moment of recapitulation where it briefly ceases, before starting again. A significant g minor moment in the string repertoire is exemplified in the development of the violin concerto op.61/i, where the agitated, triplet journey through the keys comes to a standstill when settling in g, with the violin producing an incredibly expressive melody in the high register, full of suspensions and decorative semitones, stressing the melancholic tone of the phrase (example 3.195).

Example 3.195: Violin concerto op.61 in D major, first movement, bars 330-334:



The most vivid example of the g minor qualities is reflected in the second *arioso* of op.110, in a truly astonishing representation of the vocal art. The first *arioso* has already expressed the dark sentiments of lamentation,<sup>145</sup> but when it comes back after the serene fugue, Beethoven also marks ‘ermattet’ next to ‘klagend’.<sup>146</sup> The exhaustion is revealed by a drop to g minor from the preceding A $\flat$  minor, and by the constant presence of rests that interrupt the vocal line, ‘as if excess of sorrow and

<sup>145</sup> The first *arioso* is marked ‘Klagender Gesang’ which translates as ‘song of lamentation’.

<sup>146</sup> ‘Ermattet’ translates as ‘exhausted’.

despair were making it difficult to breathe or to sustain expression for more than a few notes' (example 3.196). Rosen furthermore argues: 'we do not need either perfect pitch or key symbolism to hear this as flat, dissonant and depressed'.<sup>147</sup>

Example 3.196: Piano sonata op.110 in A $\flat$  major, third movement - second arioso, bars 1-3:

(Ermattet, klagend)  
Perdendo le forze, dolente.

*p*

*dim.*

*cresc.*

(125) 13

<sup>147</sup> Rosen, *Beethoven's Piano Sonatas*, 239; Tovey, with reference to the g minor *arioso*, states: 'its rhythm is broken and details are added so that the whole is delivered as if through sobs'. Tovey, *A Companion to Beethoven's Pianoforte Sonatas*, 268.

Table 3.16: *g* minor

<i>g</i>		<i>PIANO</i>		<i>ORCHESTRAL</i>	<i>CHAMBER</i>		
		op.49 no.1		N/A	vc no.2, op.5 no.2		
		<i>g</i> <sub>1</sub> (lyrical)					
		vc no.2, op.5 no.2 [1 <sup>st</sup> ] op.49 no.1 [1 <sup>st</sup> ]		op.79 [2 <sup>nd</sup> ] (G)		(excerpts) op.110 [3 <sup>rd</sup> ] {2 <sup>nd</sup> Arioso} (A <sup>b</sup> ) vn conc. op.61 [1 <sup>st</sup> ] {dev. 330-334} (D)	
<i>PRAXIS</i>	<i>WORK</i>	<i>TEMPO</i>	<i>TIME SIGNATURE</i>	<i>REMARKS by Czerny</i>	<i>PRIMARY KEYS</i>	<i>SIGNATURE FEATURES</i>	
<i>g</i> <sub>1</sub>	op.5 no.2 [1 <sup>st</sup> ]	Adagio sostenuto ed espressivo - Allegro molto quasi presto	C - 3/4	gloomy, tragic - impetuous, energy	g-E <sup>b</sup> g-B <sup>b</sup>	vocal textures	
	op.49 no.1 [1 <sup>st</sup> ]	Andante	2/4	for less accomplished players	g-B <sup>b</sup>		
	op.79 [2 <sup>nd</sup> ]	Andante	9/8	for less accomplished players	g-E <sup>b</sup>		
	op.110 [3 <sup>rd</sup> ]	L'istesso tempo di Arioso [Adagio ma non troppo]	12/16	-	g		



## B major

op.1 no.2 - Piano trio no.2 (G): [2<sup>nd</sup>] Largo espressione {2<sup>nd</sup> subj. 26-29}

op.14 no.1 - Piano sonata no.9 (E): [1<sup>st</sup>] Allegro {2<sup>nd</sup> subj. 22-31}

op.73 - Piano concerto no.5 (E $\flat$ ): [2<sup>nd</sup>] Adagio un poco mosso

op.90 - Piano sonata (E): [2<sup>nd</sup>] 'Night zu geschwind und sehr singbar vorzutragen' {1<sup>st</sup> eps. 60-63}

B major may not feature as the home key of a substantial, multi-movement work in Beethoven's output, but has one, truly magnificent appearance as the tonic key of a slow movement in the 'Emperor' concerto.<sup>148</sup>

Beethoven's textural approach for op.73/ii was quite unusual for its time. In an almost romantic fashion, the movement opens with muted strings<sup>149</sup> presenting a hymn-like, choral theme, at the end of which the piano melody emerges with *pp*, B major *espressivo* scalic figurations at the very top register, over long pedals, while indicating *staccatos* on each of the melodic notes accentuating their expressiveness (example 3.197); the entire movement conveys a serene, 'dream-like reflection'.<sup>150</sup>

Example 3.197: Piano concerto no.5 in E $\flat$  major op.73, second movement, bars 16-17:



Intriguingly, this angelic character of B major is briefly displayed as early as op.1 no.2/ii at the beginning of the second subject, where both hands of the piano part are

<sup>148</sup> The distant key of B major derived from its enharmonisation of C $\flat$  major, which is the flat sixth scale degree of E $\flat$  major; the same approach was used in the slow movement of 'Hammerklavier' where G $\flat$  became F#.

<sup>149</sup> Having muted instruments in a concerto setting was very unusual at the time, which could be interpreted as an intentional colour effect aiming to depict the special qualities of the key.

<sup>150</sup> Kinderman, *Beethoven*, 158.

written in the upper register of the instrument, outlining a transparent, ascending melody, full of expressive suspensions (example 3.198).

Example 3.198: Piano trio op.1 no.2 in G major, second movement, bars 26-29:



B is also exhibited as a subsidiary key in op.14 no.1/i and op.90/ii, portraying serene and songful qualities. In representing the second subject of op.14 no.1/i, it illustrates an *a cappella* theme (example 3.199), whereas in op.90/ii, it stops the momentum built from the foregoing unison semiquaver figurations by switching to quaver triplets for the accompaniment and incorporating long values for the melodic line (example 3.200).

Example 3.199: Piano sonata op.14 no.1 in E major, first movement, bars 22-26:



Example 3.200: Piano sonata op.90 in e minor, second movement, bars 58-63:



## D $\flat$ major

op.27 no.2 - Piano sonata no.14 (C $\sharp$ ): [2<sup>nd</sup>] Allegretto

op.57 - Piano sonata no.23 (f): [2<sup>nd</sup>] Andante con moto

op.101 - Piano sonata no.28 (A): [2<sup>nd</sup>] Lebhaft. Marschmäßig - Vivace alla Marcia {30-34}

op.135 - String quartet no.16 (F): [3<sup>rd</sup>] Lento assai, cantante e tranquillo

D $\flat$  major, whether as a movement or a brief excerpt, reveals a sense of stillness that is not seen in other keys. It is often presented in a slow and soft context, without intense expressive markings and with a melodic structure that does not involve wide intervallic leaps.

In the cases of opp.27 no.2 and 57, Beethoven has wedged D $\flat$  major between the two violent worlds of c $\sharp$  and f,<sup>151</sup> ascribing a dream-like reflection to the key, which, as Tovey marks, ‘must be shattered at the first hint of action’.<sup>152</sup> In op.101/ii, the vigorous F major march briefly embodies this D $\flat$  dream-like quality with the high register notations in both hands, over an intentionally long pedal marking, lasting for four entire bars (example 3.201).

Example 3.201: Piano sonata op.101 in A major, second movement, bars 30-34:



<sup>151</sup> Franz Liszt once described the second movement of op.27 no.2 as ‘a flower between two abysses’. Quoted in Kinderman, *Beethoven*, 82.

<sup>152</sup> With reference to op.57/ii. Tovey, *A Companion to Beethoven’s Pianoforte Sonatas*, 169.

The *Lento cantante e tranquillo* of op.135 is a theme and variations, built in such manner that the variable material is not as audible as in op.57/ii, which also exemplifies the same structural behaviour. The sketches of this sublime movement reveal Beethoven's personal thoughts of its conception: 'Susser Rubegesang, Friedegesang',<sup>153</sup> which is reflected by a slow, warm melody played on the violin's G string, that moves stepwise and never rises beyond *p*, accompanied by long, sustaining notes (example 3.202).

Example 3.202: String quartet op.135 in F major, third movement, bars 1-6:

As it constitutes part of Beethoven's last substantial work, it is often associated with a 'peaceful resignation', 'relaxed geniality' and 'serene acceptance of the inevitability of death'.<sup>154</sup>

<sup>153</sup> 'Susser Rubegesang, Friedegesang' translates as 'sweet restful, peaceful song'. Berger, *Guide to Chamber Music*, 74. This finding somehow contradicts Beethoven's indirect association of D $\flat$  and *maestoso*. See ch.1, 10.

<sup>154</sup> Berger, *Guide to Chamber Music*, 72.

b $\flat$  minor

op.110 - Piano sonata no.31 (A $\flat$ ): [3<sup>rd</sup>] Adagio ma non troppo {1-3}

op.106 - Piano sonata no.29 (B $\flat$ ): [2<sup>nd</sup>] Assai vivace {47-80}

op.60 - Symphony no.4 (B $\flat$ ): [1<sup>st</sup>] Adagio {1-17}

Beethoven never wrote a full movement in the key of b $\flat$  minor; however, he did incorporate it in a few brief sections, with the most extensive being the Trio from the 'Hammerklavier' Scherzo (example 3.203).

Example 3.203: Piano sonata op.106 in B $\flat$  major, second movement, bars 47-50:



The prominent use of pedal points and bass octaves in all excerpts denote a dark colour to the key, even though Beethoven had attributed that character to b minor.<sup>155</sup>

The mysticism depicted in the first five bars of the fourth symphony with the soft, unison falling thirds in the strings outlining b $\flat$ , over withheld octaves in the winds, could have constituted an opening for a Shostakovich symphony (example 3.204).

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<sup>155</sup> See ch.1, 7.

Example 3.204: Symphony no.4 in B $\flat$  major, first movement, bars 1-6:

Adagio.  $\text{♩} = 66.$

Flauto. *pp*

Oboi.

Clarinetti in B. *pp*

Fagotti. *pp*

Corni in B. *pp*

Trombe in B.

Timpani in B.F.

Violino I. *pp* pizz. arco.

Violino II. *pp* pizz. arco.

Viola. *pp* pizz. arco.

Violoncello. *pp* pizz. arco.

Basso. *pp* pizz. arco.

Similarly, the first few bars of the slow movement of op.110 portray a dark atmosphere with its dotted rhythms and repeated B $\flat$  in the bass (example 3.205).

Example 3.205: Piano sonata op.110 in A $\flat$  major, third movement, bar 1-2:

Adagio, ma non troppo.

*una corda*

*a<sup>b</sup>* minor

op.26 - Piano sonata no.12 (A<sup>b</sup>) [3<sup>rd</sup>] Marcia funebre, *sulla morte d'un Eroe*

op.110 - Piano sonata no.31 (A<sup>b</sup>): [3<sup>rd</sup>] Adagio ma non troppo, *Arioso dolente* {7-26}

The clear indications given by Beethoven next to his two *a<sup>b</sup>* minor movement tempo markings, leave no space for misinterpretations. The *Adagio ma non troppo* from op.110 marks 'Klagender Gesang',<sup>156</sup> whereas the slow movement of op.26 *Marcia funebre*, 'sulla morte d'un Eroe'.<sup>157</sup>

In op.110, the mournful character is established a few bars before the beginning of the *Arioso* with the incorporation of the 'bebung' technique (example 3.206).<sup>158</sup>

Example 3.206: Piano sonata op.110 in A<sup>b</sup> major, third movement, bars 4-5:

The musical score for Example 3.206 shows the beginning of the third movement of Piano Sonata No. 31 in A-flat major, Op. 110. The tempo is marked 'Andante. Adagio.' and the mood is 'cantabile'. The right hand features a descending melodic line with repeated semiquavers, while the left hand provides harmonic support with repeated chords. Performance instructions include 'cresc.' (crescendo), 'rit.' (ritardando), 'tutte le corde' (all strings), 'dimin.' (diminuendo), 'ritardando', and 'una corda' (one string). The left hand is marked 'sempre tenuto' (always held).

Once the repeated semiquavers complete the outlining of *a<sup>b</sup>*, a descending melodic line appears over repeated left hand chords that provide the harmonic content. The melodic anticipations and wide, often diminished, intervallic leaps convey the hero's state of mind (example 3.207).

<sup>156</sup> 'Klagender Gesang' translates as 'lamenting song'.

<sup>157</sup> 'Marcia funebre, sulla morte d'un Eroe' translates as 'Funeral march, on the death of a Hero'.

<sup>158</sup> See f# minor, 138, fn.132.

Example 3.207: Piano sonata op.110 in A $\flat$  major, third movement, bars 7-14:

The image shows a musical score for the third movement of Beethoven's Piano Sonata Op. 110 in A-flat major. It consists of three systems of music, each with a treble and bass staff. The first system is marked 'Adagio, ma non troppo.' and '(Klagender Gesang) Arioso dolente.' It features a piano introduction with 'p' dynamics and markings for 'tutti le corde', 'cresc.', and 'dim.'. The second system has an asterisk in the bass staff. The third system continues the piano texture with 'p' and 'cresc.' markings.

Regarding the funeral march of op.26, besides its self-explanatory nature, worth noting is that it comprises the only movement from the entire piano sonata cycle that Beethoven arranged for the orchestra; in a non-coincidental fashion, the composer chose b minor for this arrangement.<sup>159</sup>

<sup>159</sup> Ellison draws attention to the key of this arrangement, which is surprisingly omitted by Kinderman. Paul M. Ellison, 'The Key to Beethoven', 50; Kinderman, *Beethoven*, 100.



## CHAPTER FOUR

### CRITICAL FINDINGS

#### Overview

This examination has clearly shown that Beethoven believed in the affective powers of the keys. His music reflects this belief through the several textural similarities between works that belong to the same key, and the consistent emotional projections that appear on certain tonalities. In order to categorise the vast instrumental material in a homogenous way, the concept of ‘praxis’ was introduced, which acted purely as a textural reflection of the various excerpts. Although most tonalities consisted of two praxes, one for the slow and lyrical material and the other for the fast and motivic, certain keys that Beethoven had strong views on, displayed only one. During the examination, priority was given to the openings of the first and slow movements which were considered as primary affective sources, on the assumption that the material presented in the rest of the movement is not always harmonically independent; nevertheless, on occasion, affective material was identified in sections other than that of the opening.

#### The keys

In its second praxis, C major is presented as a vigorous expression of relentless energy with bravura textures and strong rhythmic figures, whereas in its first, as a means of profound expression. The key of *a* minor mostly exhibits a slightly angry tone with frequent use of *sf* and detached articulation, but also a sense of melancholy, without reaching great levels of intensity. *D*<sub>2</sub> has a celebratory character

which is exemplified at the very beginning with unison *f* octaves, whereas D<sub>1</sub> displays three qualities: pastoral, religious and melodious. E<sup>b</sup> major, apart from the strong and heroic content of its second praxis, also exhibits textural similarities between the E<sup>b</sup><sub>2</sub> movements, such as the frequent incorporation of B<sup>b</sup>; E<sup>b</sup><sub>1</sub> was seen to be quite inconsistent in its presentation. The emblematic key of c minor was represented only through the second praxis and, besides the pathetic and heroic qualities which have been stressed by the majority of scholars, it also demonstrates an impressive textural uniformity. E major, always presented in a non-motivic context, reveals a serene and euphoric character with non-pulsating textures and a placement after works of great dramatic power. F<sub>2</sub> contains humorous and contrapuntal works, whilst F<sub>1</sub>, with its vocalised and pastoral textures, is the only first praxis that contains six *Allegro* movements. With very little material in d minor, Beethoven prolonged Mozart's powerful tradition according to which this tonality should evoke vivid images; thus, Beethoven's d minor portrays volatile and turbulent settings, but also depressed and desperate ones. G major is the key of simplicity and playfulness, whereas e minor is a hybrid of two worlds: austerity and lament. A<sup>b</sup> major is only exemplified through its first praxis and projects a nobleness, as well as identical chordal openings. On the contrary, f minor is mostly seen through its second praxis and is used as a means of tragic and intense expression. A major mostly carries an elegance and tenderness, which is reflected in the predominantly gentle dynamics and phrasing structure of the primary thematic material. B<sup>b</sup><sub>2</sub> reveals a sense of gaiety by combining driving rhythms with lyricism, whereas B<sup>b</sup><sub>1</sub> conveys more intimate settings without a consistent textural approach. The scarce use of the black key minors combined with their strong emotional content, certainly indicates

their uniqueness: *c#* exhibits a disturbed and agitated notion, *f#* great pathos, *ab* mournful settings, and *b♭* a dark and gloomy ambiance. Finally, both *D♭* and *B* major portray similar dream-like qualities, whereas *F#* is rather obscure as a key choice, given that it was only used once, but without targeting any specific character or effect.

### Harmonic schemes

Another feature that serves as proof of Beethoven's tonal affectionism is the recurring harmonic schemes employed for certain keys. Special reference has to be made to the frequent *E♭-C/c* and *D/d* polarity between movements, the *c/C-A♭* within movements and between movements, the progression from the 'darkness' of *c* to the 'light' of *C*, the striking use of the mediant *E* when in *C/c*, the incorporation of *a* minor in *C* major finales and of the flat supertonic (*G♭*) when in *f*, as well as the powerful duality of *F/f*. Furthermore, when in *F*, *A* or *D* major, Beethoven preferred the dominant to serve as the main subsidiary key.

The existence of these harmonic schemes reflects the importance of the unequal temperament. Unquestionably, as seen earlier in this study, the tuning system used during the eighteenth century attributed different colours to each key due to the uneven distribution of semitones within the diatonic scale. Therefore, it is safe to assume that the pairing of tonalities was often based on their individual characteristics according to the desired amount of contrast Beethoven wanted to

achieve.<sup>1</sup> Worth noting is that certain harmonic behaviours appear only with specific keys: for example, the use of the mediant scale degree for a subsidiary movement only appears when the home key is C/c, while the repetition of the main thematic material in the Neapolitan, occurs only when in f.

However, not all harmonic choices are necessarily affective, especially when targeting individual movements. In fact, it is more often the case that a subsidiary key of a movement is heard as a temporary tonicisation: for example, the middle section of the *ab* minor 'Marcia funebre', op.26, is heard as a major tonicisation of the minor key and not as an affective episode in *Ab*; similarly, in op.2 no.2/i, the second subject is heard as the dominant of A major and not as an affective use of E. The same principle can be applied in sections that repeat similar thematic material in a different key. For example, the return of the *Grave* in *g* minor at the beginning of the development in the 'Pathetique' sounds more intense than the opening *Grave* in *c*, because of its higher register; even though the key of *g* is firmly established, the influence of the preceding key is still evident.

### Discrepancies

Contrary to expectations, Beethoven's music does not seem to follow the popular sharp/flat principle of the time.<sup>2</sup> According to contemporary belief, F# and C# majors are tonalities of extreme intensity and gaiety; however, C# major is nowhere

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<sup>1</sup> Unfortunately the exact physical details of the composer's own temperament have not yet been identified. However, efforts to reproduce the audible effect of different eighteenth century unequal temperaments have been made by pianist Enid Katahn in her recording 'Six Degrees of Tonality'. One of the most interesting features of the album is the recording of Mozart's d minor fantasy K.397 under three different temperaments. Enid Katahn. *Six Degrees of Tonality*. 2009. Compact disc. Precision Piano Work.

<sup>2</sup> See ch.1, 11.

to be found in Beethoven's output, whereas the op.78 F# piano sonata does not demonstrate such qualities. In fact, considering the composer's samples in E and B major, a growing amount of sharps translates to more serene settings. The major flat territory is more conventional, with B $\flat$ -E $\flat$ -A $\flat$ -D $\flat$  constituting a growing weakness according to the increasing amount of flats; Beethoven's F major, however, although having one flat less than B $\flat$ , does not exhibit brighter qualities. According to the findings of this study, arranging the keys in order of increasing intensity would read as follows: B-E-A-F#-G-C-D for major sharps; D $\flat$ -A $\flat$ -F-E $\flat$ -B $\flat$  for major flats; e-a-c#-f# for minor sharps; b $\flat$ -g-a $\flat$ -c-d-f for minor flats.

Surprisingly, the other incongruity of this study concerns Beethoven's own characterisations of certain keys. The composer has directly, or indirectly, made the following elusive associations: A $\flat$  with *barbaresco*, B $\flat$  with *amoroso*, D $\flat$  with *maestoso* and b with darkness. Of all these descriptions, only the one concerning b minor is clearly reflected in his output, given that he avoided composing in this key throughout his entire life. Regarding A $\flat$ , it can only be assumed that Beethoven attributed the term *barbaresco* in order to describe some sort of a 'foreign entity', whereas in the cases of D $\flat$  and B $\flat$ , although scarce samples justifying these characterisations can be found, the majority of music composed in them contradict these characterisations.

### Performance implications

During the examination of E major, this study briefly addressed how the knowledge of Beethoven's tonal approach towards E could affect several interpretational decisions with regard to pedalling and tempo in op.14 no.1. In a similar manner, the character of a key can be transformed into an interpretational guide for any work that displays ambiguous textures. For example, the nickname 'Appassionata' was given to op.57 by the publishing company at the time, with the view that it would best represent its emotional content. Unfortunately, its unavoidable programmatic implications – passionately quick and with great virtuosity – must have been something that Beethoven did not enjoy, considering that he named his immediate f minor successor, the string quartet op.95, 'Serioso'. Applying Beethoven's tonal approach towards f minor would have major performing consequences, since the rendering of a tragic tone requires the employment of a slower tempo and a slightly heavier touch.<sup>3</sup>

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<sup>3</sup> Apart from *Allegro assai* in the first movement of op.57, Beethoven has also marked 12/8, a very unusual time signature for an *Allegro* movement, which clearly indicates that the quaver should be the beat to form the *Allegro assai*. This detail is very often overlooked resulting in much faster interpretations.

## CONCLUSION

The concept of key characteristics is an intricate subject comprised of several layers. Elements of pitch, timbre, tuning, and volume, combined with phrasing, rhythm, speed, articulation and the harmonic language, all come together to shape a certain sound colour, which in turn triggers certain emotions, depending on the listener's musical understanding, education and experiences. A young inexperienced musician is not able to connect to tonal aestheticism because his/her hearing is not adjusted to such sophisticated levels at this early stage. Similarly, an adult whose ears are not cultivated enough will not be able to tell the difference between the tragedy of f minor and the turbulence of d minor, or the serenity of E major and the nobleness of A $\flat$ ; it truly is a concept that exists in the minds of fine professionals, with variable degree of enthusiasm.<sup>1</sup> However, no matter how attuned a person is to the concept of key characteristics, there is always going to be a certain amount of subjectivism involved when describing the various tonal colours, something that was acknowledged even by one of the leading figures in the topic, Johann Mattheson.<sup>2</sup>

Nevertheless, this study, through a journey in Beethoven's instrumental repertoire, has attempted to provide objective grounds to the concept of key characteristics, by utilising the texture as much as possible, rather than just recycling preconceived opinions. The purpose of this journey was not necessarily to define those characters but to draw attention to specific similarities between compositions that belong to the

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<sup>1</sup> On one hand there is Scriabin who was so attuned to it, to the point of being synesthetic, and on the other Toscanini who, in a more pragmatic approach, is reported to have said with regard to Beethoven's 'Eroica' symphony: 'To some it is Napoleon, to some it is Alexander the Great, to some it is philosophical struggle; to me it is Allegro con brio'. Joseph Horowitz, *Understanding Toscanini: A Social History of American Concert Life* (Berkeley: University of California Press, 1994), 102.

<sup>2</sup> See ch.1, 4.

same key in order to stress a uniformity of expression that can facilitate the overcoming of interpretational obstacles created by ambiguous textures. Certainly a bar-by-bar comparison would reveal even more textural correspondences between the works. However, the examination was mainly driven by Beethoven's 'more a feeling of expression rather than tone painting' and therefore did not delve into a deep analysis. Undoubtedly, certain keys exhibited a more convincing archetypal behaviour than some others. Overall though, it is unquestionable that Beethoven's music demonstrates a profound and thorough understanding of the psyches of the keys that will never cease to fascinate the scholarly world.



## APPENDIX A

### LIST OF SEVERAL TREATISES RELEVANT TO KEY SYMBOLISM

Gioseffo Zarlino: *Istitutioni harmoniche* (1558)

Jean Rousseau: *Méthode Claire* (1691)

Marc-Antoine Charpentier: 'Regles de composition' (c1692)

Charles Masson: *Nouveau traité* (1697)

Jean-Philippe Rameau: *Traité de l'harmonie* (1722)

Johann Mattheson: *Das neu-eröffnete Orchestre* (1713)

*Exemplarische Organisten-Probe* (1719)

Johann Philipp Kirnberger:<sup>1</sup> *Die Kunst des reinen Satzes in der Musik* (1771)

Johann Georg Sulzer & Johann Abraham Peter Schulz:<sup>2</sup> *Allgemeine Theorie der schönen Künste* (1771-1774)

Heinrich Christoph Koch:<sup>3</sup> *Musikalisches Lexikon* (1802)

Daniel Gottlob Türk:<sup>4</sup> *Anleitung zu Temperaturberechnungen* (1808)

Francesco Galeazzi: *Elementi teorico-pratici di musica* (1796)

J. J. H. Ribock:<sup>5</sup> 'Über Musil; an Flötenlieber insonderheit' in Cramer's *Magazin der Musik* (1783)

Christian Friedrich Daniel Schubart: *Ideen zu einer Ästhetik der Tonkunst* (1806)

Joseph Riepel:<sup>6</sup> *Grundregeln zur Tonordnung* (1755)

Georg Joseph Vogler:<sup>7</sup> *Betrachtungen der Mannheimer Tonschule* (1778-1781)

Justin Heinrich Knecht:<sup>8</sup> *Gemeinnützlichtes Elementarwerk der Harmonie und des Generalbasses* (1792)

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<sup>1</sup> Kirnberger defended key characters through the preservation of unequal temperament.

<sup>2</sup> Both Sulzer and Schulz were students of Kirnberger.

<sup>3</sup> Koch reiterated Kirnberger's theories.

<sup>4</sup> Türk referred to the Marpurg-Kirnberger conflict (see ch.1, 12) and acknowledged the special characters of the keys under the unequal temperament.

<sup>5</sup> J. J. H. Ribock represents one of the first known cases of synaesthesia.

<sup>6</sup> Riepel drew connections between the key qualities and the physical instrumental properties.

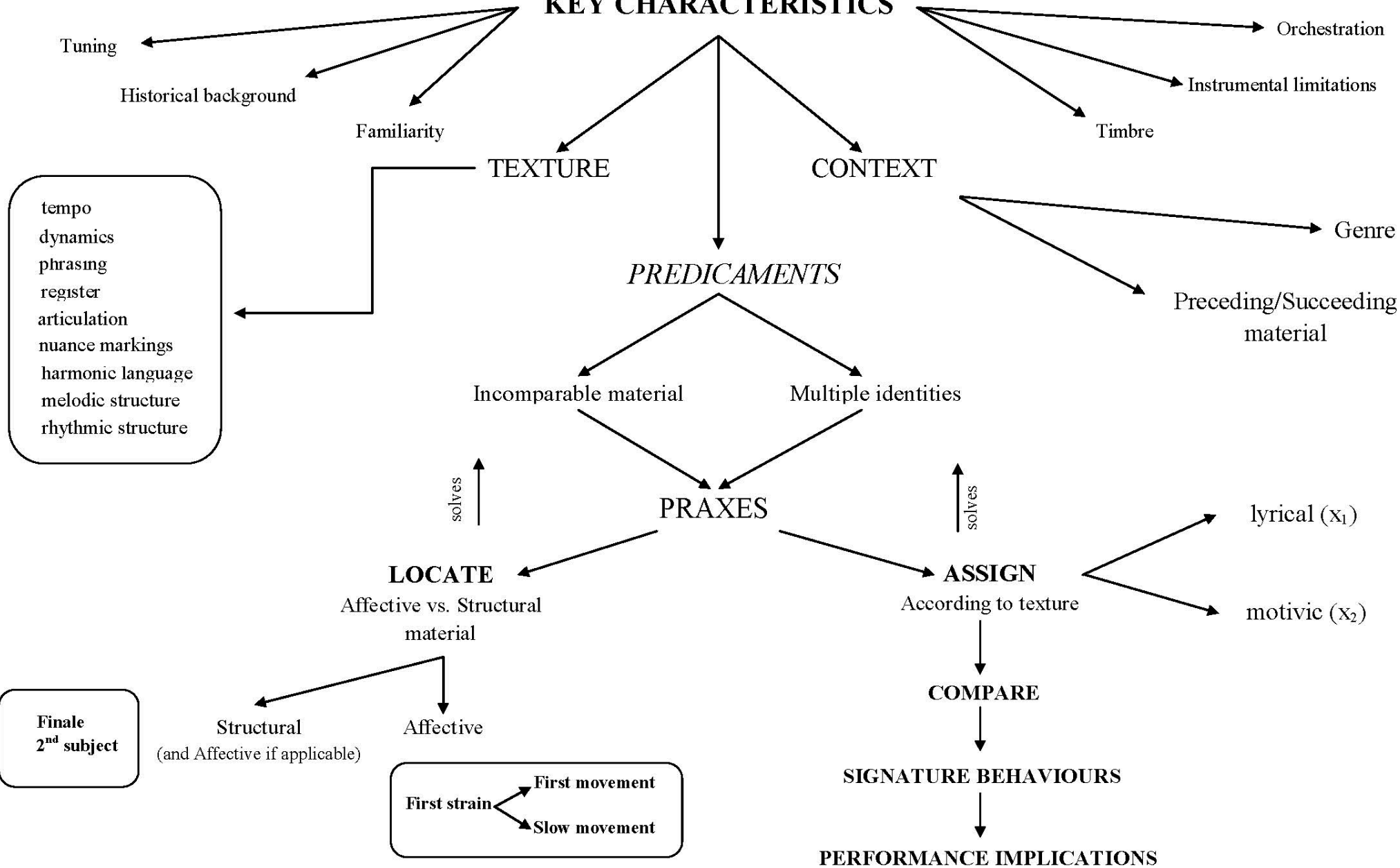
<sup>7</sup> Vogler also defended the key characters through the preservation of unequal temperament.

<sup>8</sup> Knecht was a student of Vogler's and friend of Schubart's

APPENDIX B

DIAGRAM SUMMARISING CHAPTER TWO

KEY CHARACTERISTICS



## Bibliography

Arnn, John D., Review: 'A History of Key Characteristics in the Eighteenth and Early Nineteenth Centuries by Rita Steblin', *Notes* 40 (1983), 287-289

Anderson, Emily, *The Letters of Beethoven*, ed. and trans. Emily Anderson (3 vols, London: Macmillan, 1961)

Anson-Cartwright, Mark, 'Chromatic Features of Eb-Major Works of the Classical Period', *Music Theory Spectrum* 22 (2000), 177-204

'Barbaric', in *Oxford English Dictionary Online*.  
<<http://www.oed.com/view/Entry/15384>> [accessed 9 May 2013]

Barker, Andrew, *Greek Musical Writings: The musician and his Art* (Cambridge: Cambridge University Press, 1984)

Bekker, Paul, *Beethoven*, trans. M. M. Bozman (J. M. Dent & Sons, Ltd, 1925)

Berger, Karol, Review: 'A History of Key Characteristics in the Eighteenth and Early Nineteenth Centuries by Rita Steblin', *Music & Letters* 66 (1985), 388-391

Broyles, Michael E., 'Beethoven's Sonata Op. 14, No. 1, Originally for Strings?', *Journal of the American Musicological Society* 23 (1970), 405-419

Clausen, Bruce E., 'Beethoven and the Psyches of the Keys' (PhD dissertation, University of Southern California, 1988)

Cole, M. S. 'Rondo' in *Grove Music Online. Oxford Music Online*.  
<<http://www.oxfordmusiconline.com/subscriber/article/grove/music/23787>>  
[accessed 25 February 2013]

Cooke, Deryck, *The Language of Music* (London: Oxford University Press, 1959)

Cooper, Barry, *Beethoven and the Creative Process* (Oxford: Clarendon Press, 1990)

Cooper, Barry, *Beethoven* (Oxford: Oxford University Press, 2000)

Cooper, Barry, *The Beethoven Compendium: A Guide to Beethoven's Life and Music* (New York: Thames and Hudson, 1992)

Czerny, Carl, *On the Proper Performance of all Beethoven's Works for the Piano* ed. Paul Badura-Skoda (Vienna: Universal Edition, 1970)

Drabkin, William, 'Beethoven and the Open String', *Music Analysis* 4 (1985), 15-28

Duffin, Ross W., *How Equal Temperament Ruined Harmony (and why you should care)* (New York: W. W. Norton & Company, 2007)

Einstein, Alfred, *Mozart: His Character, his Works* (Oxford: Oxford University Press, 1945)

Ellison, Paul M., 'The Key to Beethoven: Connecting Tonality and Meaning in his Music' (PhD dissertation, Cardiff University, 2010)

Fischer, Edwin, *Beethoven's Pianoforte Sonatas: A Guide for Students and Amateurs* trans. Stanley Godman (London: Faber and Faber, 1959)

Groenings, Franz, 'Key Colour', *The Musical Times and Singing Class Circular* 27 (1886), 651-653

Gombosi, Otto, 'Key, Mode, Species', *Journal of the American Musicological Society* 4 (1951), 20-26.

Horowitz, Joseph, *Understanding Toscanini: A Social History of American Concert Life* (Berkeley: University of California Press, 1994)

Irving, John, 'Sonata' in *Grove Music Online. Oxford Music Online.*  
<<http://www.oxfordmusiconline.com/subscriber/article/grove/music/26191>>  
[accessed 29 February 2013]

Johnson, Douglas, Tyson, Alan, and Winter, Robert, *The Beethoven Sketchbooks: History, Reconstruction, Inventory* ed. Johnson, Douglas (Oxford: Clarendon Press, 1985)

Keller, Hans, 'Key Characteristics', *Tempo* 40 (1956), 5-16

Keller, Hans, *The Great Haydn Quartets: Their Interpretation* (London: J. M. Dent, 1993)

Kerman, Joseph, *The Beethoven Quartets* (New York: W. W. Norton & Company, 1979)

Kerst, Friedrich and Krehbiel, Henry E., *Beethoven, the Man and the Artist, as revealed in his own words* (New York: Dover Publications, 1964)

Kinderman, William, *Beethoven's Compositional Process* (Lincoln: University of Nebraska Press, 1991)

Kinderman, William, *Beethoven* (Oxford: Oxford University Press, 2009)

Kirkendale, Warren, 'New Roads to Old Ideas in Beethoven's "Missa Solemnis"', *The Musical Quarterly*, 56 (1970), 665-701

Kirnberger, Johann Philipp, *The Art of Strict Musical Composition*, trans. David Beach and Jurgen Thym (New Haven: Yale University Press, 1982)

Kramer, Richard, 'Notes to Beethoven's Education', *Journal of the American Musicology Society* 28 (1975), 72-101

Lindeman, Stephan D., 'Czerny' in *Grove Music Online. Oxford Music Online*. <<http://www.oxfordmusiconline.com/subscriber/article/grove/music/07030>> [accessed 20 March 2013]

Lindley, M., 'Temperaments' in *Grove Music Online. Oxford Music Online*. <<http://www.oxfordmusiconline.com/subscriber/article/grove/music/27643>> [accessed 15 March 2013]

Lockwood, Lewis, *Beethoven: Studies in the Creative Process* (Cambridge, Mass. and London: Harvard University Press, 1992)

Lockwood, Lewis, *Beethoven: the Music and the Life* (New York: W. W. Norton & Company, 2003)

Lockwood, Lewis, *Inside Beethoven's Quartets: History, Interpretation, Performance* (Cambridge Mass.: Harvard University Press, 2008)

Lockwood, Lewis, and Kroll, Mark (eds.), *The Beethoven Violin Sonatas: History, Criticism, Performance* (Urbana: University of Illinois Press, 2004)

Mathiesen, T. J., et al., 'Greece' in *Grove Music Online. Oxford Music Online*. <<http://www.oxfordmusiconline.com/subscriber/article/grove/music/11694>> [accessed 19 March 2012]

Mattheson, Johann, *Der vollkommene Capellmeister*, rev. and trans. Ernest Charles Harriss (Ann Arbor, Mich.: UMI Research Press, 1981)

Mies, Paul, and Mackinnon, Doris L., *Beethoven's Sketches: an Analysis of his Style based on a Study of his Sketch-books* (New York: Dover Publications, 1974)

Montagu, J., 'Temperament' in *The Oxford Companion to Music*. *Oxford Music Online*.  
<<http://www.oxfordmusiconline.com/subscriber/article/opr/t114/e6695>> [accessed 15 March 2013]

Newman, Ernest, *The Unconscious Beethoven* (London: Victor Gollancz, revised edn 1968)

Newman, William S., *Beethoven on Beethoven: Playing his Piano Music His Way* (New York: W. W. Norton & Company, 1995)

Newman, William S., *The Sonata in the Classical Era* (New York: W. W. Norton & Company, 3<sup>rd</sup> edn 1983)

Newman, William S., *Performance Practices in Beethoven's Piano Sonatas* (London: J. M. Dent & Sons Ltd., 1972)

Nottebohm, Gustav, *Two Beethoven Sketchbooks: a Description with Music Extracts* trans. Jonathan Katz (London: Gollancz, 1979)

Perrey, Beate Julia, *Schumann's Dichterliebe and Early Romantic Poetics : Fragmentation of Desire* (Cambridge: Cambridge University Press, 2002)

Powers, H. S., et al., 'Mode' in *Grove Music Online*. *Oxford Music Online*.  
<<http://www.oxfordmusiconline.com/subscriber/article/grove/music/43718pg3>>  
[accessed 19 March 2012]

'Praxis' in *Oxford English Dictionary Online*.  
<<http://www.oed.com/view/Entry/149425>> [accessed 9 May 2013]

Ratner, Leonard G., *Classic Music: Expression, Form, and Style* (New York: Schirmer Books, 1980)

Ries, Ferdinand, *Remembering Beethoven: the biographical notes of Franz Wegeler and Ferdinand Ries*, trans. Frederick Noonan (London: Deutsch, 1988)

Rimsky-Korsakov, Nikolay, *Principles of Orchestration, with Musical Examples drawn from his own works*, ed. Shteinberg Maksimilian O., trans. Agate, Edward, (New York: Dover Publications, 1964)

Ripin, Edwin M. and Moens-Haenen, G., 'Bebung' in *Grove Music Online*. *Oxford Music Online*

<<http://www.oxfordmusiconline.com/subscriber/article/grove/music/02449>>

[accessed 10 May 2013]

Révész, Géza, *Introduction to the Psychology of Music* (New York: Dover Publications, 2001)

Rosen, Charles, *Beethoven's Piano Sonatas: A Short Companion* (New Haven: Yale University Press, 2002)

Rosen, Charles, *Sonata Forms* (New York: W. W. Norton & Company, revised edn 1988)

Rosen, Charles, *The Classical Style: Haydn, Mozart, Beethoven* (London: Faber and Faber, 1997)

Schindler, Anton, and MacArdle, Donald W., *Beethoven as I knew him* (Chapel Hill: University of North Carolina Press, 1966)

'Schubart, Christian Friedrich Daniel' in *The Oxford Dictionary of Music*. *Oxford Music Online*.

<<http://www.oxfordmusiconline.com/subscriber/article/opr/t237/e9141>> [accessed 9 May 2013]

Solomon, Maynard, *Beethoven* (London: Cassell, 1978)

Solomon, Maynard, *Beethoven Essays* (Cambridge, Mass.: Harvard University Press, 1988)

Solomon, Maynard, *Late Beethoven: Music, Thought, Imagination* (Berkeley: University of California Press, 2003)

Solomon, Maynard, *Reason and imagination: Beethoven's Aesthetic Evolution* (Rochester: University of Rochester Press, 2004)

Spitzer, Michael, *Metaphor and Musical Thought* (Chicago and London: University of Chicago Press, 2004)

Spitzer, Michael, *Music As Philosophy: Adorno And Beethoven's Late Style* (Bloomington, Ind.: Indiana University Press, 2006)

Stanley, Glenn, *The Cambridge Companion to Beethoven* (Cambridge: Cambridge University Press, 2000)

Steblin, Rita, *A History of Key Characteristics in the Eighteenth and early Nineteenth centuries* (Ann Arbor, Mich.: UMI Research Press, 1983)

'Texture' in *Grove Music Online. Oxford Music Online.*

<<http://www.oxfordmusiconline.com/subscriber/article/grove/music/27758>>

[accessed 16 March 2013]

Thayer, Alexander, *The Life of Beethoven*, rev. Elliot Forbes, ed. Ian Curteis (London: The Folio Society, 2001)

Thompson, Wendy and Cochrane, Lalage, 'Mattheson, Johann' in *The Oxford Companion to Music. Oxford Music Online.*

<<http://www.oxfordmusiconline.com/subscriber/article/opr/t114/e4286>> [accessed 9

May 2013]

Tovey, Donald Francis, *A Companion to Beethoven's Pianoforte Sonatas: (bar to bar analysis)* (London: Associated Board of the Royal Schools of Music, 1931)

Tovey, Donald Francis, *Beethoven* (London: Oxford University Press, 1945)

Treitler, Leo, *Music and the Historical Imagination* (Cambridge, Mass.: Harvard University Press, 1989)

Tusa, Michael C., 'Beethoven's C-minor mood: Some Thoughts on the Structural Implications of Key Choice', *Beethoven Forum* 2 (University of Nebraska Press, 1993), 1-27

Tyson, Alan, 'Beethoven's Heroic Phase', *The Musical Times* 110 (1969), 139-141

Watson, Angus, *Beethoven's Chamber Music in Context* (Woodbridge: The Boydell Press, 2012)

Wilson, John D., 'Of Hunting, Horns, and Heroes: A Brief History of E $\flat$  major before the *Eroica*', *Journal of Musicological Research* 32 (2013), 163-182

Wolf, Franck, Review: 'Der Charakter der Tonarten. Eine Untersuchung by Paul Mies', *Journal of the American Musicological Society* 2 (1949), 116-117