

AN INVESTIGATION INTO  
TWENTIETH CENTURY  
FLUTE TRIOS

WITH SPECIAL REFERENCE TO REPRESENTATIVE WORKS BY  
*GOOSSENS, SIL'VANSKY, RAPHAEL, DAMASE, MARX AND CRUMB*

THESIS

Submitted in fulfilment  
of the requirements for the Degree of

MASTER OF MUSIC

of

Rhodes University

by

DANIELA HEUNIS

December 1993

## ABSTRACT

This thesis ventures into the world of twentieth century chamber music, specifically the trios written for flute, cello and piano.

The first chapter discusses the history of the trio, tracing its development from the trio sonata of the Baroque Period to the *accompanied* sonatas and specifically the *sonatas* with flute and cello *obbligato*. Following the unpopularity of the genre throughout the Romantic period, its greater prominence in the Twentieth Century is discussed, mentioning specific groups through whom the repertoire has been extended. Forty trios are grouped according to compositional styles.

Six trios, each representing an example of a specific style period, have been selected for more detailed discussion, with particular reference to the various ways in which a sense of unity is achieved in each trio. The English composer Eugene Goossens uses impressionistic images, whole tone and chromatic scale patterns and other motifs to unify his trio: "*Five Impressions of a Holiday*". Nikolay Iosifovich Sil'vansky's "*The Hedgehog and the Nightingale*" is based on a Russian tale by Juri Jarmicha and uses a narrator. The three characters are represented by

specific motivic and / or thematic material which is used throughout the trio. **Günter Raphael's** *Trio-Suite* op 44 is the only cyclic work unifying the two outer movements, without repeating any additional motivic material. **Jean-Michel Damase** condenses some of the material introduced in the opening Prelude in both the two Largo's and the two Arias in his "*Sonate en Concert*" of 1950. **Karl Julius Marx** builds his entire "*Trio op 61*" on a flexible six-note motif. Various movements in the trio "*Vox Balaenae*" by the American **George Crumb** are linked through the use of motives and characteristic instrumental colour.

A comprehensive list of 180 twentieth century trios has been compiled, including details of dedications, commissions and first performances. 163 composers from twenty countries, are represented.

## TABLE OF CONTENTS

	Page
Preface	xii
Acknowledgements	xv
Abbreviations	xvii
CHAPTER I	
History of the Flute Trio:	1
Baroque Trio Sonata	2
Classical Accompanied Keyboard Sonata	3
Romantic Period	6
Instrumental Development:	
Piano	7
Flute	8
Cello	9
Twentieth-century Trios:	10
Commissions	13
Dedications	14
Ensembles:	
The Group	15
The New York Camerata	16
The Schön Kammartrio	16
Gelders Trio	18
Kamermuziekensemble 'Concertino'	18
Tre Solisti di Prague	18

Sebastian Trio	18
Trio con Flauto	18
Composers:	
Traditional	19
Neo-Baroque	20
Neo-Classical	20
Expressionistic	21
Avant-garde	21
<b>CHAPTER II</b>	
<b>Eugene Goossens</b>	
Background	23
Trio: "Five Impressions of a Holiday"	24
Outline	24
Unifying elements:	
Impressionistic	25
Melodic	31
<b>CHAPTER III</b>	
<b>Nikolay Iosifovich Sil'vansky</b>	
Background	38
Trio: "The Hedgehog & the Nightingale"	38
Outline	39
Unifying elements:	
Hedgehog theme	41
Nightingale themes	47

Fox theme	52
Accompaniment	53
New motivic material	56

#### CHAPTER IV

##### Günter Albert Rudolf Raphael

Background	60
Trio: "Trio-Suite"	61
Outline	62
Unifying elements:	
Neo-Baroque	62
Melodic:	
Praeludium	64
Gigue	66
New Material:	
Courante	68
Sarabande	71
Menuet	75

#### CHAPTER V

##### Jean-Michel Damase

Background	81
Trio: "Sonate en Concert"	82
Outline	82
Form schemes	83

Unifying elements:	
Neo-Classical	85
Melodic:	
Motif a:	87
Sigh motives	88
Consonant intervals	88
Scale passages	89
Motif b:	92
Angular intervals	93
Inversion (inverted)	94
Motif a combined with b	94
New material:	96
Intermezzo	96
Sicilienne	98
Gigue	100

## CHAPTER VI

### Karl Julius Marx

Background	103
Trio: "Trio op. 61"	104
Outline	104
Unifying elements:	
Expressionistic	104
Melodic:	
Six-note motif	109
Four-note motif	112

New material	114
Form elements:	115
Schemes	116
Rondo theme	117
Variations	119

## CHAPTER VII

### George Henry Crumb

Background	125
Trio: "Vox Balaenae"	126
Outline	127
Unifying elements:	
Eclectic:	
Tonal	128
Avant-garde:	128
Flute	128
Cello	129
Piano	131
Amplification	132
Theatrical effects	133
Geological eras	134
Citation technique:	135
Richard Strauss	135
Oliver Messiaen	135
Melodic:	
Motifs a & b	140

Motifs c, d & e	141
Motif f	142
Motifs g, h & i	143
Tone colour	147
New material:	
Motif j	148
Motifs k & l	149
Motif m	150
Motifs n & o	151
Motifs p & q	152
Motifs r, s & t	153
Motifs u, v & w	154
Motif x	155
Motifs aa, bb, cc & dd	156
Motifs ee & ff	157
Motifs gg, hh & ii	158
Motifs jj	159

## CHAPTER VIII

### Conclusion

Instrumental range	160
Instrumental techniques:	
Flute	161
Cello	164
Piano	165

Textural aspects	167
Dynamic range	169
Number & order of movements	171
Extra-musical suggestions	173
Unifying elements	173
<b>APPENDIX I</b>	175
Classical & Romantic Trios	
<b>APPENDIX II</b>	177
Comprehensive list of Twentieth-century Trios grouped into countries	
<b>APPENDIX III</b>	187
Twentieth-century Trios displaying sources	
<b>APPENDIX IV</b>	196
Twentieth-century Trios indicating dedications, commissions, musicians, publishers	
<b>APPENDIX V</b>	199
English translation of Juri Jarmicha's Russian Story used by Sil'vansky in "The Hedgehog & the Nightingale"	

<b>APPENDIX VI</b>	207
Geological eras pertaining to "Vox Balaenae" by Crumb	
<b>APPENDIX VII</b>	209
Unifying material from Messiaen and Crumb	
<b>BIBLIOGRAPHY</b>	
<b>Main Sources:</b>	
Scores	210
Correspondence	210
Records	214
Catalogues	215
Books	215
Journals	227
Theses	238
<b>Other Sources:</b>	
Scores	238
Records	242
Books	243
Journals	244

## PREFACE

I have been participating in Chamber Music from an early age. From 1978-1984 I was actively involved as flautist in a trio consisting of the cellist Leonore Ehlers and the pianist Benjamin van Eeden, staff members at the Wellington Teachers Training College. We regularly performed music written for this combination (flute, cello & piano), which will be referred to as the **Flute Trio** throughout the thesis, in contrast to the Piano Trio (violin, violoncello, piano). The trios by Haydn and J.C.F. Bach were frequently performed, but as we did not only specialize in Flute Trios, we mainly played the scores which were available in the University Libraries of Stellenbosch and Cape Town as well as the music of our respective teachers.

In 1985 I was appointed lecturer at the Department of Music & Musicology at Rhodes University. At first sonatas for flute and piano were performed by myself with Susan Gough as the pianist. She also played cello sonatas with Ishbel Sholto-Douglas. During 1986 we started playing the Flute Trios available from my repertoire (my personal library) and the Rhodes Music Library and started including Flute Trios as items on our programmes, which were well received. Subsequently we decided to specialize in full length trio concerts. The **Rhodes Flute Trio** gave their first

performance in the Music Department on 20 March 1987. In 1991 Susan Gough moved to Cape Town and was replaced by Dennis Stander as pianist of the group.

We were constantly looking for new repertoire and the music list compiled by Frans Vester in his pioneering "Flute Repertoire Catalogue" published in 1967 became our main source. After trying in vain to obtain music in South African Libraries, music was purchased from overseas firms. Since compositions regardless of their quality are listed in Vester, I thought it could be a worthwhile research project, for the Rhodes Trio in particular, but also for other musicians looking for Flute Trios, to establish which are still available in print, and to compile, apart from the Vester Catalogue, a more comprehensive list of Twentieth Century trios. Finally classifying some of the musical gems as well as the degree of difficulty of the trios in the genre, seemed to be beneficial both to me and other musicians.

During 1985 Vester published a new Catalogue specializing in the flute music of the Eighteenth Century. In this extensive catalogue he expanded greatly on the previously listed accompanied sonatas (as this genre was called). Unfortunately he died in 1990 before the other musical periods in his catalogue could be updated.

In his 1967 catalogue he lists 32 trios from the Twentieth Century representing the core with which I started. I then expanded my repertoire using other catalogues such as Altman, Baron, Boenke, Cobbett, Hinson, Houser and the BIBLIOGRAPHIC GUIDE TO MUSIC, the latter which lists all the music published since 1974. Although I went through several journals which specialize in music for the Twentieth Century, I found the most helpful journals available in South African Libraries to be: *Tempo*, *Notes* and *Sonorum Speculum*.

I further established contact with composers and Music Information Centers worldwide. From the 84 letters I wrote, 22 composers replied to my letters, while response from 12 Information Centers were received from the following countries: America, Australia, Britain, Czechoslovakia, Denmark, France, Ireland, The Netherlands, Norway, Russia, Switzerland, Sweden.

This information is reflected in the Appendices II-IV: II providing a comprehensive list of available Twentieth-century Trios grouped according to nationality; III listing main sources from where music may be obtained and IV additional information regarding dedications, premieres, commissions and performers.

The remaining Appendices V-VII pertain to specific trios discussed in Chapters III and VII.

In regard to the Bibliography, **Main Sources** (pp. 210- 238) reflect information for Chapters I-VIII, whereas **Other Sources** (pp. 238-261) cover additional material used in the compilation of Appendices I-IV.

## ACKNOWLEDGEMENTS

I would like to thank:

Prof Rupert Mayr, for advice on the construction of chapters.

My colleagues Mr Christopher Cockburn and Dr Ishbel Sholto Douglas for making valuable suggestions.

Ishbel, together with Susan Gough and Dennis Stander for playing the trios.

Lizel Vermeulen for proof-reading the text.

Mrs Fiona Patterson, Mrs Wendy Norman and Dr Julian Grundy for obtaining scores during political sanctions.

Composers, Musicians and Information Centers (listed in the Bibliography) who replied to my correspondence, as well as the many South African librarians in the various University and Municipal Libraries throughout the country, who have been of help to me in my research.

Ms Christine Reinecke and Mr Andrew Cook for translations from the Russian.

In conclusion I wish to acknowledge with deep gratitude the help, care and encouragement of my supervisor Dr T. E. K. Radloff. His stimulating advice and his kindness can hardly be measured or adequately put into words.

## ABBREVIATIONS

The following abbreviations are used in the thesis:

1. The term trio if not specified, refers to the **Flute Trio**, comprising the flute, the cello and the piano.

2. Instrumental range: The lowest note possible on each instrument is indicated by the number 1. Thus middle c will appear as c1 on the flute, c3 on the cello and c4 on the piano.

3. Musical examples:

**Movements** (or **Episodes** in the case of Sil'vansky) are indicated with Roman numerals (I, II, III, etc.).

**Bar numbers** as well as **beats** are shown as follows:

1(2-3) = bar 1 beats 2-3.

In three Episodes of the Sil'vansky trio, the same melodic material is first presented as a solo part and then accompanied. These repetitions are indicated as follows:

II.1 = Episode II, solo statement

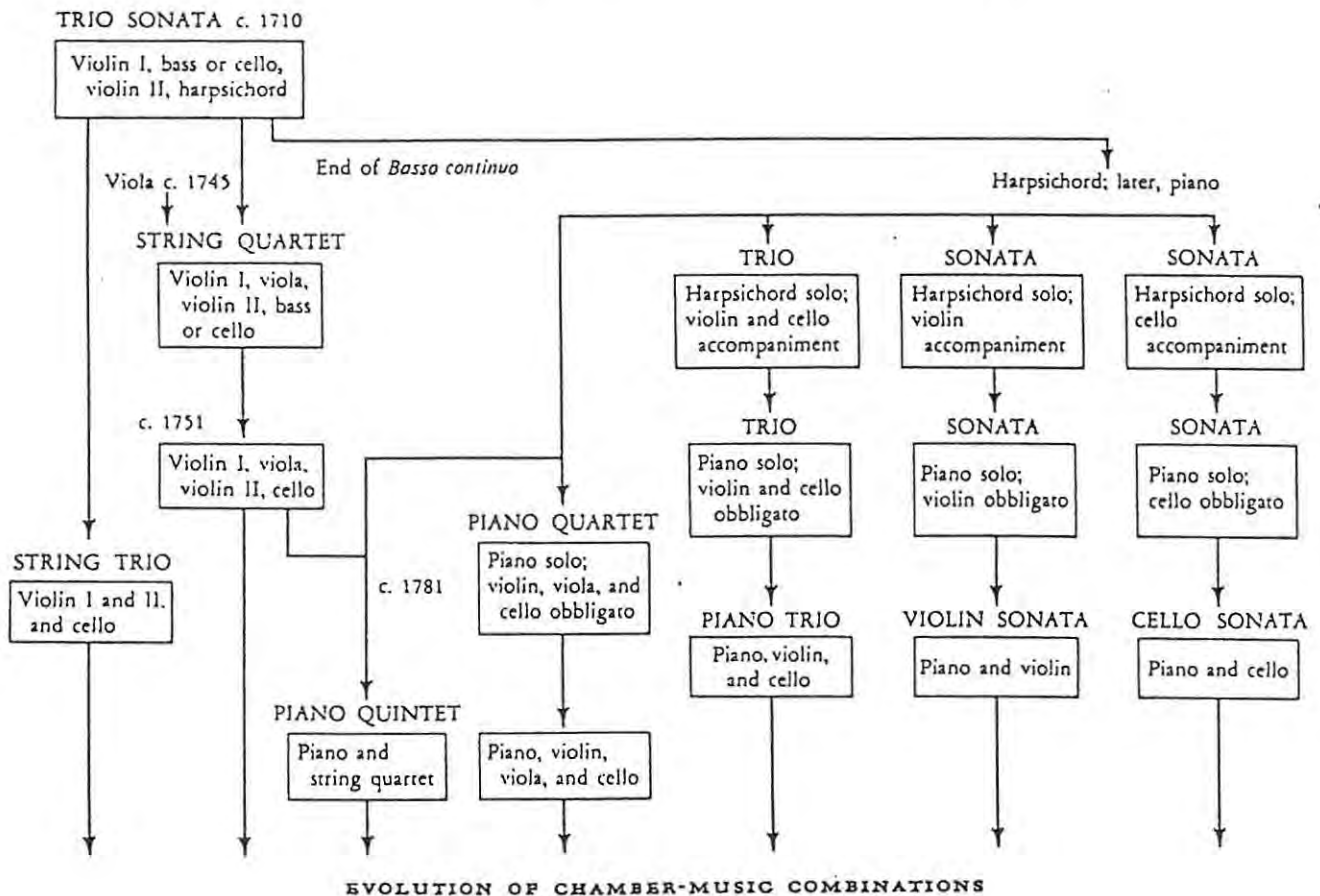
II.2 = Episode II, accompanied statement.

As Crumb does not indicate bar numbers, the respective **page** and the **system** are used as numbering identification eg: VIII 15:3 refers to Sea-Nocturne page 15 system 3.

## CHAPTER I

## HISTORY OF THE FLUTE TRIO

Ulrich Homer<sup>1</sup> presents the following diagram on the evolution of chamber music combinations from which the Trio Sonata of the Baroque Period is established as the source of the String Trio, String Quartet, Piano Quintet, Piano Quartet, Piano Trio (Flute Trio), Violin and Cello Sonata.



1. Homer, U. Chamber Music. 1966. (2nd ed.) p. 128.

The Trio Sonata consists of four separate voice parts - two melody parts, one chordal and one bass part. The violin attained a position as the instrument par excellence during the Baroque Era and was used performing melodic lines only. Virtuoso passage work typical of the violinistic idiom was at times a characteristic feature of the trio. Sometimes the violin was replaced or joined by other instruments such as the cornet, the trumpet, the recorder, the transverse flute or the oboe. Rowen<sup>2</sup> explains that:

*The Germans, French and English often mixed wind and stringed instruments in the same composition. Shy of the wind instruments, the Italians adhered to two violins in the Trio sonata. But the Germans, desiring the element of contrast lacking in the Italian trio sonata literature, introduced wind instruments in place of the violins and also provided for a mixture of wind and strings.*

According to Hogwood,<sup>3</sup> "The essence of the trio-sonata thought was the unity of the upper parts." The chordal part was played by the harpsichord or sometimes the organ and usually performed an accompanying role consisting of improvised chords from a thoroughbass part. The bass was usually played by the violoncello, but sometimes exchanged for the bassoon or the trombone. The cello reinforced the harmonic bass line or sometimes performed a concertante part, participating in imitations with the main melody

---

2. Rowen, R. Early Chamber Music. 1949. p. 71.

3. Hogwood, C. The Trio Sonata. 1979. p. 14.

lines. The prevailing texture of the Baroque Trio Sonata was polyphonic but with the influence of the Pre-classical style the music became more homophonic, as stated by Hogwood <sup>4</sup> : *"Only as the demands of cantabile melody overwhelmed the requirements of polyphony did the true trio-sonata texture give way to 'tune plus accompaniment'."*

As the Baroque Period drew to a close the Trio Sonata was gradually being replaced by the **Accompanied Keyboard Sonata with Added Strings**. The meaning of 'Trio' now changed from implying the 'number of voices' to the 'number of instruments'. <sup>5</sup> As indicated by the name of the genre, the keyboard becomes the important instrument, representing both soloist (right hand) and accompanist (left hand). The violin doubles the melodic line of the right hand part while the cello reinforces the left hand part by duplication. The strings merely shared material found in the solo keyboard and could thus easily be omitted, this being one of the available options. The other options were to substitute the violin for another instrument such as the flute and to pick either harpsichord or piano as the keyboard instrument. *"These ideas of optional instrumentation and optional accompaniments stem from remote performance practices*

4. Hogwood, C. Op cit. pp. 15-16.

5. Newman, W. S. "Concerning the Accompanied Clavier Sonata." in The Musical Quarterly, vol. 33. no. 3. July 1947. p. 339.

*inherent in the nature of Renaissance and Baroque music".<sup>6</sup>*

Between 1760 and 1770 the piano became the popular keyboard choice selected "*not for greater virtuosity and sonority but for the dynamic graduations and cantabile it could produce, which made it better suited than the harpsichord to the subjective Manieren and singing melodies of the new style*".<sup>7</sup> Dynamics appear more frequently in the keyboard part, indicating that the composer wrote it for the newly developed piano. The piano replaced the violin as the main solo instrument, incorporating in the fabric the virtuoso passages formerly played by the violin. However, as the piano tone was still comparatively weak, the main melody on the keyboard was often assisted and highlighted by the violin. This duplication of the melody was a feature typical of the Accompanied Sonata.

Coinciding with the above practice came another branch of the Accompanied Sonata, namely the **Sonatas with violin and cello obbligato**. In these sonatas the accompanying instruments (especially the violin) achieved more independence and individuality than before, although the duplication of piano figurations was still common. This offshoot eventually led to the Piano Trio and with the

6. Newman, W. S. Op cit. p. 331.

7. Ibid. p. 338.

replacement of the violin with the flute, the Flute Trio<sup>8</sup> came into existence.

According to Newman,<sup>9</sup> *"the violin-or-flute option was offered much more frequently in German and English than in French publications, which usually specified only the violin."* The German or transverse flute became the popular wind instrument in the accompanied clavier (keyboard) sonata, *"no doubt partly owing to the influence of Quantz, Frederick the Great, and the Mannheim flautist J. B. Wendling. It is this type that is always specified when the flute type is specified at all"*.<sup>10</sup> It also became a favourite instrument in England, which explains why so many Flute Trios, as witnessed in the works by Abel<sup>11</sup>, J. C. Bach, Clementi, Pleyel, Haydn<sup>12</sup> and Hummel were written, commissioned or published there.

---

8. See Appendix I for a comprehensive list of Flute Trio composers from 1770-1883. (Vester, F. 1967 & 1985.)

9. Newman, W. S. Op cit. p. 339.

10. Ibid. p. 338.

11. By 1760 the four-keyed flute became the accepted instrument in England, frequently extending the foot-joint from dl to cl by adding two more keys. (Sadie, S. (ed.) The New Grove Dictionary of Musical Instruments. vol. I. 1986. p. 780.)

12. The Haydn trios were requested by the London publisher J. Bland. (Robbins Landon, H. C. Record Sleeve. Decca SDD 521. 1978.)

In the Romantic Period the Flute Trio virtually lost its popularity to that of the Piano Trio (violin, violoncello, piano). The homogeneous sound produced by the two strings against the piano was generally preferred by the major Classical composers (Mozart, Haydn, Beethoven) who composed extensively for this combination which thus became the more popular chamber ensemble. This trend continued throughout the Romantic Period. Apart from the three frequently performed trios by *J. N. Hummel*<sup>13</sup> (1778-1837), *C. M. von Weber*<sup>14</sup> (1786-1826) and *C. Czerny*<sup>15</sup> (1791-1857), four relatively unknown composers - *T. Haigh* (1769-1808); *F. Ries* (1786-1838); *A. Farrenc* (1794-1865); *G. Macfarren* (1813-1887) - composed one flute trio each in the period 1820 to 1900.<sup>16</sup> *A. Leduc* (1804-1868) and *J. Mayseder* (1789-1863) are also listed, but their single trios are not dated. Although one can assume that other Flute Trios were written during this period, unfortunately they would have been inferior to the Piano Trios written by the Romantic masters such as *Schubert*, *Schumann* and *Brahms*.

---

13. The Trio *Adagio, Variations and Rondo on Schöne Minka* op. 78 was published in 1819.

14. Weber's Trio op. 63 was written in 1819 and dedicated to the amateur cellist Dr Philipp Jungh of Prague.

15. Czerny's *Fantasia Concertante* op. 256 was composed around 1833.

16. See Appendix I for a comprehensive list of composers taken from Vester.

## INSTRUMENTAL DEVELOPMENT

The accompanied piano sonata was *"after the string quartet, the most important field of experiment on the road towards the classical style. In both forms a transition was accomplished from the hierarchical division of parts into solo instrument and 'accompaniment' to equal weighted writing for each instrument."*<sup>17</sup>

To achieve this ideal balance between instrumental parts and true individuality, chamber music involving the piano was dependent on the development of a truly efficient keyboard instrument. What was required was enough power to match the other instruments in the ensemble and sufficient mechanical capabilities to ensure clarity in both the attack and release of notes. Precise damping was also a necessity. At the end of the Classic Era, two main trends in piano manufacture were already recognizable. The Viennese type was *"wing shaped, about 7 feet long, narrow in width and in its compass of about 5½ octaves, equipped with a very light action, thin wire strings, and leather-covered hammers"*,<sup>18</sup> and was preferred by the trio composers *"Haydn, Hummel, Weber and Czerny for its delicate, easy action and its*

---

17. Ruf, W. Record Sleeve. Das Alte Werk 6.42649. 1981.

18. Newman, W. S. The Sonata in the Classical Era. 1963. p. 86.

*bright clear sound.*"<sup>19</sup> The second Broadwood type was preferred by Beethoven and was "*characterized by greater power, heavier action, and orchestral resonance.*"<sup>20</sup>

The development of the piano is visible in the gradual increase of the piano range which the composers used. The trios by J. C. *Bach* required just over four octaves, which expanded to just under five octaves twenty years later. *Dusseck* and *Weber* used five and a half, while *Hummel* and *Czerny* used six octaves.

The development of the flute bridged the Late-Classical and Early-Romantic periods. The range and dynamics on specific notes of the old conical perforated wooden flute, first devised by the Frenchman *Hotteterre*, gradually increased with additional keys that could vary between three<sup>21</sup> to eight.<sup>22</sup> This trend is also prominent in the trios where the range of the flute increased from two octaves (d1 - d3)

---

19. Newman, W. S. Op cit. p. 87.

20. Ibid. p. 87.

21. The four-keyed flute was developed "*shortly after the mid-18th century, apparently by a group of London makers*". (Sadie, S. (ed.) Op cit. vol. I. 1986. p. 780.)

22. "*The eight-keyed flute was the most 'advanced' instrument before Theobald Boehm transformed the design of the instrument.*" (Ibid. p. 781.)

to two octaves and a major sixth (c1 - a3).<sup>23</sup> It was only during the Romantic period when a decrease in popularity of both the flute and the Flute Trio was experienced, that this instrument developed into its modern form. Theobald Boehm's<sup>24</sup> new fingering system of 1832 featured a separate hole for each note, found at the acoustically correct position and subsequently fitted with keys closing the enlarged holes. Further improvements on the bore and the material during 1847 resulted in the cylindrical silver flute with a parabolic head joint, producing a brighter tone quality and improved intonation. It took some time before Boehm's innovations became the norm in flute manufacturing, initially being adopted in France and England,<sup>25</sup> and only much later in his own country, Germany.

During the eighteenth century the cello underwent the following necessary improvements. The neck and fingerboard were both lengthened and the latter became more sharply curved. Thinner and tauter strings were strung over a higher bridge. Between 1780-1790 the bow was perfected by

---

23. "17th- and 18th-century flutes sound best in the keys of D and G, which have a minimal number of badly out-of-tune notes." (Ibid. p. 780.)

24. "Theobald Boehm (1794-1881) ... combined the careers of goldsmith, flute maker and professional flautist." (Ibid. p. 781.)

25. Baines, A. Musical Instruments through the Ages. 1966. p. 255.

Francois Tourte<sup>26</sup> into a concave bowstick. The tailpin was probably introduced by the French cellist Adrien Francois Servais (1807 - 1866). "*Even as late as 1756 the cello was still balanced between the knees, usually resting on the lower right leg and played without the aid of a tailpin*"<sup>27</sup> resulting in a most awkward playing position.

These improvements not only enhanced the volume and the tone quality of the cello, but also enabled the performer to obtain a more virtuoso technique.

Seeing that the cello was the first fully developed instrument within the Flute Trio, it is surprising that it was the last member to gain thematic independence.

Throughout the Accompanied Sonatas it was treated purely as a continuo instrument. The emancipation of the cello and its emergence as an independent voice part in Flute Trios, was only established in the compositions of later composers such as *Hummel, Dussek, Czerny* and *Weber*, but as a solo

---

26. Tourte (1747-1835) changed the length of the bow stick as well as the form of the nut and the frog. (Boyden, D. D. et al. "*The Bow.*" in *The Violin Family*. 1989. p. 212.)

27. Sholto-Douglas, I. *The Development of Cello Technique in the String Quartets of Joseph Haydn*. 1981. p. 16.

instrument it was much more advanced. The upper range of the instrument was used more frequently and playing techniques such as double and triple stops began to appear in the genre.

With regard to form, the traditional Classical three movement structure was generally favoured: sonata form for first, ternary for second and rondo for third movements. However, a few compositions incorporate certain changes: for example, Weber used the four movement structure in op. 63, while *Clementi*, *Czerny* and *Hummel* all experimented with single movements. The single movement sonatas vary in length from Clementi op. 22 no. 3 (252 bars) to Hummel op. 78 (344 bars). The latter consists of an Introduction (57 bars), a Theme (32 bars) and Seven Variations (255 bars) of which the last in rondo form is the longest (109 bars). Czerny's op. 256 is a free fantasia (460 bars).

## TWENTIETH-CENTURY TRIOS

Twentieth-century trios show a varied and complex character. None of the most distinguished composers wrote flute trios and the genre is still waiting for one composer to write an extended sequence of works for the medium. The composers who came the nearest to fulfilling this task are *Wuorinen* and

*Sollberger*, both with three and *Paul Johnson* with four trios. <sup>28</sup>

This century has seen a resurgence of interest in this genre as evidenced by the substantial list of 163 composers from at least twenty countries. <sup>29</sup> This list is not exhaustive and merely represents the response <sup>30</sup> received from music information centers, publishers and composers at the time of this investigation.

Possible reasons why chamber music and in particular the Flute Trio has become so popular this century is due to musicians and ensembles commissioning and successfully performing on three such diversified instruments as well as the ease of organizing and funding smaller ensembles often emanating from the same institution and facilitating their activities. Another important aspect is that audiences are increasingly becoming more accustomed, enlightened and responsive to modern music. <sup>31</sup>

---

28. See Appendix II.

29. Refer to Appendix II for a comprehensive list of modern trios collated until 23/10/93.

30. For a comprehensive list of sources see Appendix III.

31. A few fascinating transcripts of conversations between the writers Richard Dufallo and McCue and the composer George Crumb expressing their views:

*Dufallo: "You recall that the Buffalo project was largely sponsored by the Rockefeller Foundation, and that one of the paramount goals of the project was to bring composer and performer together, or composer-performers and other performers together with each other".*

*Crumb: "I have always felt that there must be a very close relationship between composer and performer - I feel that composition really is a kind of extension of performance".*

This more manageable group often leads to closer cooperation between composers and performers. The many trios composed either as commissions or dedications to specific musicians or ensembles are examples of this collaboration.<sup>32</sup>

The earliest commission traced in this research project occurred in 1934 when the pianist and conductor of the Rotterdam Philharmonic, Eduard Flipse, commissioned the Dutch composer Ary Verhaar to write a trio for himself and

---

taken from an interview between George Crumb and R Dufallo (Dufallo, R. Trackings. 1989. p. 90.)

*Crumb: "I think there is a developing audience for new music, and that helps all of us. Progress seems slow, but I think there has been progress ... I've done a lot of traveling abroad over the last dozen years or so, and I see interest everywhere in new music".* (Ibid. p. 98.)

*"There is a larger and more receptive audience for new music than ever in recent memory. In fact, considering that in the past ages only a tiny percentage of the public was ever involved in formal music, composers today address the largest and most varied audience in music history".* (McCue, G. Music in American Society 1776-1976. From Puritan Hymn to Synthesizer. 1977. p. 160.)

32. George Crumb acknowledges this fact: *"I think one's writing is definitely influenced by a certain performer which one has in mind. I think that's probably a healthy influence. It can help to keep the music sort of real if you imagine it being performed by a person you know".* (Gagne, C. & T. Caras. Soundpieces. 1982. p. 123.)

two of his orchestral colleagues. Other individual musicians who commissioned trios include Mario Steiner (pianist), René le Roy and Bernard Goldberg (flautists) as well as established ensembles such as the New York Camerata, the Walden Trio, the Huntingdon Trio,<sup>33</sup> The Group and Trio Isselee.<sup>34</sup>

A number of trios are dedicated to actual ensembles,<sup>35</sup> less often to specific musicians (Goldberg, Takahashi), and in some cases to the memory of famous personalities (eg. the flautist Louis Fleury and the composers Boris Blacher and Igor Stravinsky).

Apart from the existing contact between musicians, several composers are also active performers, thereby providing an ideal platform for both experimentation and execution of their own works. Examples of such cases are:

Marilyn *Bliss* (flute), Toke Lund *Christiansen* (flute), Jean-Michel *Damase* (piano), Roger *Frima* (piano), Anthony

---

33. See Discography: The Huntingdon Trio recorded the Lyric Trio op 27 by Hoover on the label Leonarda LE 325.

34. See Appendix IV for a more comprehensive list.

35. See Appendix IV for listed examples of the composers Alkema, Bonsel, Crumb, De Braal, Ghedini, Hoover, Huber, Luening, Orthel, Wuorinen.

*Hedges*<sup>36</sup> (pianist), *Jean Shepard* (piano), *Wuorinen* (pianist) and *Sollberger*<sup>37</sup> (flautist).

The last two musicians mentioned founded **The Group**<sup>38</sup> for Contemporary Music in New York during 1962, to promote various styles of chamber music of the twentieth century.<sup>39</sup> *Wuorinen* and *Sollberger* at first combined with the cellist *Joel Krosnick* (during the first season) and subsequently

---

36. *Hedges* composed two trios (op. 99 & 112) in 1985 "for a local flute trio in which I played the piano". (*Hedges, A. Letter. 21/05/91.*)

37. *Wuorinen* and *Sollberger* each composed three trios.

38. "Another significant trend ... has been the formation of groups for performing contemporary music. Here the composer-performer, with the backing of universities and foundations, has taken the initiative in breaking through the restrictions of the musical Establishment based on the standard repertoire of familiar works. As stated in the prospectus of one of these groups, such initiatives are found on 'the firm belief that the artist of today can and must extend his expressive vocabulary to include imaginative use of the materials of today.'" (*Chase, G. America's Music: From the Pilgrims to the Present. 1955. p. 692.*)

39. "It was the first collection of musicians joined in ensemble to present new music exclusively and appropriately, with the necessary preparation, in time and understanding ... The Group's primary aim is to present a broad spectrum of the highest compositional achievements of our time (with a particular focus on works by living American composers)." (*Stokar, H. Letter. 14/11/91.*)

with Fred Sherry. They formed the flute trio within The Group for whom the following works were composed: *Stefan Wolpe's* Trio in Two Parts of 1964, *Otto Luening's* Trio of 1962, (which was a commission) and *Raoul Pleskow's* trio Movement <sup>40</sup> of 1962, of which the last was written "On the occasion of *Stefan Wolpe's* 60th birthday". <sup>41</sup>

Other ensembles which gained prominence by giving regular performances in their respective regions or countries are:

1) The New York Camerata <sup>42</sup> which was founded in 1963 in the U.S.A. The following prominent works were dedicated to them: Crumb's *Vox Balaenae* and Bennett's *Commedia II*.

2) The Schön Kammartrio from Göteborg <sup>43</sup> in Sweden was

---

40. Pleskow, R. Letter. 23/5/91.

41. Pleskow, R. Score. p. i.

42. The trio consisting of Paula Hatcher (flute), Charles Forbes (cello) and Glenn Jacobson (piano) have performed inter alia at the Carnegie Recital Hall, the Phillips Collection in Washington D.C., the Metropolitan Museum in New York City and the Philadelphia Free Library and has recorded trios by Clementi, Haydn and Hummel among others.

43. According to Jan Olof Rudén, director of Svensk Musik: "There is a strong concentration to the Göteborg region among composers and performers". (Rudén, J. O.

founded in 1958 by Sanfrid Schön (flute) and Maja Vogl (cello). The group was active until 1984 at which time Jörgen Amsö was the pianist of the ensemble. <sup>44</sup> Sanfrid Schön <sup>45</sup> confirmed that the chamber music society "*Levande Musik*" ... "*asked us to play new music and also commissioned new works*" including the trios by *Eckerberg*, *Karkoff*, *Deák* and *Grandert*.

With the exception of the Trio by *Sörenson* which was premiered in Stockholm, the following Swedish <sup>46</sup> trios were given their first performance in Göteborg:

*Eckerberg's* 'Trio concertante' of 1966 on 25/04/66;

*Karkoff's* 'Terzetto op 91' of 1967-68 on 20/09/68;

*Björklund's* 'Metamorphoses' of 1969 on 16/11/69;

*Deák's* 'Trio' of 1971 on 01/03/71;

*Grandert's* 'Non lo so' of 1970 on 01/03/71;

*Sörenson's* 'Flaucepi' of 1971 on 14/11/71.

---

44. "We changed pianist three times and worked with a cembalo specialist for two years. ... At the beginning we played everything, from baroque to contemporary music. However, we specialised sometimes: periods of new music when composers dedicated music to us, periods of baroque music, when we cooperated with a baroque specialist, a cembalo player." (Schön, S. Letter. 14/10/92.)

45. Schön, S. Letter. 29/01/93.

46. Rudén, J. O. Letter. 10/7/91.

3) The pianist Eugene Roosegaarde founded two separate trios in the Netherlands: the *Gelders Trio*<sup>47</sup> which existed from 1967-1970 and the *Kamermuziekensemble 'Concertino'*<sup>48</sup> (1971-73). Both ensembles regularly performed the Trio by Ary *Verhaar* throughout their country. The following trios were dedicated to the latter group in 1971: *Orthel's 'Otto Abozzi'* and *Bonsel's 'Musica'*.

4) The following Czech trio-ensembles were listed in the 1991 Czech Music Directory: "*Tre Solisti di Prague*",<sup>49</sup> the "*Sebastian Trio*"<sup>50</sup> founded in 1989, and "*Trio con Flauto*",<sup>51</sup> the oldest group established in 1973 and to whom the '*Tri ronda*' by *Z. Lukas* was dedicated.

---

47. The other members were Harda Obbink (flute) and Hans van den Bijlaard (cello). (*Mens & Melodie*. vol. 23. no. 4. p. 47.) They performed in Renkum / Doorwerth, Velp, Utrecht, Krefeld, and broadcasted on Radio Rono and Radio NRU. (*Sonorum Speculum*. vol. 32: p. 41, vol. 36: p. 47, vol. 40: p. 47, vol. 44: p. 52, vol. 45: p. 38).

48. Karel Wolters (flute) and Gerrit van de Graaf (cello) were the other members of the trio, which regularly played in Etersheim, Kleve, Arnhem, Velp and Den Burg, and broadcasted on Radio VARA. (*Sonorum Speculum*. vol. 54: p. 38, vol. 55: p. 51, vol. 52: p. 49, vol. 53: p. 43, vol. 48: p. 44).

49. Consisting of Eva Hallerova (flute), Daniel Veis (cello) and Martin Vojtisek (piano).

50. Consisting of Helena Hubena (flute), Karel Fiala (cello) and Alice Bürgerova (piano).

51. Consisting of Magdalena Tumova (flute), Danuse Sommerova (cello) and Ludmilla Cermakova (piano). Other Czech trios listed in their repertoire are:

Trios have been composed in most of the twentieth century compositional styles - including Impressionism, Neo-Baroque, Neo-Classicism, Expressionism, Serial, Avant-garde and Electronic. Some of the contributors towards this genre are briefly referred to below.

Some of the composers following the traditional trend in their trios are the Dutch composers *Ary Verhaar* (1900), *Hans Osieck* (1910) and *Léon Orthel* (1905-1985), the Danish composer *Knud Jeppesen*<sup>52</sup> (1892-1974), the English composers *Eugene Goossens*<sup>53</sup> (1893-1962) and *Maurice Jacobson* (1896-1976), and the Canadian *Claude Champagne* (1891-1965). Most of the above composers use a three movement outline in their trios, but a few show individuality by varying their structures, namely *Jacobson* (four movements), *Goossens* (five) and *Orthel* (eight).

---

*Jirovec V.* : Sonata in D major and C major,

*Jelinek S.* : Scény of 1976 and

*Semerak O.* : Trilogy of 1980.

52. The trios composed by Verhaar and Jeppesen utilize clear formal structures, thin-textures and are well balanced regarding instrumentation.

53. See Chapter II.

Another traditional trio "*The Hedgehog and the Nightingale*" by the Russian *Nikolay Iosifovich Sil'vansky*<sup>54</sup> (1915/16 - 1985) is based on "the well known Russian tale by *Juri Jarmicha*".<sup>55</sup> This trio together with *Seven Dramatic Episodes*<sup>56</sup> by the American *Ann Callaway* (1949-), are the only two known compositions written for flute trio incorporating a narrator. The latter trio is classified under *Avant-garde*.

Trios written by the Frenchman *Gabriel Pierné* (1863-1937) and the German *Günter Raphael*<sup>57</sup> (1903-1960) were composed in the Neo-Baroque style while the Neo-Classical style was used by the Czechoslovakian *Bohuslav Martinu* (1890-1959), the French composers *Jean-Michel Damase*<sup>58</sup> (1928) and *Marcelle de Manziarly* (1899), the Danish composer *Vagn Holmboe* (1909), and the Americans *Norman Dello Joio*

---

54. See Chapter III.

55. Translated from the Russian. *Score*. p. 3.

56. This trio, written in 1976 uses "short quotations from various poems and short stories of " Edgar Allen Poe " to provide a loose narrative 'feeling' to the work. ... A narrator (ideally, a separate narrator, although it could be the pianist or cellist) is requested to read the particular quotation immediately before each of the seven Episodes is played." (Callaway, A. Letter. 18/09/91.)

57. See Chapter IV.

58. See Chapter V.

(1913) and *Katherine Hoover* (1937).

Composers who have incorporated **Expressionism** in their trios include the **Americans** *Otto Luening* (1900), *Stefan Wolpe* (1902-1972), *Ned Rorem* (1924), *Charles Wuorinen* (1938), *Harvey Sollberger* (1938) and *Raoul Pleskow* (1931), the **Dutch** *Henk Alkema* (1944), *Adrian Bonsel* (1918) and *Andries de Braal* (1909-1987), as well as the **Italian** *Giorgio Federico Ghedini* (1892-1965), the **German** *Karl Julius Marx*<sup>59</sup> (1897-1985), the **Belgian** *Norbert Rosseau* (1907-1975) and the **English** composer *Richard Rodney Bennett* (1936).

These works vary in length from a short (*Sollberger's Elegy*) to an extremely long single movement (*Wuorinen: Trio no 3*), while others vary from three (*Rousseau*), to four (*Rorem*) and five (*Ghedini*) movements. These expressionistic works were composed mainly between 1960-1972.

Apart from *Callaway's* trio *Collections-Recollections* of 1980, the **Avant-garde** trios studied were composed between 1968-1973. The repertoire represents diverse countries such as **Sweden:** *Sven-Erik Bäck* (1919), **Rumania:** *Stefan Niculescu* (1927), **Germany:** *Friedheim Döhl* (1936), **France:** *Claude Lefebvre* (1931), **Switzerland:** *Klaus Huber* (1924),

---

59. See Chapter VI.

and *America: Roger Reynolds* (1934), *George Crumb* (1929) and *Ann Callaway* (1949).

Of the *Avant-garde* composers listed, the following four have included the use of *Amplified* instruments: *Callaway*, *Crumb*,<sup>60</sup> *Lefebvre* and *Reynolds*.

Six trios have been selected for more detailed discussion. The chosen trios are musically interesting for the performers and the listener, as well as for the musicologist as each represents an example of a specific style period. They are further linked to each other through unifying elements which occur in each separate trio. The selected trios stem from a period of sixty years (1915 (*Goossens*) to + - 1979 (*Sil'vansky*)) and range from an early (*Goossens, Damase*) to a late (*Marx, Sil'vansky*) composition in the composers' life span.

---

60. See Chapter VII.

## CHAPTER II

### **EUGENE GOOSSENS**

The conductor and violinist Sir Eugene Goossens<sup>1</sup> was born in London in 1893 and died in Hillingdon, Middlesex in 1962. He received his early education in Belgium, returning to England in 1904 after which he attended the Liverpool College of Music. From 1907 he studied at the Royal College of Music under Stanford (composition), Rivarde (violin) and Wood (harmony).

He began his career as violinist in the Queen's Hall Orchestra (1912-1915) and also played in ensembles such as the Langley-Mukle Quartet and the Philharmonic String Quartet. These chamber music experiences served him well when composing for small ensembles.

During the First World War he concentrated on conducting,<sup>2</sup> gaining a reputation for his ability to study and perform

---

1. The Goossens family were prominent musicians with Eugene following in the footsteps of both his father and grandfather as operatic conductors. His brother Leon was a celebrated oboist and both sisters, Marie and Sidonie, distinguished harpists.

2. Goossens conducted various orchestras in America (Cincinnati Symphony) and Australia (New South Wales Conservatory and Sydney Symphony).

unfamiliar or difficult works with ease. <sup>3</sup>

As a composer he is a distinct follower of Ravel and Debussy, and at times shows the influence of Richard Strauss. <sup>4</sup> These influences are combined with his own personal style. His compositions include operas, an oratorio, a ballet, incidental music, solo concerti for oboe, violin and piano, solo songs and chamber music.

His compositions became prominent during the War years when his two Trios op 6 and 7 were performed "at the War Emergency Concerts and attracted attention by the novelty of their idiom". <sup>5</sup> Both trios were written in 1914, of which the latter "*Five Impressions of a Holiday*" was written for flute or violin, cello and piano.

The five movements which clearly depict pastoral scenes, are given the following inscriptions:

- |    |               |                     |
|----|---------------|---------------------|
| I  | In the Hills  | : <i>Moderato</i>   |
| II | By the Rivers | : <i>Tranquillo</i> |
- 

3. He was a pupil of Sir Thomas Beecham (from 1916) and conducted the English premier of Stravinsky's "*Le Sacre du Printemps*" in 1921.

4. Sadie S. (ed.) The New Grove Dictionary of Music & Musicians. vol. VII. 1989. p. 532.

5. Blom E. (ed.) Grove's Dictionary of Music & Musicians. vol. III. 1954. p. 713.

III The Water Wheel : *Con moto e leggiro*

IV The Village Church: *Andante con moto*

V At the Fair : *Scherzando*

The five movements are rondo in outline, but in some cases little contrast is evident between the episodes.

Although each movement does have its own distinct individual character and mood, the overall impressionistic nature of the pieces strongly unifies the work.

1. The trio portrays the following typical impressionistic elements:

1.1 scale patterns such as:

1.1.1 chromatic scales:

The underlying descending chromatic line of motif c (see eg 29), occurs in various guises in *The Water Wheel* and *At the Fair*.

eg. 1: III 19-21(1) (ascending flute part also presented in 89-90)



eg. 2: V 49(2)-50 ascending flute part (descending flute part in V 23-26)



eg. 3: V 51-54 (piano)

51 underlying chromatic lines

*mf marcato*

Ta \* Ta \* Ta \* Ta \* Ta \* Ta Ta

1.1.2 the whole tone scale:

eg. 4: I 29-31 (flute)

29 **B**

*p* *cresc.*

eg. 5: II 43(2)-46 (flute)

43

*pp*

eg. 6: III 69-72 (flute and cello)

69

*f* *cresc.*

*f* *cresc.*

eg. 7: V 23-26 (cello)

23

*fff* *din*

eg. 8: V 91-95(1) (flute)



1.1.3 the pentatonic scale occurring in all three instrumental parts

eg. 9: III 75-76

A piano score for measures 75-76. It consists of three staves: two for the right hand and one for the left hand. The music features a pentatonic scale in the right hand, with a long slur and a dotted line indicating an octave extension. The left hand provides a rhythmic accompaniment. The key signature has three sharps (F#, C#, G#) and the time signature is 4/4. Measure 75 is marked with a '75'.

1.2 the full (rich) chords illustrated in the following two examples represent the typical pianistic idiom of impressionism

eg. 10: I 35-36(2)

A piano score for measures 35-36(2). It consists of two staves: one for the right hand and one for the left hand. The music features rich, full chords in the right hand, with a long slur and a 'gliss.' marking. The left hand provides a rhythmic accompaniment. The key signature has two flats (Bb, Eb) and the time signature is 4/4. Measure 35 is marked with a '35'. The score includes dynamic markings 'fff' and 'dim.', and asterisks (\*) under the left hand.

eg. 11: IV 77-78

Musical score for example 11, measures 77-78. The score is for piano and features a constant quaver pattern in the piano part. The piano part is marked 'mf' and 'dim'. The violin part is marked '8' and 'dim'. The score includes a first ending bracket and a second ending bracket. The piano part is marked 'p' and 'cresc.'.

1.3 the water theme occurring in *By the Rivers* and *The Water Wheel* and illustrated in examples 12 and 14, illustrates a typical subject in impressionism. <sup>6</sup>

2. Goossens uses particular effects to sketch the picturesque titles of the individual movements:

In *By the Rivers* water sounds are represented in the constant quaver pattern in the piano part

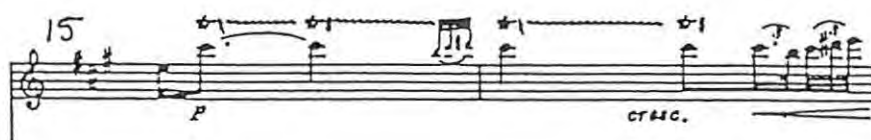
eg. 12: II 15-16 (piano)

Musical score for example 12, measures 15-16. The score is for piano and features a constant quaver pattern in the piano part. The piano part is marked 'p' and 'cresc.'. The violin part is marked 'p' and 'cresc.'. The score includes a first ending bracket and a second ending bracket. The piano part is marked 'p' and 'cresc.'.

6. This impressionistic sound picture reminds one of Ravel's "*Jeux d'eau*" of 1901.

while bird song is depicted in repeated notes and trills in the flute and cello parts.

eg. 13: II 15-16 (flute)



In *The Water Wheel* the running water theme presented in the piano part is developed through the gradually extended melodic range indicating the stronger flow of the water.

eg. 14: III 1-2

Musical notation for example 14, piano part, measures 1-2. The notation shows a piano part with a melodic line in the right hand and a bass line in the left hand. The right hand melody is marked "one octave" and the left hand bass line is marked "Ped."

eg. 15: III 17-18

Musical notation for example 15, piano part, measures 17-18. The notation shows a piano part with a melodic line in the right hand and a bass line in the left hand. The right hand melody is marked "two octaves" and the left hand bass line is marked "Ped." and "cresc."

eg. 16: III 77-78

In *The Village Church* the piano part resembling the sound of bells, accompanies a hymn played an octave apart in the flute and cello parts. The hymn is repeated in the cello part (IV 51-64) with a flute descant (obligato) decorating the line with trills and runs.

eg. 17: IV 6-10

The unity in the work becomes more apparent with certain recurring melodic elements. The following three motifs (a b and c) introduced in the opening movement *In the Hills* unify the trio.

The movement starts with an anacrusis (motif a) preceding motif b in the piano part. Motif a appears freely, extending into an accompaniment figure used throughout the movement.

eg. 18: I 1-8

PIANO.

1 a b a poco stringendo a

6 p L. H.

7

5 Più mosso e crescendo b b b b molto rall. ff

a a a a

The accompaniment figure appears as a broken chord,

eg. 19: I 17-18

17 10 10

a a \*

and in different rhythmical guises.

eg. 20: I 29-30

Musical score for example 20, measures 29-30. The score is in G major and 3/4 time. It features a piano part with a recurring motif in the left hand. The motif is circled and marked with 'Ta' and asterisks. The right hand part includes dynamics like 'mp leggiero' and 'cresc.'

Motif a recurs in the left hand part in *The Village Church*

eg. 21: IV 29-30

Musical score for example 21, measures 29-30. The score is in G major and 3/4 time. It features a piano part with a recurring motif in the left hand. The motif is circled and marked with 'Ta'. The right hand part includes dynamics like 'p'.

and as a consistent accompaniment figure in *At the Fair*.

eg. 22: V 47-50

Musical score for example 22, measures 47-50. The score is in G major and 3/4 time. It features a piano part with a recurring motif in the left hand. The motif is circled and marked with 'Ta' and asterisks. The right hand part includes dynamics like 'mf'.

The second, a four note motif (b) is presented in octaves in the piano part.

eg. 23: I 1-2

Motif b occurs throughout the movement in all three instrumental parts displaying the following changes:

1. pitch

1.1 showing slight intervallic variations between the two middle notes

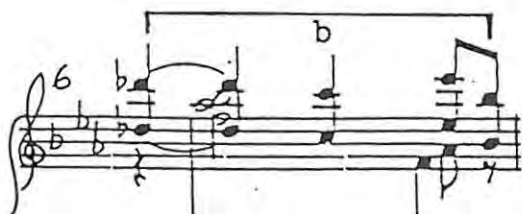
eg. 24: I 3-6(2)

1.2 appearing in inversion

eg. 25: I 27(3)-28(2)

## 2. rhythm

eg. 26: I 6(3)-7(3)



## 3. texture

imitation between the three instrumental parts also includes rhythmic variation.

eg. 27: I 33-34

The *b* motif undergoes certain changes in *By the Rivers* but still maintains the overall shape.

eg. 28: II 33-34 (piano)

Motif c is introduced in the flute part (I 9-12) and immediately repeated in the piano part in bars 11-12.

eg. 29: I 9-11

The three subsequent appearances occur in the piano part (I 29, 37, 50) accompanied by a descending chromatic line found simultaneously in the flute and cello parts.

eg. 30: I 29-30

The most striking example of cyclic unity is found with the reappearance of motif b in *At the Fair* bars 59(2)-62 and 79(2)-82,

eg. 31: V 59-62

eg. 32: V 79-82

and the bell motif quoted from *The Village Church* returning in bars 73-78. From this it emerges that the bell motif is also related to motif b.

eg. 33: V 75-78

75 bell motif

2

8

ff

2

2

\*

\*

\*

\*

eg. 34: IV 3(2)-4(1)

1 Andante con moto.

b

8

Bells. *pp*  
Cloches.

Bell.  
Cloche.

*p* d. *mp* d. *mf* d.

## CHAPTER III

**NIKOLAY IOSIFOVICH SIL'VANSKY**

Nikolay Iosifovich Sil'vansky was born in Lyubotin in the Kharkov district. His birthdate which is not precisely ascertained is given as 12/23/1915 \ 1/05/1916 in the "Biographical Dictionary of Russian / Soviet Composers".<sup>1</sup> He graduated from the Moscow Conservatory in 1944 and after a period of study at Kharkov Conservatory, was appointed to the academic staff in 1947. From 1954 he taught at the Kiev Conservatory and died on 3/06/85.

Sil'vansky was known as pianist, pedagogue and composer. From the limited information available, the following works are listed: a Symphony (1966); seven Piano Concerti (composed between 1956-1980), one Trumpet Concerto (1967), three Ballets,<sup>2</sup> three Sonatas and 24 Preludes for piano as well as some vocal works.

His Trio<sup>3</sup> "The Hedgehog and the Nightingale" based on "the

---

1. Ho, A. & D. Peofanov. Biographical Dictionary of Russian / Soviet Composers. 1989. p. 498.

2. The three ballets are *Ivan* (1956), *Unusual Day* (1963) and *Mal'chish-Kibal'chish* (1977).

3. The trio was published in Kiev in 1979.

well known Russian tale by Juri Jarmicha",<sup>4</sup> uses a narrator<sup>5</sup> and unfolds in eight episodes of words<sup>6</sup> and music.

I	Moderato:		12 bars
		flute solo	(4)
		piano solo	(4)
		cello solo	(4)
II	Allegretto:		35 bars
II.1	a)	flute solo	(15)
II.2	b)	ensemble	(20)
III	Allegro giocoso:		45 bars
III.1		piano introduction	(4)
		flute & piano	(8)
		ensemble	(26)
III.2	Allegro:	ensemble	(7)

---

4. Sil'vansky, N.I. *Score*. 1979. p. 3.

5. Some other works for chamber ensemble specifying a narrator are: Poulenc's *L'Histoire de Babar, le petit éléphant* (1945), Stephen Dodgson's *Bag of Winds* (1974) for string quartet, Geoffrey Grey's *The Twelve Labours of Hercules*, Richard Arnell's *I think of all soft limbs* and Elizabeth Poston's *An English Calendar*, as well as Prokofiev's orchestral work *Peter and the Wolf* (1935-36).

6. See Appendix V for the text.

IV	Allegretto:			22 bars
IV.1		a) cello	(10)	
IV.2		b) ensemble	(12)	
V	Moderato:	flute	( 4)	4 bars
VI	Allegro:			96 bars
		piano	(16)	
		cello & piano	(10: 17-26(3))	
		ensemble	(52: 26(4)-78)	
		piano	( 5: 78(4)-83)	
	Andante:	piano	(13: 84-96)	
VII	Andante:			17 bars
		piano	(5)	
	Allegro:	piano & flute	(6)	
		ensemble	(6)	
VIII	Moderato:			69 bars
		ensemble	(12)	
		piano & flute	(6: 13-18)	
		piano & cello	(4: 19-22)	
		piano & flute	(8: 23-30)	
		ensemble	(39:31-69)	

The whole composition is held together by the fragmented storyline and by the constant repetition of motifs and themes representing the main parts in a highly descriptive manner. The principal characters are the hedgehog, the nightingale and the fox, with the hedgehog playing the leading role. The thematic material connected to the hedgehog is freely used by all three instrumentalists, not only conveying changes in mood, but also functioning as the dominant unifying force throughout the work.

The opening twelve bars introducing the hedgehog's theme can be regarded as a prelude foreshadowing various incidents and moods in the story.

The *first* phrase (bars 1-4(3)) announces a "dolce" flute part in a rather carefree manner in 5/4, presenting a pseudo-modal melody hovering around a central pitch and confined within an interval of a minor tenth.

eg. 1: I 1-4(3)

Flauto

entire phrase

Moderato partial phrase

1

*p* dolce motif

3

X X X X X

This is followed by the *second* phrase, a "doloroso" homorhythmic<sup>7</sup> piano part (bars 5-8) with a narrower melodic range of a minor seventh and a harmonic structure mainly consisting of minor triads. The augmented interval of the fourth (appearing between c and f# in bar 7(3)) builds up tension which is released in an open chord in bar 8. The sorrowful mood anticipates the loneliness of the hedgehog.

eg. 2: I 4(4)-8

The image shows a musical score for piano, consisting of two staves (treble and bass clef) and a grand staff bracket. The music is in 4/4 time. The first staff (treble clef) has a key signature of one flat (B-flat). The second staff (bass clef) has a key signature of one flat (B-flat). The score is divided into four measures, numbered 5, 6, 7, and 8. Measure 5 starts with a piano (p) dynamic and a 'doloroso' marking. The music is homorhythmic, with both hands playing chords in a similar rhythmic pattern. The chords are primarily minor triads. In measure 7, there is an augmented interval of a fourth between C and F# in the bass line. The piece concludes in measure 8 with an open chord.

The prelude concludes with the *third* phrase, an "espressivo" cello solo combining material previously presented by the other two instruments. This phrase, however, does not hover around a central note, but gradually descends to low A in a relaxed manner, joined by the piano and the flute parts in the last two bars. The turn-motif in the flute part ending the prelude anticipates the *nightingale's* theme.

---

7. A chordal style where the same (or similar) rhythm is used in all parts. (Randel, D. The New Harvard Dictionary of Music. 1986. p. 380.).

eg. 3: I 9-12

Each of these three phrases conveys a specific mood: the flute solo represents the hedgehog's cheerful surroundings (episodes II, V, VIII), while the piano solo with its mild chromaticism portrays anxiety, fear and solitude (episodes IV, VII, VIII). This mood is initially continued in the cello part (bar 9), but later (bar 10-11(2)) returns to the opening phrase conveying a more joyful ending to the fairytale.

References to particularly the *first* phrase of the hedgehog's theme appear throughout the composition in the form of the opening four-note motif (I 1(1-2)) and in the partial (I 1(1)-2(2)) or entire (I 1-4(3)) restatement of the phrase (see eg. 1).

1. The four-note motif occurs frequently in augmentation and is on occasion sequentially extended. (VII 1-2; VI 19-21).

eg. 4: VI 19-21 (cello part: augmentation and sequences)

It appears in the individual instruments in episode VI and VII, simultaneously in two instrumental parts in episode III and VIII,

eg. 5: III 22 (cello & right hand piano parts in sixths)

eg. 6: VIII 12 (imitation: flute & cello)

and initially with imitation between the three parts, in the concluding Coda of episode VIII.

eg. 7: VIII 59-63

In the following variant, the four-note motif I 1(1-2) is used as repetition:

eg. 8: VI 9-10 (piano)



2) The "dolce" first phrase reappears partially as a single melodic line in the cello and piano parts of episodes II and VI. Octave and open fifth duplication frequently appear in the piano part, while rhythmic augmentation and especially the following pattern occurs regularly in both parts.

eg. 9: VI 5-8 (rhythmic pattern used most frequently)



Episode VI progresses from the lowest (see eg. 9 bars 5-8) to the highest register of the piano thereby increasing the emotional tension in the story.

eg. 10: VI 31-34 (bars 13-17, 31-34)



Extended augmentation occurs four octaves apart in the piano part (VI 65-71).

eg. 11: VI 65-68

3) The entire flute phrase reappears exactly in the solo flute part in episode V (bars 1-4) and with strict imitation (episode VIII 19-22) between the cello and right hand piano parts, representing an exact repeat of the opening four bars.

eg. 12: VIII 19-20

4) The final episode starts with a combination of this entire first phrase presented in the piano part (1-4(3)) with the theme partially used in the other two parts.

## eg. 13: VIII 1-2

Musical score for example 13, VIII 1-2. The score is in 2/4 time and marked *Moderato* with a dynamic of *ff*. It features a string part (top two staves) and a piano part (bottom two staves). The string part includes a triplet of eighth notes, a 9-measure rest, and a triplet of eighth notes. The piano part includes a triplet of eighth notes and the instruction "open fourths & octaves".

5) Later in the final episode the only reappearance of the *second* "doloroso" piano phrase occurs in the piano part (VIII 4(4)-8), which is subsequently repeated in the flute part (VIII 8(3)-11).

## eg. 14: VIII 4(4)-6

Musical score for example 14, VIII 4(4)-6. The score is in 4/4 time and marked *p*. It features a flute part (top staff) and a piano part (bottom two staves). The flute part includes the instruction "sigh motifs". The piano part includes the instruction "Doloroso Theme".

The second important character, the **nightingale** is represented by means of several descriptive melodic ideas. The *first*, an Allegretto fourteen bar theme based on various chordal patterns, represents the *singing nightingale* and

appears exclusively in the flute part, starting in b min. The agility of the singing bird is depicted in acciaccaturas, trills, large intervals, dotted rhythmic patterns, and in the repetition of motifs and sequences.

eg. 15: II.1 bars 1-9

Allegretto

The singing theme is immediately repeated, this time cleverly accompanied by the cello and piano parts sharing the hedgehog's first phrase (II.2 bars 1-5 and 6-10 respectively). The bordun effect created in the piano part enhances its affinity to folk music.

eg. 16: II.2 bars 6-8

The episode ends with a five bar extension in the piano part starting with a triplet figure and ending with the *acciaccatura* nightingale motif.

Fleeting references to this motif also occur at various stages in the work presented in the flute part (episode VIII 57-58) and more frequently in the piano part (episodes II, III, IV and VIII).

The work concludes with a brief reference to both these characters, commencing with the nightingale's *acciaccatura* and ending with the hedgehog's triplet figure.

eg. 17: VIII 67(2)-69 (flute)



Episode III marked *Allegro giocoso*, introduces the *second* nightingale theme, the *fledgling* theme, which consists of two alternating ideas, the first of which appears in the piano part

eg. 18: III.1 bars 1-4

Two staves of music in treble clef, key signature of two sharps (F# and C#), and 2/4 time signature. The tempo marking 'Allegro giocoso' is written above the first staff. The piano part is indicated by 'P-no' on the left. The first staff begins with a first ending bracket. The first measure has a piano dynamic marking 'p'. The music consists of alternating eighth and sixteenth notes, with some rests. The second staff continues the melodic line with similar rhythmic patterns.

and the second in the flute part.

eg. 19: III.1 bars 5-8



These two ideas are subsequently used either alternately or in combination. An abridged version (12 bars) reappears in episode VIII bars 37-48.

The sparsely textured piano accompaniment (bars 5-18) mainly consists of chromatically shifting open fifths together with the *acciaccatura* nightingale theme.

eg. 20: III.1 bars 9-12

This episode concludes with the following new material which links up with episode III.2:

1. Bitonal scale passages stated simultaneously in the cello (*f* melodic minor) and right hand piano parts (whole tone) (bar 28), followed in the flute part with the  $\text{D flat}$  major scale (bar 29) and ending in *c* minor which coincides with a major chord in the piano part (bar 30).

eg. 21: III.1 bars 28-30<sup>8</sup>

2. A chromatic theme probably derived from bar 1 (see eg. 18: left hand part) occurring four times as a two bar phrase. When repeated in the piano part, it is accompanied by a reference to the nightingale's *acciaccatura* motif with implied change in meter (3+3+2).

eg. 22: III.1 bars 35-36

---

8. It would seem that episode 3.1 should end at bar 30, thereby providing an ideal opportunity for the narrator to continue the story.

3. The third motif suggesting the nightingale's *homecoming* (episode VIII 22(3)-30(3)) is clearly linked to the opening hedgehog idea with the addition of a trill figure.

eg. 23: VIII 8:22(4)-24



The third character, the fox, introduced in the cello part, appears in the Allegretto fourth episode. The imaginative use of repeated notes (IV 1), chromatic intervals (IV 1-2; 3-4; 7-8), large interval leaps and multiple stops portray typical behaviour of this sly animal. Although bars 3-4 are a repetition of bars 1-2, auxiliary notes and rhythmic diminution disguise the original melodic line.

In bars 5-7 the melodic compass is extended with the "b flat" becoming the prominent pitch occurring seven times, four of which are on strong beats. Bars 5 and 6 share the same material, but incorporate two different perfect fifth double stops. Bars 7-9 have an undulating melodic line ending with a glissando in bar 10.

eg. 24: IV.1 bars 1-10

The accompanied restatement gives the fox theme a march-like character, achieved especially by the pizzicato chords and arco semiquaver runs in the cello part, which are subsequently imitated in the piano part in bars 7-8. The melodic material is shared between the three voice parts with duplication occurring between the flute and right hand piano parts (bars 3-6), and between the flute and the cello parts in bars 9-12.

eg. 25: IV.2 bars 1-4 (all parts)

The musical score for example 25, IV.2 bars 1-4, is presented in three systems. The first system contains the Flute (Fl.) and Violoncello (V.c.) parts. The Flute part begins with the tempo marking 'Allegretto' and a dynamic marking 'p'. It features four measures of music with various articulations and phrasing. The Violoncello part starts with a 'pizz.' (pizzicato) marking, followed by an 'arco' (arco) marking, and then another 'pizz.' marking. The second system contains the Piano (P.no.) part, which is marked 'Allegretto' and 'p'. It consists of two staves (treble and bass clef) showing the piano accompaniment for the first four bars. The piano part includes chords and melodic lines that mirror the rhythmic and melodic elements of the other parts.

The first two bars of the fox's theme reappear in octaves in the piano part, in the opening five bars of episode VII.

Another unifying element occurs in the form of *open chordal accompaniments* involving parallel perfect fifths and octaves and occasionally fourths (see eg. 13: VIII 2).

eg. 26: VIII 59-63 (left hand piano part)



This idea is first introduced in the opening prelude, ending both the second (I 8) and third phrase (I 12) with an open fifth chord.

eg. 27: I 8

I 12

This device subsequently reappears throughout the work in various guises such as:

a slow sustained rhythmic chordal pattern;

eg. 28: VIII 25-27

Musical score for example 28, measures 25-27. The score is in treble and bass clefs with a key signature of two sharps (F# and C#). It features sustained block chords in both hands, with a 'cresc.' marking above the right hand in the third measure.

block chords with rhythmic variation in every alternate bar;

eg. 29: VI 59-60

Musical score for example 29, measures 59-60. The score is in treble and bass clefs with a key signature of two sharps (F# and C#). It features block chords in both hands with rhythmic variation in every alternate bar.

a semiquaver alberti bass idea

eg. 30: VIII 17

Musical score for example 30, measure 17. The score is in treble and bass clefs with a key signature of two sharps (F# and C#). It features a semiquaver alberti bass idea in the bass line and a melodic line in the treble.

and a drone bass pattern.

eg. 31: III 5-8

New motivic material, often appearing with the *hedgehog's first phrase*, is introduced in the sixth and most extensive episode.

The first of these is a dark continuous tremolo *misfortune* motif (bars 1-30), presented in the piano part, reflecting the ominous mood change in the story. In bar 31 the tremolo accompaniment is replaced by trills in the flute part but the tremolo reappears in the piano part bars 61-64 as well as in bars 74-79 while accompanying the *hedgehog* phrase.

eg. 32: VI 17-19

A fire theme is also introduced in the piano part but accompanied by a flute scale figure and a cello pizzicato chord.

eg. 33: VI 37-40

37

Musical score for example 33, measures 37-40. The score consists of four staves. The top staff is for flute, marked 'sub. p' and 'plzz.', showing a scale-like figure. The second staff is for cello, marked 'sub. p', showing a chordal accompaniment. The third and fourth staves are for piano, marked 'sub. p', showing a complex accompaniment with repeated notes and chords.

The fleeing motif using repeated notes is introduced in bar 39 and used extensively in the cello and flute parts, bars 43-52.

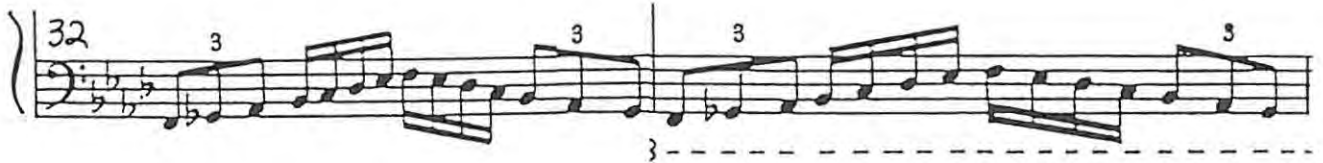
eg. 34: VI 48-50

Musical score for example 34, measures 48-50. The score consists of two staves. The top staff is for flute, marked '48', showing a scale-like figure. The bottom staff is for piano, showing a diatonic scale in semiquavers.

These motives are mostly followed or sometimes preceded by a diatonic scale occurring in semiquavers in the right hand piano part (VI 27-30; 72-73; 78-79), and changing to an

ostinato combination with triplets (VI 31-36) introduced in the left hand piano part

eg. 35: VI 32-33



and a chromatic scale introduced by the piano part in bar 55, which is subsequently shared by all three voice parts in bar 56.

eg. 36: VI 55-56

Smaller scale figures such as the tetrachord used in contrary motion occur between all three parts with the leading chordal piano part inverted by the other two instruments using diminution in the cello and an ornamented figure in the flute parts.

eg. 37: VI 57-58

Musical score for example 37, measures 57-58. The score is written for Violin I, Violin II, and Piano. The Violin I and II parts feature melodic lines with slurs and accents. The Piano part features a complex arpeggiated accompaniment with many accidentals. Dynamics include 'f' (forte) and 'f' (piano). There are also some handwritten annotations and arrows in the score.

Another example shows a semiquaver ostinato pattern in the cello part against a triplet arpeggio figure in the flute.

eg. 38: VI 74-76

Musical score for example 38, measures 74-76. The score is written for Flute and Cello. The Flute part features a triplet arpeggio figure. The Cello part features a semiquaver ostinato pattern. Dynamics include 'f' (forte). There is a dashed line above the Flute staff.

## CHAPTER IV

**GÜNTER RAPHAEL**

Günter Albert Rudolf Raphael was born in Berlin on 30 April 1903. From a musical background, he received his initial studies with Arnold Abel. During the period 1922-1925 he attended the Hochschule für Musik in Berlin, studying under Robert Kahn (composition), Walter Fischer (organ) and Max Trapp (piano). He taught theory and composition at the State Conservatory and at the Kirchenmusikalisches Institut in Leipzig<sup>1</sup> from 1926-1934. Banned by the Nazi regime, he resigned and moved to Meiningen and later to Laubach. In 1948 he received the Liszt Prize for Composition<sup>2</sup> in Weimar and was to continue his academic career in theory and composition at the Conservatory of Duisberg (1949-1953), and Mainz (1956-58), and hold a professorship at the Staatliche Hochschule für Musik in Cologne from 1958<sup>3</sup> until his death in Herford<sup>4</sup> in 1960.

1. According to Hans Klotz under Furtwängler ("*Zum Tode von Günter Raphael*" in Musik und Kirche. vol. 30. 1963. p. 289.), who also premiered his First Symphony in 1926. (Mezger, H. Musik und Kirche. vol. 43. no. 3. 1973. p. 140.)

2. Ibid. p. 140.

3. This date varies between different sources from 1956-1958, with 1958 most frequently cited, for example by Hans Klotz in "*Zum Tode von Günter Raphael*" (Klotz, H. Op cit. p. 289.) and by Klaus Linkenbaum in "*Zum Gedenken an Günter Raphael*" (Musik und Kirche.

Raphael was a prolific composer, writing in the major genres with the exception of opera. He regarded his choral music as his most important works,<sup>5</sup> but according to Gudger "*his more adventurous work is to be found in the chamber<sup>6</sup> and orchestral pieces*".<sup>7</sup>

His compositions can be divided into three periods with his earliest works in the late-Romantic style, reminiscent of Brahms and Reger, those from 1935 to 1945 reflecting the sparser textures and motor rhythms of the Baroque period, and those from 1945 onwards exploring the possibilities of the twelve-tone technique.

His Flute trio entitled Trio-Suite op. 44 of 1938, was composed in his second period, "*that of exile in Meiningen*

---

vol. 38, 1968. p. 140.). Gudger (The New Grove Dictionary of Music & Musicians, vol. XV, 1989. p. 588.) indicates 1957.

4. Ibid. p. 588.

5. Schmiedeke, E. Musik und Kirche. vol. 53. no. 2. 1983. p. 84.

6. Of his five trios for the following combinations: vn vc pf; fl vc pf; cl vc pf; fl vn va; 2 vn va, two different categories can be identified. The first uses the vc and pf with vn/fl/cl, while the second uses the vn and va with a second melody instrument in the vn or fl.

7. Gudger, W. Op cit. p. 589.

and Laubach" when "he reached further into the past for his models" Bach and Schütz.<sup>8</sup>

The Trio-Suite consists of the following five movements:

- I **Praeambulum**: *Heiter* (bright, clear)
- II **Courante** : *Leicht beschwingt* (light, easy, speedy)
- III **Sarabande** : *Langsam, mit viel Ausdruck* (slowly, with great expressiveness)
- IV **Menuett** : *Zierlich, mit Anmut* (graceful, sweet)
- V **Gigue** : *Frisch und lebendig* (brisk and lively)

The work has a typical Neo-Baroque design, consisting of the following four traditional dances of the Baroque Suite: the *Courante*, *Sarabande*, *Menuett* and the *Gigue*, all presented in their traditional positions. The substitution of the Allemande as the regular first dance by the *Praeambulum*, was frequent in the Baroque period.

The five movements use an outward ternary structure, with each movement, though individual in character, strongly inwardly unified.

---

8. Ibid. p. 588.

Raphael uses the following regular Baroque practices:

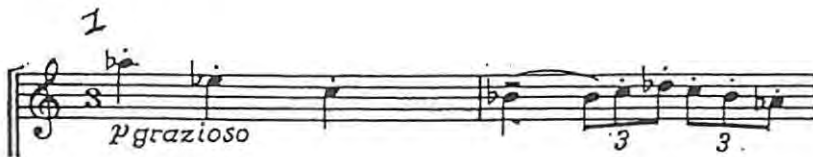
- 1) Fortspinnung technique on a recurring headmotif or theme  
eg. 1: I 1-4 (flute)



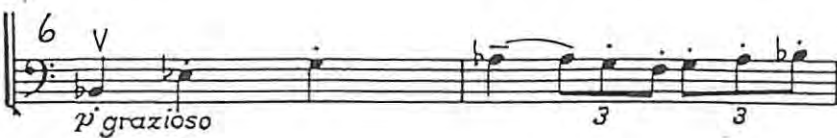
- 2) Inversion and imitation between voice parts:

inverted melodic lines appearing between the flute and cello parts

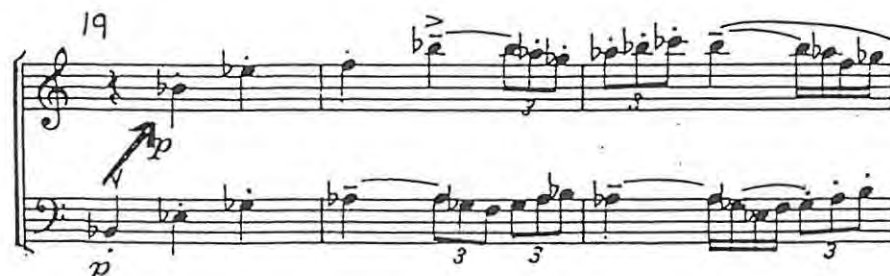
- eg. 2: IV 1-2 (flute)



- eg. 3: IV 6-7 (cello)



- eg. 4: IV 19-21: imitation between inverted parts



## 3) Repeated rhythmic patterns in the form of ostinatos

eg. 5: II 57-60

## 4) Trills and mordents

eg. 6: I 25-27 (flute and cello)

Cyclic unification is achieved by the first and the last movements using the same material but employing rhythmic and melodic changes to accommodate the compound character of the *Gigue*.

The *Praeambulum*, in ternary form starts with a melody built on the following two motifs.

motif a: I 1(1)

eg. 7:

Flöte

motif b: I 1(2)

eg.8:



Variants of motif b occur as follows:

eg.9: I 1(3)-2(2) (right hand piano part: augmentation of b)



eg.10: I 2(3) (inversion of last interval)



eg.11: I 4(1-3) (right hand piano part: sequence built on the interval of the perfect fourth)



Combinations of a + b:

eg.12: I 2(1-3) (flute part)



eg. 13: I 3(1-3) (flute) ~



Although the piano is mainly used in an accompanying capacity, the imitation between the right hand - partially using augmented rhythmic patterns in bar 1-2(2) (see eg. 9) - and the flute part, enhances the polyphonic writing.

In the *Gigue* these two motifs are restated, initially in the flute part (the b motif appearing twice with augmentation),  
eg. 14: V 1-2



with imitation in the cello part which is sequentially extended (V 3(2); 4(2)) into a six-bar theme;  
eg. 15: V 1(3)-3



and subsequently partially repeated in the flute part. The *Gigue* freely alternates between  $\frac{6}{8}$  and  $\frac{9}{8}$ , yet still retains the dance's traditional character.

eg. 16: V 8-10

The twelve bar A section of the *Praeambulum* is expanded to sixteen bars in the *Gigue*, the B section with one to ten bars, and the repeated A section with two to thirteen bars.

PRAEAMBULUM			GIGUE				
Form :	A	B	A	:	A	B	A
Bar no:	1-12	13-21(1)	21(1)-31	:	1-16	17-26(2)	26(1)-38
Bars :	12	9	11	:	16	10	13

Despite its Neo-Baroque sound, fundamental harmonic progressions with modulations to closely related keys (b, e, a, D, G) are used.

The meticulous articulation and expression throughout the work enhances the Baroque style. The piano accompaniment becomes more transparent in the *Gigue*, effectively imitating the harpsichord by using broken chords (bar 1, 2, 7, 15, etc), prevailing staccato patterns and a scale passage at the end of the first section (bar 16).

eg. 17: V 14-16

Musical score for example 17, measures 14-16. The score is in 3/4 time and features a piano accompaniment. The right hand has a melodic line with a semi-quaver anacrusis at measure 14. The left hand has a bass line with a hemiola figure. Dynamics include 'fz' and 'mf cresc.'

The semi-quaver anacrusis and the time signature (3/4) resemble both the *Courante* and the *Corrente*. The solemn and grave character as well as the occasional use of hemiola figures lean more towards the *Courante*. (see eg. 5)

eg. 18: II 11(1)-14

Musical score for example 18, measures 11-14. The score is in 3/4 time and features a violin and piano accompaniment. The violin part has a flowing triplet. The piano part has a hemiola figure. Dynamics include 'p' and 'c'.

The Italian *Corrente* characteristics are depicted in the tempo indication "*leicht beschwingt*"; the flowing triplets interchanging with dotted rhythms, almost resulting in a 9/8 feel,

eg. 19: II 6-7



and the homophonic texture (see eg. 20) which combined with sparser textures appears throughout the movement in mainly two instrumental parts at a time, with the two piano parts occasionally occurring in parallel octaves.

The dotted theme (a) introduced in the A section, together with constant leaps (b) in the cello and piano accompaniment eg. 20: II 1-4

and the demi-semiquaver pattern (c) starting in the piano part (see eg. 18), contribute to the restless character of the movement. The use of the interval of the augmented fourth interchanging with consonant intervals in the cello accompaniment, further increases the tension.

Form	:	A	A	B	A	Coda
Bar no:	:	1-16(1)	16(1)-29(1)	29(2)-44(1)	43(3)-57(1)	57(1)-67
Bars	:	16	14	15	14	10

The repetition of A (16(1)-29(1)) shows slight *rhythmical*, and *melodic* alteration. The former is found in the interchanging dotted pattern into triplets and vice versa, and the latter in the indicated piano (bars 21(2)-26(3)) and the flute parts (bars 26-27(1)).

The middle section (B) introduces the melody a minor third lower in the cello part.

eg. 21: II 29-32



The accompanying motif is restated in the left hand piano part and changes to the following pattern in bars 32-39.

eg. 22: II 32-36



The A section returns in the original pitch, in the right hand piano part (bars 43(3)-45(3)) and is sequentially extended in bars 46-47. Bars 48-49 use the same extension as in bar 20-21.

The Coda (bars 57-67) starts with the dotted piano accompaniment and consonant intervals in the cello part

(both presented as hemiolas), and ends *pianissimo*, with the "col legno" cello quality further intensifying the desolate mood.<sup>9</sup>

The short *Sarabande* in Ternary form (A:BA), begins and ends in E major - retaining the slow, tender and expressive character as well as the 3/4:3/2 meter typical of this dance.

Although the melody starts uncharacteristically on the second beat of the bar it affects the normal stress of the second beat, which is further complicated by the perfect fourth interval in bar 1, causing the third beat to be stressed instead. However, the normal stresses are resumed in bar 3. This unusual effect of a displaced accent recurs throughout the movement and could be solved by applying the *hemiola* principle to the first two bars of each phrase, clearly illustrated in the three bar phrase structure of the chordal piano accompaniment and the main melodic line (a) introduced by the cello part, which is imitated by the flute part three bars later.

---

9. This is the only movement in the work which emotionally reflects the composer's war experience as exile.

eg. 23: III 1-6 (all three parts)

The musical score consists of three staves. The top staff is in treble clef, showing measures 1, 2, 3, 1, 2, 3. It features accents 'a' and dynamic markings 'mfespr.'. The middle staff is in bass clef, with 'Pespr.' and 'mf' markings. The bottom two staves are for piano accompaniment, labeled 'P begleiten' and 'ground bass'. A section of the piano part is marked 'retrograde & imitation' with arrows indicating the direction of the musical material.

Through grouping bars 1 and 2 together the natural accent is placed on the **second** beat of both bars.

[ 3 1 2 3 4 5 6 | 3 1 2 3 ]

[ 2 1 2 3 | 4 1 2 3 ]

The chordal accompaniment, bars 1(3)-3(1), is derived from the opening cello theme (a) (2(1)-3(1)) but altered by means of retrograde and augmentation (see eg. 23).

The left hand piano part is repeated with slight rhythmic alteration  $2\frac{1}{2}$  times in the form of a ground bass, the third time interrupted by the partial restatement of the original cello theme (1(2)-2(2)), beginning in bars 8(3)-10(1), and which is subsequently imitated in the cello part in bar 9(2). This section ends in B major.

eg. 24: III 7-10 (piano & cello)

The B section - (bars 12(2)-23(1)) also in E major, introduces an inversion of 'a' in the flute part, which is imitated by the cello three bars later, and modulates to B major in bar 21(1).

eg. 25: III 13(2)-19 (flute & cello)

The A section (bars 22(2)-38), commences in both the cello and the left hand piano parts (22(2)), overlapping with the conclusion of the B section in the flute part.

eg. 26: III 20-25 (all three parts)

20

*mf* *a* *p*

*mf* *p*

Strict imitation between the cello and the flute resumes in bar 24(2)-37(1), this time only two bars apart. Slight rhythmic alterations in bar 37 enhance the definite ending in E major.

eg. 27: III 32-38 (all three parts)

32

rhythmic alteration

*f* *rit.*

*f* *rit.*

The *Menuett* the longest movement, complies with the traditional dance form in the following manner: it uses a moderate tempo ("Zierlich, mit Anmut": graceful, sweet), retains the 3/4 time signature, and applies an overall Ternary form with the "*Keck*" as the contrasting B section (IV 63-100). The *Menuett* and the *Keck* each feature two different themes constructed as follows:

*Menuett1* (A)

Form :	A	B	A+B	B
Bars no:	1-26	27-39	40-52	52-62
Bars :	26	14	12	11

*Keck* (B)

Form :	C	C'	Epilogue
Bars no:	63-76	77-94	93-99
Bars :	14	18	7

*Menuett2* (A)

Form :	A	B	A+B	B
Bars no:	100-112	113-126	127-138	138-148
Bars :	13	14	12	11

The *Menuett* starts with a six bar flute theme (a) in A flat major, accompanied by a dance-like figure in the right hand piano part (motif x).

## eg. 28: IV 1-4

Bars 6(1)-11(2) feature inversions of both theme a (which will be referred to as a') in the cello part, and the embellished right hand piano motif x.

## eg. 29: IV 6-8

Theme a (14-19(2)) recurs in the right hand piano part, followed by inversion (a') and imitation between the cello and flute parts (see eg. 4), and succeeded by a final entry of a, occurring a perfect fourth lower in the right hand piano part (23(3)-26).

piano part (23(3)-26).

The B section consists of a triplet theme (b), which is partially anticipated in the piano part and fully presented one bar later by a five bar cello phrase.

eg. 30: IV 27-30 (piano & cello)

The musical score for piano and cello, measures 27-30, is shown. The piano part (top staff) features a triplet theme 'b' starting in measure 27, consisting of three eighth notes (Bb, Bb, Bb) in a triplet. This theme is repeated in measures 28 and 29. The cello part (bottom staff) features a five-bar phrase starting in measure 27, also consisting of three eighth notes (Bb, Bb, Bb) in a triplet. The piano part is marked with dynamics *mf* and *p*, and the cello part is marked with *p*. The score is labeled '27' at the beginning of the piano part.

Theme b is repeated a whole tone higher with imitation in the flute part (32-37(3)) and a third time a perfect fifth higher in the piano part, though only for three bars (37(1)-39(3)).

In bar 40 the three themes of sections A and B combine, beginning with the first portion of b in the piano part (40-41), a in the flute and a' in the cello parts simultaneously appearing in bar 40(3).

eg. 31: IV 40-42 (all three themes)

Theme a and a' initially appear in contrary motion (40(3)-46(2)) and theme a subsequently in imitation (47(1)-50(3)).

eg. 32: IV 47-50 (flute & cello)

The b theme (51(3)-62) reappears with imitation between all three instrumental parts. The *Menuett* ends with the first four notes of this theme appearing with augmentation in the right hand piano part (IV 55(3)) followed by a similar presentation in the flute (IV 59(2)) part.

The *Keck* starts with  $\hat{a}$  dotted theme (c) in f minor, introduced in octaves by the piano part and accompanied by a bordun (open fifth) idea in the cello (63-70). The melody is repeated in the flute part with the bordun effect featuring in the left hand piano part.

eg. 33: IV 63-66

Musical score for example 33, measures 63-66. The score is in 4/4 time and f minor. It features a piano part with a bass line and a treble line. The bass line starts with a dotted half note 'a' (marked with a hat) and is followed by a series of eighth notes. The treble line has a melody with slurs and accents. There are markings for 'p', 'p1', 'c', '3', and '6'.

From bars 77-94 an altered version of theme c, indicated as d, appears twice, first introduced in the right hand piano part (77-86) and repeated in the flute part (86(1)-94(1)). This middle section concludes with a static eight bar epilogue confined to the piano.

eg. 34: IV 77-80

Musical score for example 34, measures 77-80. The score is in 4/4 time and f minor. It features a piano part with a bass line and a treble line. The bass line starts with a dotted half note 'a' (marked with a hat) and is followed by a series of eighth notes. The treble line has a melody with slurs and accents. There are markings for 'f', 'd', and 'fp'.

The *Menuett* (Erstes Zeitmaß) returns in the flute and cello parts (bars 100-105(2)), followed by a' reappearing with imitation one beat later between the left and right hand piano parts (bars 105(1)-108(2)) and recurring in the flute part in bars 109(3)-112.

From bars 113-148, with the return of the B theme, the *Menuett* is repeated exactly as found in bars 27-62.

## CHAPTER V

**JEAN-MICHEL DAMASE**

The French pianist and composer Jean-Michel Damase was born in Bordeaux in 1928. As a child prodigy he started piano lessons at the age of five and began composing at nine. At thirteen he was admitted to the Paris Conservatory to study composition under Henri Büsser and harmony and counterpoint under Marcel Dupré.<sup>1</sup> In 1947 he received the first prize in composition as well as the Prix de Rome for his cantata *Et la Belle se réveille*.<sup>2</sup> He made his New York debut as pianist and composer in 1954.<sup>3</sup>

Damase composed for various instrumental combinations in almost every possible genre, but his chamber music and especially the works for the harp<sup>4</sup> are his more popular compositions. His style merges the essentially French qualities of refinement, wit and subtle harmonic colouring and reflects insight into the capabilities of the various

---

1. Greene, D. M. Greene's Biographical Encyclopedia of Composers. 1985. p. 1318.

2. Le Courrier Musical de France. vol XVIII. French Centre de Documentation de la Musique Contemporaine (Letter 17/3/92).

3. Thompson, O. The International Cyclopedia of Music & Musicians. 1985. p. 512.

4. His mother was the celebrated harpist Micheline Kahn. (Girardot, A. in The New Groves Dictionary of Music & Musicians. vol V. 1989. p. 170.)

instruments.

His Trio for flute, cello and harp, which received the second composition prize in 1946,<sup>5</sup> paved the way for his subsequent trio substituting the piano for the harp. This trio entitled *Sonate en Concert* of 1950<sup>6</sup> consists of the following movements:

I Prelude : *Largo ma non troppo*

II Rigaudon: *Allegro*

I Largo I : (*Tempo I*)

III Aria I: *Andante*

IV Intermezzo: *Allegro molto*

III Aria II:

V Sicilienne: *Andantino* [*Poco più Animato, Tempo I*]

I Largo II : (*Tempo I*)

VI Gigue : *Presto*

---

5. He was only eighteen at the time.

6. Although the work was published in 1952, the trio was written in 1950 according to The New Grove Dictionary of Music & Musicians (vol V. 1989. p. 170.) and Le Courrier Musical de France. vol XVIII. The French Information Center (Centre de Documentation de la Musique Contemporaine).

The opening *Prelude* in Ternary form,

Form :	A	B	A'
Bar no:	1-9(1)	9(2)-17(1)	17(2)-23
Bars :	9	8	6

and the *Rigaudon* in Rondo form,

Form :	A	B	A'	C	A''
Bar no:	1-9(1)	9(2)-16	17(1)-24(3)	24(4)-39	40(1)-47
Bars:	9	7	8	15	8

combine into an overall Ternary form, ending with an abridged *Largo* of seven bars restating material of the A section.

The same situation arises with the subsequent *Aria* in Ternary form

Form :	A	B	A'
Bar no:	1-8(3)	8(4)-16(3)	16(4)-27(1)
Bars :	8	8	10

and the *Intermezzo* in Rondo form.

Form :	A	B	A'	B
Bar no:	1-10(3)	10(4)-18(1)	18(1)-25(1)	25(1)-33(1)
Bars :	10	8	8	9

Form :        C                    A  
 Bar no: 33(1)-43(1) 43(1)-54  
 Bars :        11                    12

*Aria II* is similar to *Aria I* but is considerably shorter in length (26 to 13 bars). The second *Aria* is more homogeneous in sound owing to the flute part reappearing a major seventh lower and duplicated at the octave in the cello part.

The two *Arias* are strongly related to the opening *Prelude* in both mood and motif.

The *Sicilienne* in Ternary form

Form :	A	B	Interlude	A
Bar no:	1-16(2)	17(1)-28(2)	29(1)-40(2)	41(1)-56
Bars :	16	12	12	16

and the *Gigue* in Little Rondo form,

Form :	A	B	A	B	A	Coda
Bar no:	1-40	41-56	57-64	65-72	73-115	116-140
Bars :	40	16	8	8	43	25
	(24+16)				(27+8+8)	(15+10)

comprise the last two contrasting movements. Both are in compound time and are separated by the return of a shortened version of the opening *Largo*. Although only nine bars in length, as opposed to the 23 bars in the opening *Prelude*, virtually all the melodic material is concisely restated.

The movements of the trio interlock to form the following ingenious Rondo<sup>7</sup> structure:

Form	:	A	B	A	A'	C	A'	D	A	E
Movement:		I	II	I	III	IV	III	V	I	VI
Bars	:	23	47	7	26	54	13	56	9	140

The Neo-Classical idiom of this trio is depicted in the strict classical forms as illustrated in the diagrams, the regular phrase structures,

eg. 1: V 1-8 (flute)

The image shows two staves of musical notation for flute. The top staff is labeled 'Flûte' and the bottom staff is also labeled 'Flûte'. The music is in 6/8 time and features a melodic line with a first ending bracket over the first four measures. The tempo marking 'très calme' is written below the first staff. The notation includes various note values, rests, and dynamic markings.

7. According to The New Groves Dictionary of Music & Musicians. (vol VI. 1989. p. 172.)

this can be regarded as a multi-couplet or chain rondo.

the use of diatonic key centers and traditional harmonic progressions although the latter often incorporates major sevenths (bar 2(1)) and major ninths (3(1))

eg. 2: V 1-4 (piano)

and clusters.

eg. 3: V 29-30

All the movements except the *Intermezzo* can be found in the Baroque Suite. The trio starts with a conventional *Prelude*, followed by three dances namely the *Rigaudon*, the *Sicilienne*, the *Gigue* and an *Aria*.

The strong unity throughout the composition is further accomplished by recurring motivic material, introduced in the *Prelude*. Bars 1(2)-5(1) have the following melodic structure (*a b c b*) and the B section (I 9(2)-17(1)) a binary design (*d b' d b'*). The individual motifs are subtly

linked to one another through similar tetrachords, as well as expressive and angular intervals.

The motifs are mainly announced by the flute part and subsequently shared between the other instruments using various aspects of imitation and duplication.

eg. 4: I 1-5(1) (all three instruments)

The musical score consists of three systems. The first system includes the Flute part (top staff), Violoncelle part (middle staff, marked *ad lib.*), and Piano part (bottom two staves, marked *ff*). The tempo is *Largo ma non troppo*. The second system includes the Flute part (top staff), Violoncelle part (middle staff, marked *Pizz.*), and Piano part (bottom two staves). The third system includes the Flute part (top staff), Violoncelle part (middle staff, marked *Arco*), and Piano part (bottom two staves). The score shows a descending C major scale passage in the flute part, which is imitated by the cello and piano.

1. The lyrical motif a features the following descending C major scale passage incorporating intervals progressing from a semi-tone to a perfect fourth and a perfect fifth.

eg.5: I 1-2(1) motif a (flute)



The following derivatives from motif a occur:

1.1 Sigh motives:

Two sigh motives c1 and c2 (a variation of c1).

eg.6: sigh motifs (I 3-4(1))



The expressive whole-tones of c1 (the first sigh motive) recur as semi-tones in the lyrical flute melody of the D section (II 33-40) in the *Rigaudon*.

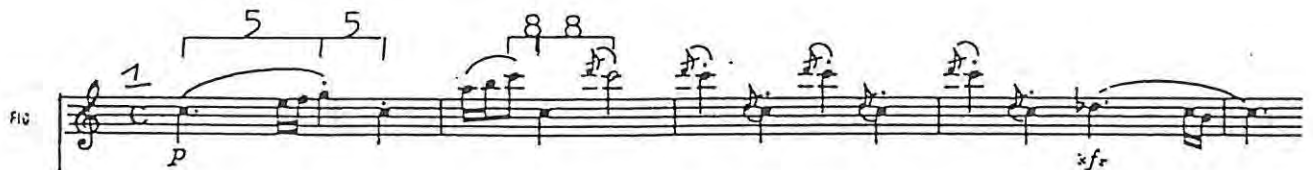
eg.7: II 33-36(2)



1.2 Consonant intervals:

The melodic line of the *Rigaudon*'s spritely A section (bars 1-9(1)) prominently uses octaves and perfect fifths,

eg.8: II 1-5(1) (flute)



which are cleverly disguised in a quaver and triplet movement in the right hand piano part of the B section (II 9(1)-17(1)).

eg.9: II 11(1)-12(4)



The C section (II 25-32) still retains the octave as main interval but the fourth and seventh gain prominence.

eg.10: II 25-26(3)

### 1.3 Scale passages:

Scale passages in the *Rigaudon* feature inversion (II 17-24),

eg.11: II 17

imitation (II 40-44) between the flute and right hand piano parts,

eg. 12: II 40-41

and contrary motion between left and right hand piano parts.

eg. 13: II 13-14

Descending and ascending scale figures introduced in the *Intermezzo* (bars 6-7)

eg. 14: IV 6(3)-7(4)

reappear in the C section in all three instrumental parts.

eg. 15: IV 34(1)-36(4)

The scale pattern recurring in the accompaniment and in the concluding melody line of the main theme of the *Gigue*, not only unifies the movement, but also the entire trio.

eg. 16: VI 6-7 (flute)

eg. 17: VI 1-4 (piano)

Another appearance of the scale theme, this time in two eight bar units, occurs in the B episode (bars 41-56) of the *Gigue*. The first unit features the main idea in the flute part which is repeated in the right hand piano part

accompanied by a flute counter melody using portions of the scale motif in retrograde and in augmentation.

eg. 18: VI 49-56

Musical score for Example 18, measures 49-56. The score is written for Flute and Piano. The flute part (top two staves) shows a counter melody with a retrograde and an augmented scale motif. The piano part (bottom two staves) includes a counter melody with fingering (2 3 1) and the instruction "en dehors".

2. Motif b starts with an inversion of the tetrachord of a leading to angular intervals involving minor and major sixths as well as a major seventh

eg. 19: I 2(2)-3(1) motif b

Musical score for Example 19, showing a flute part with a motif b. The score is written for Flute and includes a motif b.

and is prominently used throughout the movement and in the two recurring Largos.

eg. 20: Largo II 4(2)-5(1) (right hand piano part)

Musical score for Example 20, showing a piano part with a motif b. The score is written for Piano and includes a motif b.

The following derivatives from motif b occur:

### 2.1 Angular intervals:

Angular intervals appear simultaneously in the cello and the left hand piano parts of the *Rigaudon's* A section (bars 1-9) as a crotchet accompaniment

eg. 21: II 1-5(1)

RIGAUDON  
Allegro (♩ = 126)

Flute  
Violoncello  
Piano

*pp léger*

Allegro

and in bars 11-12 and 15-16 of the *Rigaudon's* B section.

eg. 22: II 15(1)-16(4) (piano)

15<sub>8</sub>

## 2.2 Inversion:

Inversion of motif **b** occurs with added chromatic notes.

eg.23: I 11(2)-13(1) motif **b'**



3. The two motifs **a** and **b** are combined and extended with sequential variation to form motifs **c3** and **c4**.

eg.24: I 5(2)-9(1)

Musical notation for eg.24: I 5(2)-9(1). The notation is on two staves, both with treble clefs and labeled 'Flöte'. The first staff begins with a double bar line and a fermata. The first measure contains a quarter rest followed by a quarter note G4. The second measure contains a quarter note A4 with a sharp sign. The third measure contains a quarter note B4 with a sharp sign. The fourth measure contains a quarter note C5 with a sharp sign. The fifth measure contains a quarter note B4 with a sharp sign. The sixth measure contains a quarter note A4 with a sharp sign. The seventh measure contains a quarter note G4 with a sharp sign. The eighth measure contains a quarter note F4 with a sharp sign. The ninth measure contains a quarter note E4 with a sharp sign. The tenth measure contains a quarter note D4 with a sharp sign. The eleventh measure contains a quarter note C4 with a sharp sign. The twelfth measure contains a quarter note B3 with a sharp sign. The thirteenth measure contains a quarter note A3 with a sharp sign. The fourteenth measure contains a quarter note G3 with a sharp sign. The fifteenth measure contains a quarter note F3 with a sharp sign. The sixteenth measure contains a quarter note E3 with a sharp sign. The seventeenth measure contains a quarter note D3 with a sharp sign. The eighteenth measure contains a quarter note C3 with a sharp sign. The notation ends with a fermata.

### 3.1. Motif **d**: **c3** variant

The more pensive main motif (**d**) of the *Prelude's B* section is a variant from bars 5(4)-6(1) of motif **c3** (see eg.24).

eg.25: I 9(2)-10(1)

Musical notation for eg.25: I 9(2)-10(1). The notation is on a single staff with a treble clef. It begins with a double bar line and a fermata. The first measure contains a quarter rest followed by a quarter note G4. The second measure contains a quarter note A4 with a sharp sign. The third measure contains a quarter note B4 with a sharp sign. The fourth measure contains a quarter note C5 with a sharp sign. The fifth measure contains a quarter note B4 with a sharp sign. The sixth measure contains a quarter note A4 with a sharp sign. The seventh measure contains a quarter note G4 with a sharp sign. The eighth measure contains a quarter note F4 with a sharp sign. The ninth measure contains a quarter note E4 with a sharp sign. The tenth measure contains a quarter note D4 with a sharp sign. The notation ends with a fermata. The dynamic marking 'p dolce' is written below the staff.

Motif **d** also recurs as the first part (bars 1-2 and 6-7) of the *Aria's A* theme,

eg.26: *Aria* I 0(4)-2(3)

Musical notation for eg.26: *Aria* I 0(4)-2(3). The notation is on two staves, both with treble clefs. The first staff begins with a double bar line and a fermata. The first measure contains a quarter rest followed by a quarter note G4. The second measure contains a quarter note A4 with a sharp sign. The third measure contains a quarter note B4 with a sharp sign. The fourth measure contains a quarter note C5 with a sharp sign. The fifth measure contains a quarter note B4 with a sharp sign. The sixth measure contains a quarter note A4 with a sharp sign. The seventh measure contains a quarter note G4 with a sharp sign. The eighth measure contains a quarter note F4 with a sharp sign. The ninth measure contains a quarter note E4 with a sharp sign. The tenth measure contains a quarter note D4 with a sharp sign. The notation ends with a fermata. The dynamic marking 'p' is written below the first staff. The second staff begins with a double bar line and a fermata. The first measure contains a quarter rest followed by a quarter note G4. The second measure contains a quarter note A4 with a sharp sign. The third measure contains a quarter note B4 with a sharp sign. The fourth measure contains a quarter note C5 with a sharp sign. The fifth measure contains a quarter note B4 with a sharp sign. The sixth measure contains a quarter note A4 with a sharp sign. The seventh measure contains a quarter note G4 with a sharp sign. The eighth measure contains a quarter note F4 with a sharp sign. The ninth measure contains a quarter note E4 with a sharp sign. The tenth measure contains a quarter note D4 with a sharp sign. The notation ends with a fermata. The dynamic marking 'p' is written below the first staff. The word 'soutenu' is written above the second staff.

while the *B section* (bars 8(4)-16(2)) of the *Aria* is an exact repetition of *d*.

eg.27: *Aria* I 8(4)-10(2)

### 3.2. Motif c6:

The reappearing *A section* (*Largo* I) of the *Prelude* uses derivatives of motif *c* but in a different order: *c3*, *c4*, *c1*, *c2*, followed by a new derivative *c6*. This motif returns at the end of the *Largo* II between the *Sicilienne* and the *Gigue*,

eg.28: *Largo* I 6(2)-7(1)

as well as in the two *Arias* (*Aria* I: bars 6(4)-8(2); *Aria* II: bars 3(4)-5 and 7(4)-13).

eg.29: *Aria* I 2(4)-4(2)

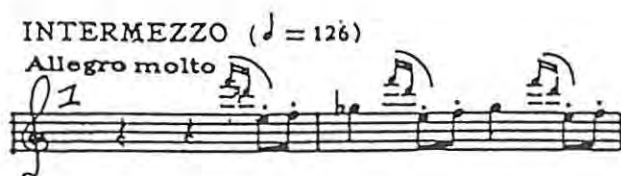
The following NEW MATERIAL occurs:

The brisk *Intermezzo* is characterized by the use of light acciaccaturas and trills appearing mainly in the exacting and dominant flute part and accompanied by a constant pizzicato quaver chordal pattern in the right hand piano part with the cello supporting the left hand progressions.

The A section (1-10) uses the following motifs:

1) e - involving a minor seventh and ninth acciaccatura leading on to a chromatic motif

eg.30: IV 1(4)-2(1)



2) f - an angular chromatic semiquaver melodic line

eg.31: IV 3(1)-4(2)



As in the Prelude these motifs recur throughout the Intermezzo unifying the movement despite the fact that the formal structure is Rondo (see diagram on p. 83).

The diagram indicates the central A' section as eight bars in length, with the two outer sections regular, the final section cadentially extended by two bars.

The contrasting episodes cleverly utilise aspects of the mentioned motifs, some of which are shown in the following examples:

Motif e (bars 1(4)-2) combined with the chromatic idea of motif f (bars 3(3-4), is repeated in the cello and piano parts and extended over four bars.

eg.32: IV 10(4)-13(3)

10 Arco  
V-la  
mf

The following quaver pattern occurring in the B section is related motif f in bar 3(3) (see eg-31).

eg.33: IV 14(1)-15(2)

14  
Flüte  
mf

The *Sicilienne* opens with a lyrical A section (bars 1-16) which is periodic in structure. Bars 1-8 consist of four symmetric two-bar phrases. The forephrase (g) remains unchanged.

eg.34: V 1-2 and 5-6

SICILIENNE  
Andantino (♩ = 120)

*très calme*

while the more prominent afterphrase (h) interchanges between an interval of a major second

eg.35: V 3-4

and a perfect fifth facilitating the cadence points.

eg.36: V 7-8

In bars 9-16 this afterphrase alternates between the three instrumental parts.

eg.37: V 9-16

The image displays a musical score for measures 9-16, divided into two systems. Each system includes staves for Flute (Flüte), Violin (Vlle), and Piano.

**System 1 (Measures 9-16):**

- Flüte:** Measures 9-10 have a fermata. Measures 11-16 contain a melodic line with slurs.
- Vlle:** Measures 9-10 are silent. Measures 11-16 contain a melodic line with a *(Pizz.)* marking above measure 11.
- Piano:** Measures 9-10 are marked *mf*. Measures 11-12 are marked *pp*. Measures 13-16 are marked *mp*.

**System 2 (Measures 17-22):**

- Flüte:** Measures 17-22 are silent.
- Vlle:** Measures 17-22 contain a melodic line with an *Arco* marking above measure 17 and a *p* dynamic below measure 17.
- Piano:** Measures 17-22 contain a piano accompaniment with a *pp* dynamic marking.

Motif h reappears in the contrasting and quicker B section, strongly unifying the *Sicilienne*. This section consists of two angular melodies, the first ( $i^1$ ) (bar 17-22) virtually utilizes the entire range of the flute,

eg. 38: V 17(1)-22(2)

Poco più Animato

whereas the second motif ( $i^2$ ) occurs after a two bar restatement of the  $h$  motif.

eg. 39: V 25(1)-28(2)

From *Poco più mosso* (29-41), motif  $h$  is used to prompt an extended twelve bar link back to a return of the regular A section.

The *Gigue* is characterized by a perpetual quaver movement. The main idea of the A section is an oscillating motif ( $h$ ),<sup>8</sup> ending in a prominent scale passage (derived from motif  $a$ : see eg. 16), which in turn becomes the main theme of the B episode.


---

<sup>8</sup>. This motif can be directly linked to the *Sicilienne*.

Motif h is stated in three symmetrical phrases (1-24) and shared between the flute and the right hand piano parts.

eg. 40: VI 1(1)-7(2)

GIGUE  
Presto (♩. = 168)



pp

A variation of motif (h') appears sequentially in the flute and the cello parts (25-40).

eg. 41: VI 33(1)-40(2) (cello)



*p legger*

The B episode (41-56) utilizes the scale motif (see eg. 18) with the second and shorter restatement (8 bars) varying the presentation.

An interesting feature occurs in the final and expanded A' section. Diverse phrase lengths progressively building tension, eventually lead to the faster "*più mosso*" Coda - creating an exciting climax to this effervescent work.

eg. 42: VI 80(1)-91(2) (2+2+1½+1½+1+4)

The musical score is divided into two systems. The first system includes Violin I (V.I.), Violin II (V.II.), and Piano (P.). The Violin I part begins with a tempo marking of 80 and features a melodic line with dynamics *mp cresc.* and *mf*. The Violin II part includes markings for *Pizz.* and *Alco.*. The Piano part starts with a dynamic of *p* and includes markings for *cresc poco* and *a poco*. The second system includes Violin I (V.I.), Violin II (V.II.), and Piano (P.). The Violin I part features a rhythmic pattern of eighth notes with a dynamic of *f*. The Violin II part includes a dynamic of *mf*. The Piano part continues with a dynamic of *mf*. The score is written in a key signature of one sharp (F#) and a 4/4 time signature.

## CHAPTER VI

**KARL MARX**

Karl Julius<sup>1</sup> Marx was born in München in 1897. His Science studies in München were interrupted by military service and imprisonment (1917-19) during World War I. He became interested in music, received some lessons from Carl Orff<sup>2</sup> and was motivated by him to start studying at the Munich Academy of Music<sup>3</sup> in 1920.

He taught at schools<sup>4</sup> in Munich, Graz and Stuttgart and was appointed professor of Music in 1946 and of School Music in 1955 in Stuttgart, from where he retired in 1966.

As a composer he is known mainly for his choral and vocal music.<sup>5</sup> He also composed orchestral works and chamber

---

1. Although his second name is not regularly indicated, it is used by both Kay (International Who's Who in Music and Musicians' Directory. 1985. 10th edition. p. 583.), and Hinson (The Piano in Chamber Ensemble. p. 381).

2. Sadie, S. (ed.) The New Grove Dictionary of Music & Musicians. vol. XI. 1980. p. 741.

3. His teachers were A. Beer-Wallbrunn, S. von Hausegger, and E. Schwickerath.

4. The Music High School in Munich, the State Musical Training High School in Graz and the State Music High School in Stuttgart. (Kay, E. (ed.) Op cit. p. 583.)

5. Examples of his vocal works such as "Jeden Morgen geht die Sonne auf" can be found in Unser Liederbuch. Band II. p. 12 and p. 15. (Binkowski, B. (ed.) 1975.)

music for various combinations.<sup>6</sup>

According to Drabkin "*His works display a strong feeling for poetic sense, formal solidity and linear polyphony*".<sup>7</sup>

The *Trio op. 61* of 1962, his only work written for three instruments, applies the following three movement structure:

I **Fantasia:** *Andante sempre rubato*

II **Scherzo:** *Allegro*

III **Introduzione - Rondo:** *Adagio, sempre rubato - Allegro*

This piece belongs to a group of later works composed in an Expressionistic style, portrayed by sparse motivic material, angular melodic lines at times based on twelve-tone rows, detailed phrasing and articulation, and the extensive use of expression marks. The interval of the second appears in various combinations as the main intervallic element, thereby providing a link with Bartok, Schönberg and Minimalism.

---

6. Sadie, S. (ed.) Op cit. p. 742. and Karkoschka, E. *Über späte Instrumentalwerke von Karl Marx*. in *Musica*. vol. 26, no. 6. 1972. p. 542.

7. Sadie, S. (ed.) Op cit. p. 742.

eg. 1: III 46-49

46 (♩ = ♩)

Apart from the minor second interval and its inversion, the interval of the perfect fourth features fairly prominently. In the following two examples fourths occur separately as a sustained accompaniment (I 23-47) and

eg. 2: I 23-25 (piano)

23 Tempo I.

in combination with seconds and sevenths.

eg. 3: II 51-55 (piano)

51

The trio is highly chromatic and at times makes free use of twelve-tone techniques, but seldom in a pure form. The clearest example appears at the beginning of the *Scherzo* but the subsequent use of this scheme is quite free.

eg. 4: II 1-11 (piano)

The image displays a musical score for piano, consisting of three systems of music. The first system is in 3/4 time and begins with the instruction *p leggiero sempre*. It features a complex melodic line with many accidentals. A bracket below the first two measures of the bass staff is labeled "12-tone pattern". The second system, marked with a circled "6", continues the melodic line. The third system shows a continuation of the melodic line on a single staff.

The beginning of the *Fantasia* (I 1-2(4)) also starts with a free atonal melody, with the b flat occurring twice and the b natural omitted. The first six notes of this row, introduced by the flute part (bars 1-3(2)), provide fundamental intervals and contours which recur as unifying elements throughout the work.

eg.5: I 1-3(2) (flute & piano)

Musical score for example 5, showing flute and piano parts. The flute part has intervals  $m2$ ,  $m2$ , and  $M7$  marked above it. Dynamics include *mf espr.* and *p*.

This shape reappears in bar 3(1-2) in diminution (as semiquavers concluding with a minor seventh) in the right hand piano part,

eg.6: I 3(1-2)

Musical score for example 6, showing a piano part with intervals  $m2$ ,  $m2$ , and  $m7$  marked above it.

and return two bars later in inversion with added notes separating certain intervals in the cello part.

eg.7: I 5-6(1)

Musical score for example 7, showing a cello part with dynamics *mf espr.* and *f*.

The latter two examples are separated in bars 3(3)-4 by a chordal version of the twelve-tone row in the piano part.

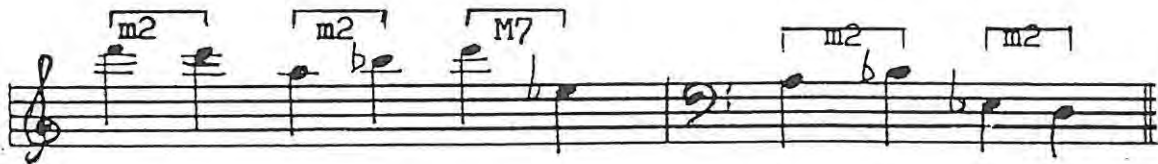
eg. 8: I 3(3)-4



The four-note motif introduced in the *Scherzo* is in itself derived from the opening six-note motif.

eg. 9:

<b>FANTASIA</b>	<b>SCHERZO</b>
(six-note motif)	(four-note motif)



This six-note motif further links the *Fantasia* and the *Introduzione*,

eg. 10:

<b>FANTASIA</b>	<b>INTRODUZIONE</b>
I 1-2	III 2



while the four-note motif recurs in both the *Scherzo* and the *Rondo*.



In the *Fantasia* bars 23(4)-24(1) only the last four notes are used, with the concluding notes reversed.

eg.14: I 23(4)-24(1) (flute)



Another example is the recurring interval of a seventh (major or minor) which appears in different voice parts.

eg.15: I 8-10(1)

3) altered interval order from M2 m2 M7 to m2 M2 M7 occurring:

with the seventh interval appearing in the original descending form (see eg.9) and

eg.16: III 2 (cello)

with a change in direction in the last interval.

eg.17: I 40(4)-41(1) (cello)



4) disguising the motif through the use of passing and added notes (see eg.7).

eg.18: III 13 passing notes (cello)



eg.19: III 6 added notes (cello)



In some cases intervals are altered within an extended melodic phrase, yet retain the basic angular melodic shape.

eg. 20: III 10 (flute)



5) theme and its inversion:

Strict inversion.

eg.21: III 20-21 (piano)

20 *tranquillo*

*pp senza espr.*

*pp senza espr.*

Partial inversion and imitation.

eg.22: I 32(2)-33(4) (flute & cello)

32

*p legg.*

The four-note motif frequently appears throughout the *Scherzo* and the *Rondo* undergoing the following changes:

1) altered rhythm with displaced accents,

eg.23: II 28-30 (right hand piano part)

28

*p*

eg.24: III 24(2-4) (cello)



2) appearing within quaver movement:

eg.25: II 71(3)-72(1) (flute)



eg.26: III 35(3)-36(1) (piano)



3) augmentation:

eg.27: II 32-33 (piano)



eg. 28: III 57(1-4) (flute)



4) diminution:

eg. 29: III 140(3-4) (cello)



5) inversion:

eg. 30: II 37(1-2) (flute)



In addition to this unifying four-note motif, two further contrasting motifs are introduced in the *Scherzo*,<sup>8</sup> both built on the intervals of the semitone and the minor third / augmented second. The first of these is (B)<sup>9</sup> an angular motif introduced by the flute part returns in bar 125(2) with imitation between the cello and the flute parts.

8. Marx, K. Karl Marx - Kammermusik. Record Sleeve. CAL 30450. 1972.

9. Refer to the diagram of the Scherzo (p. 116) for more details.

eg. 31: II 13(2)-14(3) (flute)



The second (C) consists of two sequences, each using four chromatic notes appearing concurrently in the cello and flute parts, the latter presented in diminution and inversion with only one intervallic change. This motif returns in bar 89(1).

eg. 32: II 47(1)- 49(2)

The work achieves further unity through the linking of movements I and IIIa and II and IIIb. <sup>10</sup> The *Fantasia* <sup>11</sup> (47 bars) and the *Introduzione* (21 bars), both slow

10. The *Introduzione* can almost be regarded as a slow third movement, succeeded by the *Rondo* as an *attacca* fast fourth movement.

11. According to Karkoschka (*Musica*, vol. 26, no. 6, 1972, p. 542.), Marx regularly used the title *Fantasia* when the indicated movement was not built on any formal classical structure.

and improvisatory in character on the one hand, and the *Scherzo* (188 bars) and the *Rondo* (124 bars) combining elements of variation and rondo techniques on the other. Diagrams of the latter structures follow, initially in a condensed form and then by a more detailed scheme.

**SCHERZO (II) (Condensed Outline)**

	B	C	C1	B1	C2	
A	A1	A2	A3	A4	A5	

**RONDO (IIIb) (Condensed Outline)**

	B	C	D	E	F	G	H	I	J	Coda
A	A1	A2	A3							

**SCHERZO (II)**

Form :	A	B	A1	C	A2
Bar no:	1-13	13(2)-27(3)	28-46(2)	46(2)-71(2)	70(3)-88(3)
Bars :	13	14	19	23	19

Form :	C1	A3	B1	A4
Bar no:	88(3)-113(3)	113(3)-125(1)	125(2)-145(1)	145(2)-153
Bars :	26	12	20	8

Form :	C2	A5
Bar no:	154-176(3)	176(3)-188
Bars :	22	13

## RONDO (IIIb)

Form :	A	B	A1	C
Bar no:	22-30(1)	30(1)-38(1)	38(1)-57(1)	57(2)-67(2)
Bars :	9	9	20	10
Form :	A2	D	A3	E
Bar no:	68(1)-74(1)	74(2)-83(1)	83(1)-94(3)	92(3)-105(1)
Bars :	7	9	12	13
Form :	F	G	H	I
Bar no:	105(2)-116(1)	116(2)-122	123(1)-133(1)	133(2)-141(3)
Bars :	11	6	10	5
Form :	J	Coda		
Bar no:	136(2)-141(3)	141(4)-144		
Bars :	5	4		

The alternating *Rondo* theme (A, A1, A2, A3) freely occurring between the three instrumental parts, shares the *staccatissimo* repeated accompaniment patterns, thereby maintaining a uniform and distinctive character typical to rondo form.

eg. 33: III 22-24

22

*f* *p* *cresc.*

*fz* *p* *sempre staccatissimo* *cresc.*

*p* *cresc.*

eg. 34: III 68-70

(68) Tempo I. (Allegro)

*mf* *cresc.*

*mf* *cresc.*

*f* *mf* *cresc.*

This same motif, however, is continued in the contrasting episodes (B - J), which are in essence character variations on the original four-note motif, freely incorporating mood and tempo changes.

The rondo-variation design is maintained up to the end of A3. The original *Rondo* theme does not return but the remaining variation episodes each develop the theme individually, gradually becoming more complex in structure.

The peaceful B variation (30-38(1)) in 3/4, specifies the original motif and its inversion in the piano part, with a sustained pedal point in the cello part.

eg. 35: III 30-33

The musical score for measures 30-33 of Variation B is presented in three staves. The top staff is for the flute, the middle for the piano, and the bottom for the cello. The key signature has one sharp (F#) and the time signature is 3/4. Measure 30 is marked with a '30' above the flute staff. The piano part starts with a forte (f) dynamic and a 'poco piu tranquillo' marking. The cello part has a sustained pedal point. Dynamics include piano (p) and accents (>). A first ending bracket (I.H.) is shown at the end of the passage.

The slower *leggiero e grazioso* C variation (57(2)-68(1)) and the *dolce* F Variation (105(2)-116(1)) both feature a Canon in Inversion between the flute and the cello parts.

eg. 36: III 57-60

57  
mf  
p leggiere e grazioso  
leggiere e grazioso

The D variation (*dolce espressivo*) (74(2)-83(1)) in 3/4 features imitation between the three instrumental parts.

eg. 37: III 74(2)-77

74) Poco meno mosso  
(♩ = 126-132)  
f mf espr. f  
f mf espr.  
f mf espr. p cresc. espr. mf  
p dolce

Variation E (poco sostenuto) (92(3)-105(1)) is slightly slower but more marcato, starting with duplicated octaves between three instrumental parts and continuing with imitation, sometimes inverted, in all four parts.

eg. 38: III 92-95

mpo  
sostenuto (♩ = 116)

pizz.

arco

poco rit.

ff

molto marc.

ffz

mp

a tempo più sostenuto (♩ = 100)

mf espr. molto

mf sempre molto legc

The slightly faster Variation G (116(2)-122) contains strict imitation between the right and left hand piano parts.

eg. 39: III 116-118

116

f espr.

mp

The imitation between the flute and cello parts in Variation H (123-136(2)) is accompanied by a triplet figure in the piano part.

eg. 40: III 123-124

Musical score for Variation H (123-136(2)). The score is in 4/4 time and consists of three staves. The top staff is for the flute, the middle for the cello, and the bottom for the piano. The flute and cello parts are marked *f* *molto espr.* and feature a melodic line with slurs and accents. The piano part features a triplet figure in the right hand, marked *poco f*, and a corresponding line in the left hand. The score is numbered 123 in a circle at the beginning.

In Variation I (133(2)-136(1)) (*molto sostenuto e pesante*), the flute part duplicates the right hand piano part at the octave, and the cello the left hand piano part in unison. The two latter parts subsequently imitate the flute / right hand combination at a distance of one beat.

eg. 41: III 133(1)-134

Musical score for Variation I (133(2)-136(1)). The score is in 5/4 time and consists of three staves. The top staff is for the flute, the middle for the cello, and the bottom for the piano. The flute part is marked *ff* and features a melodic line with slurs and accents. The cello part is marked *ff* and features a melodic line with slurs and accents. The piano part features a complex accompaniment with slurs and accents. The score is numbered 133 in a circle at the beginning.

The *Adagio* Variation J (136(2)-141(3)) uses two part imitation between the motif and its inversion, first appearing between the two piano parts and then between the cello and the flute parts.

eg. 42: III 136(2)-138(2)

Musical score for Variation J, measures 136-138. The score is in 5/4 time and features two systems of staves. The first system shows the flute and piano parts with *p espr.* markings. The second system shows the cello and piano parts with *espr.* markings. The piano part in both systems plays a rhythmic accompaniment.

The variation continues with strict imitation, using rhythmic diminution and augmentation between the four parts.

eg. 43: III 138(3)-140(1)

Musical score for Variation J, measures 138-140. The score is in 5/4 time and features two systems of staves. The first system shows the flute and cello parts with *V* markings. The second system shows the piano and cello parts with *6* markings. The piano part in both systems plays a rhythmic accompaniment.

The initial six-note motif of the *Fantasia* reappears in its original form (141(4)-142(3)), imitated by an inversion (142(2)-143(3)) in the Coda of the *Rondo*, thereby strongly confirming the work's cyclic unity.

eg. 44: III 141(4)-143(4)

⑭①

*dolce* 6

*pp*

*pp*

*pizz.*

*pp*

(>)

## CHAPTER VII

## GEORGE CRUMB

George (Henry) Crumb was born in Charleston, West Virginia in 1929. He received his early musical training from his parents, who were both professional musicians,<sup>1</sup> and studied at Mason College in Charleston<sup>2</sup> and at the Universities of Illinois and Michigan.<sup>3</sup> In 1955 he studied with Boris Blacher in Massachusetts<sup>4</sup> and Berlin.<sup>5</sup>

He held teaching posts at Colorado University (1959-1964) at SUNY (State University of New York), Buffalo (1964-5), and became professor and composer-in-residence at the University of Pennsylvania in 1965. He visited Korea, England, Denmark,

1. Borroff, E. *Crumb, George (Henry)*. in The New Grove Dictionary of American Music. vol. I. 1986. p. 551.

2. His father, a clarinetist, was a staff member at Mason College. Crumb's first composing experience was writing for his father's band as a child (Thomson, O. The International Cyclopedia of Music & Musicians. 1985. p. 498.).

3. He received his doctorate while studying under Ross Lee Finney, (Gagne, C. & Caras, T. Soundpieces: Interviews with American Composers. 1982. p. 118.) who after his father, had the greatest influence on the young composer (Borroff, E. Op cit. p. 551.).

4. Berkshire Music Center, Tanglewood (Butterworth, N. A Dictionary of American Composers. 1984. p. 111.).

5. Hochschule für Musik (Ibid. p. 111.).

Greece and Italy as state department lecturer. <sup>6</sup>

Crumb has been the recipient of numerous awards including a Fulbright Scholarship (1954), a Rockefeller (1964) and Koussevitzky Award (1965), a Pulitzer Prize (1968) and an award from the International Rostrum of Composers, which is affiliated to the United Nations Education, Science & Culture Organization, in 1971.

His works include orchestral music, numerous songs and song cycles for voice and instruments (on texts by F. G. Lorca, W. Whitman and E. A. Poe) and chamber music for diverse instrumental combinations, often incorporating unusual instruments such as the musical saw, stone jug, Jew's harp and an African log drum.

The trio *Vox Balaenae* of 1971 was inspired by the eerie singing of the humpback whale, <sup>7</sup> heard on tape in 1969. This expressive sound picture was composed in the period when Crumb's *"style became more advanced in idiom, concentrating upon timbre and texture more than upon*

---

6. Anderson, E. R. Contemporary American Composers: A Biographical Dictionary. 1982. p. 115.

7. Crumb, G. Score. 1971. Performance notes no. 1.

thematic development".<sup>8</sup>

The work is divided into the following eight parts:

I *Vocalise (... for the beginning of time)*

Wildly fantastic; grotesque

*Variations on Sea-Time:*

II *Sea Theme* Adagio; solemn, with a calm majesty

III *Archeozoic* (Var I) Timeless, inchoate

IV *Proterozoic* (Var II) Darkly mysterious

V *Paleozoic* (Var III) Flowing

VI *Mesozoic* (Var IV) Exultantly

VII *Cenozoic* (Var V) Dramatic; with a sense of imminent  
destiny

VIII *Sea-Nocturne (... for the end of time)*

Adagio; serene, pure, transfigured

It has, according to Crumb, a "three part design":<sup>9</sup>

i Prologue : *Vocalise* (I)

ii Variations: *Sea Theme* (II) and *Variations* (III - VII)

iii Epilogue : *Sea-Nocturne* (VIII)

---

8. Butterworth, N. Op cit. 1984. p. 111.

9. Crumb, G. Record sleeve. Columbia M 32739. 1974. p. 1.

The second part, *Variations on Sea-Time*, consists of the *Sea Theme* and five Variations which, if regarded as one movement, is the longest of the three. The main progression in the variations is established by mood changes achieved through musical elements such as tone color, tempo and dynamics.

The trio though eclectic, is motivically strongly unified, combining different musical writing techniques ranging from traditional and neoclassicism to "open" compositions.

1. Reference to traditional tonality is evident in the final movement *Sea-Nocturne*,<sup>10</sup> which is written "in the luminous tonality of B major".<sup>11</sup> Polytonality, however, is evident in VI, where each part uses different scale patterns (see eg. 37 and 39).

2. Avant-garde instrumental trends are illustrated in:  
the flute part indicating

---

10. "The tonal music in *Sea-Nocturne* is to be read in the traditional manner (Crumb, G. *Score*. 1971. Performance Notes no. 5.).

11. Crumb, G. Record sleeve. Columbia M 32739. 1974. p. 1.

harmonics, <sup>12</sup> (see eg. 35: motif bb)

glissandi, <sup>13</sup> (see eg. 27: motif l)

a specified tempo indication with vibrato, <sup>14</sup> (see eg. 32 motif t)

the simultaneous singing and whispering over the mouthpiece of the instrument while playing; (see eg. 24: motif j)

the cello part incorporating interesting fingering techniques such as:

glissando combined with both natural<sup>15</sup> and artificial<sup>16</sup>

---

12. Natural harmonics on the flute are produced by combining the technique of overblowing with the use of normal fingerings from b3 to d#5. The overtone series used is that for pipes open at both ends.

13. Flute glissandi can be produced with the headjoint, the fingers or the lips. The finger type specified here can only be performed on open-hole flutes where fingers slide carefully off the holes of the keys, before lifting the rims of the keys. The finger glissando can be identified from a lip glissando by the indicated duration, although the difference is not always clear.

14. Flute vibrato can be produced by the throat (Bartolozzi, B. New Sounds for Woodwinds, 1967. p. 24.), the lips (Ibid. p. 24.), the larynx (Artaud, P. & G. Geay. Present Day Flutes, 1980. p. 16.), or the diaphragm (Ibid. p. 16.). The latter technique can be best controlled to vary the speed and intensity levels required in twentieth century trios.

15. Natural harmonics (° or flageolet) are "obtained by the light touch of a left hand finger at one of the nodes of an open vibrating string" (Mony, W. A. Avant-garde String

- harmonics <sup>17</sup> (see eg. 13: motif g)
- microtones <sup>18</sup> (see eg. 30: motif o)
- percussive fingering <sup>19</sup> (see eg. 34: motif v & w)
- double stops <sup>20</sup> glissandi played with ponticello <sup>21</sup>  
 bowing (see eg. 35: motif dd)

Techniques (1950-1975). 1982. p. 327.), resulting in a pure 'bell-like' tone quality due to the absence of the upper partials.

16. Artificial harmonics (diamond) are "based on a fundamental which is created artificially. The open string is effectively shortened by stopping it firmly with a lower finger (1 or 2) at the desired fundamental; simultaneously one of the higher fingers (3 or 4) touches the shortened string lightly at one of the nodes" (Ibid. p. 328.).

17. "Numerous frequencies are present in a pitched tone. The fundamental frequency is either the lowest or the dominant / (loudest) frequency present in the note. Additional frequencies above the fundamental are called overtones or harmonics. ... The fundamental frequency or any of the harmonics are called partials of the tone" (Holmes, T. B. Electronic and Experimental Music. 1985. p. 240-241.).

18. Microtones are "pitches smaller than the semitones of the equal tempered twelve-tone division of the octave span" (Mony, W. A. Op cit. p. 389.).

19. "Strike string sharply with fingertip" (Crumb, G. Score. 1971. Performance note \*\*\*\*\*. p. 9.).

20. Two pitches played simultaneously on a stringed instrument.

21. Ponticello literally means the bridge of the stringed instrument. When bowing is specified very close to the bridge a flutelike sound is produced.

scordatura tuning.<sup>22</sup>

The piano part requires special performing techniques involving the *strings* of the instrument together with the damper pedal such as:

pizzicato<sup>23</sup> (see eg. 31: motif q1)

harmonics<sup>24</sup> (see eg. 9: motif e)

muted tones<sup>25</sup> (see eg. 8: motif c)

---

22. Scordatura refers to the tuning of a stringed instrument to pitches other than the normal, as suggested by the composer. In the trio the three lower strings undergo the following pitch changes:



(Crumb, G. Score. 1971. Performance notes no 9.)

23. The plucking of strings with fingertip.

24. Piano harmonics are produced in two ways:

1. "by depressing one or more keys in such a way as to release the dampers without allowing the hammers to strike the strings and then inducing vibrations in these strings by striking and releasing other keys" (Randel, D. M. The New Harvard Dictionary of Music. 1986. p. 364.), and

2. "by touching the proper node on the interior string with the fingertip of one hand while striking the corresponding key with the other hand" (Read, G. Op cit. 1976. p. 55.). Crumb uses the first technique extensively throughout the trio, while the second appears in Var III, V and Sea-Nocturne.

25. "Mute strings about one inch from end with fingertip" (Crumb, G. Score. 1971. Performance note \*\*, p. 7.).

glissandi<sup>26</sup> (see eg. 8: motif d)

The following *prepared* piano techniques, where additional utensils are either **applied** or **attached** to specific piano strings, are used. The former includes "*chisel-piano*" (see eg. 31) and a glass rod (see eg. 37, 38), while the latter uses a paper clip (see eg. 32).

3. The trio is scored for three **amplified** acoustical instruments, thus creating a new sound spectrum from the traditional instruments. The following miniscule sound effects, generally scarcely audible, are only projected when amplified:<sup>27</sup>

---

26. Glissandi produced on the strings are performed with the right hand thumbnail or the left hand fingertips.

27. "*The three instruments should be amplified and for this purpose conventional microphones would be quite practical. For the piano, a microphone should be suspended over the bass strings of the instrument; for the flute and the cello, microphones should be placed near the instruments. Alternate possibilities: for the flute, a special joint equipped with a built-in pick-up can be used; for the cello, a contact microphone can be affixed to the belly of the instrument. The placement of the speakers is left to the discretion of the performers. The amplification should be adjusted so that forte passages are quite powerful in effect, but without distortion, and the level of amplification should not be adjusted during the performance*" (Crumb, G. Score. 1971. Performance notes no. 2.).

the simultaneous singing while playing in the flute part (see eg. 24),

the glissando effect in the cello part (see eg. 29) and the application of a paper clip in the piano part (see eg. 32).

4. Theatrical effects include the performers wearing black half-masks ("*vizor-mask*")<sup>28</sup> as well as the use of deep-blue stage lighting.

*"The use of exotic percussive effects are evocative of oriental theater and dance"*<sup>29</sup> and are evident in the four antique cymbals (*crotales*) (see eg. 15) and the sound qualities achieved by the "*chisel piano*" (see eg. 31), the *glass rod* (see eg. 37, 38) and the "*fifth partial harmonics*" (see eg. 36).

---

28. "*The masks, by effacing a sense of human projection, will symbolize the powerful impersonal forces of nature (nature dehumanized)*" (Crumb, G. *Score*. 1971. Performance Notes no. 1.).

29. Wernick, R. in *Dictionary of Twentieth Century Music*. 1974. p. 156.

5. The titles of the five variations<sup>30</sup> in the second

---

30. The Archeozoic and Protozoic Eras "are the two divisions of the Cryptozoic (hidden life) Era and are often designated as subdivisions of Pre-Cambrian time" (Young People's Science Encyclopedia, vol. 2, p. 132.).

*Variation I: Archeozoic Era.*

"It is thought that some form of plant life was present .... No fossils have been found ... but some formations in the limestone are believed to be evidence of some kind of sea plant" (Ibid. vol. 2, p. 132.).

*Variation II: Proterozoic Era.* "The lime deposits of blue-green algae are the only known plant fossils. Animal fossils are even more rare and less distinct. They include the marine worms, jellyfish, sponges, and one-celled protozoans. These plants and animals were all marine forms" (Ibid. vol. 14, p. 1377.).

*Variation III: Paleozoic Era.*

"During this 400 million years many changes occurred, with a progression from the Age of Invertebrates to the Age of Fishes and the Age of Amphibians. During this era came the first vertebrates, land animals, insects, plants, forests, and seed-bearing plants" (Ibid. vol. 13, p. 1239.).

*Variation IV: Mesozoic Era.*

This "is the age of the dinosaurs, the 'middle' time era in the earth's history. ... Pines and flowering plants were new developments. Reptiles were the most important form of animal life in numbers and kinds. Insects and the first gliding birds appeared" (Ibid. vol. 11, p. 1047.).

*Variation V: Cenozoic Era.*

This era "represents the most recent history of the earth. Referred as the *Age of Mammals*, it covers a period of time of at least 65 million years. Nearly all of the important

movement refer to Geological eras. <sup>31</sup>

6. Another feature common to some twentieth century works is the use of the citation technique whereby motifs or ideas are borrowed from other composers.

6.1 Crumb uses a quotation taken from R. Strauss's "*Also sprach Zarathustra*" in his *Vocalise* which forms an intrinsic part <sup>32</sup> of the composition. (see eg. 6: motif a, b, c)

6.2 A second and more important example involves a clear reference to Messiaen's *Quartet for the End of Time* (*Quatuor pour la Fin du Temps* 1940-1941) for clarinet, violin, cello and piano. Part of the first (I) and last movements (VIII) of the trio "... for the beginning of time" and "... for the end of time" respectively are derived from Messiaen's title.

Several other notable similarities occur between these two works:

---

features of the earth's surface today were formed during this era" (Ibid. vol. 4. p. 361.).

31. See Appendix VI for the Geologic time table (Young People's Science Encyclopedia. vol. 8. Children's Press. Chicago. 1982. p. 766-767.).

32. Refer to 7.1 for the explanation as an unifying element.

1. The title of the trio's first movement "Vocalise" is derived from the quartet's second movement "Vocalise, pour l'Ange qui annonce la fin Temps".

2.1 They combine woodwind, string and piano colour.

2.2 The woodwind instrument features as a prominent solo instrument (Messiaen, III: Abyss of the birds, and Crumb, I: Sound of the Humpback whale.).

3.1 The eight part structure found in the trio is reminiscent of the quartet.

3.2 Messiaen unifies movements II and VII,<sup>33</sup> and Crumb II and VIII.<sup>34</sup>

3.3 Clear tonality is used in certain movements - Messiaen V and VIII and Crumb in VIII (*Sea-Nocturne*).

3.4 Last movements have a slow tempo indication, (Crumb "Adagio" and Messiaen "Extrêmement lent et tendre, extatique") and end with a repetitive motif dying away. (see eg. 18: Crumb VIII 15:3)

eg. 1: Messiaen VIII 31-33

(terminé au Stalag VIII A. Gurlitz, Silésie, en janvier 1941)

33. See Appendix VII with diagram taken from Johnson, R. S. Messiaen. 1975. p. 63.

34. See Appendix VII with diagram.

4. Instrumental sound qualities in the trio can also be linked to the quartet:

4.1 The sustained cello harmonics in the first movement  
eg. 2: Messiaen I 2(3)-6 (cello)

The image contains two musical staves for cello. The top staff is labeled 'cello' and shows a melodic line with a '1' above the first measure and 'ppp (vibrato)' below the first two measures. The bottom staff shows a similar melodic line with 'glissando' markings above the first and fourth measures and an asterisk (\*) below the first measure.

also occur in Crumb's *Sea Theme* (see eg. 13: II 8:1).

4.3 The thematic material in Crumb VI can be linked to the whole tone scale pattern in Messiaen VI 1-4 (see eg. 2). The augmented fourth is prominent in both movements.

4.4 The repeated note pattern found in the bass line of the piano part in VII of the Quartet (13(3), 15, 39, 43, 94) recalls a similar motif in the Trio (see eg. 8: motif c).

eg. 3: Messiaen VII 15(1-2)

Musical score for Messiaen VII 15(1-2). The score includes parts for Violin (vn), Clarinet (Clar.), Cello (celle.), and Piano (piano). The piano part features a tremolo figure in the bass line, marked with *sf* and *8<sup>a</sup> bassa*. The number 15 is written above the violin staff.

4.5 The cello glissando effects used against a tremolo figure in the other three instruments (Messiaen VII 23, 67, 70-73) can be compared with the glissando - microtone - trill - sul ponticello cello part found in the Trio (see eg. 11: motif f).

eg. 4: Messiaen VII 23-24

Musical score for Messiaen VII 23-24. The score includes parts for Violin (vn), Clarinet (Clar.), Cello (celle.), and Piano (piano). The tempo is marked *Au mouvt*. The piano part features a tremolo figure in the bass line, marked with *fff (trille)*. The cello part features glissando effects, marked with *arco glissando* and *glissando*. The number 23 is written above the violin staff.

4.6 Messiaen frequently uses melodic patterns played in unison and octaves, between the different instrumental parts (Messiaen: II vn & vc; IV vn, vc, cl; VI all five parts; VII). This thin texture creates a unique colour.

eg. 5: Messiaen VI 1-3

1 Décidé, vigoureux, granitique, un peu vif

VOLON *ff*

CLARINETTE en Si *ff*

VIOLONCELLE *ff*

PIANO *ff (non legato, martelé)*

A Décidé, vigoureux, granitique, un peu vif (♩ = 176 env.)

A similar sound effect is achieved in Crumb VI despite using only two instruments (flute and cello) in octaves. This may have suggested the prepared piano technique of applying the glass rod indicated by Crumb in VI (see eg. 37 & 38).

7. The recurrence of the following motivic material helps to unify the trio (motifs a - j):

7.1 "The emergence of man ... is symbolized by a restatement of the Zarathustra reference" <sup>35</sup> first introduced in the flute (motif a) and piano parts (motif b) of the Vocalise (I)

eg. 6: I 7:1

The musical score for 'Vocalise (I)' consists of two parts: Electric Flute (E.Fl.) and Electric Piano (Electric Piano).  
 The E.Fl. part starts with '(a tempo)' and features three motifs: a triplet of 3 notes, another triplet of 3 notes, and a quintuplet of 5 notes. Dynamics range from *p* to *fff*. A note is marked with an asterisk and the instruction '(mulate brass timbre)'.  
 The Electric Piano part includes a section marked '(dramatic, fateful!)' with dynamics *fff* and *f*. It also features an 'allarg.' section with '(mute strings)' and a 'f' dynamic. A note is marked with an asterisk and the instruction '(hold pedal down) (on keys)'. A tempo change to 'allarg.' is indicated with a dashed line. A bracket labeled '3' spans a section of the piano part.

returning in the piano chords of the Cenozoic variation (VII).

eg. 7: VII 12:1

12:3

Two musical excerpts for Electric Piano (E.Pno.) are shown. The first excerpt features a triplet of 3 notes with dynamics *fffz*. The second excerpt features a triplet of 3 notes with dynamics *fff* and a note marked with an asterisk.

35. Crumb, G. Record sleeve. Columbia M 32739. 1974. p. 1.



Motifs c, d and e reappear simultaneously in the Sea-  
Nocturne, thus unifying all three movements.

eg. 10: VIII 15:2

Handwritten musical score for a cello part. The score includes a complex glissando and trill passage. Key annotations include:
 

- Top staff: *rapid gliss. over strings (fatefully)*, *act. sound*, *on keys*, *3* [a tempo,  $\text{♩} = \text{ca. } 40$ ], *5*
- Dynamic markings: *poco f*, *ppp*, *f*, *ppp*
- Performance instructions: *depress keys silently*, *touch strings at node for 5th part. harmonics*, *gliss. over strings (fingertip) (l.v.)*
- Pedal markings: *senza Ped.*, *Ped.*
- Bottom section: *d*, *e*, *c*, *d* (motifs in boxes)

7.3 The trill (motif f) in the cello part of VII (13:1)

eg. 11: VII 13:1

Handwritten musical score for a cello part showing a trill. Key annotations include:
 

- Staff: *arco #e*, *begin modo ord.*, *ff intense (glissando sempre)*, *f*
- Performance instruction: *very gradually move bow to*
- Timing: *= 3 sec.*

refers back to the Archeozoic variation (III 9:1).

eg. 12: III 9:1

Handwritten musical score for a cello part (E.V.C.). Key annotations include:
 

- Staff: *pppp*, *(pochiss.)*, *(pochiss.)*, *(al niente)*
- Performance instructions: *sul pont. sempre*, *tr(1/2) (sempre gliss.)*, *3*, *4*, *3*, *5*

7.4 The *Sea Theme* introduces the cello part playing double stops indicated as two harmonics. The pianist silently depresses chords on the keyboard, over a sostenuto pedal while playing rapid glissandi with the fingertips on the strings, thereby enhancing different harmonics as the various strings vibrate in sympathy.

eg. 13: II 8:1

The musical score consists of two staves: 'Electric Cello' and 'E. Pno.'. The 'Electric Cello' staff has two sections, 'g1' and 'g2', each with a bracket above it. The 'E. Pno.' staff has a section marked '(l.v.)' followed by a series of notes and chords. The score includes various musical notations such as double stops, glissandi, and dynamic markings. Performance instructions are written in the margins, including 'rapid gliss. over strings (fingertip)' and 'depress keys silently'. Pedal markings are indicated at the bottom of the 'E. Pno.' staff.

The three ideas (g, h, and i) announced in the *Sea Theme* (II) further unify the trio by reappearing as the main material in the *Sea-Nocturne*<sup>38</sup> (VIII).

38. According to Crumb the *Sea-Nocturne* is "an elaboration of the *Sea Theme*. / ... In composing the *Sea-Nocturne* I wanted to suggest 'a larger rhythm of nature ... and a suspension in time" (Crumb, G. Record sleeve. Columbia M 32739. 1974. p. 1-2.).

eg. 14: VIII 13:3<sup>39</sup>

The musical score for Example 14 shows two staves: E.Fl. (top) and E.Vc. (bottom). The key signature has two sharps (F# and C#). The score is divided into six measures, each with a bracketed label above it: g1, g2, h, gI, i, and h. The first measure (g1) features a flute part with a 'whistle' instruction and a portamento (port.) leading to a note. The second measure (g2) is similar. The third measure (h) is marked 'mp' and '(sim.)' and features a complex melodic line. The fourth measure (gI) is marked 'mp' and '(sim.)' with a 'y y' instruction. The fifth measure (i) is marked 'mp' and '(sim.)'. The sixth measure (h) is marked '(sim.)'. The E.Vc. part in the first two measures is marked 'mp dolce, espr.' and includes a 'whistle' instruction.

In this reappearance the performers are required to whistle rather than to play their instruments. This strongly resembles the distinctive sound quality produced by the cello harmonics in the initial presentation in the Sea Theme.

7.4.1 Motif *g* is introduced in the flute part, and sequentially repeated by the cellist. This motif also appears in the piano part (14:1) and in the antique cymbals (14:1-2, 15:3) played by the flautist and the cellist.

eg. 15: VIII 15:3

The musical score for Example 15 shows two staves: [Fl.=] (top) and Ant.Cym. (bottom). The key signature has two sharps (F# and C#). The score consists of three measures. The first measure is marked 'pp (let cymbals ring)'. The second measure is marked 'pp'. The third measure is marked 'ppp' and includes an upward-pointing arrow below the staff.

39. Portamento is "a very short glissando immediately preceding the note" (Crumb, G. Score. 1971. Performance notes no. 11.).

Inversion of g features in

eg. 16: VIII 13:3

Handwritten musical notation for Flute (Fl) and Violoncello (Vc) parts. The Fl part shows a melodic line with a bracketed section labeled 'gI'. The Vc part shows a rhythmic pattern with 'y' notes and a 'sim.' marking. The dynamic marking 'mp' is at the bottom.

Another variation of this motif is contained within the 10-note ostinato pattern in the piano part appearing in several variants before returning to the complete pattern in 15:1.

eg. 17: VIII 14:1

Handwritten musical notation for E.Pno. showing a 10-note motif and its variations. The motif is circled and labeled 'g'. The variations are labeled 'gI', 'g', and 'gI'. The dynamic marking 'mp' is at the bottom.

[10-note motif] | [variation of 10-note motif]

Crumb states that "The concluding gesture of the work is a gradually dying series of repetitions of a 10-note figure."<sup>40</sup>

40. Crumb, G. Record sleeve. Columbia M 32739. 1974. p. 2.

eg. 18: VIII 15:3

7.4.2 motif h comprises a mainly descending line featuring twice, firstly in the flute part followed by an echo in the cello part.

eg. 19: VIII 13:3

This reappears in 14:2 with imitation between the cello and flute parts, while the right hand piano part follows the shape of the melodic line

eg. 20: VIII 14:2

7.4.3 motif i is a symmetrical rising and falling pattern appearing respectively in the cello (13:3, 15:1) and the flute parts (14:3).

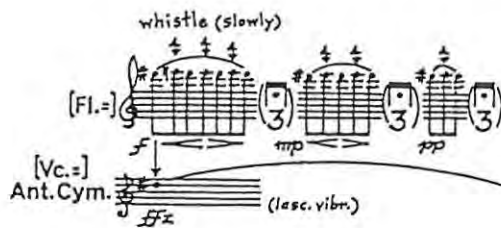
eg. 21: VIII 13:3



These three self-contained motifs subsequently reappear throughout the movement.

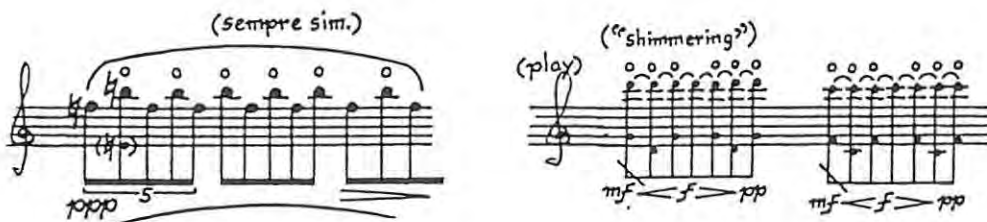
8.1 The antique cymbals at first in combination with whistling, serve as a tone color link between the end of the Variations (VII 13:2) and the Sea-Nocturne (VIII 14:1-2, 15:3 see eg. 15).

eg. 22: VII 13:2



8.2 A second tone colour link is established in the flute harmonics used in V 10:1-2 and VIII 14:1-2.

eg. 23: V 10:1 : VIII 14:1



9. Additional independent melodic material (j - jj), confined to the *Vocalise* (I) and *Variations I-IV* (III - VI), is dealt with chronologically.

9.1 The *Vocalise* (I) starts with an extended flute solo or according to Crumb a "cadenza".<sup>41</sup> The flautist simultaneously plays and sings into his instrument, while the damper-pedal of the piano is kept depressed to facilitate sympathetic vibrations from the keyboard.

Crumb specifies two techniques in this opening flute solo. The first (motif j) indicates the duplicating of the flute part with the voice. The pitch between the parts will vary from unison (for a female player) to the octave (for a male), as indicated in the example.

eg. 24: I 6:1

The image shows a musical score for Electric Flute. It consists of two staves. The top staff is labeled 'play' and the bottom staff is labeled 'sing'. The music is written in a 4/4 time signature. The top staff begins with a treble clef and a key signature of one flat. The bottom staff begins with a bass clef. The score includes various musical notations such as notes, rests, and dynamic markings. Handwritten annotations include: '\*1) "Sing-flute"', 'ffpp sub.', 'molto f sempre', and 'sub p'. A boxed note at the bottom reads: 'N.B. The pianist should keep the damper pedal depressed throughout the flute solo!'

The second technique requires the player to cover the mouthpiece with the lips projecting the sound through the

41. Crumb, G. *Record sleeve*. Columbia M 32739. 1974. p. 1.

closed pipe. The sustained voice part is indicated with  $\curvearrowright$  and  $\dagger$  while fingering changes in the flute part are presented as broken chords (motif k1: 6:1), trills (motif k2: 6:1,2) and

eg. 25: I 6:1

broken chords & trill  
sustained voice part

runs (motif k3: 6:3).

eg. 26: I 6:3

runs & trill  
sustained voice part

Crumb combines both types with finger glissandi creating mysterious effects such as a slow glissando (motif 1) performed with flutter-tonguing<sup>42</sup> over the open pipe,

42. Flutter tonguing is produced by pronouncing the letter "r" on the embouchure of the head joint with the tongue or the uvula. The tongue produces a fairly slow trill and is more difficult in the low and very high notes of the instrument as well as in fast articulated sections where the tone quality deteriorates accompanied by a windy sound. Artaud & Geay (Op cit. p. 19.), prefer the throat method activating the uvula to produce

eg. 27: I 6:4

and a slow glissando (motif *m*) in the voice part combined with a fast tremolo (specified as a trill) played across the closed pipe.

eg. 28: I 6:4

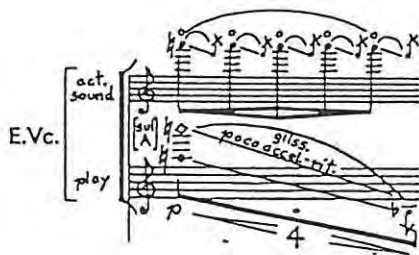
9.2 The Archeozoic (III) variation introduces two different descending glissandi in the cello part and a symmetrically ascending and descending example in the piano part. The three glissandi are presented in alternation between the two instruments and have clear performance instructions.

---

a fast trill, with no loss of tone and brilliant in all registers. The type of flutter tonguing preferred by the player will most likely depend on the 'r' pronounced most naturally in his mother tongue, therefore French players like Artaud and Geay will prefer flutter tonguing produced with the uvula.

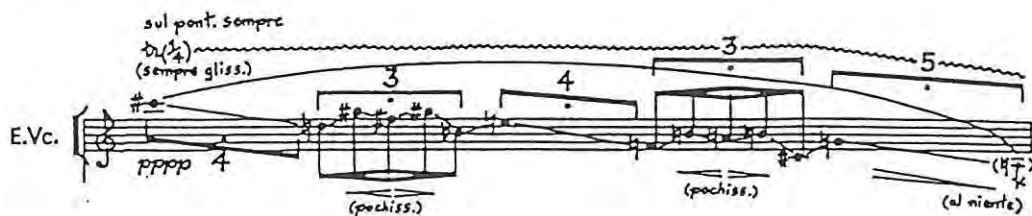
The haunting "seagull effect" in the cello part (motif n) combines the glissando technique with harmonics on the A string and is produced "with 4th finger (lightly touching string) an octave above lower note. Keep same spacing of hand throughout glissando (the interval thereby diminishing)." 43

eg. 29: III 8:2



The second cello technique (motif o), concluding this Variation, produces a mosquito-like sound and combines the quarter-tone trill and a glissando fingering techniques with the bowing technique sul ponticello. The intervals of the augmented fourth and different degrees of the seventh are prominently used.

eg. 30: III 9:1



43. Crumb, G. *Score*. 1971. Footnote \*\*\*. p. 8

The oriental "*chisel-Piano*" effect (motif p) in III is produced by a "5/8 inch chisel with smooth cutting edge" to create special harmonics and glissandi on the strings. "In (sic) first phrase, apply chisel (hold in r.h.) to A string at proper point to produce written D# when (sic) string is plucked (l.h.). Slide chisel smoothly along string to produce the various pitches."<sup>44</sup> The sostenuto pedal remains depressed.

This glissando can be divided into three motifs, the first has a compass of a diminished third or a major second (p1), the second motif (p2) a perfect fourth or a double diminished fifth and the third one (p3) a minor seventh.

All three motifs are accompanied by a single rhythmically repeated note<sup>45</sup> (motif q1).

eg. 31: III 8:2-3

The musical score for E. Pno. illustrates three motifs (p1, p2, p3) and a repeated note (q1). The score is written on two staves. The upper staff shows the glissando effect, with notes marked with 'x' and 'k' indicating the chisel's position. The lower staff shows the repeated note (q1) with a 'fizz. (ff.)' marking and a 'mp' dynamic. The score includes performance instructions such as 'chisel on string (A4) (semprè gliss.)', 'fizz. (ff.)', 'mp', '(hold Pedal down) (hold Pedal down - -)', 'accell. - - - rit. - - -', 'on the key', and '13 = p'. The motifs p1, p2, and p3 are bracketed above the upper staff, and q1 is bracketed below the lower staff.

44. Crumb, G. *Score*. 1971. Footnote \*\*\*\*, p. 8.

45. This figure is related to the repeated flute figure in eg. 32.

9.3 The *Proterozoic* (IV) variation combines the three instruments, using the piano part as an accompaniment for the alternating melodic line appearing in the flute and the cello parts.

The piano motif (r) consists of a pizzicato note followed by a scraping sound (added vibrations) and is achieved by applying a paper clip to the string (see eg. 32). The two B strings are used alternatively to avoid "choking vibrations".<sup>46</sup>

The three melodic phrases, each separated by rests of approximately five seconds duration, are subdivided into three compound motifs in the flute and four in the cello parts. The three flute motifs consist of a fast moving angular motif (s), a single note motif (t) with a "slow, wide"<sup>47</sup> vibrato and a whispering motif (q2) using the syllables "ko-ki-ka-ku-ka-ki-ko"<sup>48</sup> over the mouthpiece.

---

46. Crumb, G. *Score*. 1971. Footnote \*\*\*. p. 9.

47. *Ibid.* p. 9:1.

48. *Ibid.* p. 9:2.

eg. 32: IV 9:1-2

PROTEROZOIC [VAR. II]  
Darkly mysterious  
♩ = 60

E.Fl. [a slow, wide vibr.] [whisper] "speak-flute"  
Ko-ki-ka-ku-ka-ki-ko

E.Vc. [lay bow aside] apply paper clip to vibrating strings  
pizz. (f.t.)

E.Pno. (steady, unvarying) sempre sim.  
p sempre (like a longer rhythms of nature)  
(hold Ped. down --)

s t q2

The angular flute motif (s) is repeated thrice, the first repetition being sequentially higher, finally combining both in an extended repetition as shown in example 33.

eg. 33: IV 1-3

E.Fl. s t q2

The cello motifs all produced without the bow, start with a rapid pizzicato tremolo with two fingers (motif u), followed by two further ideas, motifs v and w. Motif v is produced by striking the "string sharply with fingertip (percussive fingering); then slide to the next pitch" and motif w by plucking "string with 4th (sic) finger while stopping with

1st (sic); then slide to next pitch(es)." 49 A pizzicato arpeggio chord (motif x) ends the phrase.

eg. 34: IV 9:2

The musical score is for Violin (l.h.) and Cello (r.h.), with a bracketed section for Violin and Cello (Vc.). The score is divided into two main sections, 'V' and 'W', each containing a triplet of notes. The first section 'V' is marked with a forte dynamic (f) and includes instructions for 'mort.' (marcato), '(l.h. pizz.)' (left hand pizzicato), and '(accel.--)' (accelerando). The second section 'W' is marked with a mezzo-forte dynamic (mf) and includes instructions for 'mort.' and '(l.h. pizz.)'. The left hand part features a 'very rapid pizz. tremolo (2 fingers)'. The right hand part includes a 'pizz. arpegg.' (pizzicato arpeggio) marked with a 'p' and 'x'. The score concludes with a 'Coda' section marked with a 'C' and 'f'.

The Coda ends softly and expressively with a shortened flute motif (r) alternating with cello pizzicato chords (motif x).

9.4 The *Paleozoic* (V) variation is characterized by the use of harmonics in all three instrumental parts which together with extremely soft dynamics (pp-pppp), enhance the watery image. The main focus in this variation is possibly on marine life. 50

49. Crumb, G. *Score*. 1971. Performance note \*\*\*\*\*, p. 9.

50. See Appendix VI.

Diminished fifths / augmented fourths are used extensively throughout the movement, first introduced in the piano part and echoed in the flute and cello parts. <sup>51</sup>

A four part phrase structure (aa bb cc dd) occurs three times in succession. The piano is used as individual sound source (motifs aa and cc) while the cello part alternatively combines with the flute part (motif bb) or when appearing separately (motif dd), plays single or double stop glissandi sul ponticello.

eg. 35: V 10:1

The image shows a handwritten musical score for three instruments: E.Fl. (English Flute), E.Vc. (Electric Violin), and E.Pno. (Electric Piano). The score is divided into four motifs: aa, bb, cc, and dd. Motif aa is in the piano part, motif bb is in the flute and violin parts, motif cc is in the piano part, and motif dd is in the violin part. The score includes various performance instructions such as 'pppp legatiss.', 'sul pont.', 'gliss.', 'pizz.', 'ffz pp sub.', and 'poco f'. There are also some handwritten notes like '(on keys)', '(legatiss.)', '(sulle D#-A)', '(l.v.)', and '(mod.)'.

51. With the indicated scordatura tuning the open strings are now an augmented fourth apart.

A contrasting idea using artificial <sup>52</sup> piano harmonics (motif ee) and a cello glissando "over natural harmonics" <sup>53</sup> (motif ff) (produced on the D# and the A strings), separates the initial aa bb cc dd structure and the concluding cc dd idea of the first phrase.

eg. 36: V 10:2-3 (motifs ee, ff, cc, dd)

The image shows four musical motifs labeled ee, ff, cc, and dd.   
 - **Motif ee**: Features piano harmonics on the 5th string, with instructions like "(made ord.)", "gliss. over natural harmonics", "(sul D#)", "pp sempre", "act. pitch = p", "(on keys)", and "touch string at proper node for 5th part. harmonics".   
 - **Motif ff**: A cello glissando over natural harmonics, marked "(sul A)".   
 - **Motif cc**: A piano part with pizzicato ("pizz. ffz pp sub. (f.f.)") and sub-octave notes ("poco f").   
 - **Motif dd**: A cello glissando over natural harmonics, marked "sul pont." and "(gliss.)".

9.5 The *Mesozoic* (VI) variation has a "percussive, 'jangling'" <sup>54</sup> sound quality with a Oriental sitar flavor achieved by the positioning of a glass rod "over (sic) strings (next to (sic) dampers)" <sup>55</sup> in the prominent piano part.

52. "Touch string at proper node for 5th part. harmonic" (Crumb, G. Score. 1971. p. 10:2.).

53. Ibid. p. 10:2.

54. Ibid. Performance note \*\*. p. 10:3.

55. Ibid. p. 10:3.

The dynamic range varies from p to fff, with the louder levels more frequently used.

This Oriental flavour is enhanced by acciaccaturas and bitonal modal motifs of a minor third, a whole tone and / or a semi-tone appearing in all the instrumental parts. The following motifs appear throughout the movement.

Motif gg consists of four freely alternating notes (b<sup>b</sup> d<sup>b</sup> e<sup>b</sup> a) in the right hand piano part and motif hh of a three note motif (e g a) in the left hand part.

eg. 37: VI 10:3

The third motif (ii) is derived from motif hh formed into a cluster and uses acciaccatura chords alternating between the left and right hand piano parts.

eg. 38: VI 11:1

The flute and the cello parts (motif jj) share a five note motif (d# f g<sup>b</sup> a b) two octaves apart.

eg. 39: VI 10:3-11:1

The image shows a handwritten musical score for two staves: E. Fl. (English Flute) and E. Vc. (English Violoncello). Both staves are in the key of D major (one sharp) and 4/4 time. The music consists of a five-note motif: D#4, F5, Gb5, A5, B5. The flute part is written in the treble clef, and the cello part is written in the bass clef. The notes are beamed together and have a fermata over them. The flute part is marked with a dynamic of *ff* and the instruction "broad, with passion!". The cello part is also marked with *ff* and "broad, with passion!". There are two measures of the motif, with the second measure marked with "(ff sempre)".

## CHAPTER VIII

### CONCLUSION

Flute Trios cater for many different tastes. There are many works available from which one can select several programmes which will provide for a group's specific needs in difficulty, taste and style. The six trios selected for discussion as examples of varying style periods (Chapters II - VII), illustrate some of the variety accessible to performers which is further enjoyed by listeners. The *Five Impressions of a Holiday*" by Goossens (Chapter II) is Impressionistic in style and though the ensemble is taxing, audiences enjoy it. The Programmatic *"The Hedgehog and the Nightingale"* by Sil'vansky (Chapter III), is readily accessible to all age groups. Raphael's *"Trio-Suite"*, written in a Neo-Baroque style (Chapter IV) and the Neo-Classic *"Sonate en Concert"* by Damase (Chapter V), are relatively easy for the performers and delightful for audiences. Of the two remaining works the Expressionistic *"Trio"* by Marx (Chapter VI), is the most difficult trio for listeners to assimilate, while Crumb's avant-garde *"Vox Balaenae"* (Chapter VII) is the most demanding trio to perform but less challenging for the audience to comprehend.

From this study the following conclusions can be made:

## 1. INSTRUMENTAL RANGE

Crumb indicates the lowest piano note (a1), followed by Damase (c1), Goossens (c#1 enharmonic), Sil'vansky, (f1), Marx (f#1) and Raphael (g1). The highest ranges used are: Crumb (b8), Goossens (a8), Raphael (g#7), Damase (f7), Sil'vansky (c#7) and Marx (g#6).

All six cello parts require the cellist to play the lowest note on the instrument, with the indicated scordatura tuning lowering the string to b in the trio by Crumb. The highest notes vary between a3 (Raphael) and d#5 (Crumb), with Damase, Goossens & Sil'vansky and Marx using e#4, g4 and g#4

respectively. The highest indicated harmonic sound was written by Crumb (a5°), with Marx and Damase both indicating a4°.

Crumb is the only composer requiring the flautist to use an extended foot joint, which enables the player to produce the low b. Apart from Sil'vansky who indicates f#1 as the lowest note, middle c is written by the other composers. The highest range for the flute varies from a3 (Raphael), a#3 (Damase), b3 (Marx), c4 (Goossens) to an extension into the fourth register (above the normal c4) used by Crumb (d4) and Sil'vansky (a4).<sup>1</sup> These top notes are unusual in trios,<sup>2</sup> only occurring once in each trio and situated at the climax of the piece.

## 2. INSTRUMENTAL TECHNIQUES

### FLUTE

Goossens writes well for the flute, applying the full range of the instrument and successfully using flautistic

---

1. According to the flute fingering charts by P. Artaud & G. Geay (Present Day Flutes, 1980. p. 15.), and R. Dick (The Other Flute, 1975. p.7.), f4 and f#4 are respectively the highest notes playable on the instrument.

2. The Trio's by the American composer Wuorinen also indicate the use of the fourth register (with the highest note f4).

ornamentation such as acciaccaturas, trills and tremolos.

The flute part can be substituted by a violin, but only in the last movement is an occasional alternative given in the score, adapting to the diverse capabilities of the different instruments. It is felt however that the flute is more suited to the required impressionistic sounds.

The most significant change involves the descending chromatic scale in V bar 23 which is replaced by a long trill in the violin part. Chromatic runs are technically easier on the flute than on the violin and have a brighter, cleaner quality. Avoiding a problematic chromatic scale in combination with a whole tone scale in the cello part is a wise decision.

eg. 1: V 23-26

The next example is more suited to the violin as the suggested pitches are all in the low register of the flute which projects with difficulty and requires difficult fingering combinations involving both fifth fingers in alternation. The piano part, occurring in a higher range than the flute, further complicates instrumental balance.

eg. 2: III 104-107



The chant effect needed in IV bars 1-24 will be better portrayed when performed by a uniform string sound.

Like Goossens, the flute parts by Sil'vansky, Damase and Crumb display the agility of the flute in frequent trills, runs and acciaccaturas. Sil'vansky does not specify the instrument's lowest range, while Damase compensates for the softer tone qualities achieved in the very low pitches, (cl - dl) by writing thin textured accompanying parts and / or soft dynamic indications.

Crumb's trio further displays fluttertonguing as well as the following avant-garde techniques: harmonics, glissandi, specified tempo indication with vibrato, as well as singing, whistling and talking over and into the mouthpiece. In addition the flautist is required to "emulate brass timbre"<sup>3</sup> on the instrument, while the indicated harmonics should be "shimmering".<sup>4</sup>

---

3. Crumb, G. Score. p. 7:1.

4. Ibid. p. 14:1.

Marx and Raphael write similar melodic material for both flute and cello parts, incorporating polyphonic devices, the former more expressionistic, while the latter leans more towards a neo-baroque style. Opposed to instrumental individualism, the blending together of instruments is the main aim of these trios.

#### CELLO

A variety of fingering devices (pizzicato, double and triple stops, tremolo, trills) are regularly suggested in the cello parts, while glissando (Sil'vansky, Marx, Crumb), harmonics (Damase, Marx, Crumb) and the following bowing techniques: con sordino (Goossens), col legno (Raphael), and sul ponticello (Goossens, Damase, Crumb), are used by individual composers.

Marx and Crumb occasionally indicate register and fingerings, while Marx and Raphael specify bowing directions up or down. An interesting notation using two separate staves for the right and left hand cello parts is used by Crumb.

Avant-garde cello techniques applied by Crumb are glissando combined with natural and artificial harmonics, microtones and double stop glissandi played with ponticello bowing.

A particularly difficult technical challenge is prescribed by Goossens in Impression II. The perfect fifth double stop indicated to be played ponticello and pianissimo over eight bars (35-42) requires exceptional bow control.

Sil'vansky cleverly overcomes a possible intonation problem by indicating the cello's highest note g<sub>4</sub> (which appears once in II.2 9) as an octave double stop.

Although the cello part in the trio by Damase is indicated as an optional instrument (*ad lib*), the importance of the cello in adding colour and depth, is clearly reflected in the trio's dedication to both the English flautist Geoffrey Gilbert and the well known cellist William Pleeth, who premiered the work with the composer at the piano. <sup>5</sup>

#### PIANO

Three of the composers (Sil'vansky, Raphael and Damase) were pianists. The following traditional techniques were used: arpeggiation by Goossens, Sil'vansky, Raphael and Damase; acciaccaturas by Sil'vansky, Damase, Marx and Crumb; runs by Sil'vansky, Raphael, and Marx.

---

5. See Appendix II.

The traditional *glissando* technique produced on white keys appears in the trios by Damase and Goossens, while the latter composer also indicated the technique on black keys using the wide range of three octaves and a perfect fourth, displaying the most extended range found in the studied trio repertoire.

Alternating tremolos using single and double notes, are employed by Sil'vansky (depicting the *misfortune* theme) and Crumb. They appear in either the left and right hand parts or combined. The octave is most frequently specified by Sil'vansky, while the perfect fifth alternating with the enclosed perfect fourth (a semi-tone lower / higher) is used by Crumb.

The single repeated notes used by Crumb can be regarded as an avant-garde application of the reiterated tremolo.

Two kinds of avant-garde piano techniques were applied by Crumb. The first involves the *strings* of the instrument together with the damper pedal: *pizzicato*, harmonics, muted tones, and *glissandi*. The second illustrates *prepared* piano techniques using a chisel, a glass rod and a paper clip.

Crumb is the only composer to use avant-garde techniques for all three instruments. Many of these sounds are

audible only when amplified. The amplification of the instruments has opened a new sound spectrum. The sound quality of Crumb's melodies are individual and geared towards specific instruments.

### 3. TEXTURAL ASPECTS

Goossens' mainly homophonic writing is at times coloured with thick textured chords. Sil'vansky builds his textures on open fifths and octaves. His piano part provides both melodies and accompaniment. Raphael's piano part primarily supports the melodic line, which frequently appears with imitation between the flute and the cello parts. At times the piano provides the leading role. Damase also alternates the piano part between an accompanying and leading capacity.

Sil'vansky and Marx use all three instruments as soloist. Marx shares the constant quaver motion started by the piano between the three instruments. The piano further appears as soloist at the beginning of the trio by Goossens and in short phrases in Damase. Crumb's first movement comprises a long flute solo.

Crumb uses "different vertical and horizontal densities."<sup>6</sup> The whole texture is built on alternating the short individual instrumental phrases in such a way that their separate sound qualities can be clearly recognized. These sounds are usually repeated more than twice, which further enhances the atmosphere created.

Doubling of melodies in unison or in octaves regularly occurs in trios. Sil'vansky, Raphael and Marx duplicate their left and right hand piano parts. Marx briefly doubles the flute and right hand parts, imitated by the combined cello and left hand parts. The latter combination is also briefly specified by Crumb. Damase combines the flute, cello and right hand piano parts and Sil'vansky all four parts.

As Damase's cello part is *ad libitum*, doubling occurs with the flute, the left hand piano part, and occasionally with the right hand piano part.

The use of doubling between the flute and cello parts, is exacting regarding intonation. Crumb, Damase and Goossens specify the doubling of parts *two octaves* apart. Goossens on occasion stipulates the technique in the highest registers of the respective instruments.

---

6. Wernick, R. in Dictionary of Twentieth Century Music. 1974. p. 157.

eg 3: IV 39-43

The musical score shows two systems of music. The first system consists of two staves: a vocal line in treble clef and a piano line in treble clef. The second system also consists of two staves: a vocal line in treble clef and a piano line in bass clef. The key signature is three sharps (F#, C#, G#). The tempo is marked *pp*. The piano part includes a 'Pedal' marking and the instruction 'Pedal each chord.'

Apart from doubling parts, Goossens, Sil'vansky, Damase and especially Raphael and Marx achieve a fine balance between the voice parts by frequently sharing melodic material between instruments. Within a homophonic texture, melodic and accompanying parts may alternate (Goossens). Within a polyphonic texture, imitation between parts may also involve inversion, augmentation or diminution (Marx, Sil'vansky). Goossens sometimes adds an ornamental descant above.

#### 4. DYNAMIC RANGE

The general dynamic range for the three instrumental parts varies between *pp* and *ff*. With the exception of Crumb's *ppppp* indication in the piano and cello parts, the soft *ppp* dynamic indication is more frequently used in the piano part (Goossens, Raphael and Damase), and occurs only once in

Goossens' flute part. Sil'vansky only indicates *pp* in the piano part (episode X).

Goossens, Sil'vansky and Crumb use *fff* in all three parts. Composers indicating the loudest dynamic in their final movements are: Goossens (*fff* and *sfz*), Raphael (*ff* and *fzp*) and Damase (*ff*).

Sil'vansky only indicates *pp* in the piano part (episode X) and generally applies dynamics to enhance climaxes in the story line. The three instrumental parts frequently use corresponding dynamics.

Damase achieves different dynamic levels through thinner chordal texture and occasionally by omitting the cello part.

The most interesting use of dynamics is found in the trio by Crumb. "Dynamic levels ... shape Crumb's music; like timbre they are determined by dramatic rather than by mathematical or serial considerations."<sup>7</sup> His dynamic levels are clearly notated and determined by dramatic considerations, such as the emergence of man occurring in Variation V, which clearly depicts the main event in the trio with the loudest

---

7. Borroff, E. *Crumb, George (Henry)*. in The New Grove Dictionary of American Music. vol. I. 1986. p. 551.

dynamics.

Crumb fully exploits the dynamic advantages of the three amplified instruments. He specifies vast contrasts in single phrases (decrescendo: flute: *fff-pp* and *ff-pp*; crescendo: cello (*ppp - fff*) and uses interesting dynamic combinations to achieve a specific quality (colour). Two examples will suffice: the first, a cello example, combines *pp* with *fz* and *mf*, while the second illustrates innovative use of the piano, combining the dynamics *ffz pp subito* with a *forte pizzicato* technique.

The fact that the instruments are amplified further enhances the possible extended dynamic range. A totally new performance skill is required - not only to distinguish the amplified dynamic sound of the individual instruments through using the microphone to your advantage (especially to extend the breath of the flautist), but also to balance between the instruments in the ensemble.

##### 5. NUMBER & ORDER OF MOVEMENTS

The movements of the trios by Goossens and Damase form a well-balanced overall structure.<sup>8</sup> The fourth movement in

---

8. See analysis in Chapters II and V.

the trio by Raphael is the longest of the five, lasting approximately four minutes. The slow Sarabande is about three and the other three movements about two minutes each. This long fourth movement causes a slight imbalance in the trio.

The trio by Marx has a three movement structure, with the third beginning with a slow Introduzione and a Rondo. As discussed in chapter VI,<sup>9</sup> one could regard the Introduzione as a short third movement, succeeded by the Rondo as an attacca fast fourth movement.

The three part design suggested by Crumb gives the work a well-balanced form. The two outer movements comprise nearly half the time-span of the middle movement. This three part format however is more evident visually than aurally, as the theme and short variations (varying from one to two minutes) each have a definite individual character and thus suggest an equally well-balanced eight part structure.

As the trio by Sil'vansky unfolds while the story is being told, the importance of specific events determines the length of the episodes.

---

9. See Chapter VI. Footnote 10. p. 116.

## 6. EXTRA-MUSICAL SUGGESTIONS

The trios by Raphael and Damase both use dance movements from the Baroque Suite. The descriptive trios by Goossens, Sil'vansky and Crumb were inspired by extra-musical ideas, strongly influenced by nature themes as depicted in the titles of the trios, and shared by all three composers. This is reflected in the water and bird sounds by Goossens, the three animal characters, as well as other related themes such as the destruction of fire, in the trio by Sil'vansky and the sound of the humpback whale portrayed in the trio by Crumb.

In addition, Goossens was inspired by familiar suburban images such as the church, the fair and the water wheel. Sil'vansky's trio was initially inspired by Russian folklore. Crumb's trio uses the idea of geological eras as seen in the descriptions of the variations, and has been influenced by various dramatic disciplines (western & oriental) depicted in the different theatrical effects.

## 7. UNIFYING ELEMENTS

The six trios all incorporate unifying elements in some way within their overall structure. Raphael's trio is the only cyclic work unifying the two outer movements, without repeating any additional motivic material. Crumb unifies

movements II and VIII, basically restating the thematic material. Movement VIII is further extended by the incorporation of elements from I, V and VII, while VII in itself is motivically related to movements I and III. Damase condenses some of the material introduced in the opening Prelude in both the two Largo's and the two Arias. In Sil'vansky's trio the three characters are represented by specific motivic and / or thematic material, used throughout the trio. Goossens uses impressionistic themes, whole tone and chromatic scale patterns and other motifs to unify his trio. Marx builds his entire work on a flexible six-note motif.

It is evident that the Flute Trio has regained and even exceeded the popularity it enjoyed during the Classical Period. The rebirth was initially rather slow owing to the Romantic Period favouring the Piano Trio. The first half of the Twentieth Century witnessed about 21 trios from six nationalities, whereas the latter half of the century (1950-1991) has seen a marked increase of at least 159 trios from 20 countries. (See Appendix II)

## APPENDIX I

## CLASSICAL &amp; ROMANTIC COMPOSERS

This Appendix provides a list of the Flute Trios written in the Classical and Romantic periods. It further specifies the composers and shows the number or sets of trios which were written in a specific year.

## 1. Trios / sets of trios composed in a specific year.

Trios / sets	2	1	1	2	2	3	1	3	4	2
Year	1770	1772	1778	1780	1781	1785	1786	1787	1788	1789
Period <sup>1</sup>	1770-1789 = + 22 trios / sets of trios <sup>2</sup>									

Trios / sets	5	5	2	6	3	6	2	2	2	4
Year	1790	1791	1792	1793	1794	1795	1796	1797	1798	1799
Period	1790-1799 = + 37 trios / sets									

Trios / sets	1	3	3	1		2	+ - 2	1	+ - 2	
Year	1800	1801	1803	1804		1808	1810	1812	1816	
Period	1800-1816 = + 15 trios / sets									

Trios	1	3	2	2	1	1	1	1	1	
Year	1816	1817	1818	1819	1820	1825	1833	1866	1883	
			(9 trios)				(4 trios)			
Period	1816-1883 = + 15 TRIOS									

1. Flute trios written before 1770 were composed by F. X. Richter (c. 1759 and c. 1765), C. F. Abel (1760, 1764), J. C. Bach (c. 1763) and G. S. Löhlein (1767).

2. A set of trios in the Classical Period often comprised 6 sonatas as in the case of J. C. Bach's op 2 of c. 1763.



## APPENDIX II

A LIST<sup>1</sup> OF COMPOSERS GROUPED ACCORDING TO COUNTRIES.

This Appendix presents a comprehensive list of 163 Twentieth-Century composers, grouped according to 20 countries, their dates of birth and death; the 180 trios which they have composed as well as the year in which the specific trios were written.

## 1. UNITED STATES OF AMERICA (41 composers) (54 trios)

Ames William	(1901-	House celebration Incantation	1972
Bauer Marion	(1887-1955)	First Trio Sonate 2 nd. " "	1944 1951
Bennett Robert Russell	(1894-1981)	5 Improvisations on... Exotic Scales	1947
Blank Allan	(1925-	Trio	1983
Bliss Marilyn	(1954-	Chameleon	1981
Bolz Harriett	(1937-	Poem Cantare	1984
Brooks Richard	(1942-	Serenade	1982
Callaway Ann	(1949-	7 Dramatic Episodes Collections- ... Recollections	1976 1980
Crumb George	(1929-	Vox Balaenae	1971
Dello Joio Norman	(1913-	Trio	1944
Doran Matt	(1921-	Trio	1957
Emery Dorothy Radde	(1901-	Trio in F	
<u>Greenbaum Matthew</u>	(1950-	Chamber Music	

1. Information received until 23/10/93 was included.

Hadley Henry	(1871-1937)	Andante & Scherzino	
Haubiel Charles	(1892-1978)	In the French Manner	1942
		Pastoral Trio	1949
Hier Ethel Glen	(1889-1971)	Scherzo	1952
Hoover Katherine	(1937-	Lyric Trio	1983
Jacobi Frederick	(1891-1952)	Music for Monticello	1945
Jannery Arthur		Three Fantasias	1974
Johnson A. Paul	(1956-	Autumn Trio	1980
		Spring Trio	1982
		Summer Trio	1985
		Winter Trio	1990
Karchin Louis	(1951-	Trio	1972
Lackman Susan C. Cohn	(1948-	Fragments	
Lateef Yusef	(1920-	Trio	
Luening Otto	(1900-	Trio	1962
Menotti Gian Carlo	(1911-	House warming party	1936
Meyerowitz Jan	(1913-	Trio	1946
Moore Undine Smith	(1905-	Afro-American Suite	1969
O'Leary Jane Strong	(1946-	Trio	1972
Pleskow Raoul	(1931-	Movement	1962
		Trio	1977
		Four Pieces	1980
Reynolds Roger	(1934-	Traces	1968
Rorem Ned	(1924-	Trio	1960
Rudhyar Dane	(1895-1985)	3 Melodies	1918
Schickele Peter	(1935-	Summer Trio	1966

Schwartz Elliott	(1936-	Trio	1964
Shepard Jean Ellen	(1949-	Trio	1972
Smith Leland	(1925-	Trio	1947
Sollberger Harvey	(1938-	Compositions	1961
		Divertimento	1970
		Elegy for Stravinsky	1971
Stringfield Lamar	(1897-1959)	Mountain Sketches	1923
Trombly Preston	(1945-	Trio da Camera	1975
Wolpe Stefan	(1902-1972)	Trio in Two Parts	1964
Wuorinen Charles	(1938-	Trio no 1	1961
		Trio no 2 for Wolpe	1962
		Trio no 3	1972

## 2. AUSTRALIA

Carr-Boyd	(1938-	Song of the women of the Menero Tribe	
Ghandar Ann	(1943-	Lentus in umbra	1984
		Yatasana	1991
Maclean Clare	(1958-	Canticle	

## 3. BELGIUM

Quinet Marcel	(1915-1986)	Sonate en Trio	1977
Rosseau Norbert	(1907-1975)	Trio op 60	1956

## 4. CANADA

Champagne Claude	(1891-1965)	Suite Miniature	1958
Dela Maurice	(1919-	Suite	
Noda Eva	(1921-	Sonatine	1976

## 5. CZECHOSLOVAKIA

Lukas Zdenek	(1928-	Tri ronda	
Martinu Bohuslav	(1890-1959)	Trio	1944
Semerak Oldrich	(1932-	Triology	1980
Stanislav Jelinek	(1945-	Scény	1976

## 6. DENMARK (10)

Bentzon Niels Viggo	(1919-	Grosses Trio op 274	1971
Bjerre Jens		Mosaique musicale ... no 2b	1974
Christiansen Toke Lund		En Dansker i Paris	1989
Christiansen Asger Lund	(1927-	Trio	1983
Hogehaven Knud		Peters Jul op 14a	1953
Holm Mogens Winkel	(1936-	Overtoner II	1971
Holmboe Vagn	(1909-	Trio op 97	1968
Jeppesen Knud	(1892-1974)	Little Summer Trio	1957
Kammerer Edwin		Trio	1970
Sandby Hermann	(1881-1965)	Trio	

## 7. THE NETHERLANDS (10)

Alkema Henk	(1944-	Rituelen	1984
Bonsel Adriaan	(1918-	Musica	1971
De Braal Andries	(1909-1987)	Trio	1976
De Waal Lies	(1900-1961)	Scherzo op 38b	1933
Leerink Hans	(1906-	Franse Suite	1930-1935
Orthel Léon	(1905-1985)	Otto Abbozzi op 57	1971
Osieck Hans	(1910-	Trio	1975
Verhaar Ary	(1900-	Triosonate op 7	1934
Wall Constant van de	(1871-1945)	Minuet du Soir op 49	
Wijdeveld Wolfgang	(1910-1985)	Scherzo	

## 8. UNITED KINGDOM (16)

Arnell Richard	(1917-	Trio	
Bate Stanley	(1913 / 1911-1959)	Trio	
Bennett Richard Rodney	(1936-	Commedia II	1972
Brown Christopher	(1943-	Trio	
Crane Laurence	(1961-	Air	
		Processional	
Davidson Howard		Mare Iridum	
Goossens Eugene	(1893-1962)	Five Impressions ...	
		of a Holiday	1914
Hedges Anthony John	(1931-	Trio no 1 op 99	1985
		Trio no 2 op 112	1985
Jacobson Maurice	(1896-	Suite of 4 Pieces	1946

Lucas Mary Anderson	(1882-1952)	Rhapsody	1946
Mellers Wilfrid	(1914-	Trio	1962
Scott Cyril (Meir)	(1879-1970)	Trio	
Shipley Edward	( -1988)	The Dream	1971
Skempton Howard	(1947-	Surface Tension	1975
Weir Judith	(1954-	Trio	1972
		Several Concertos	1980
Woolrich John	(1954-	Lazzi	1984

9. FRANCE (17 composers) (19 trios)

Arma Paul	(1905-	Divertimento no 2	1951
Bayer Francis	(1938-	5 Essais	1970
Bonis Melanie Helene	(1858-1937)	Suite	1907
Damase Jean-Michel	(1928-	Sonate en Concert	1950
Fouillaud Patrice	(1949-	Riflesso	1979
Frima Roger		Trio	
Gaubert Philippe	(1879-1971)	Piece Romantique	
		3 Aquarelles	1915
Hillemacher Paul	(1852-1933)	Elegie	1900
Indy Vincent d'	(1851-1931)	Trio	
Lefebvre Claude	(1931-	D'un arbre de Nuit	1971
Lefebvre Charles Eduard	(1843-1917)	Ballade	
Lenot Jacques	(1945-	The Julian Trio	1978
Manziarly Marcelle de	(1899-	Trio	1952
Martelli Henri	(1895-	Trio	1951

Merlet Michel	(1939-	Trio op 24	1973
Pierné Gabriel	(1863-1937)	Sonata da Camera	1927
		Serenade op 7	
Vallier Jacques		Trio	

## 10. GERMANY (12)

Dichler Josef	(1912-	Trio	1968
Döhl Friedheim	(1936-	Sotto Voce	1973
Genzmer Harold	(1909-	Trio	
Haentjes Werner	(1923-	Trio	
Hessenberg Kurt	(1908-	Swegala-Fantasie	1986
Josten Werner Eric	(1885-1963)	Trio	1943
Ludewig Wolfgang	(1926-	Reflextionen	1974-75
Marx Karl Julius	(1897-1985)	Trio op 61	1962
Raphael Günter	(1903-1960)	Trio op 44	1938
Schelb Josef	(1894-	Trio	
Stahnke Manfred	(1951-	Rithus	
Steffen Wolfgang	(1923-	Trio op 37	1971
Werner Fritz	(1898)	Concertino	

## 11. ITALY

Ghedini Giorgio Federico	(1892-1965)	Trio	1963
Jachino Carlo	(1887-1971)	Trio	1954

## 12. JAPAN

Miyoshi Akira	(1933-	Sonate	1955
---------------	--------	--------	------

## 13. LATVIA

Plakidis Peteris	(1947-	Dedication to Haydn	
------------------	--------	---------------------	--

## 14. NORWAY

Gjerstroem Bjorn G	(1939-	Trio op 18	1985
--------------------	--------	------------	------

Madsen Trygve	(1940-	Divertimento op 56	1986
---------------	--------	--------------------	------

## 15. POLAND

Stachowski Marek	(1936-	Audition	1970
------------------	--------	----------	------

## 16. RUMANIA

Niculescu Stefan	(1927-	Triplum	1971
------------------	--------	---------	------

## 17. RUSSIA

Sil'vansky Nikolay Iosifovich		The Hedgehog & Nightingale	
-------------------------------	--	----------------------------	--

(1915/1916-1985)

Tolstoy D		Trio op 113	1986
-----------	--	-------------	------

## 18. SPAIN

Muñoz Molleda José	(1905-	Trio	1951
--------------------	--------	------	------

## 19. SWEDEN (20)

Ahlberg Gunnar	(1946-	Syntes	1967
Ahlbom Pär	(1932-	Colladus III	1968
Bäck Sven-Erik	(1919-	Sentire	1969
Björklund Staffan	(1944-	Metamorphoses	1969
Brandström Christer	(1951-	Trio humana op 35	1982
Deák Csaba	(1932-	Trio	1971
Eckerberg Sixten	(1909-1991)	Trio concertante	1966
Glaser Werner Wolf	(1910-	Trio	1985
Grandert Johnny	(1939-	Non lo so	1970
Hallnäs Hilding	(1903-1984)	Stanze Sensitive	1959
Hallnäs Lars	(1950-	Treat	1977
Hultqvist A	(1955-	Nature Morte	1985
Jeverud Johan	(1962-	Ricercare	1983
Johanson Sven-Eric	(1919-	Marina Skisser	1965
Karkoff Maurice	(1927-	Terzetto op 91	1967-1968
Käck Max	(1951-	Samtal i lå	1982
Larsson S Roger I	(1955-	Trio	1981
Linde Bo	(1933-1970)	Divertimento op 25	1962
Sörenson Torsten	(1908-	Flaucepi	1971
Valkare Gunnar	(1943-	Kristoffer-fantasi	1990

## 20. SWITZERLAND (10)

Benary Peter	(1931-	Strophen	1980
Escher Peter	(1915-	Fantasia	1964
Fenigstein Victor	(1924-	Sette Miniature	1964

Furer Arthur	(1924-	Reminiszenzen	1985
Hess Ernst (Susanne)	(1912-1968)	Divertimento op 54	1963
Huber Klaus	(1924-	Ascensus	1969
Looser Rolf	(1920-	Fantasia a tre	1985
Peyrot Fernande	(1888-1978)	Trio	1966
Reichel Bernard	(1901-	Sonata a tre	1962
Wettstein Peter	(1939-	Abraxas	1970

21. OTHER<sup>2</sup>

Driessler L		Serenata a tre	
Grimm Carl Hugo	(1890-	Four Stencils	
Nelson Larry		Poem of Soft Music	

---

2. No information regarding these composers' nationality have been obtained.

## APPENDIX III

SOURCES<sup>1</sup> OF TRIOS

This Appendix reveals information regarding the sources which were used in compiling the extensive list of trios presented in Appendix II. It provides useful reference material for prospective students.

- Ahlberg** : Swedish MIC.  
**Ahlbom** : Swedish MIC.  
**Alkema** : Donemus p 190.  
**Ames** : House Celebration: Sloane; ACA p 1.  
**Ames** : Incantation: Marcia Sloane: W. Ames Collection.  
**Arma** : French MIC; Padorr.  
**Arnell** : Vester p 6.  
**Bäck** : MR vol 36 p 240; Swedish MIC.  
**Bate** : Vester p 15.  
**Bauer** : Groves Am Mus I p 162; Goss p 139.  
**Bayer** : French MIC.  
**Benary** : Swiss MIC.  
**Bennett Robert Russell**: Goss p 192.  
**Bennett Richard Rodney**: Hinson p 369; Grove II p 498.  
**Bentzon** : Danish MIC.  
**Bjerre** : Danish MIC.  
**Björklund** : Swedish MIC.  
**Blank** : Groves Am Mus I p 232; ACA p 1; Letter 10/10/91.  
**Bliss** : Cohen p 88; Boenke p 14; Letter 29/10/91.  
**Bolz** : Cohen p 92; Boenke p 16; Letter 22/05/91.  
**Bonis** : Cohen p 472; Boenke p 17.

1. A list of abbreviations is provided at the end of this Appendix.

- Bonsel : Donemus p 191; Who's Who 1990 p 82.
- Brandström: Swedish MIC.
- Brooks : ACA p 2; Letter 11/10/91.
- Brown : British MIC.
- Callaway : ACA p 2; Letter 18/09/91; Cohen p 128; Boenke p 22.
- Carr-Boyd : Australian MIC.
- Champagne : Vester p 41.
- Christiansen T: Danish MIC.
- Christiansen A: information from brother Toke 14/03/92.
- Crane : British MIC.
- Crumb : Grove V p 71; MT vol 119 October 1978 p 844.
- Damase : Vester p 48.
- Davidson : Composer Vol 39 p 34; M & M vol 19 p 68.
- De Braal : Keynotes 1977 (1) p 51; Donemus p 191.
- Deák : Swedish MIC.
- Dela : Vester p 50.
- Dello Joio: Vester p 116.
- De Waal : Vester & de Reede p 248.
- Dichler : Notes vol 42 p 170; Doblinger 1992 catalogue new issues p 13.
- Döhl : Hinson p 372.
- Doran : Letter 31/05/91; Notes vol 29 p 145.
- Driessler : S. Schön (brochure).
- Eckerberg : Swedish MIC.
- Emery : Cohen p 212.
- Escher : Swiss MIC.
- Fenigstein: Notes vol 32 p 661; Bib G 1987 p 467.

- Fouillaud : French MIC.
- Frima : BMY 1972-73 p 132.
- Furer : Swiss MIC.
- Gaubert : Vester p 79.
- Genzmer : Bib G 1980 p 779; Peters.
- Ghandar : Australian MIC.
- Ghedini : Vester p 82.
- Gjerstroem: Norwegian MIC.
- Glaser : Swedish MIC.
- Goossens : Vester p 86.
- Grandert : Swedish MIC.
- Greenbaum : Notes vol 41 p 399.
- Grimm : Vester p 89.
- Hadley : Vester p 92.
- Haentjes : Vester p 92.
- Hallnäs H : S. Schön (brochure); Swedish MIC.
- Hallnäs L : Swedish MIC.
- Haubiel : Ewen p 318-319; Vinton p 311; Vester p 97.
- Hedges : Letter 21/05/91.
- Hess : Swiss MIC.
- Hessenberg: Notes vol 44 p 603.
- Hier : Cohen p 319; Boenke p 53.
- Hillemacher: Vester p 103.
- Hogenhaven : Danish MIC.
- Holm : Hinson p 376; M & M vol 20 p 24; Brochure p 5; Danish MIC.
- Holmboe : Notes vol 37 p 434; Danish MIC.

- Hoover : Boenke p 55; Who's Who 1990 p 417; Letter 20/05/91.
- Huber : Melos vol 41 no 6 1974 p 344; Hinson p 376.
- Hultqvist : Swedish MIC.
- Indy d' : Vester p 122.
- Jachino : Grove IX p 437; Padorr.
- Jacobi : Ewen p 356; Groves Am Mus II p 529; Thompson p 1093.
- Jacobson : Vester p 113.
- Jannery : Hinson p 377.
- Jeppesen : Hinson p 378; Vester p 115.
- Jeverud : Swedish MIC.
- Johanson : Swedish MIC.
- Johnson : ACA p 3; Who's Who 1990 p 424; Letter 2/12/91.
- Josten : Ewen p 363; Thompson p 1130.
- Käck : Swedish MIC.
- Kammerer : Danish MIC.
- Karchin : ACA p 3.
- Karkoff : Swedish MIC.
- Lackman : Cohen p 392; Boenke p 66.
- Larsson : Swedish MIC.
- Lateef : Bib G 1977 p 439.
- Leerink : Vester & de Reede p 248.
- Lefebvre C: Who's Who 1988 p 538; Letter 8/07/91.
- Lefebvre C E: Vester p 142.
- Lenot : French MIC.
- Linde : S. Schön (brochure); Swedish MIC.
- Looser : Swiss MIC.

- Lucas M A : Cohen p 429; Boenke p 72; Slonimsky p 763; Vester p 149.
- Lukas Z : Czech MIC.
- Ludewig : M & L Vol 60 no 1 p 125; Grove XI p 304.
- Luening : Hinson p 380; Letter 23/7/91.
- Maclean : Australian MIC.
- Madsen : Norwegian MIC.
- Manziarly : Vester p 153.
- Martelli : Vester p 155; Slonimsky p 1097.
- Martinu : Vester p 155.
- Marx : Hinson p 381.
- Mellers : Grove XII p 109; Hinson p 381; Letter 19/06/91.
- Menotti : Grove XII p 164; Vester p 159.
- Merlet : MT vol 130 June 1989 p 354.
- Meyerowitz: Groves Am Mus III p 222; Slonimsky p 846; Bib G 1974 p 510; Padorr.
- Miyoshi : Hinson p 382; Grove XII p 372; Slonimsky p 1169.
- Moore : Cohen p 488; Boenke p 85.
- Munoz Molleda: Grove XII p 781; Vester p 170.
- Nelson : Bib G 1980 p 779.
- Niculescu : Hinson p 383.
- Noda : Boenke p 88.
- O'Leary : Cohen p 518; Boenke p 90; Letter 16/06/91.
- Orthel : Sonorum Speculum vol 52 p 49; Donemus p 195.
- Osieck : Keynotes 1975 (1) p 54; Donemus p 195; Letter 25/06/91.
- Peyrot : Cohen p 544; Boenke p 94.
- Pierne : Vester p 182.
- Plakidis : Russian MIC.

- Pleskow : ACA p 4; Bib G 1975 p 431; Letter 23/05/91.
- Quinet : HBM vol 17 no 2 Des 1978; Cebedem.
- Raphael : Vester p 193; Swiss MIC.
- Reichel : Swiss MIC.
- Reynolds : Slonimsky p 1419; Grove XV p 784.
- Rorem : Vester p 203.
- Rosseau : Vester p 204.
- Rudhyar : Ewen p 549; Groves Am Mus IV p 104; Bib G 1977 p 439.
- Sandby : Vester p 208.
- Schelb : Vester p 211.
- Schickele : Groves Am Mus IV 151; Letter 17/07/91; P Q vol 27.
- Schwartz : Hinson p 386; Bib G 1974 p 510.
- Scott : Slonimsky p 1144.
- Semerak : Czech MIC.
- Shepard : Cohen p 638; Boenke p 110; Letter 18/11/91.
- Shipley : British MIC.
- Sil'vansky: May & May 1989 catalogue.
- Skempton : Tempo vol 120 p 1; Composer Vol 81 p 33; Letter 25/07/91.
- Smith : ACA p 5; Hinson p 386; Slonimsky p 1621.
- Sollberger: Grove XVII p 456; Butterworth p 437.
- Sörenson : Swedish MIC.
- Stachowski: BMY 1980 p 108; Grove XVIII p 41; Bib G 1974 p 510.
- Stahnke : Notes vol 39 p 712; Peters.
- Stanislav : Czech MIC.
- Steffen : Hinson p 387; Slonimsky p 1653; MT vol 120 May 1979 p 412.
- Stringfield: Groves Am Mus IV p 326; Butterworth p 450; Vester p 229.

- Tolstoy : Russian MIC.
- Trombly : ACA p 6; Groves Am Mus IV p 413.
- Valkare : Swedish MIC.
- Van de Wall: Vester & de Reede p 248.
- Vallier : BMY 1972-73 p 140.
- Verhaar : Vester p 242; Letter 23/5/91.
- Weir : Bib G 1989 p 507.
- Werner : Vester p 252; French MIC letter 17/1/92.
- Wettstein : Swiss MIC.
- Wijdefeld : Sonorum Speculum vol 45 p 38 & vol 32 p 36.
- Wolpe : Stefan Wolpe Society 2/06/92; Wolpe Catalogue 1991 p 3, 10.
- Woolrich : British MIC.
- Wuorinen : Vester p 257.

## ABBREVIATIONS: <sup>2</sup>

### 1. CORRESPONDENCE

#### 1.1 INFORMATION CENTERS (MIC)

Australian

British

Danish

Swedish

Russian

French

Czech

2. Refer to the **BIBLIOGRAPHY** for specified information regarding the sources.

Swiss

Norwegian

## 1.2 PUBLISHERS

ACA

Cebedem

Doblinger

Donemus

May & May

Peters

### 1.3.1 COMPOSERS INDICATED WITH "Letter date".

### 1.3.2 OTHER

Padorr

Sloane

## 1.4. BROCHURES

Holm

Schön

Wolpe

## 2.1 Names of writers or editors listed under BOOKS:

Boenke

Butterworth

Cohen

Ewen: American Composers

Goss

Hinson

Slonimsky

Thompson

Vester (1967)

Vester & De Reede

Vinton

## 2.2 Abbreviated titles of BOOKS.

International Who's Who in Music and Musicians' Directory  
(Who's Who).

Bibliographic Guide to Music (Bib G).

British Music Yearbook (BMY).

The New Grove Dictionary of Music & Musicians (Grove).

The New Groves of American Music (Groves Am Mus).

## 3. JOURNALS

Composer

Het Belgische Muziekleven (HBM)

Keynotes

Melos

Music & Letters (M & L)

Music & Musicians (M & M)

Music Review (MR)

Musical Times (MT)

Notes

Piano Quarterly (P Q)

Sonorum Speculum

Tempo

## APPENDIX IV

This Appendix listing 81 trios, provides specific details of the persons and ensembles to whom 22 trios were dedicated, and by whom 31 trios were commissioned; the places of first performances as well as the musicians who took part in the respective premieres. (References are given in brackets.)

COMPOSER	TRIO	DEDICATION	PREMIERE PLACE	DATE	COMMISSIONED BY * COMPOSED FOR	MUSICIANS
Ahlberg G	Syntes		Aarhus (SMIC)	06/02/68		Jens Boje Hansen Niels Erik Clausen Fjeld Simonsen (Danish musicians) (SMIC)
Alkema H	Rituelen	Amsterdams Fluittrio (score)			Fonds voor de Scheppende Toonkunst (score p 0)	
Bayer F	5 Essais		Concours de Composition ENM (PMIC)	09/11/70		
Bennett R R	Commedia II				New York Camerata (score)	
Bentzon N V	Grosses Trio op 274			08/03/72 (DMIC)		
Björklund S	Metamorphoses		Göteborg (SMIC)	16/11/69		Schön Kammartrio: Sanfried Schön (fl) Maja Vogel (vc) Jörgen Amsö (pf) (SMIC)
Blank A	Trio		Richmond, VA (letter)	1984	* Richmond Camerata (letter)	Richmond Camerata: Patricia Werrell (fl) (lette Jacqueline Spears (vc) Hope Armstrong Erb (pf)
Bliss M	Chameleon		New York (letter)	09/06/83	* Group which she had in mind disbanded before they could play (letter)	Bliss (fl) Chris Finckel (vc) James Primosch (pf) (letter)
Bolz H	Poem Cantare				* Women's Music Club Columbus Ohio (letter)	Mary Stanton (fl) Jerry Cribb (vc) Belva Robbins (pf) (letter)
Bonsel A	Musica	Ensemble 'Concertino' (score)			Johan Wagenaar Stichting (score)	Concertino: Karel Wolters (fl) Gerrit van de Graaf (vc) Eugene Roosegaarde (Sonorum Speculum)
Brooks R	Serenade		New School for Social Research New York (letter)	22/05/82		Da Capo Chamber Players: Patricia Spencer (fl (Musical America) Other group members: Joel Lester Laura Flax, André Emelianoff, Sarah Rothenber Walden Trio: Gwyndolyn Mansfield (fl) Maxine Neuman (vc) Joan Stein (pf) (letter)
Callaway A	Seven Dramatic Episodes		WBAI Radio New York	1976	Walden Trio (letter)	
Callaway A	Collections- Recollections		New Jersey (letter)	1981	* Walden Trio (letter)	
Christiansen Toke Lund	En Dansker i Paris	Erik Mortensen (letter)	Nordjyllands Kunstmuseum (DMIC)	28/05/89	Nordjyllands Kunstmuseum (DMIC)	Toke Lund Christiansen (flute), Niels Ullner
Crumb G	Vox Balaenae	New York Camerata (score)	The Library of Congress Washington, D.C. (Crumb G. Performance Notes)	17/03/72	New York Camerata (Crumb Performance Notes)	New York Camerata (Crumb G. Performance Notes)
Damase J-M	Sonata en Concert		BBC (PMIC)	1950		Geoffrey Gilbert (fl) William Pleeth (vc) Damase (pf) (PMIC)
Deák C	Trio		Göteborg (SMIC)	01/03/71	Levande Musik (Schön 29/01/93)	Schön Kammartrio: Sanfried Schön (fl) Maja Vogel (vc) Jörgen Amsö (pf) (SMIC)
De Braal A	Trio of 1976	Trio Bonsel (score)			De Stichting Het Buma Fonds (Score & Keynotes p 54)	
Dello Joio N	Trio		New York (Sabin R: p 553)	01/03/44		René Le Roy (virtuoso French flautist then living in America) Janosz Scholz (vc) Sidney Foster (pf) (Sabin R: p 553)
Döhl F	Sotto Voce	In memoriam Boris Blacher (score)				
Doran M	Trio					
Eckerberg S	Trio		Göteborg (SMIC)	25/04/66	Levande Musik (Schön 29/01/93)	Schön Kammartrio: Sanfried Schön (fl) Maja Vogel (vc) Jörgen Amsö (pf) (SMIC)
Fouillaud P	Riflesso		Settimana Musicale Senese	29/08/79		

COMPOSER	TRIO	DEDICATION	PREMIERE PLACE	DATE	* COMMISSIONED BY COMPOSED FOR	MUSICIANS
Prima R	Trio		Paris (BNY 1972-73: p 132)	03/03/71		Pierre-Yves Artaud (fl) Christine Virloux (vc) Prima (pf) (BNY 1972-73: p 132)
Gaubert P	Trois Aquarelles (Schön 29/01/93)	I Madame de Leotard, II Madame Fr Melays, III Monsieur Chizalet				
Ghandar A	Lentu in umbra.		Southampton (Curriculum Vitae p 6)	1984	Rosemarie Wright (request) (Curriculum Vitae p 6)	Rosemarie Wright (pf) (Curriculum Vitae p 6)
Ghedini F	Musiche per Tre..	Trio Pro Musica di Trieste (score)				
Gjerstroem B	Trio op 18		Norwegian Radio Program 1 (NMIC)	19/07/87		Oernulf Gulbrandsen (fl) Aage Kvalbein (vc) Robert Levin (pf) (NMIC)
Glaser W W	Trio		Sveriges Riksradio (SMIC)	06/01/88		Berndt Andersson, Pär Öjebro, Albena Zaharieva (musicians from Örebro) (SMIC)
Grandert J	Trio		Göteborg (SMIC)	01/03/71	Levande Musik (Schön 29/01/93)	Schön Kammartrio: Sanfried Schön (fl) Maja Vogel (vc) Jörgen Amsö (pf) (SMIC)
Hallnäs L	Stanze sensitive		Sveriges Riksradio (SMIC)	03/11/83	Levande Musik (Schön 29/01/93)	Schön Kammartrio: Sanfried Schön (fl) Maja Vogel (vc) Jörgen Amsö (pf) (Schön 29/01/93)
Hedges A	Trio no 1		Southampton University Hull Univ (letter)	11/85 06/91		David Butt (fl) Ros Pople (vc) Rosemary Wright pf David Butt (fl) Sharon McKinley (vc) Rosemary Wright (pf) (letter)
Hogehaven K	Trio no 2 Peters Jul op 14a			22/12/53	Danmarks Radio (DMIC)	
Holmboe V	Trio op 97		Lyngby by Copenhagen (letter)	08/10/68 (DMIC)	Claes Eriksson Gert von Bülow John Damgaard (letter)	Claes Eriksson Gert von Bülow John Damgaard (letter)
Hoover K	Lyric Trio	Huntingdon Trio (score)	Huntingdon's premiere (letter) New Jersey: Montclair's Union Congregational Church	03/84 11/86	Huntingdon Trio (letter)	Huntingdon Trio: Lloyd & Retha Smith, Diane Gold Jersey: Peggy Schechter (fl) Gerald Appleman (vc) Bernice Silk (pf) (crit 17/11/85)
Huber K	Ascensus	Susanne Huber, Rama Jucker Mario Steiner (score & letter Pehr)		1969 (letter)	Commissioned by "Internationalen Meisterkursus 1969, Lenzerheide (score) * Marion Steiner "on demand of" (letter)	Susanne Huber (fl) Dieter Leicht (vc) Marion Steiner (premiere in 1969) (letter Pehr)
Hultqvist A	Nature Morte		Göteborg (SMIC)	25/04/85		Gunnar Wallin, Johanna Dahland, Bodil Sjögren (SMIC)
Jeppesen K	Lille Sommer-Trio	Til Majse & Wenzel de Neergaard (score)				
Jeverud J	Ricercare				* Colleagues from the Stockholm College of Music (SMIC)	Sarah Elfvik, Cecilia Wahlström Anders Kihlström (SMIC)
Johnson P	Autumn Trio				Pivellas Country Arts Council (letter)	Trio da Camera: Barbara Prescott (fl) Zsuzsanna Varosy (vc) Ildiko Vadas (pf) (letter)
	Spring Trio Summer Trio Winter Trio				* Trio da Camera * Trio da Camera * Trio da Camera	
Käck M	Samtal i lä		Härnösand	02/04/84		Ensemble HND
Kammerer E	Trio		Statens Museum for Kunst (DMIC)	04/05/75		Claes Ericsson, Gert von Bülow, Ulla Kapel (DMIC)
Karkoff M	Terzetto op 91		Göteborg (SMIC)	20/09/68	Levande Musik (Schön 29/01/93)	Schön Kammartrio: Sanfried Schön (fl) Maja Vogel (vc) Jörgen Amsö (pf) (SMIC)
Lefebvre C	D'un Arbre de Nuit	Paul Hefano (score)	Arts Festival Royan (letter & PMIC)	08/04/71		Renaud Francois (fl) Pierre Pénassou (vc) Maria Helena Barrientos (pf) (letter & PMIC)
Lenot J	The Julian Trio			19/01/79 (PMIC)		

	TRIO	DEDICATION	PREMIERE PLACE	DATE	COMMISSIONED BY * COMPOSED FOR	MUSICIANS
Linde B	Divertimento op 25		Stockholm (SMIC)	18/11/62		L Ericsson, B Holtsberg, G Asplund (SMIC)
Lucas Z	Trio Ronda					Trio con Flauto: Magdalena Tumova (fl) Danuse Sommerova (vc) Ludmilla Cermakova (pf) (Czech MIC)
Luening O	Trio	Charles, Harvey and Nicolas & The Group (score)	MacMillan Theater (letter) Columbia Univ, New York	22/10/62	The Group for Contemporary Music (letter)	Sollberger (fl) Krosnick (vc) Wuorinen (pf) (letter)
Madsen T	Divertimento op 56	Trio 86 (NMIC)	Munch Museum Oslo (NMIC)	08/86		Torkild Bye (fl) Geir Tore Larsen (vc) Einar Henning Smebye (piano) (NMIC)
Manziarly M	Trio		Festival "Le Triptyque" (PMIC)	04/02/55		
Martelli H	Trio		Stè Nationale de Musique (PMIC)	29/03/53		
Martinu B	Trio		New York (Halbrech: p 152) London (Thompson: p 331)	29/02/45  1947	René Le Roy (Halbrech H: p 152)	René Le Roy (fl), Roger Albin Claude Hellfer (PMIC) American: René Le Roy (fl) Janosz Scholz (vc) Sidney Foster (pf) (Halbrech: p 152) English: Geoffrey Gilbert (fl) James Whitehead (vc) Liza Fuchsovà (pf) (Thompson: p 331)
Mellers W	Trio				Bernard Goldberg (fl) and his Musica Viva Trio (letter)	
Merlet M	Trio op 24			23/02/81		Trio Courmont (PMIC)
Moore U S	Afro-American Suite				Trio Pro Viva (Cohen p 488)	
Niculescu S	Triplum	A Madame Francis Salabert (score)			Madame Francis Salabert (score)	
Orthel L	Otto Abbozzi	Ensemble 'Concertino' (score)			BUMA Cultuurfonds (score)	Concertino: Karel Wolters (fl) Gerrit van de Graaf (vc) Eugene Roosegaarde (pf)
Osieck H	Trio		Hiddelburg (Nd1) (letter)		Dutch Government (letter, score)	
Pierne G	Sonata da Camera	à la mémoire de Louis Fleury (score)				BBC broadcast 20/07/28: Mrs Fleury (pf) (Cobbett: p 213)
Pleskow R	Movement	'On the occasion of Stefan Wolpe's 60th birthday (score)	New York The Group's second season (letter)		* The Group (letter)	Sollberger (fl) Krosnick / Sherry (vc) Wuorinen (pf)
Quinet M	Sonate en Trio				Trio Isselee (letter Cebedes)	Trio Isselee: A Isselee (fl) R Dessart (vc) T Evdokimova (pf) (letter Cebedes)
Reynolds R	Traces	Yuji Takahashi (score)			* Yuji Takahashi	Recorded by Karen Reynolds (fl) Lin Barron (vc) Yuji Takahashi (pf) (Gillespie D: p 42)
Rorem N	Trio	Bernard Goldberg (score)				
Rosseau N	Trio		Antwerp	02/02/71		Louis Stoeps (fl) Henri van de Velde (vc) Lode Backx (pf) (letter Cebedes)
Schickele P	Summer Trio		Carnegie Hall (letter)	1966	* Paula Robinson Robert Sylvester Samual Sanders (letter)	Paula Robinson, Robert Sylvester Samual Sanders (letter)
Shepard J	Trio		Graduation concert (letter)	03/73	Student composition (letter)	Shepard (pf) Cynthia Steigerwald (fl) Carter Brey (vc) (letter)
Skempton H	Surface Tension		Nottingham University East Midlands Arts Day (Tempo)	08/03/77	Arts Council of Great Britain * Dreamtiger (letter)	Dreamtiger (a British ensemble) (letter)
Sollberger H	Elegy	Igor Stravinsky (score)			* commemorate Stravinsky's death	Sollberger (fl) Krosnick / Sherry (vc) Wuorinen (pf)
Sörenson T	Flaucepi		Stockholm (SMIC)	14/11/71		Schön Kammartrio: Sanfried Schön (fl) Maja Vogel (vc) Jörgen Amsö (pf) (SMIC)
Stachowski	Audition		London (British) (BNY 1980: p 108)	11/07/78		Ingrid Culliford (fl) Nicholas Gethin (vc) Odaline de la Martinez (pf) (BNY 1980: p 108)
Vallier J	Trio		Paris (BNY 1972-73: p 140)	06/05/71		Isabelle Chapuis (fl) Frédéric Lodéon (vc) Jacqueline Lacki-Bernard (pf) (BNY 1972-73: p 140)
Verhaar A	Trio-Sonate op 7		The Hague Vereniging vor Moderne Muziek (letter)	15/02/35	Eduard Flipse and the Rotterdam (letter) Trio	The Hague: T Sevenstern (fl) Fr Gaillard (vc) Ary Verhaar (pf) (letter)
Weir J	Several Concerto		Bonar Hall, Dundee Univ (Weir' brochure p 2)	21/01/81	Lontano ensemble sponsored by the Arts Council (Weir brochure p 2)	Rotterdam: Rotterdam Trio: Joh Versloot (fl) Will de Jong (vc) Eduard Flipse (pf) (letter) Lontana ensemble (Weir brochure)
Wolpe S	Trio					Sollberger (fl) Krosnick (vc) Wuorinen (pf)
Wuorinen C	Trio's I III II	(score) Stefan Wolpe, Harvey Sollberger Joel Krosnick (score)				Sollberger (fl) Krosnick / Sherry (vc) Wuorinen (vc) (letter Stoker)

**APPENDIX V**

This Appendix presents an English translation from the Russian, by Ms Christine Reinecke and Mr Andrew Cook, of the text written by Juri Jarmicha.

**SIL'VANSKY: THE HEDGEHOG & THE NIGHTINGALE****EPISODE 1**

In Spring, the nightingale returned from the warm regions, to the wood. The hedgehog looked out from his little burrow under a hawthorn bush. He greeted his songster neighbour politely, and began to wait for twilight. He knew that without fail the nightingale would sing in the evening. And he was not wrong. The sun departed and the hedgehog heard the sweet "Tek-tek-tek"!

**EPISODE 2**

The hedgehog gathered his needles together, opened his small eyes and listened .... listened ...

The nightingale sang about the distant places which he had visited, and from which he had returned, and about all the other times he had returned home to his wood, because a foreign region always remains foreign. The nightingale did not stop for a moment until dawn. And the hedgehog sat under the hawthorn bush, listening to the woodland song.

**EPISODE 3**

Before sunrise a friend came to visit the nightingale and started to build a nest. Soon afterwards, little green eggs appeared. Now the nightingale sang for a shorter time because small nightingales were hatching and it was necessary to catch insects and caterpillars, in order to feed them.

One day a strong wind started blowing, and it shook the bush so that one little bird fell onto the ground, onto the leaves which had fallen the previous year.

**EPISODE 4**

Fortunately he did not hurt himself. He actually found it interesting under the branches, and could not understand - why were his parents so worried? Why did they become frightened when, a little further away, a huge red-haired animal appeared?

The hedgehog rolled up into a little ball, stuck out his needles, and said angrily,

"Clear off from here, you cunning fox! I will pierce you with my needles!"

"Ha, ha!" yelped the fox. "I am very full and contented today. But had this not been the case, I would have gobbled up not only that little nightingale; I know that you do not have prickles on your tummy!"

"All the same, I'm not afraid of you!" exclaimed the hedgehog bravely.

"And that little nightingale is not for you!"

The fox made a face.

"Come now, you silly hedgehog; you are being irritating! You may be sure, I will not visit you in the wood again."

#### EPISODE 5

The little nightingale grew up on the ground. The hedgehog made a soft bed for him of dry leaves. The two of them became great friends ... the nightingale and the hedgehog. The days passed, and the nightingale began not only to fly, but also to sing.

Not far from the hawthorn bush a small pine tree sprang up. The nightingale was most intrigued.

"The little pine tree looks like you", he said to the hedgehog, in wonder...- "The same needles, but softer and gentler."

#### EPISODE 6

Already the nights had become colder; already the green leaves had died. The nightingale had joined the larger family.

"Goodbye, little hedgehog," cried the nightingale. "We are flying to warmer regions, because winter is near." "In spring I will sing you an even better song," promised the little nightingale.

Tears rolled uncontrollably from the hedgehog's eyes.

In the wood everything became cold. But for some reason it was unusually dry. There was not even one little raindrop.

"Misfortune is coming, misfortune is coming," chattered the magpie.

## EPISODE 7

"All the same, I'm staying here!" said the hedgehog to himself. "You see, when my nightingale returns in spring, he will not know his birthplace, so unless I meet him, he will fly somewhere else."

The hedgehog cleared the hard, stiff black leaves out of his burrow, and then ran down into the gully, since it had escaped, and was still in autumn leaf. When the hedgehog returned, with leaves thickly wound around his needles, he saw, beside his hole - the fox!

"Hello," said the fox, maliciously; "Indeed, I thought that I had not caught you. I am very hungry and your prickly needles do not worry me in the least."

The hedgehog froze and stood motionless. But the fox had already raised his sharp-clawed paw above him:

"Now I have you!"

Then the hedgehog gathered all his strength to himself, and said, firmly,

"Stand here, pine tree, to make the nightingale happy!"

"What did you say?" cried the fox, startled, " - that you are a pine tree, not a hedgehog! I think I better go now, while the going is good. Perhaps this wood is bewitched!"

And the fox left the wood and never came back.

#### EPISODE 8

With the arrival of Spring, the nightingale returned from the dark regions. He flew from one burnt area to another, and sadly trilled,

"Is it possible that this is my birthplace? It was so glorious here during the summer. But is this really my wood? I will fly on for a while, because even the hedgehog is not here, and he would surely have waited for me to return."

The nightingale flew up into the sky to look at the burnt region for the last time. Immediately, on the ground, he saw a small green pine tree.

"No, I will not fly further," decided the nightingale; "Here is where my best friend, the hedgehog, lives. But is this my pine tree? It looks very much like it - prickly, but soft and beautiful."

He flew down to the pine tree and with his beak he lifted off the little yellow leaves, from the previous year, which were wound around the needles. These were the same leaves that the hedgehog was going to use for his burrow.

"I will build my nest out of these leaves," said the nightingale, and he began to sing...

And all the while, he became black from the charred bushes, and he waited. Out of all the corners green shoots were springing to life. And it seemed to the nightingale that his pine tree could not keep still, and was listening to the nightingale's song; ... he realized that it was indeed the hedgehog that was listening! ...

## APPENDIX VI

## GEOLOGICAL ERAS

This Appendix provides a detailed description of the land forms, the base of study, plant and animal life as they appeared in the different geological eras, and used by Crumb indicating the different sections in his trio.

	LAND FORMS	BASE OF STUDY	PLANT LIFE	ANIMAL LIFE
PRECAMBRIAN ERA-	began 4 billion years ago		PRECAMBRIAN ERA	
Early Precambrian	Probably massive gas formations. Volcanic eruptions.		Nothing known	Nothing known
	Volcanic activity. Mountains created and eroded to plains. Minerals deposited.	Canada Great Lakes	Algae	Traces of unicellular marine life
Late Precambrian	Mountains raised with extrusions of granite and gneiss. Continued volcanic eruption, and at least two glacial periods.	Grand Canyon Great Lakes	Algae	Simple marine life, worm-like bodies
PALEOZOIC ERA -	began 700 million years ago		PALEOZOIC ERA	
I N V E R T E B R A T E S	Cambrian lasted about 100 million years	Europe Asia Eastern Canada Great Lakes	Algae	Brachiopods, trilobites, gastropods and sponges
	Ordovician lasted about 60 million years	Canada New York	Algae	Additional marine life: foraminifera, coral, graptolites, cystoids, arachnids and nautiloids
	Silurian lasted about 40 million years	New York Great Britain	Mosses and primitive land plants appeared	Bryozoans, crinoids, echinoids, lamellibranchs joined the invertebrate life in this era
F I S H	Devonian lasted about 50 million years	New York Grand Canyon	Marine algae abundant. Ferns and lichen developed on land	First amphibians appeared. Graptolites and cystoids decreased
A M P H I B I A N S	Carboniferous Mississippian lasted 35 million years	Mississippi Valley Newfoundland	Hardy lichen covered in coal marsh. Conifers and fern trees developed	Amphibians increased. Crinoids and blastoids disappeared
	Pennsylvanian lasted about 40 million years	Asia Europe Pennsylvania	Warm moist air had encouraged vegetation	Trilobites vanished and amphibians increased in size and number. Insect life increased.
	Permian lasted about 10 million years	Texas Grand Canyon Germany	Many swamp-growing plants were lost in this era	Amphibian life began to decrease and primitive reptiles developed

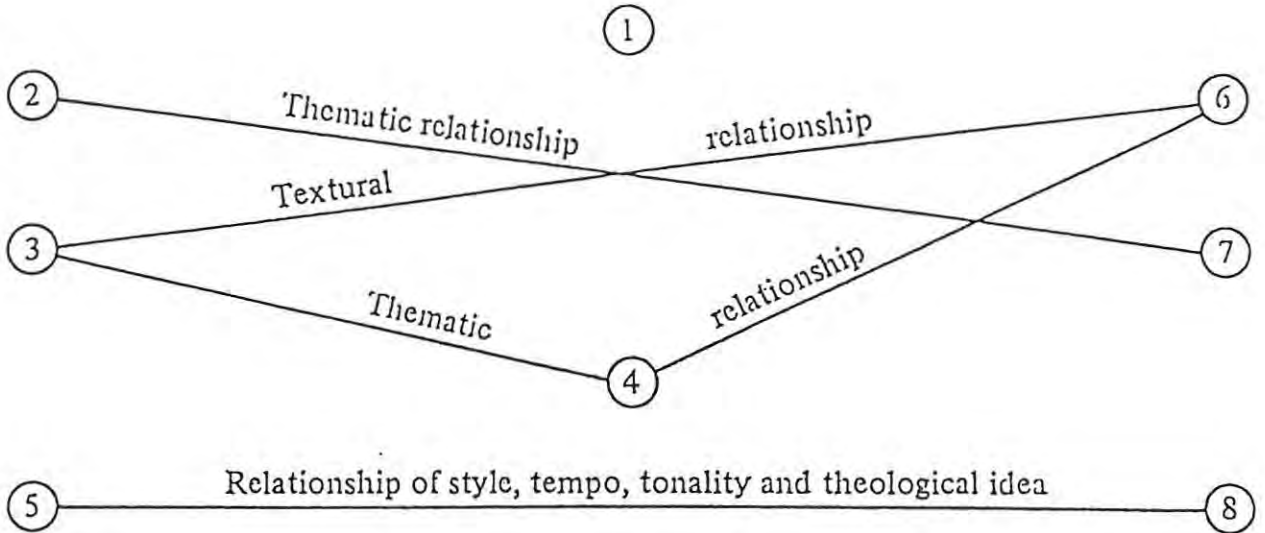
	LAND FORMS	BASE OF STUDY	PLANT LIFE	ANIMAL LIFE	
A G E O F	MESOZOIC ERA - Triassic lasted about 45 million years	began 230 million years ago  Upthrusts and tilting violent in Germany and eastern U.S.A. Seas flooded western coast as far as Kansas. Salt beds were deposited	Germany New Jersey Nevada	MESOZOIC ERA  Forests of conifers and cycads, ferns and fern trees grow. Air became dry, affecting vegetation	Dinosaurs and aquatic reptiles came into being
R E P T I L E S	Jurassic lasted about 45 million years	Great floods washed over the continents in both hemispheres. Land between S.America and Africa disappeared. Faulting created the Sierra Nevada range.	Germany England Texas	Gymnosperms appeared. Vegetation was becoming more scant	Reptiles dominated the land, sea and air. The first bird (archaeopteryx) appeared. Modern insects, bees, moths and flies now lived
	Cretaceous lasted about 65 million years	Great beds of chalk, coal and marl are created by the most wide-spread floods on all continents. Andes and Rocky Mountains are formed.	Atlantic Coast California England	Angiosperms, the first flowering plants grew. Huge conifers and other deciduous tree developed	This was the age of the tyranno- saurus and the armored, horned and duckbill primitive mammals
	CENOZOIC ERA -	began 65 million years ago	CENOZOIC ERA		
A G E O F	Tertiary Paleocene and Eocene Epochs lasted about 35 million years	Gulf and Pacific Coasts are submerged. Upthrusts created wider mountain ranges in Western Hemisphere. Lands vanished in Southern Hemisphere and at South Pole.	California	Seed-bearing plants and grasses were now abundant	Marsupials were in existence and grazing animals began to develop. The first carnivores were found
M A H A L S	Miocene lasted about 15 million years	Coasts of America rise. Volcanic activity great in U.S.A. and Europe. Andes, Alps, Himalayas and Rocky Mountains rose.	Atlantic and Pacific coasts Europe (France) Asia	Modern plant life is more or less developed	The mammoth and the first horse appeared. Mammals were predominant Anthropoid apes existed
	Pliocene lasted about 8 million years	Volcanic activity continued on Pacific Coast. Sierras and all Rocky Mountain chain increased. Appalachian range also lifted higher. Climate became cooler.	California Florida Texas France		Mastodons and Old World monkeys migrated to Western Hemisphere. Carnivores and furred-animals flourished
M A N	Quaternary Pleistocene lasted 6+ million years	The glacial or ice ages. The Northern Hemisphere was covered many times by ice which receded and reformed. Land bridges disappeared between the continents. Lakes and valleys were formed. Volcanic activity lessened but continued.	Great Lakes Scandinavia Asia, Alaska Greenland	Many plants moved with glaciers to new locations, more were destroyed	The mammoth was destroyed under ice. Man now moved into a world that was at least 4 billion years in formation
	Recent	With the receding of the ice, lakes and waterways were formed. Erosion and volcanic ash formed soil and alluvials.  Young People's Science Encyclopedia, Children's Press Chicago, 1963.			Neolithic man became known 20,000 years B.C.

**APPENDIX VII**

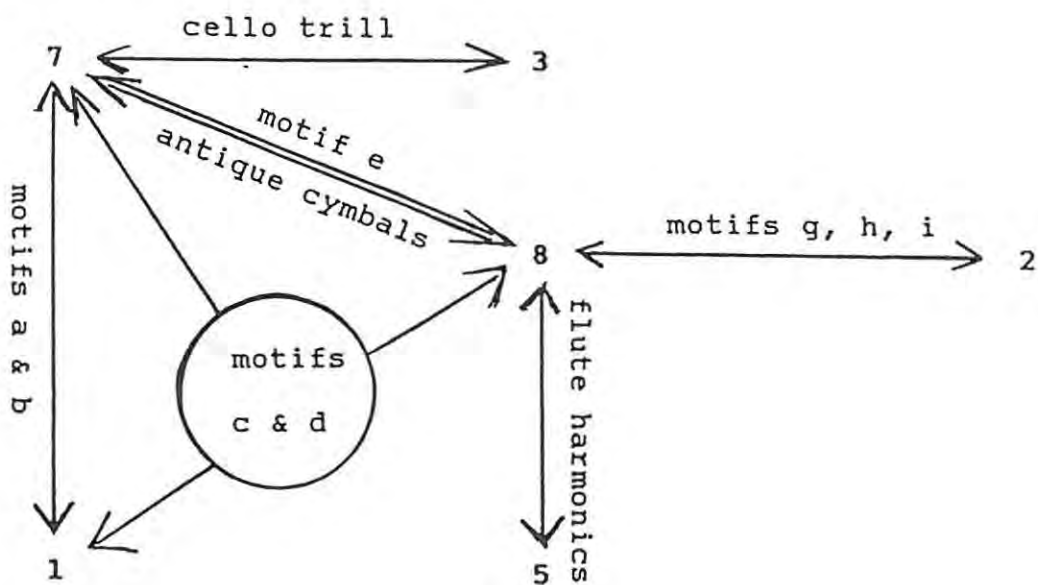
**UNIFYING MATERIAL IN MESSIAEN'S QUARTET & CRUMB'S TRIO.**

This Appendix shows the similarity between the unifying aspects used in the Quartet by Messiaen and the Trio by Crumb.

**MESSIAEN: *Quartet for the End of Time.***



**CRUMB: *Vox Balaenae.***



## BIBLIOGRAPHY

## I MAIN SOURCES

## 1. SCORES.

Crumb, George. Vox Balaenae for Masked Players. C.F. Peters  
no. 66466. New York. 1972.

Damase, Jean-Michel. Sonate en Concert. Lemoine. Paris.  
1952.

Goossens, Eugène. Five Impressions of a Holiday, op. 7 no.  
1-5. Chester Music Ltd. London. 1916.  
Stuttgart. 1972.

Messiaen, O. Quatuor Pour la Fin du Temps. Durand. Paris.  
1942.

Raphael, Günter. Trio-Suite op. 44. Willy Müller  
Süddeutscher Musikverlag. Heidelberg. 1968.

Sil'vansky, Nicolai, Joseph. The Hedgehog and the  
Kiev. 1979.

## 2. PERSONAL CORRESPONDENCE.

2.1 Composers.

Blank, Allan. Richmond. U.S.A. 10/10/91.

Bolz, Harriett. Columbus, Ohio. U.S.A. 22/05/91.

Brooks, Richard. New York. U.S.A. 11/10/91.

Callaway, Ann. Rochester. U.S.A. 18/09/91.

Christiansen, Toke Lund. Valby. Denmark. 18/03/92.

Doran, Matt H. California. U.S.A. 31/05/91.  
Hedges, Anthony J. Hull. England. 21/05/93.  
Holmboe, Vagn. Helsingør. Denmark. 16/06/91.  
Hoover, Katherine. New York. U.S.A. 20/06/91.  
Johnson, A. Paul. Florida. U.S.A. 17/02/91.  
Lessard, John. New York. U.S.A. 23/08/91.  
Luening, O. New York. U.S.A. 23/07/91.  
Mellers, Wilfrid. York. England. 19/06/91.  
O'Leary, Jane. Galway. Ireland. 16/06/91.  
Osieck, Hans. Bloemendaal. The Netherlands. 25/06/91.  
Pentland, Barbara. Vancouver. Canada. 21/06/91.  
Pitfield, Thomas, B. Cheshire. England. 1/06/91.  
Pleskow, Raoul. New York. U.S.A. 14/11/91.  
Schickele, Peter. New York. U.S.A. 17/07/91.  
Shepard, Jean. New York. U.S.A. 18/11/91.  
Skempton, Howard. London. England. 25/07/91.  
Verhaar, Ary. The Hague. The Netherlands. 23/05/91.

## 2.2 Musicians.

Gal, E. F. York. England. 3/03/91.  
Padorr, L. Los Angeles. California. U.S.A. 11/09/91.  
Pleeth, W. London. England. 20/02/91.  
Schön, S. Göteborg. Sweden. 14/10/92; 29/01/93.

2.3 Music Information Centres (MIC), Unions, Curators, etc:

- Brick, H. Australian Music Centre Ltd, trading as Sounds  
Australian. Sydney. Australia. 25/05/92.
- Calabrese, R. American Composers Alliance. New York. U.S.A.  
26/06/91.
- Clarkson, A. The Stefan Wolpe Society, Inc. Ontario. Canada.  
2/06/91.
- Fohr, B. Klaus Huber - Ascensus. Freiburg. Germany.  
23/01/92.
- Greenall, M. British MIC. London. Britain. 6/02/92.
- Hogh, B. Danish MIC. Copenhagen. Denmark. 18/10/91.
- Holbaek-Hanssen, H. Norwegian MIC. Oslo. Norway. 9/01/92.
- Long, D. L. American Composers Alliance. New York. 11/09/91.
- Meier, E. Schweizerische Gesellschaft für die Rechte der  
Urheber musicalischer Werke. Zürich. Switzerland.  
23/1/92.
- Monceau, C. Centre de Documentation de la Musique  
Contemporaine. Neuilly-sur-Seine. France.  
17/01/92.
- O'Kelly, E. The Contemporary Music Centre. Dublin. Ireland.  
27/09/91.
- Rudén, J. O. Swedish MIC. Stockholm. Sweden. 10/07/91.
- Rudén, J. O. Swedish MIC. Stockholm. Sweden. 11/11/91.
- Shcherbak, V. Union of Composers of the USSR. Moscow.  
11/02/92.

Sloane, M. Curator, William Ames Collection. Navarro. U.S.A.

24/10/91.

Stokar, H. Howard Stokar Management. New York. U.S.A.

14/11/91.

Vseteckova, N. MIC of the Czech Music Fund. Prague.

Czechoslovakia 28/01/92.

#### 2.4 Publishers.

Dick, J.S. PETERS Edition Ltd. London. England. 19/02/92.

Johnson, R. CHESTER Music. London. England. 3/07/91.

Stokhof-Westhof, R. DONEMUS. Amsterdam. The Netherlands.

30/01/91.

Von Volborth, D. CEBEDEM. Brussels. Belgium. 4/02/91.

#### 2.5 Information Leaflets (Booklets, Brochures) and

##### Programmes received from composers:

##### 2.5.1

Ann Carr-Boyd. Broadway. Australia. 1989.

Katherine Hoover. Papagena Press. New York. U.S.A.

Peter Schickele. Elkan Vogel. Pennsylvania. U.S.A.

Oldrich Semerak. Prague. 1990. Czechoslovakia

Jelinek Stanislav. Prague MIC. Czechoslovakia

Madsen Trygve. Musikk-Husets Forlag A/S. Oslo. Norway.

Judith Weir. Chester Music. London. England.

## 2.5.2

Blyme, A. Niels Viggo Bentzon. Wilhelm Hansen, Copenhagen.  
1984.

Kasander, J. Werken van Ary Verhaar. Odeon Schouwburg.  
Zwolle. 18/10/85.

Ketting, K. Mogens Winkel Holm. Danish MIC. Copenhagen.  
1984.

Ledec, J. Lucas, Zdenek. Prague. 1990.

Mihule, Jaroslav. Bohuslav Martinu 1890-1959: Life and Work.  
Czech Music Fund. Prague. Czechoslovakia. 1990.

Rapoport, P. Vagn Holmboe. Wilhelm Hansen, Copenhagen. 1988.

2.5.3 Ensembles:

Schön's Chamber-Trio. Gothenburg. Sweden.

Trio con Flauto. Prague MIC. Czechoslovakia.

## 3. RECORDS.

Crumb, G. Vox Balaenae. Record Sleeve M 32739. Columbia.  
1974.

Marx, Karl. Musik der Gegenwart: Trio op. 61 (1962). Record  
sleeve CAL 30450. Calig-Verlag. Heidelberg. 1972.

Messiaen, O. Quartet for the End of Time. RCA Victor Gold  
Seal. GD 87835. 1976.

- Robbins Landon, H.C. Joseph Haydn. Decca ACE of Diamonds.  
SDD 521. London. 1978.
- Ruf, W. Joseph Haydn. Das Alte Werk. AW 6.42649. Hamburg.  
1981.
- Walsh, M. Crumb G. New World Records. NW 357-2. New York.  
1987.

#### 4. CATALOGUES.

- American Composers Alliance. American Composers Edition.  
Mixed Chamber Ensembles. ACA. New York.
- Chester. Catalogue of Chamber Music. London.
- Donemus. Catalogue of Chamber Music. Vol II. Donemus.  
Amsterdam. September 1989.
- Huber, Klaus. Werkverzeichnis. Zurich. September 1980.
- Swiss Composers. Dates of Swiss Composers. Suisa.
- Wolpe, Stefan. Catalogue of Published Scores and Recordings.  
The Stefan Wolpe Society. 1991.

#### 5. BOOKS.

- ..... Bibliographic Guide to Music: Music 1974 - 1989. G.K.  
Hall & Co. Massachusetts. 1976 - 1990.
- Abraham, G. The Concise Oxford History of Music. Oxford  
University Press. London. 1979.

- Abraham, G. E. On Russian Music. Books for Libraries Press.  
New York. 1970.
- Abraham, Gerald. This Modern Stuff. An Introduction to  
Contemporary Music. (2nd ed.) The Citadel Press.  
London. 1946.
- Altmann, W. Kammermusik - Katalog. Ein Verzeichnis von seit  
1841 veröffentlichten Kammermusikwerken. Friedrich  
Hofmeister Verlag. Hofheim am Taunus. 1944.
- Anderson, E. R. Contemporary American Composers: A  
Biographical Dictionary. G.K. Hall. Boston  
Massachusetts. 1982.
- Apel, W. (ed.) The Harvard Dictionary of Music. Heinemann  
Educational Books. London. 1970. (2nd ed.).
- Artaud, P. & G. Geay. Present Day Flutes. Jobert. Paris.  
1980.
- Austin, W. W. Music in the Twentieth Century from Debussy  
through Stravinsky. J.M. Dent & Sons. London.  
1966.
- Baines, A. Musical Instruments through the Ages. Penguin  
Books. London. 1966.
- Baron, J. H. Chamber Music. A Research and Information  
Guide. Garland Publishing Inc. New York. 1987.
- Bartolozzi, B. New Sounds for Woodwind. O.U.P. London. 1967.
- Bate, P. The Flute. W. W. Norton. New York. 1969.
- Bent, I. Analysis. The New Grove Handbooks in Music.  
Macmillan Press. London. 1987.

- Benton, R. Ignace Pleyel. A Thematic Catalogue of His Compositions. Pendragon Press. New York. 1977.
- Binkowski, B. (ed.) Unser Liederbuch. Band II. J. B. Metzlersche Verlagsbuchhandlung. Stuttgart. 1975.
- Blom, E. (ed.) Grove's Dictionary of Music & Musicians. Macmillan. London. 1954.
- Blum, D. The Art of Quartet Playing. Victor Gollancz Ltd. London. 1986.
- Boenke, H. M. Flute Music by Women Composers. An Annotated Catalog. Greenwood Press. New York. 1988.
- Boyden, D. D. et al. The New Grove Violin Family. Macmillan. London. 1989.
- Bray, T. Twentieth-Century Music 1900-1945. Unit 23-25. The Open University Press. Milton Keynes. 1974.
- Butterworth, N. A Dictionary of American Composers. Garland Publishing. New York. 1984.
- Campbell, M. The Great Cellists. Victor Gollancz Ltd. London. 1988.
- Carlson, E. F. A Bio-Bibliographical Dictionary of Twelve-Tone and Serial Composers. The Scarecrow Press. Metuchen, New Jersey. 1970.
- Chase, G. America's Music. From the Pilgrims to the Present. McGraw Hill. New York. 1955.
- Childs, B. An Interview with Barney Childs. Holt, Rinehart & Winston. New York. 1967.

- Clarke, G. E. Essays on American Music. Greenwood Press.  
London. 1977.
- Cobbett, W. W. Cobbett's Cyclopedic Survey of Chamber Music.  
(1930) with supplementary material by Colin Mason  
(1963). Oxford University Press. London. 1963.
- Cohen, A. I. International Encyclopedia of Women Composers.  
R. R. Bowker Co. New York. 1981.
- Cole, H. *Chamber Music*. in The Musical Companion. Victor  
Gollancz. London. 1982.
- Cooper, M. (ed.) The Concise Encyclopedia of Music &  
Musicians. Hutchinson & Co. London. 1978.
- Cooper, M. (ed.) The New Oxford History of Music vol. X. The  
Modern Age 1890-1960. O. U. P. London. 1974. (1st  
ed.).
- Cope, D. New Music Composition. Schirmer. New York. 1977.
- Cope, D. H. New Directions in Music. Wm. C. Brown Company  
Publ. Iowa. 1982. (3rd ed., 2nd print).
- Danuser, H.; Kämper, D. & P. Terse. Amerikanische Musik  
seit Charles Ives. Laaber - Verlag. Köln. 1987.
- Davies, L. César Franck and his Circle. Barrie & Jenkins.  
London. 1970.
- Demuth, N. Musical Trends in the Twentieth Century.  
Rockliff. London. 1952.
- Dickinson, G. S. A Handbook of Style in Music. Da Capo  
Press. New York. 1969.
- Dick, R. The Other Flute. O. U. P. New York. 1975.

- Dufallo, R. Trackings. Composers Speak with Richard Dufallo.  
O. U. P. Oxford. 1989.
- Dunhill, T. F. Chamber Music: A Treatise for Students.  
Macmillan & Co. London. 1938.
- Dyson, sir G. The New Music. (2nd ed.) O. U. P. London.  
1926.
- Edwards, A. C. & W. T. Marrocco. Music in the United States.  
Wm. C. Brown Company Publishers. Iowa. 1968.
- Ewen, D. American Composers. A Biographical Dictionary.  
G. P. Putnam's Sons. New York. 1982.
- Ewen, D. (ed.) The Book of Modern Composers. Alfred A.  
Knopf. New York. 1943.
- Ewen, D. The Complete Book of Twentieth Century Music.  
Prentice-Hall. Englewood Cliffs, New Jersey. 1966.
- Ewen, D. The World of Twentieth Century Music.  
Robert Hale & Co. London. 1969.
- Fairley, A. Flutes, Flautists and Makers. Pan Educational  
Music. London. 1982.
- Ferguson, D. N. Image and Structure in Chamber Music. Da  
Capo Press. New York. 1977.
- Foreman, L. British Music Now. A Guide to the Work of  
Younger Composers. Paul Elek. London. 1975.
- Forsyth, E. M. Building a Chamber Music Collection.  
Scarecrow Press Inc. London. 1979.
- Gagne, C. & T. Caras. Soundpieces: Interviews with American  
Composers. Scarecrow Press. London. 1982.

- Gillespie, D. Roger Reynolds: Profile of a Composer. C. F. Peters. New York. 1982.
- Goossens, E. Overture and Beginners. A Musical Autobiography. Greenwood Press. Westport. 1972.
- Goss, M. Modern Music Makers. Contemporary American Composers. E. P. Dutton & Co. New York. 1952.
- Greene, D. M. (ed.) Greene's Biographical Encyclopedia of Composers. Collins. London. 1985.
- Griffiths, P. Modern Music. The Avant Garde since 1945. J. M. Dent & Sons. London. 1981.
- Griffiths, P. Modern Music. A Concise History from Debussy to Boulez. Thames & Hudson. New York. 1978.
- Griffiths, P. The Thames and Hudson Encyclopaedia of Twentieth Century Music. Thames & Hudson. New York. 1986.
- Gümbel, M. Neue Spieltechniken in der Querflöten-Musik nach 1950. Bärenreiter. Kassel. 1974.
- Halbreich, H. Bohuslav Martinu. Werkverzeichnis, Dokumentation und Biographie. Atlantis Verlag. Zürich. 1968.
- Havergal, B. Havergal Brian on Music. Selections from his Journalism. Toccata Press. Exeter. 1986.
- Hinson, M. The Piano in Chamber Ensemble: An Annotated Guide. The Harvester Press. London. 1978.
- Ho, A. & D. Feofanov. Biographical Dictionary of Russian / Soviet Composers. Greenwood Press. New York. 1989.

- Hogwood, C. The Trio Sonata. BBC Publishers. London. 1979.
- Holmes, T. B. Electronic and Experimental Music. Charles Scribner's Sons. New York. 1985.
- Homer, U. Chamber Music. Columbia University Press. New York. 1966 (2nd ed.).
- Horton, J. Scandinavian Music: a Short History. Faber & Faber. London. 1963.
- Houser, R. Catalogue of Chamber Music for Woodwind Instruments. Da Capo Press. New York. 1973.
- Howell, T. The Avant-Garde Flute: A Handbook for Composers and Flutists. University Press of California. Berkeley. 1974.
- Hull, R. *Eugène Goossens*. in British Music of Our Time. Penguin. London. 1951.
- Jacobs, A. (ed.) British Music Yearbook. A. & C. Black. London. 1980. (6th ed.).
- Jacobsson, S. & H-G. Peterson. Swedish Composers of the 20th Century. Swedish Music Information Center. Stockholm. 1990. (2nd ed.).
- Johnson, R. S. Messiaen. J.M. Dent & Sons. London. 1975.
- Kay, E. (ed.) International Who's Who in Music and Musicians' Directory. Melrose Press. Cambridge. 1985. (10th ed.), 1988. (11th ed.), 1990. (12th ed.)
- King Hyatt, A. Chamber Music. Max Parrish & Co. New York. 1948.

- Kretzchmar, F. (ed.) The Music Index. A Subject - Author Guide to Music Periodical Literature. Harmonie Park Press. Michigan. 1949 - 1978.
- Lang, P. H. & N. Broder. (ed.) Contemporary Music in Europe: A Comprehensive Survey. J. M. Dent & Sons. London. 1965.
- Lester, J. Analytic Approach to Twentieth Century Music. W. W. Norton & Co. New York. 1988.
- Lincoln, H. B. & S. Bonta. Study Scores of Historical Styles. vol. II. Prentice-Hall. Englewood Cliffs, New Jersey. 1987.
- Machlis, J. Introduction to Contemporary Music. W.W. Norton & Co. New York. 1961.
- Mallows, K. Chamber Music by South African Composers in South African Libraries: A Bibliography. University of Cape Town. Cape Town. 1979.
- Martin, W. R. & J. Drossin. Music of the Twentieth Century. Prentice-Hall. Englewood Cliffs, New Jersey. 1980.
- Marcuse, S. Musical Instruments: A Comprehensive Dictionary. Country Life Ltd. London. 1964.
- McCue, G. Music in American Society 1776-1976. From Puritan Hymn to Synthesizer. Transaction Books. New Jersey. 1977.
- Mellers, W. Man and His Music: The Sonata Principle. Barrie & Rockliff. London. 1962.

- Monnikendam, M. Nederlandse Componisten van Heden en Verleden. A. J. G. Strengholt's Uitgeversmaatschappij. Amsterdam. (no date indicated).
- Moore, D. From Madrigal to Modern Music: A Guide to Musical Styles. W. W. Norton. New York. 1942.
- Newman, W. S. The Sonata in the Classical Era. The University of North Carolina Press. Durham N. C. 1963.
- Newman, W. S. The Pianist's Problems. Harper & Row Publishers. New York. 1974.
- Nicholls, D. American Experimental Music, 1890-1940. Cambridge University Press. Cambridge. 1990.
- Peacock, J. D. Women Composers: The Lost Tradition Found. The Feminist Press. New York. 1988.
- Potterton, W. J. (ed.) International Who's Who in Music and Musicians' Directory. Burke's Peerage Ltd. London. 1969. (5th. ed.); 1972. (6th. ed.).
- Pruett, J. W. & T. P. Slavens. Research Guide to Musicology. American Library Association. Chicago. 1985.
- Raeburn, M. & A. Kendal. Heritage of Music. Music in the Twentieth Century. vol. IV. O. U. P. Oxford. 1989.
- Randel, D. The New Harvard Dictionary of Music. Belknap Press. Cambridge. 1986.
- Rapoport, P. Opus Est: Six Composers from Northern Europe. Kahn & Averill. London. 1978.

- Read, G. Contemporary Instrumental Techniques. Schirmer. New York. 1976.
- Read, G. Modern Rhythmic Notation. Indiana University Press. Bloomington. 1978.
- Renner, H. Reclams Kammermusikführer. Philip Reclam jnr. Stuttgart. 1959.
- Reynolds, R. A Searcher's Path. A Composer's Way. Institute for Studies in American Music. New York. 1987.
- Robbins Landon, H.C. Haydn Chronicle and Works. Haydn at Esterhaza 1766-1790. Thames and Hudson. London. 1978.
- Robertson, A. Chamber Music. Penguin Books. London. 1957.
- Rowen, R. Early Chamber Music. King's Crown Press. New York. 1949.
- Sachs, C. Rhythm and Tempo. A Study in Music History. W. W. Norton. New York. 1953.
- Sadie, S. & H.W. Hitchcock (eds.) The New Grove Dictionary of American Music. Macmillan. London. 1986.
- Sadie, S. (ed.) The New Grove Dictionary of Music & Musicians. Macmillan. London. 1980; 1989.
- Sadie, S. (ed.) The New Grove Dictionary of Musical Instruments. vol. I-III. Macmillan. London. 1984.
- Safranek, M. Bohuslav Martinu. His Life and Works. Allan Wingate. London. 1962.
- Safranek, M. Bohuslav Martinu. The Man and his Work. Dennis Dobson Ltd. London. 1946.

- Salzman, E. Tentieth-Century Music: An Introduction.  
Prentice-Hall. Englewood Cliffs, New Jersey. 1967.  
(1st ed.).
- Salazar, A. Music in Our Time. Butler & Tanner. London.  
1944.
- Saucier, G.A. Woodwinds: Fundamental Performance Techniques.  
Schirmer. New York. 1981.
- Schaefer, J. New Sounds. The Virgin Guide to New Music.  
Virgin Book Pub. W.H. Allen & Co. London. 1990.
- Schwartz, E. Electronic Music and Live Performance. in G.  
Battcock's Breaking the Sound Barrier. E.P.  
Dutton. New York. 1981.
- Schwartz, E. & B. Childs. Contemporary Composers on  
Contemporary Music. Holt, Rinehart & Winston. New  
York. 1967.
- Searle, H. & R. Layton. Twentieth Century Composers.  
Weidenfeld and Nicolson. London. 1972.
- Slonimsky, N. Baker's Biographical Dictionary of Musicians.  
Schirmer. London. 1978. (6th ed.).
- Smallman, B. The Piano Trio. Its History, Technique, and  
Repertoire. Clarendon Press. Oxford. 1990.
- Smith Brindle, R. The New Music. The Avant-garde since 1945.  
O. U. P. Oxford. 1987.
- Stevens, B. Czechoslovakia and Poland. Penguin / Pelican.  
London. 1957.

- Stone, K. Music Notation in the Twentieth Century: A Practical Guidebook. W.W. Norton & Co. New York. 1980.
- Stratelak, N. A. (ed.) The Music Index. A Subject - Author Guide to Music Periodical Literature. Harmonie Park Press. Michigan. 1979 - 1990.
- Stratton, G. & A. Frank. The Playing of Chamber Music. Dennis Dobson Ltd. London. 1935.
- Thompson, K. A Dictionary of Twentieth Century Composers 1911-1971. Faber & Faber. London. 1973.
- Thomson, V. Twentieth Century Composers. American Music since 1910. vol. I, IV. Weidenfeld and Nicolson. London. 1971.
- Thompson, O. (ed.) The International Cyclopedia of Music & Musicians. Dodd, Mead & Co. New York. 1985.
- Timm, E. L. The Woodwinds. Allyn & Bacon Inc. Boston. 1971. (2nd ed.).
- Toff, N. The Development of the Modern Flute. Taplinger. New York. 1979.
- Vester, F. Flute Music of the 18th Century. Musica Rara. Monteux. 1985.
- Vester, F. Flute Repertoire Catalogue. Musica Rara. London. 1967.
- Vester, F. & R. De Reede. Catalogus van de Nederlandse Fluitliteratuur. Uitgeverij Frits Knuf. Buren. 1988.

- Vinton, J. (ed.) Dictionary of Twentieth Century Music.  
Thames & Hudson. London. 1974. (1st ed.).
- Wallner, B. Scandinavian Music after the Second World War.  
J. M. Dent & Sons. London. 1966.
- Watkins, G. Soundings. Music in the Twentieth Century.  
Schirmer Books. New York. 1988.
- Westrup, J. A. & F. Harrison. The New College Encyclopedia  
of Music. W. W. Norton. New York. 1976 (revised  
ed.).
- White, J. D. The Analysis of Music. Prentice - Hall. New  
York. 1976.
- Wittlich, G. E. (ed.) Aspects of Twentieth - Century Music.  
Prentice Hall. New York. 1975.
- Wuorinen, C. Simple Composition. Longman. New York. 1979.

## 6. ARTICLES AND REVIEWS

- Antcliffe, H. "*The Recent Rise of Chamber Music in England.*"  
in The Musical Quarterly. January 1968. vol. VI,  
no. 1. pp. 19-23.
- Apfel, E. "*Zur vorgeschichte der Triosonate.*" in Die  
Musikforschung. 1965. vol. 18. pp. 33-36.
- Appleton, J. "*Tone-Relation; Time Displacement and Timbre.  
An Approach to Twentieth-Century Music.*" in The  
Music Review. 1966. vol. 27. pp. 54-58.

- Bailly, L. "My Views on Chamber Music." in The Strad.  
October 1973. vol. 83, no. 1002. pp. 365, 367.
- Banfield, S. "Sir (Aynsley) Eugene Goossens." in The New Grove Dictionary of Music & Musicians. 1989. vol. VII. pp. 533-534.
- Bartlett, K. W. "Günter Raphael." in Grove's Dictionary of Music & Musicians. 1954. vol. VII. p. 49.
- Batstone, P. N. "Multiple Order Functions in Twelve-Tone BATSMusic. Part II." in Perspectives of New Music.  
Fall / Winter 1972. vol. 11, no. 1. pp. 92-105.
- Beeson, R. A. "Background and Model. A Concept in Musical Analysis." in The Music Review. 1971. vol. 32, no. 4. pp. 349-359.
- Bell, C. A. "The Growth of Chamber Music in Europe and America." in The Strad. August-December 1971. vol. 82, nos. 976-980. pp. 169-173; 209-213; 313-315; 355-361.
- Black, R. "Contemporary Notation and Performance Practice." in Perspectives of New Music. Fall-Winter 1983 & Spring-Summer 1984. vol. 22. pp. 117-137.
- Blom, E. "Eugene Goossens." in Grove's Dictionary of Music & Musicians. 1954. vol. III. p. 713.
- Block, S. D. "The Making of a New Music Ensemble." in Perspectives of New Music. Spring / Summer 1982. pp. 592-599.

- Böhm, H. "*Günter Raphael -Uraufführung.*" in Musik und Gesellschaft. June 1963. vol. 13. pp. 378-379.
- Böhm, H. "*In memoriam Günter Raphael.*" in Musik und Gesellschaft. January 1961. vol. 11. pp. 53-54.
- Borroff, E. "*Crumb, George (Henry).*" in The New Grove Dictionary of American Music. 1986. vol. I. p. 551-553.
- Brooks, R. "*Geórgie Crumb: Star-Child.*" in Notes. March 1989. vol. 45, no. 3. p. 619.
- Brown, E. "*The Notation and Performance of New Music.*" in — The Musical Quarterly. 1986. vol. 72, no. 2. pp. 180-201.
- Burge, D. "*About Pianists.*" in The Instrumentalist. September 1987. vol. 26, no. 7. pp. 50-51.
- Cardew, C. "*Notation - Interpretation, Etc.*" in Tempo. Spring 1961. vol. 58. pp. 21-33.
- Celentano, J.P. "*Chamber Music: Challenge and Opportunity.*" in Music Educators Journal. October 1966. vol. 53, no. 2. pp. 103-107.
- Chapman, M. "*Methods of Listening.*" in Music & Musicians. November 1969. vol. 18, no. 3. pp. 48-49.
- Chew, G. "*Notation: System or Symbol?*" in The Musical Times. October 1979. vol. 120, no. 1640. pp. 819-820.
- Crumb, G. "*The Composer between Man and Music.*" in Interface. 1980. vol. 9. p. 151.

- De Reede, R. "*Geoffrey Gilbert (1914-1989). Nestor des Englischen Flötenspiels.*" in Tibia. 1989. vol. 14, no. 4. pp. 593-595.
- Dennis, B. "*Repetitive and Systematic Music.*" in The Musical Times. December 1974. vol. 115, no. 1582. pp. 1036-1038.
- Drabkin, W. "*Marx, Karl.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. XI. pp. 741-742.
- Ferguson, H. "*Prelude.*" in The New Grove Dictionary of Music & Musicians. 1989. vol. XV. pp. 210-100.
- Finscher, L. "*Hausmusik und Kammermusik.*" in Musica. 1968. vol. 22, no. 4. pp. 325-329.
- Fowler, C. B. "*American Composer sketches. George Crumb.*" in Music Educators Journal. April 1967. vol. 53, no. 8. p. 61.
- French Music Information Centre. Le Courrier Musical de France. vol. XVIII. 1967.
- Frid, G. "*Ervaringen met Kamermuziek.*" in Mens & Melodie. May 1974. vol. 29. pp. 141-142.
- Fuller, D. "*Accompanied Keyboard Music.*" in The Musical Quarterly. April 1974. vol. 60, no. 2. pp. 222-259.
- Fuller-Maitland, J. A. "*Ensemble.*" in The Musical Quarterly. January 1915. vol. 1, no. 1. pp. 83-92.

- Gaburo, V. "*Notes from Inside the Piano.*" in Perspectives of New Music. Spring-Summer 1978. vol. 16, no. 2. pp. 3-18.
- George, W. H. "*The Acoustics of the Chamber Music Room.*" in The Musical Times. February 1931. vol. 72, no. 1055. pp. 123-125.
- Gericke, H. P. "*Festschrift Karl Marx.*" in Musica. 1968. vol. 22, no. 5. p. 425.
- Girardot, A. "*Damase, Jean-Michel.*" in The New Grove Dictionary of Music & Musicians. 1989. vol. V. p. 170.
- Goléa, A. "*Lyrische Musikkomödie nach Anouilh.*" in Neue Zeitung für Musik. July / August 1961. vol. 122, no. 7/8. p. 323.
- Greene, D. M. "*Jean Michel Damase.*" in Greene's Biographical Encyclopedia of Composers. Collins. London. 1985. p. 1318.
- Gross, E. L. "*Introducing Contemporary Sounds through Tone Clusters.*" in Clavier. April 1978. vol. 17, no. 4. pp. 32-34.
- Gudger, W. D. "*Raphael, Günter (Albert Rudolf).*" in The New Grove Dictionary of Music & Musicians. 1989. vol. XV. pp. 588-589.
- Gumber, M. "*Karl Marx wird Fünfundachtzig (12 November).*" in Musica. November / December 1982. vol. 36, no. 6. p. 572.

- Haack, H. "*Kammermusik, Hausmusik, Jugendmusik.*" in Neue Zeitschrift für Musik. March 1973. vol. 134, no. 3. pp. 143-146.
- Hasty, C. "*Rhythm in Post-Tonal Music: Preliminary Questions of Duration and Motion.*" in Journal of Music Theory. Fall 1981. vol. 25, no. 2. pp. 183-213.
- Heiss, J. "*The Flute: New Sounds.*" in Perspectives of New Music. Spring-Summer 1972. vol. 10. pp. 153-158.
- Heiss, J. "*New Sounds.*" in The Instrumentalist. May 1974. vol. 28, no. 10. pp. 47-50.
- Heiss, J. "*For the Flute: A List of Double-Stops, Triple-Stops, Quadruple-Stops, and Shakes.*" in Perspectives of New Music. vol. 5, no. 1. pp. 139-141.
- Henahan, D. "*Current Chronicle.*" in The Musical Quarterly. January 1968. vol. 54, no. 1. pp. 83-86.
- Hering, H. "*Das Klavier in der Kammermusik des 18. Jahrhunderts.*" in Die Musikforschung. 1970. vol. 23. pp. 22-37.
- Howell, A. C. "*Chamber Music: Günter Raphael: Sonate vc & organ.*" in Notes. January 1970. vol. 26, no. 4. pp. 847-848.
- Hull, R. H. "*Eugène Goossens.*" in Music & Letters. 1931. vol. 12. pp. 345-353.
- Jones, L. S. "*The Cello in the 20th Century.*" in The Strad. May 1980. vol. 91, no. 1081. pp. 40-42.

- Karkoschka, E. "Über späte Instrumentalwerke von Karl Marx." in Musica. 1972. vol. 26, no. 6. pp. 542-547.
- Kidd, R. R. "The Emergence of Chamber Music with Obligato Keyboard in England." in Acta Musicologica. 1972. vol. 44. pp. 122-144.
- Klotz, H. "Zum Tode von Günter Raphael." in Musik und Kirche. 1960. vol. 30. pp. 289-290.
- Koch, G. R. "Rückzug nach Vorn. Nostalgie und Regression in der Neuen Musik." in Musica. 1973. vol. 27, no. 5. pp. 433-437.
- Komma, K. M. "Zum Tode von Karl Marx." in Musica. July / August 1985. vol. 39, no. 4. p. 408.
- Komlos, K. "The Viennese Keyboard Trio in the 1780's: Sociological Background and Contemporary Reception." in Music & Letters. July 1987. vol. 68, no. 3. pp. 222-233.
- Kupkovic, L. "The Role of Tonality in Contemporary and 'up to date' Composition." in Tempo. December 1980. vol. 135. pp. 15-17.
- Lang, P. H. "Introduction." in The Musical Quarterly. January 1965. vol. 51, no. 1. pp. 2-11.
- Lee, D. A. "Current Chronicle: Penderecki and Crumb at Wichita State". in The Musical Quarterly. October 1975. vol. 61, no. 4. pp 584-588.

- Linkenbach, K. "*Zum Gedenken an Günter Raphael.*" in Musik und Kirche. November / December 1968. vol. 38, no. 6. p. 306.
- Ludewig, W. "*Über Strömungen und Entwicklungen in der Musik der Zwanziger Jahre.*" in Musica. September / October 1977. vol. 31, no. 5. pp. 412-415.
- Matthew, R. "*Concerts: Lontano.*" in The Musical Times. December 1988. vol. 129, no. 1750. p. 677.
- McCarty, F. L. "*New Directions: Woodwinds: Extentions of Convension.*" in The Instrumentalist. May 1974. vol. 28, no. 10. pp. 33-34.
- Mezger, M. "*Ein erneuerer evangelischer Kirchenmusik zum 70. Geburtstag von Günter Raphael.*" in Musik und Kirche. May / June 1973. vol. 43, no. 3. p. 140.
- Newman, W. S. "*Concerning the Accompanied Clavier Sonata.*" in The Music Quarterly. July 1947. vol. 33, no. 3. pp. 327-349.
- Osborne, N. "*Recordings of Crumb: Vox Balaenae.*" in Tempo. September 1983. vol. 146. pp. 46-47.
- Pay, A. "*Performance of Contemporary Music. vol. III.*" in Composer. Spring 1980. pp. 15-18.
- Pearlman, L. A. "*Crumb, George (Henry).*" in The New Grove Dictionary of Music & Musicians. 1989. vol. V. p. 71.

- Racek, J. & J. Vyslouzil. *"Problems of Style in 20th - century Czech Music."* in The Musical Quarterly. January 1965. vol. 51, no. 1. pp. 200-201.
- Read, G. *"Extending the Tonal Sources of Wind Instruments: some Contemporary Techniques."* in Musical Educators Journal. September 1976. vol. 63. pp. 50-55.
- Rowen, R. H. *"Some 18th-century Classifications of Musical Style."* in The Musical Quarterly. 1947. vol. 33, no. 1. pp. 90-100.
- Sachs, J. *"New York Consortium for New Music."* in Musical America. January 1988. vol. 107, no. 6. pp. 18-20, 28.
- Schmiedeke, E. *"Soli Deo Gloria. Zum 80. Geburtstag von Günter Raphael."* in Musik und Kirche. March / April 1983. vol. 53, no. 2. pp. 84-85.
- Schoffman, N. *"A Shorthand for Atonal Music."* in The Music Review. November 1980. vol. 41, no. 4. p. 297-301.
- Schwartz, E. *"Directions in American Composition since the Second World War. Part I 1945-1960."* in Musical Educators Journal. February 1975. pp. 29-39.
- Sheldon, D. A. *"The Transition from Trio to Cembalo-obbligato Sonata in the works of J.G. and C.H. Graun."* in American Musicological Society Journal. Fall 1971. vol. 24, no. 3. pp. 395-413.

- Silberman, L. "*Karl Marx Trio.*" in Notes. September 1976. vol. 33, no. 1. p. 167.
- Sitsky, L. "*Ferruccio Busoni's 'Attempt at an Organic Notation for the Pianoforte', and a Practical Adaption of it.*" in The Music Review. 1968. vol. 29, no. 1. pp. 27-33.
- Stegemann, M. "*Günter Raphael: Trio cl, vc, pf op 70.*" in Neue Zeitschrift für Musik. March 1985. vol. 146, no. 3. pp. 52-53.
- Steinitz, R. "*George Crumb.*" in The Musical Times. October 1978. vol. 119. no. 1627. pp. 844-846.
- Stephan, R. "*Über Schwierigkeiten der Bewertung und der Analyse Neuester Musik.*" in Musica. 1972. vol. 26, no. 3. pp. 225-232.
- Stockmeier, W. "*Raphael Heute.*" in Musik und Kirche. November / December 1980. vol. 50, no. 6. pp. 306-308.
- Stone, K. "*New Notation for New Music.*" in Music Educators Journal. November 1976. vol. 63, no. 3. pp. 55-61.
- Strange, P. "*New Direction: Strings: New Resources.*" in The Instrumentalist. May 1974. vol. 28, no. 10. pp. 28-32.
- Stuckenschmidt, H. H. "*Contemporary Techniques in Music.*" in The Musical Quarterly. January 1963. vol. 49, no. 1. pp. 1-16.

- Tilbury, J. "*The Contemporary Pianist.*" in The Musical Times. January 1969. vol. 110, no. 1511. pp. 150-152.
- Tovey, D. F. "*Chamber Music.*" in Essays in Musical Analyses. O. U. P. London. 1944. pp. 1-19.
- Tovey, D. F. "*Haydn's Chamber Music.*" in Essays and Lectures on Music. O. U. P. London. 1949. pp. 1-64.
- Verkoeyen, J. "*De Strijkers en de Nieuwe Muziek.*" in Mens & Melodie. July 1969. vol. 24. pp. 202-205.
- Vester, F. "*Blazer en Vibrato.*" in Mens & Melodie. 1961. vol. 16, no. 3 & 4. pp. 74-78 & 111-114.
- Vinton, J. "*A Change of Mind.*" in The Music Review. 1974. vol. 35, no. 3-4. pp. 301-318.
- Weissmann, J. "*Reviews of Music. Günter Raphael "Jabonah" vn & pf op 66.*" in The Music Review. 1955. vol. 16. pp. 269-270.
- Wernick, R. "*George Crumb.*" in Dictionary of Twentieth Century Music. 1974. Thames & Hudson. London. pp. 156-157.
- Whitman, G. "*Seminal Works of Quartertone Music.*" in Tempo. Spring 1967. vol. 80. pp. 11-15.
- Wright, R. "*George Crumb 50th Birthday Concert.*" in Tempo. June 1979. vol. 129. p. 42.

Young People's Science Encyclopedia. Children's Press.  
Chicago. 1982. (Edited by the staff of the  
National College of Education, Evanston,  
Illinois.)

## 7. THESES.

Logie, T. M. The Transverse Flute. B.Mus Thesis. Rhodes  
University. November 1975.

Mony, W. Avant-garde String Techniques: (1950-1975).  
D.Phil. University of the Witwatersrand.  
Johannesburg. 1982.

Sholto-Douglas, I. The Development of Cello Technique in the  
String Quartets of Joseph Haydn with reference  
to its influence on Structure and Style. D.Phil.  
Rhodes University. Grahamstown. 1981.

## II OTHER SOURCES

### 1. SCORES

#### 1.1 Modern

Alkema, Henk. Rituelen. Donemus. Amsterdam. 1984.

Ames, William. House Celebration Piece. 1972. Photocopy  
received from Marcia Sloane from The William Ames  
Collection. 1991.

- Bäck, Sven-Erik. Sentire. AB Nordiska Musikförlaget.  
Stockholm. 1974.
- Bennett, Richard Rodney. Commedia II. Novello. Kent. 1975.
- Bolz, Harriett. Poem Cantare. Alpheus Music Corp. Hollywood,  
California. 1981.
- Bonsel, Adriaan. Musica. Donemus. Amsterdam. 1972.
- Callaway, Ann. Collections-Recollections. American Composers  
Alliance. New York. 1982.
- Champagne, Claude. Suite Miniatur. Exello Reproductions.  
Montreal. 1991.
- DeBraal, Andries. Trio. Donemus. Amsterdam. 1976.
- Dello Joio, Norman. Trio. Carl Fischer. New York. 1948.
- Döhl, Friedheim. Sotto Voce. Musikverlag Hans Gerig. Köln.  
1975.
- Ghedini, Giorgio Federico. Musiche per Tre Strumenti.  
Ricordi no. 130726. Milan. 1964.
- Hedges, Anthony. Trio no. 1 op. 99. Westfield Music. 1985.
- Hedges, Anthony. Trio no. 2 op. 112. Westfield Music. 1990.
- Holmboe, Vagn. Trio. Wilhelm Hansen. Copenhagen. 1979.
- Hoover, Katherine. Lyric Trio. Papagena Press. New York.  
1983.
- Jacobsen, Maurice. Suite of Four Pieces. Augener. London.  
1946.
- Jeppesen, Knud. Lille Sommer-Trio. Wilhelm Hansen.  
Copenhagen. 1957.
- Lefebvre, Claude. D'un Arbre de Nuit. Salabert. Paris. 1982.

- Luening, Otto. Trio. C.F. Peters no. 66557. New York. 1973.
- Manziarly, Marcelle De. Trio. Durand. Paris. 1962.
- Martinu, Bohuslav. Trio. Associated Music Publishers. New York. 1950.
- Niculescu, Stefan. Triplum. Salabert: Musique Contemporaine. Paris. 1971.
- Orthel, Léon. Otto Abbozzi op. 57. Donemus. Amsterdam. 1972.
- Osieck, Hans. Trio. Donemus. Amsterdam. 1975.
- Pierné, Gabriel. Sonata da Camera. Durand. Paris. 1927.
- Plakidis, Peter. Dedication to Haydn. Léningrad Muzyka. Leningrad. 1988.
- Pleskow, Raoul. Movement. Seesaw Music Corp. New York. 1966.
- Reynolds, Roger. Traces. C.F. Peters no. 66247. New York. no date indicated.
- Rorem, Ned. Trio. C.F. Peters no. 6430. New York. 1966.
- Rosseau, Norbert. Trio op. 60. CEBEDM. Brussels. 1965.
- Sollberger, Harvey. Elegy for Igor Stravinsky. in *Perspectives of New Music*. Spring/Summer - Fall/Winter 1971. vol. 9/2 - 10/1. pp. 75-77.
- Tolstoy, D. Trio op. 113. Léningrad Muzyka. Leningrad. 1988.
- Verhaar, Ary. Trio-Sonate op. 7. Donemus. Amsterdam. 1954.
- Wuorinen, Charles. Second Trio: Piece for Stefan Wolpe (1962). C.F. Peters no. 66381. New York. 1976.
- Wuorinen, Charles. Third Trio. C.F. Peters no. 66578. New York. 1974.

## 1.2 Other

- Bach, J.C. 6 Sonaten op. 2. Doblinger Verlag. Vienna. 1978.
- Bach, J.C.F. Sonata. Nagels Verlag. Kassel. 1957.
- Clementi, M. Trio op. 21, no. 1. (Alan Tyson Catalogue).  
Willy Müller Süddeutscher Musikverlag. Heidelberg.  
1972.
- Czerny, C. Fantasia Concertante op. 256. Eulenburg.  
Zürich. 1975.
- Dusseck, J.L. Trio op. 65. Musica Rara. London. 1975.
- Haydn, J. Trio Hob XV / no. 15, 16, 17. IMC. New York.  
1970.
- Hoffmeister, F.A. Trio III in D major. Boosey & Hawkes.  
Bonn. 1979.
- Hummel, J.N. Trio op. 78. Musica Rara. London. 1968.
- Pleyel, I. Grand Trio op. 29. Musica Rara. London. 1971.
- Pleyel, I. Sonate op. 16, no. 2. Kisstner & Siegel Co.  
Lippstadt. 1949.
- Pleyel, I. Sonate op. 16, no. 5. Kisstner & Siegel Co.  
Lippstadt. 1949.
- Richter, F.X. Sonaten 1-3 op. 2. Hortus Musicus 86.  
Bärenreiter Verlag. Kassel. 1951.
- Weber, C.M. von Trio op. 63. C.F. Peters no. 1473. New  
York. no date indicated.

2. RECORDS.

2.1 MODERN

- Anonymous. *"The Contemporary Composer in the USA."* no. TV-S 34515. Vox Productions. USA. 1972.
- Brown, M. A. *"Trios by Rebecca Clarke and Katherine Hoover."* Record no. LP I 103. Leonardo Productions. New York. 1980.
- Callaway, A. *"Music by Women Composers vol. I."* Record no. 3105 Hyperion. London. 1982.
- Dommett, K. *"Martinu Trio in F 1944."* Record Sleeve A 66084. CAB. Coronet Recording Co. Ohio. 1972.
- Ramey, P. *"Songs of Samuel Barber and Ned Rorem."* in Recorded Anthology of American Music Inc. no. NW 229. New York. 1978.
- Salzman, E. *"Virtuosity Alienation and New Music."* New World Records. no. NW 209. New World Records. New York. 1977.
- Sollberger, H. *"New Music for Virtuoses II."* in Recorded Anthology of American Music Inc. no. NW 254. New York. 1978.
- Wolpe, S. *"Trio 1963."* no. CRI 233. USD.

2.2 OTHER.

- Braunstein, J. *"Trios for Flute, Violoncello & Piano."* Vox Productions. TV-S 34575. New York. 1975.

Da Camera Magna. "*Trios der Romantik.*" Heidelberg. SM 92108.  
1970.

Ober, W.B. "*Weber / Dusik Trios.*" Vox Productions.  
Turnabout. T.V. 34329 S. New York. 1970.

Worbs, H.C. "*Haydn Klaviertrios.*" Philips no. 9500035.  
Holland.

### 3. BOOKS.

Allign, I. Konzertbuch. Kammermusik A-G. VEB Deutscher  
Verlag. Leipzig. 1988.

Beckwith, J. & K. Macmillan. Contemporary Canadian  
Composers. O. U. P. Toronto. 1975.

Bunge, S. & R. Schaute. (ed.) 60 Year of Dutch Chamber  
Music. 1913-1973. Stichting Cultuurfonds Buma &  
Stichting Nederlandse Muziekbelangen. Amsterdam.  
1974.

Dibelius, U. Moderne Musik 1945-1965. R.Piper & Co. München.  
1966.

Ford, C. Canada's Music: A Historical Survey. GLC  
Publishers Ltd. Ontario. 1982.

Schumann, O. Schumanns Kammermusikbuch. Hermann Hübner  
Verlag. Wilhelmshaven. 1956.

Searle, H. & R. Layton. Twentieth Century Composers:  
Britain, Scandinavia and the Netherlands.  
Weidenfeld & Nicolson. London. 1972.

- Southern, E. Moore, Undine Smith: Biographical Dictionary of Afro-American and African Musicians. Greenwood Press. London. 1982.
- Volans, K. Summer Gardeners: Conversations with Composers. "(Howard Skempton.)" Newer Music Edition. Durban. 1985.

#### 4. ARTICLES AND REVIEWS

- .... "Obituary Louis Fleury." in The Times. London Monday 28 June 1926. p. 7.
- .... "The NATS Bulletin Interviews ... Ned Rorem." in The NATS Bulletin. (National Association of Teachers of Singing) November / December 1982. vol. 39, no. 2. pp. 5-7, 46-50.
- Anderson, G. "The Music of Ned Rorem." in Musical Journal. April 1963. pp. 34, 71, 72.
- Archibald, B. "Reviews of Records: Otto Luening: Chamber Music." in The Musical Quarterly. April 1964. vol. 60, no. 2. pp. 321-326.
- Archibald, B. "Schwartz, Elliott." in The New Grove Dictionary of Music & Musicians. 1980. vol. XVII. p. 40.
- Archibald, B. "Schwartz, Elliott (Shelling)." in The New Grove Dictionary of American Music. 1986. vol. IV. pp. 172-173.

- Arnold, D. & E. Olleson. (ed.s.) "*Music Received: Chamber Music*". in Music & Letters. January 1979. vol. 60, no. 1. p. 125.
- Aston, P. "*Wilfrid Mellers: A 70th-Birthday Tribute*." in The Musical Times. July 1984. vol. 125, no. 1697. pp. 373-374.
- Bail-Milot, L. "*Champagne Claude*." in Encyclopedia of Music in Canada. University of Toronto Press. Toronto. 1981. pp. 176-178.
- Bantel, O. "*Der 126. Psalm von Kurt Hessenberg*." in Musik und Kirche. January/February 1972. vol. 42, no. 1. p. 41.
- Barkin, E. & M. Brody. "*Blank Allan*." in The New Grove Dictionary of American Music. 1986. vol. I. p. 232.
- Becher, C. "*Die mörderische Kinderstunde des Ned Rorem*." in Neue Zeitschrift für Musik. May 1989. vol. 150, no. 5. pp. 38-39.
- Beckwith, J. "*Music in Canada*." in The Musical Times. December 1970. vol. 111, no. 1534. p. 1214.
- Beeson, J. "*Luening, Otto (Clarence)*." in The New Grove Dictionary of Music & Musicians. 1980. vol. XI. pp. 309-310.
- Bergsagel, J. "*Jeppesen Knud (Christian)*." in The New Grove Dictionary of Music & Musicians. 1989. vol. IX. pp. 602-603.

- Block, A. F. "*Hier Ethel Glenn.*" in The New Grove Dictionary of American Music. 1986. vol. II. p. 383.
- Blom, Eric & H. Ottaway. "*Jacobson, Maurice.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. IX. p. 447.
- Bowen, M. "*Elliott Schwartz.*" in Music & Musicians. March 1968. vol. 16, no. 7. pp. 24-27.
- Bradshaw, S. "*Richard Rodney Bennett.*" *The Last Decade.* in The Musical Times. September 1982. vol. 123, no. 1675. pp. 609-611.
- Brennecke, W. "*Döhl, Friedheim.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. III. p. 522.
- Brothers, L. D. "*Josten, Werner (Erich).*" in The New Grove Dictionary of Music & Musicians. 1989. vol. IX. p. 738.
- Byrnside, R. "*Bennett, Robert Russell.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. II. p. 499.
- Byrnside, R. & R. Skinner. "*Bennett, Robert Russell.*" in The New Grove Dictionary of American Music. 1986. vol. I. pp. 185-186.
- Chase, G. "*Reynolds, Roger.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. XV. p. 784.
- Claphan, J. "*Martinu's Instrumental Style.*" in The Music Review. 1963. vol. 24. pp. 158-167.

- Cohen, A. "*Fleury Louis (Francois).*" in The New Grove Dictionary of Music & Musicians. 1989. vol. VI. pp. 740-641.
- Cole, H. "*Hedges, Anthony (John).*" in The New Grove Dictionary of Music & Musicians. 1980. vol. VIII. p. 430.
- Cole, H. "*Rorem: Symphony no. 3.*" in Tempo. December 1973. vol. 107. pp. 44-45.
- Cory, E. "*Reviews of Records. Contemporary Piano Music.*" in The Musical Quarterly. April 1975. vol. 61, no. 2. pp. 326-329, 332-335.
- Cosma, V. "*Niculescu, Stefan.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. XIII. p. 220.
- Cox, D. "*Pierné (Henri Constant) Gabriel.*" in The New Grove Dictionary of Music & Musicians. 1989. vol. XIV. pp. 736-737.
- Dale, S. S. "*Contemporary Cello Concerti.*" in Strad. January 1977. vol. 87, no. 1041. pp. 821, 823.
- Davis, D. "*An Interview about Choral Music with Ned Rorem.*" in The Musical Quarterly. July 1982. vol. 68, no. 3. pp. 93-97.
- De Groot, C. "*Wie vergeet een componist? Het Publiek of die Uitvoerenden?*" in Mens & Melodie. 1986. vol. 41, no. 7/8. p. 298.

- Desautels, A. "*Champagne, Claude (Adonai).*" in The New Grove Dictionary of Music & Musicians. 1989. vol. IV. pp. 125-126.
- Desautels, A. "*The History of Canadian Composers 1610-1967.*" in Aspects of Music in Canada. University of Toronto Press. Toronto. 1969. pp. 104-109.
- Döhl, F. "*Komponist - in der Provinz.*" in Neue Zeitschrift für Musik. July / August 1980. vol. 141, no. 4. pp 349-351.
- Döhl, F. "*Wege der Neuen Musik. Zur Entwicklung der Seriellen, Elektronischen und Experimentellen Musik.*" in Neue Zeitung für Musik. March 1965. vol. 126, no. 3. pp. 105-108.
- Downes, E. "*The Music of Norman Dello Joio.*" in The Musical Quarterly. April 1962. vol. 48, no. 2. pp. 149-152.
- East, L. "*Mellers, Wilfrid (Howard).*" in The New Grove Dictionary of Music & Musicians. 1980. vol. XII. pp. 108-109.
- Evans, P. "*Martini the Symphonist.*" in Tempo. Autumn / Winter 1960. vol. 55/56. pp. 19-29.
- Favre, M. "*Klaus Hubers " Soliloquia".*" in Musica. January 1963. p. 35.
- Frisius, R. "*Kontinuität und Dialog der Generationen. zum 14. Musikfestival in Metz.*" in Neue Zeitschrift für Musik. January 1986. vol. 147, no. 1. p. 43.

- Gaska, R. "*Klaus Hubers 'James Joyce...'*" in Musica. 1970. vol. 24, no. 4. pp. 368-369.
- Geraerdt, J. "*Léon Orthel: Scherzo no. 2.*" in Sonorum Speculum. 1965. vol. 25. pp. 20-23.
- Girardot, A. "*Martelli Henri.*" in The New Grove Dictionary of Music & Musicians. 1989. vol. XI. p. 711.
- Gojowy, D. "*Die leibhaftige Knurren des andalusischen Hundes. Die Tage der Neuen Musik. Hannover 1985.*" in Neue Zeitschrift für Musik. March 1985. vol. 146, no. 3. p. 43.
- Goldbeck, F. "*Marcelle Manziarly.*" in Grove's Dictionary of Music & Musicians. 1954. vol. V. p. 556.
- Goodman, A. G. "*Steffen, Wolfgang.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. XVIII. p. 98.
- Gottwald, C. "*Ludewig, Wolfgang.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. IX. pp. 304-305.
- Gradenwitz, P. "*IGNM-Fest in Island.*" in österreichische Musik Zeitschrift. October 1973. vol. 28, no. 10. pp. 474, 476.
- Griffiths, P. "*Bennett's Comedies.*" in The Musical Times. August 1974. vol. 115, no. 1578. pp. 649-650.
- Griffiths, P. "*Manziarly Marcelle de.*" in The New Grove Dictionary of Music & Musicians. 1989. vol. XI. pp. 636-637.

- Hanuszewska, M. "*Stachowski Marek.*" in The New Grove Dictionary of Music & Musicians. 1989. vol. XVIII. p. 41.
- Harwood, P. "*A Swedish Opera Set.*" in Music & Musicians. March 1962. vol. 10, no. 7. p. 22.
- Hellquist, P-A. & H. Astrand. "*Bäck, Sven-Erik.*" in The New Grove Dictionary of Music & Musicians. 1989. vol. II. pp. 1-2.
- Helm, E. "*Anthology of Music from the Netherlands.*" in Sonorum Speculum. March 1964. vol. 18. pp. 27-29.
- Henderson, R. "*The Music of Wilfrid Mellers. Tradition and Necessity.*" in The Musical Times. March 1963. vol. 104, no. 1441. pp. 178-179.
- Henahan, D. "*Reviews of Records. Wuorinen: Piano Concerto.*" in The Musical Quarterly. July 1969. vol. 55, no. 3. pp. 424-425.
- Hibbard, W. "*Younger American Composers. Charles Wuorinen: The Politics of Harmony.*" in Perspectives of New Music. Spring-Summer 1969. vol. 7, no. 2. pp. 156-166.
- Hinson, M. "*Bohuslav Martinu. Czechoslovakia's Greatest Twentieth Century Composer.*" in Clavier. October 1982. vol. 21, no. 8. pp. 19-20.
- Hinson, M. "*Great Composers in our Time: Ned Rorem.*" in The Piano Quarterly. Summer 1980. vol. 28, no. 110. pp. 6-16.

- Hitchcock, H. W. "*Current Chronicle: United States: Ann Arbor Michigan.*" in The Musical Quarterly. April 1962. vol. 48, no. 2. pp. 244-248; July 1965. vol. 51, no. 3. pp. 539-540.
- Holms, J. "*Rorem Ned.*" in The New Grove Dictionary of Music & Musicians. 1989. vol. XVI. pp. 190-191.
- Hübner, U. "*Chicago - Oper in Augsburg.*" in Neue Zeitschrift für Musik. February 1987. vol. 148, no. 2. p. 46.
- Jackson, R. "*Dello Joio Norman.*" in The New Grove Dictionary of American Music. 1986. vol. I. pp. 596-598.
- Jackson, R. "*Dello Joio Norman.*" in The New Grove Dictionary of Music & Musicians. 1989. vol. V. pp. 350-351.
- Jeske, L. "*Lateef Yusef (Evans, William)*" in The New Grove Dictionary of American Music. 1986. vol. III. p. 15.
- Johnson, B. "*Still sings the Voice. A Portrait of Ned Rorem.*" in Tempo. June 1985. vol. 153. pp. 7-12.
- Kanazawa, M. "*Miyoshi, Akira.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. XII. p. 372.
- Kerman, J. "*Current Chronicle: Princeton.*" in The Musical Quarterly. April 1949. vol. 35, no. 2. pp. 19-23, 301-305.
- Kessler, H. "*Jan Meyerowitz' Oper 'Der Mulatte'.*" in Musica. September/October 1971. vol. 51, no. 5. pp. 477-478.

- Kirchberg, K. "*Hessenberg, Kurt.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. VIII. p. 537.
- Kirchberg, K. "*Hoffnung aus Verzweiflung. Klaus Hubers "Spes Contra Spem" in Düsseldorf.*" in Neue Zeitschrift für Musik. May 1989. vol. 150, no. 5. p. 31.
- Konold, W. "*Melos Berichtet.*" in Melos. 1971. vol. 38. p. 21.
- Kresky, J. "*The Recent Music of Charles Wuorinen.*" in Perspectives of New Music. 1987. vol. 25. pp. 410-417.
- Kresky, J. "*University of Michigan. Asuc's Second Summer Institute in Compositional Studies.*" in Perspectives of New Music. Fall/Winter 1968. vol. 7, no. 1. pp. 147-149.
- Krusenstjerna, M. "*Instrumental, Solo and Ensemble Music: Peter Schikele: Monochrome V for 8 Flutes.*" in Notes. June 1988. vol. 44, no. 4. p. 823.
- La Rue, J. "*An Electronic Concert in New York.*" in The Music Review. 1961. vol. 22, no. 3. pp. 223-225.
- Lambert, V. "*Arma Paul.*" in The New Grove Dictionary of Music & Musicians. 1989. vol. I. pp. 595-596.
- Large, B. "*Martinu Bohuslav (Jan).*" in The New Grove Dictionary of Music & Musicians. 1989. vol. XI. pp. 731-735.

- Layton, R. "*Holmboe, Vagn.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. VIII. pp. 653-655.
- Layton, R. "*Vagn Holmboe and the Quartet.*" in The Musical Times. December 1969. vol. 110, no. 1522. pp. 1232-1234.
- LeRoux, J. A. "*An Interview with Peter Schikele.*" in The Music Educators Journal. November 1983. vol. 70, no. 3. pp. 48-53.
- Levarie, S. "*Meyerowitz, Jan.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. XII. pp. 255-256.
- Levarie, S. "*Meyerowitz Jan.*" in The New Grove Dictionary of American Music. 1986. vol. III. pp. 221-222.
- Lucchesi, J. "*Porträt des Komponisten Klaus Huber.*" in Musik und Gesellschaft. January 1986. vol. 36, no. 1. pp. 36-37.
- Luening, O. "*Some Random Remarks about Electronic Music.*" in Contemporary Composers on Contemporary Music. Holt, Rinehart & Winston. New York. 1967. pp. 258-259.
- Lutz, L. "*Ars Subtilior im Computerzeitalter.*" in Neue Zeitschrift für Musik. November 1989. vol. 150, no. 11. pp. 18-23.
- Lutz, L. "*Uneigentliche Klangtapeten: Manfred Stahnkes Oper "Heinrich der Vierte" in Kiel.*" in Neue Zeitschrift für Musik. June 1987. vol. 148, no. 6. p. 31.

- Matthews, D. "Review of Recordings." in Tempo. March 1978.  
No. 124. pp. 48-49.
- Maw, N. "Richard Rodney Bennett." in The Musical Times.  
February 1962. vol. 103, no. 1428. pp. 95-97.
- McGinty, D. E. "Moore Undine Smith." in The New Grove  
Dictionary of American Music. 1986. vol. IV. p.  
269.
- Milhaud, D. "Louis Fleury." in The Chesterian. 1925-1926.  
vol. vii. pp. 264-265.
- Moor, P. "San Francisco Symphony: Wuorinen 'The Golden  
Dance'." in Musical America. March 1987. vol. 107,  
no. 1. pp. 29-30.
- Morgan, T. "Weir Judith." in New Music. Oxford University  
Press. Oxford. 1988.
- Muggler, F. & M. Knauer. "Die Avantgarde in der Schweiz."  
in Gösterreichische Musikzeitschrift. March 1969.  
vol. 24, no. 3. pp. 170-171.
- Nachman, M. S. "Trombly Preston." in The New Grove  
Dictionary of American Music. 1986. vol. IV. pp.  
412-413.
- Neff, S. "Pleskow Raoul." in The New Grove Dictionary of  
American Music. 1986. vol. III. p. 579.
- Nelson, D. R. "Stringfield Lamar E(dwin)." in The New Grove  
Dictionary of Music & Musicians. 1989. vol. XVIII.  
p. 276.

- Nelson, D. R. "*Stringfield Lamar E(dwin).*" in The New Grove Dictionary of American Music. 1986. vol. IV. p. 326.
- Nyman, M. "*Believe it or not. Melody Rides Again.*" in Music & Musicians. October 1971. vol. 20, no. 2. pp. 26-28.
- O'Loughlin, N. "*Modern Flute under 'Music Reviews'.*" in The Musical Times. May 1979. vol. 120, no. 1635. pp. 412-413.
- Oehlschlägel, R. "*Auf Gegenwart Reagierend. Eine Kritische Würdigung Klaus Huber.*" in Musica. January 1974. vol. 28, no. 1. pp. 18-21.
- Oppens, K. "*Speculum Musicae.*" in Musica. September / October 1971. vol. 25, no. 5. p. 479.
- Orr, B. "*First Performances and Commissions.*" in Composer. Spring 1973. vol. 47. p. 28; Summer 1972. vol. 44. p. 36.
- Orr, C. W. "*Reviews of Music.*" in The Music Review. 1947. vol. 8. p. 150.
- Paap, W. "*De Componist Constant de Wall.*" in Mens & Melodie. 1962. vol. 17, no. 3. pp. 76-80.
- Paap, W. "*De Componist Léon Orthel.*" in Mens & Melodie. April 1974. vol. 29. pp. 98-100.
- Paap, W. "*De Componist Hans Osieck.*" in Mens & Melodie. March 1970. vol. 25. pp. 89-90.

- Paap, S. "*De Componist Wolfgang Wijdeveld.*" in Mens & Melodie. Junie 1969. vol. 25, no. 6. pp. 183-187.
- Paap, W. "*Het Nederlands Studentenorkest.*" in Mens & Melodie. Februarie 1958. vol. 13, no. 2. pp. 54-55.
- Paap, W. "*Muziekweek Gaudeamus 1968.*" in Mens & Melodie. November 1968. vol. 23. pp. 322-323.
- Parker, C. M. "*The Compleat Peter Schikele.*" in The Piano Quarterly. Fall 1979. vol. 27, no. 107. pp. 40, 42.
- Parsons, M. "*Systems in Art and Music.*" in The Musical Times. October 1976. vol. 117, no. 1604. pp. 817-818.
- Pauli, H. "*Klaus Huber.*" in Musica. January 1963. vol. 17, no. 1. pp. 10-17.
- Persichetti, V. "*Reviews of Records: Leland Smith: Selected Works.*" in The Musical Quarterly. January 1962. vol. 48, no. 1. p. 132.
- Petersen, B. A. "*Doran Matt Higgins.*" in The New Grove Dictionary of American Music. 1986. vol. I. p. 646.
- Pincherle, M. "*René le Roy.*" in Grove's Dictionary of Music & Musicians. 1954. vol. V. p. 143.
- Porter, A. "*Some New British Composers.*" in The Musical Quarterly. January 1965. vol. 51, no. 1. pp. 18-19.

- Potter, K. "*Boulez and Stockhausen, Bennett and Cardew.*" in The Musical Times. March 1981. vol. 122, no. 1657. pp. 170-171.
- Reese, R. G. "*Jacobi, Frederick.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. IX. pp. 444-445.
- Reese, R. G. "*Jacobi, Frederick.*" in The New Grove Dictionary of American Music. 1986. vol. II. pp. 528-529.
- Reich, N. B. "*Sydeman, William (Jay).*" in The New Grove Dictionary of Music & Musicians. 1980. vol. XVIII. p. 424.
- Reynolds, R. "*Current Chronicle: Japan.*" in The Musical Quarterly. October 1967. vol. 53, no. 4. pp. 563-571.
- Reynolds, R. "*Thoughts on Sound Movement and Meaning.*" in Perspectives of New Music. vol. Spring / Summer 1978. pp. 181-190.
- Root, D. "*Schickele Peter.*" in The New Grove Dictionary of American Music. 1986. vol. IV. p. 151.
- Rudhyar, D. "*The Composer between Man and Music.*" in Interface. 1980. vol. 9. pp. 225-226.
- Salomé, E. "*Eduard Flipse.*" in Sonorum Speculum. June 1961. vol. 7. pp. 28-29.

- Samuel, R. "*Wuorinen, Charles: Crossfire for Orchestra.*" in Music & Letters. November 1989. vol. 70, no. 4. p. 597.
- Schweizer, G. "*Glückwunsch für Kurt Hessenberg.*" in Musica. 1968. Vol. 22, no. 5. p. 369.
- Schweizer, G. "*Kurt Hessenberg Sechzig Jahre alt.*" in Musik und Kirche. September/October 1968. vol. 38, no. 5. pp. 258-259.
- Schweizer, K. "*Du Holde Kunst...*" in Neue Zeitschrift für Musik. July/August 1988. vol. 149, no. 7/8. p. 77.
- Schweizer, K. "*Geschichte, eingespannt in Gegenwart. Choräle in Partituren von Klaus Huber.*" in Neue Zeitschrift für Musik. July/August 1985. vol. 146, no. 7/8. pp. 32-35, 37-38.
- Schwartz, E. "*Electronic Music: A Thirty Year Retrospective.*" in The Music Educators Journal. March 1978. vol. 64, no. 7. pp. 37-39.
- Schwartz, E. "*At Florida State Romanticism Reigns.*" in Musical America. November 1987. vol. 107, no. 5. pp. 42-43.
- Slonimsky, N. "*Roger Reynolds.*" in Baker's Biographical Dictionary of Musicians. 1978 (6th ed.) p. 1419
- Sollberger, H. "*Reynolds Roger (Lee).*" in The New Grove Dictionary of American Music. 1986. vol. IV. pp. 34-35.

- Starreveld, R. "*Orthel, Léon.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. XIII. p. 875.
- Starreveld, R. "*Verhaar, Ary.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. XIV. pp. 668-669.
- Stenger, M. "*50 Jahre 'Wittener Tage für neue Kammermusik'.*" in Musica. May/June 1986. vol. 40, no. 3. pp. 258-259.
- Stevenson, R. "*Rudhyar, Dane.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. XVI. pp. 313-314.
- Stevenson, R. "*Rudhyar Dane.*" in The New Grove Dictionary of American Music. 1986. vol. IV. pp. 103-104.
- Stone, K. "*Current Chronicle. New York.*" in The Musical Quarterly. July 1963. vol. 49, no. 3. pp. 372-373.
- Stone, K. "*Reviews of Records.*" in The Musical Quarterly. October 1966. vol. 52. p. 541.
- Stürzbecher, U. "*Das Grosze Fragezeichen hinter einer Gesellschaftspolitischen Funktion der Musik.*" in Melos. 1972. vol. 39, no. 3. p. 147.
- Sutcliffe, T. "*Music in Denmark.*" in Music & Musicians. September 1971. vol. 20, no. 1. p. 24.
- Swift, R. "*Smith, Leland.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. XVII. p. 417.
- Swift, R. "*Smith Leland C(Layton).*" in The New Grove Dictionary of American Music. 1986. vol. IV. p. 248.

- Swift, R. "*Sollberger, Harvey (Dale).*" in The New Grove Dictionary of Music & Musicians. 1989. vol. XVII. pp. 456-457.
- Swift, R. "*Wuorinen Charles.*" in The New Grove Dictionary of Music & Musicians. 1989. vol. XX. p. 548.
- Thomas, E. "*Im Zeichen der Wechselwirkung. Neue Musik aus Japan.*" in Neue Zeitschrift für Musik. June/July 1960. vol. 121, no. 6/7. pp. 295-297.
- Trimble, L. "*Luening Otto (Clarence).*" in The New Grove Dictionary of American Music. 1986. vol. III. pp. 123-126.
- Urmetzner, R. "*Wohin mit dem Musikmüll? Ein Podiumgespräch über neue Musik in Oben-Schwaben.*" in Neue Zeitschrift für Musik. May 1987. vol. 148, no. 5. pp. 50-51.
- Vanhulst, H. "*Quinet, Marcel.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. XV. p. 509.
- Vanhulst, H. "*Rosseau Norbert (Oscar Claude).*" in The New Grove Dictionary of Music & Musicians. 1989. vol. XVI. p. 211.
- Vermeulen, E. "*Opening naar hedendaagse muziek? Ars Musica in België.*" in Mens & Melodie. April 1989. vol. 44, no. 4. pp. 236-246.
- Visser, P. "*In Memoriam Léon Orthel.*" in Mens & Melodie. 1985. vol. 40, no. 10. p. 445.

- Vogel, J. P. "*Die Wiederbelebung der Klaviersonate.*" in Musica. July/August 1985. vol. 39, no. 4. pp. 353-359.
- Walker, T. "*Schikele, Peter.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. XVI. p. 640.
- Waterhouse, J. C. G. "*Ghedini, Giorgio Federico.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. VII. pp. 332-335.
- Waterhouse, J. C. G. "*Jachino, Carlo.*" in The New Grove Dictionary of Music & Musicians. 1980. vol. IX. pp. 436-437.
- Waterhouse, J. C. G. "*Obituary of Ghedini Giorgio Federico.*" in The Musical Times. May 1965. vol. 106, no. 1467. p. 372.
- Whittall, A. "*Reviews of Music.*" in The Music Review. 1975. vol. 36. pp. 240-241.
- Wouter, J. "*Léon Orthel: Piccola Simfonie.*" in Sonorum Speculum. March 1961. vol. 6. pp. 20-25.
- Wuorinen, C. "*An Appreciation.*" in Perspectives of New Music. Fall-Winter 1976. vol. 15, no. 1. pp. 41-42.
- Wuorinen, C. "*Conversations with Otto Luening.*" in Perspectives of New Music. 1971. vol. 9, no. 2 & 10 no. 1. pp. 200-208.