

INFORMATION TO USERS

This was produced from a copy of a document sent to us for microfilming. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help you understand markings or notations which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure you of complete continuity.
2. When an image on the film is obliterated with a round black mark it is an indication that the film inspector noticed either blurred copy because of movement during exposure, or duplicate copy. Unless we meant to delete copyrighted materials that should not have been filmed, you will find a good image of the page in the adjacent frame.
3. When a map, drawing or chart, etc., is part of the material being photographed the photographer has followed a definite method in "sectioning" the material. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.
4. For any illustrations that cannot be reproduced satisfactorily by xerography, photographic prints can be purchased at additional cost and tipped into your xerographic copy. Requests can be made to our Dissertations Customer Services Department.
5. Some pages in any document may have indistinct print. In all cases we have filmed the best available copy.

**University
Microfilms
International**

300 N. ZEEB ROAD, ANN ARBOR, MI 48106
18 BEDFORD ROW, LONDON WC1R 4EJ, ENGLAND

7923786

JOHNSON, MARY IMOGENE EVANS
CHARACTERISTIC METRICAL ANOMALIES IN THE
INSTRUMENTAL MUSIC OF ROBERT SCHUMANN; A
STUDY OF RHYTHMIC INTENTION.

THE UNIVERSITY OF OKLAHOMA, PH.D., 1979

COPR. 1979 JOHNSON, MARY IMOGENE EVANS
University
Microfilms
International 300 N. ZEEB ROAD, ANN ARBOR, MI 48106

© 1979

MARY IMOGENE EVANS JOHNSON

ALL RIGHTS RESERVED

THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

CHARACTERISTIC METRICAL ANOMALIES
IN THE INSTRUMENTAL MUSIC OF ROBERT SCHUMANN:
A STUDY OF RHYTHMIC INTENTION

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment of the requirements
for the degree of
DOCTOR OF PHILOSOPHY IN MUSIC EDUCATION

BY

MARY EVANS JOHNSON

Norman, Oklahoma

1979

CHARACTERISTIC METRICAL ANOMALIES
IN THE INSTRUMENTAL MUSIC OF ROBERT SCHUMANN:
A STUDY OF RHYTHMIC INTENTION

Volume I: Text

Volume II: Appendices

APPROVED BY

Gail de Stwolinski
Gail de Stwolinski, Co-Chairman
Digby Bell
Digby Bell, Co-Chairman
Harry W. Pierbaugh
Harry W. Pierbaugh
Michael Hennagin
Michael Hennagin
Melvin C. Platt
Melvin C. Platt

DISSERTATION COMMITTEE

CHARACTERISTIC METRICAL ANOMALIES
IN THE INSTRUMENTAL MUSIC OF ROBERT SCHUMANN:
A STUDY OF RHYTHMIC INTENTION

BY: MARY EVANS JOHNSON

MAJOR PROFESSORS: GAIL DE STWOLINSKI, Ph. D.

DIGBY BELL, D. M. A.

Certain of Schumann's metrically anomalous passages have long been subjects of complaint. Throughout this search for his rhythmic intention in such passages, it has been assumed that he did not mean to mystify, that in the context of his over-all rhythmic practice the function of the oddities would become clear.

To this end, six types of conspicuous vagaries were identified: empty barbeats; lilt formation (end-stopped triplets); consistent metrical displacement; oblique harmonic rhythm (harmonic anticipation and implied suspension); metrical repositioning; and hemiolic construction. These were then sought throughout Schumann's instrumental music.

They were found to be characteristically frequent, well-developed in a range of surface detail and formal position, and relatively comprehensive of Schumann's metrical irregularities. Some much less well developed anomalies appear: unmetered passages; polymeter; compound motion within simple meters; non-metrical beaming; metrical flexing; and unconventional or contradictory notation. The findings

indicate the primacy of meter for Schumann's rhythmic thought. To him the divisive metrical armature normal in the early 19th century was an active inflective influence, not a passive measuring device. It functions independently of surface reinforcement. Schumann often carried anomalous procedures to an extreme, both in inventiveness (as in the numerous ways of anomalizing a barbeat) and in consecutive repetition of an irregular feature. His use of meter confirms a functional difference between stress and accent. Also significant is the texturally uni-metrical nature of music for a single performer. Hemioles were found to be a sub-division of metrical repositioning, on the evidence of specific usage, including overlapped and nested hemiolic constructions, initial hemioles, and partially hemiolic textures.

The investigative types are anomalous structurally, in sonority, or in rhythmic function. Structural non-congruence is most common; however, lilt formation is rhythmically abnormal on one level, and empty barbeats exhibit anomalous sonority while remaining rhythmically normal. Meter shapes the non-congruencies, a procedure which, while it conciliates, also emphasizes their non-conforming character. Since Schumann's anomalies depend upon normal inflective presumptions for their effect, metrical inflection is the performer's basic resource for carrying out Schumann's rhythmic intentions.

However, this recognition does not necessarily solve the performance problems. Difficulties arise particularly with consecutive all-tying, diluted melodic identity in stretto, and inflecting hemiolic constructions. Apparently such problems are due to applying anachronistic performance conventions in these passages, compounded by lack of an overt tradition of conciliatory metrical inflection.

Changing concepts of rhythm and meter between Schumann's time and ours have eroded the inflective presumptions of metrical notation to the point of replacing the "tyranny of the bar" with a "tyranny of surface factors." The new tyranny cancels the notated meter with its inflective expectations. But to Schumann, metrical expectation was an ally. Applying the new tyranny to his music drains his anomalies of their dramatic force.

ACKNOWLEDGEMENTS

I should like to express my gratitude to the Danforth Foundation for an enabling fellowship; to each member of my dissertation committee for sustained interest, encouragement, and candor, which resulted in clarifying many issues; to the Memorial Foundation of Mu Phi Epsilon for a doctoral grant; to Prof. John Kollen of the University of Michigan, who first introduced Schumann's music to me; to Elizabeth McGraw and her staff of the Music Research Department of the University of California at San Diego, Music Librarian Vynola Newkumet of the University of Oklahoma, and Reference Librarian Kathy Kane of the University of Tulsa, for efficient and perceptive assistance; to Helene and Heinrich Buchmann of Marburg/Lahn, Germany, Jane Lyons of London, and Malcolm Frager of Lenox, Massachusetts, for help in locating elusive materials; and to my husband, Manly, for endless patience.

TABLE OF CONTENTS

Volume I: Text

Chapter	Page
I. INTRODUCTION TO THE STUDY	1
Purpose of the Study, 4	
Assumptions, 4	
Limitations, 6	
Design of the Study, 7	
Anomalous Types Investigated, 8	
Definition of Terms, 24	
Further Abbreviations and Symbols, 30	
II. RELATED LITERATURE	31
Biographical and Historical Materials, 31	
Analytical and Theoretical Materials, 41	
Time as a Philosophical Idea, 50	
Rhythm and Meter in Poetry, 51	
Performance Concerns, 52	
Summary of Related Literature, 56	
III. REPORT ON EMPTY BARBEATS	58
Thwarted Expectation, 58	
Initial Silence, 62	
Almost Empty Barbeats, 65	
Findings, 65	
IV. REPORT ON LILT FORMATION	69
Distinct Lilt Formation, 69	
Mutability in Lilt Formation, 77	
A Notational Oddity, 80	
Findings, 80	

V.	REPORT ON CONSISTENT METRICAL DISPLACEMENT	85
	Single Strand Displacement, 85	
	"Normal" vs. Anomalous Displacements, 89	
	Multiple Strand Displacement, 91	
	Slant Texture, 95	
	Consistent Displacement in Variation Movements, 96	
	Patterned Consistent Displacement, 97	
	Consistent Displacement Relative to Rubato Traditions, 99	
	Ambiguities Involving Slant Structures, 100	
	Special Cases, 101	
	Findings, 102	
VI.	REPORT ON OBLIQUE HARMONIC RHYTHM	107
	Harmonic Anticipation, 107	
	Implied Suspension, 123	
	Manneristic Oblique Harmonic Rhythm, 126	
	Findings, 131	
VII.	REPORT ON METRICAL REPOSITIONING	138
	Repositioning of Melodic, Harmonic, and Rhythmic Motifs, 138	
	Overtly Repositioned Patterns, 140	
	Intrinsically Repositioned Patterns, 145	
	Comparative Metrical Repositioning with Larger Formal Significance, 147	
	Manneristic Metrical Repositioning, 149	
	Special Cases, 159	
	Relation of Hemiolic Construction to Metrical Repositioning, 162	
	Findings, 164	
VIII.	REPORT ON HEMIOLIC CONSTRUCTION	177
	Bases for Anomalous Inner Grouping, 178	
	Variety in Formal Treatment, 180	
	Special Cases, 186	
	Hemiolic Mannerism:	
	A Characteristic Pattern, 189	
	The Inflection of Hemiolic Construction, 197	
	Findings, 213	

IX.	REPORT ON OTHER ANOMALOUS FEATURES	217
	Metrical Flexing, 217	
	Unmetered Passages, 219	
	Compound Motion Within Simple Meters, 222	
	Polymeter, 224	
	Special Uses of Alternative Divisions, 226	
	Unconventionally Notated Ties, Rests, and Notes, 228	
	Non-Metrical Beaming, 229	
	Notational Contradictions, 237	
	Findings, 238	
X.	RECONSTRUCTING SCHUMANN'S RHYTHMIC-METRIC PRINCIPLES	245
	Anomalous Processes, 245	
	Theoretical Conclusions, 249	
XI.	IMPLICATIONS FOR PERFORMANCE	252
	Toward an Authentic Performance Style, 254	
	Changes in Metrical Presumptions, 258	
	Inflective Tyrannies, 261	
	The Concept of Metronomic Time, 278	
	The Relation of Accent and Stress to Inflection, 281	
	Melodic Identity in Close Stretto, 288	
	Special Problems of Inflecting Hemioles, 293	
	Conciliatory Metrical Inflection, an Invisible Tradition, 311	
	Findings, 324	
	Practical Conclusions, 325	
XII.	SUMMARY OF THE STUDY	328
	SELECTED BIBLIOGRAPHY	336

Volume II: Appendices

A.	Examples for Chapter III, Empty Barbeats	1

B.	Examples for Chapter IV, Lilt Formation	28
C.	Examples for Chapter V, Consistent Metrical Displacement	64
D.	Examples for Chapter VI, Oblique Harmonic Rhythm	113
E.	Examples for Chapter VII, Metrical Repositioning	179
F.	Examples for Chapter VIII, Hemiolic Construction	242
G.	Examples for Chapter IX, Other Anomalous Features	301
H.	Listing of Schumann's Instrumental Works . . .	325

All musical examples, unless otherwise indicated, are from Schumann's Werke (edited by Clara Schumann and published by Breitkopf and Härtel between 1881 and 1893) as reprinted in 1967 by Gregg International Publishers, Westmead, England.

CHARACTERISTIC METRICAL ANOMALIES
IN THE INSTRUMENTAL MUSIC OF ROBERT SCHUMANN:
A STUDY OF RHYTHMIC INTENTION

CHAPTER I

INTRODUCTION

Aspects of Schumann's rhythmic practice drew criticism from the beginning. His music seems generally metrical, an impression confirmed by a glance at the scores, with their normal signs of metrical notation: meter signatures, barlines, division and sub-division of beats, standard note- and rest-values; yet he was accused of rhythmic obfuscation. Wasielewski considered Schumann's rhythmic proportions unclear;¹ Clara Wieck (later Clara Schumann) asked the composer to try to be "lucid" to avoid being misunderstood.² Moscheles, though finding the unusual

¹Joseph Wilhelm von Wasielewski, Life of Robert Schumann, 1858; trans. A. L. Alger (Boston: Oliver Ditson, 1871); reprinted with an introduction by Leon Plantinga (Detroit: Reprints in Music, 1975), p. 123.

²Joan Chissell, Schumann (1st ed.; London: J.M. Dent and Sons, 1968), pp. 60, 136.

rhythmic features of Schumann's Opus 14 "ingenious," wrote:

[These procedures] are frequently harsh, though justified. In order not to be disturbed or abused by them, one must be an experienced musician ¹

Schumann's early pianistic thought was widely considered so recondite as to be impractical. Liszt explained his neglect of Schumann's piano music in this way:

The repeated failures of my performances of Schumann's compositions, both in private and in public, discouraged me from entering them on [my] programs ²

More specifically, Clara Schumann's first London performance of the Piano Concerto, in 1856, was a disaster because of a rhythmic misunderstanding. She wrote to Brahms:

Dr Wylde [the conductor of the New Philharmonic Society] . . . could not grasp the rhythm of the last movement. At the performance he put the orchestra quite out ³

The perspective of time has not dissolved the enigmatic character of some of Schumann's rhythmic procedures. In the 20th century Schauffler speaks of "rhythmic mischief";⁴ Brown hypothesizes that Schumann's shifting rhythmic complex-

¹Henry Pleasants (ed.), The Musical World of Robert Schumann (New York: St. Martin's Press, 1965), p. 197.

²Wasielewski, Life, pp. 269-70.

³Berthold Litzmann, Clara Schumann: An Artist's Life, trans. Grace Hadow (London: MacMillan & Co., 1913), II, p. 133.

⁴Robert Haven Schauffler, Florestan: The Life and Work of Robert Schumann (New York: Henry Holt & Company, 1946), p. 315.

ities reflect the cosmological uncertainties of the time;¹
and Goetschius, who finds the composer's rhythmic spirit
"impetuous--often bewildering," mentions

unique syncopations and 'oblique' rhythm [which] seem
sometimes to dislocate the metric pattern.²

Dale complains of Schumann's

insistence upon rhythmic displacements, syncopations,
and combinations of conflicting or complementary
metrical units.³

Sachs, too, implies a metrical norm which is thwarted, in
"conflicting coincidences of different rhythms"⁴; whereas
Cooper and Meyer describe a "somewhat strained" hemiolic
effect.⁵ An unsuccessful rhythmic-metric treatment is
hinted by Chissell:

Schumann frequently had overlooked the fact that the
abnormal can be appreciated only when heard against
the norm.⁶

¹Thomas Alan Brown, The Aesthetics of Robert Schumann (London: Peter Owen Ltd., 1969), p. 136.

²Percy Goetschius (ed.), Symphony Number One in B^b Major by Robert Schumann (Boston: Oliver Ditson Company, 1917), p.v.

³Kathleen Dale, "The Piano Music," Schumann: A Symposium, ed. Gerald Abraham (London: Oxford University Press, 1952), p. 65.

⁴Curt Sachs, Rhythm and Tempo (New York: W. W. Norton, 1953), p. 334.

⁵Grosvenor Cooper and Leonard B. Meyer, The Rhythmic Structure of Music (Chicago: University of Chicago Press, 1960), p. 89.

⁶Chissell, Schumann (1st ed.), p. 118.

The possibility emerges, both from such critical comment and from the performance experience of the investigator, that an idiosyncratic interaction of meter and rhythm is at the root of problematical features of Schumann's rhythmic practice.

Purpose of the Study

The study is concerned with the relationship of rhythm to meter in Schumann's practice as manifested in certain conspicuous procedures which constitute metrical anomalies. The purpose of the study is threefold: first, to investigate rhythmic-metric anomalies in Schumann's music; second, to reconstruct Schumann's rhythmic intention in certain anomalous rhythmic-metric circumstances by discovering their underlying rhythmic principle(s); and third, to suggest, on the basis of that reconstruction, a comprehensive rhythmic approach to Schumann's music for performers.

Assumptions

This study stems from a presumption that Schumann's rhythmic oddities, if approached systematically in a broad context, offer clues to solving the problems they raise. Some of these anomalous constructions have been considered imaginative freaks, unsuccessful experiments, or even evidence of Schumann's compositional incompetence. That the anomalies function, rather, within the framework of Schumann's basic rhythmic principles has been the fundamental premise of this study.

"The impression of a piece must not be dubious," Schumann wrote.¹ His rhythmic imagery was not meant to be unclear, irritating, or impractical. Since the problematical passages occur in a basically metrical style, without any particular remarking on the part of the composer, his view of the metrical system must have allowed both the creation of and the notation of those passages now considered odd or troublesome.

Just as a noun is not what it names, so music notation is not what it represents. The incomplete congruence of a musical idea with its notation has been a major concern throughout this study. To think about musical rhythm is to be plagued by its natural invisibility. Even the well-developed European notation of the early 19th century is incapable of capturing performance realities completely. Chopin was accused of playing his own mazurkas in duple meter;² Beethoven added words to notes--"ritmo di tre battute"--to point out an unexpected rhythmic construction;³ and Schumann

¹Willi Reich, "Schumann the Man," Schumann: A Symposium, ed. Gerald Abraham (London: Oxford University Press, 1952), p. 10.

²Both Hallé and Meyerbeer reported this, on separate occasions. Harold C. Schonberg, The Great Pianists (New York: Simon and Schuster, 1963), pp. 143-44; also, Curt Sachs, Rhythm and Tempo (New York: W.W. Norton, 1953), p. 339.

³Beethoven, Symphony no. 9 in D Minor, Op. 125/II, m. 177-233.

wrote an impossible directive for a pianist, an accent over a chord with all members tied.¹ For performer, critic, or theorist to assume that a written score is an exact formula mirroring the composer's rhythmic intention is unwarranted.

Rhythmic analysis must also cope with rhythm's double function. Rhythm is, first, a time-binding procedure, intelligibly grouping durational phenomena. But it is, as well, the vehicle for all of music's other time-binding procedures. The self-determined exigencies of tonality, both melodic and harmonic, are fulfilled through rhythmic manifestation. Rhythm is music's comprehensive hold on time.

Schumann's rhythmic imagery is here assumed to be an aurally intelligible whole, with all aspects of the musical tissue interacting; his notation, whether routine or anomalous, is assumed to attempt to capture that whole.

Limitations

The primary limitation of this study is that reconstruction of a musical style from another time and culture can never be conclusive. Another basic limitation is that the problem is an aural one. The evidential judgments involved in aural understanding and misunderstanding are not necessarily demonstrable on paper, either verbally or notationally.

¹Schumann, *Impromptus*, Op. 5/2 (1st ed.), m. 2,3,4, etc.; shown in Vol. II, Ex. 345b, p. 98.

There is also the practical limitation imposed by the size of Schumann's creative output. Since approximately half of the 148 published opus numbers are instrumental, the other half vocal works, the arbitrary device of limiting the study to the instrumental works only has been employed. One clear advantage of this division rises from the fact that Schumann's style was formed in the early, predominantly piano works. Dealing only with the instrumental works also avoids consideration of word accentuation and syntactical groupings, issues which would add an unwieldy dimension to a study focussing on musical rhythm. Excluded, therefore, from the study are all works involving sung or spoken words--the solo songs and cycles, works for small and large vocal ensembles, choral works with orchestra, the opera, and the "melodramas," works for narrator with accompaniment. A listing of Schumann's instrumental works is found in Volume II, Appendix H.

Design of the Study

To Schumann even his most extreme rhythmic experimentation was logical and effective. Consequently the problem at the outset of this study was to devise a procedure making use of the vagaries themselves to point to his fundamental rhythmic principles. An investigation of Schumann's rhythmic intention in metrically anomalous passages was constructed as follows:

- 1) Schumann's known anomalous practice was separated into types.
- 2) These six types were sought throughout Schumann's instrumental music.
- 3) Schumann's use of each type was analyzed both descriptively and critically. Reports of these findings constitute Chapters III through VIII.
- 4) Other metrical irregularities were noted during the searches, as a check on the comprehensiveness of the chosen anomalous types. This further anomalous evidence is reported in Chapter IX.
- 5) The theoretical implications of these findings were correlated for the reconstruction of Schumann's fundamental rhythmic-metric principles, the "theoretical solution" of Chapter X.

The theoretical solution, however, brought to the fore conflicts between Schumann's rhythmic intentions and certain 20th-century performance assumptions. Therefore, pertinent changes of viewpoint from Schumann's time to ours were explored in Chapter XI; performance solutions were suggested, outlining an approach more authentic chronistically. Some readers may prefer to read Chapter XI as a preface to Chapters III-X. Chapter XII presents conclusions and recommendations for further research, following the summary of the study.

Anomalous Types Investigated

The six metrically anomalous situations drawn from Schumann's practice which were designated investigative types are identified below. Each presentation begins with a reminder of more normal practice with which the anomaly contrasts.

Empty barbeats

It is normal for the first beat of a bar to carry sound, and for rests to fall on relatively weaker metrical divisions. Example 1 shows typical use of rests in a final cadence. The shift from rests which mark the weaker parts of beats to those which mark the weaker parts of bars reinforces supermetrical stability. All of these rests are congruent with multi-level metrical function.

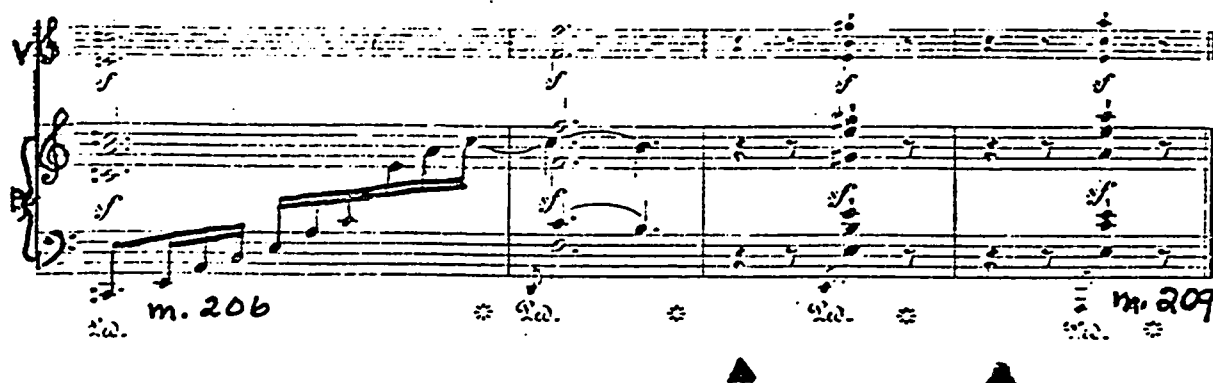
Ex. 1 - Normal Use of Rests at a Final Cadence (Op. 80/I,
m. 452-56)

Sehr lebhaft, 6/8

However, rests falling on the stronger metrical divisions are unusual. In Example 2 the barbeats of both final measures are marked by rests, not chords; the expected chords follow, on beats weaker metricaly than the barbeats. Silence on a barbeat constitutes an anomalous metrical procedure. Empty barbeats are indicated by ▲ .

Ex. 2 - Empty Barbeats: Anomalous Use of Rests at a Final Cadence (Op. 105/I, m. 206-209)

Mit Leidenschaftlichen Ausdruck, 6/8



Lilt formation: end-stopped triplets

It is normal in triple meter for the third beat to function as an upbeat to the impending barbeat (Ex. 3).

Ex. 3 - Normal Upbeat Function of Third Beats in Triple Meter (Op. 21/8, into m. 282-85)

Munter, nicht zu rasch



An end-stopped triplet, however, is anomalous at its own level of motion. It occurs when the last--the third--division of a triplet is construed as an afterbeat, not as an upbeat. In this study the end-stopped triplet, at any

level (bar, beat, or beat-division), is termed the "lilt." Lilt is often, but not always, manifested melodically. They are indicated by the symbol $\frown$ above or $\smile$ below, which spans the cohesive triple division.

Schumann used the lilt thematically in the motto-like opening shown in Example 4.

Ex. 4 - The Lilt as a Thematic Motto (Op. 41#3/I, m. 8,12)

Allegro molto moderato

The musical score for Example 4 shows four staves: VI (Violin I), VII (Violin II), VA (Viola), and C (Cello). The tempo is Allegro molto moderato. The score is for measures 8 and 15. Above the staves, there are lilt symbols (frown and smile) indicating the cohesive triple division. The score includes dynamics like *p* (piano) and tempo markings like *p sempre teneramente* and *len.* (lento). The staves are labeled VI, VII, VA, and C. The measures are labeled m. 8 and m. 15.

Here empty barbeats (m. 9 and m. 13) punctuate the lilt. This motto is prominent thematically and developmentally throughout the movement, but most unexpectedly in the 'cello's final bar (Ex. 5).

Ex. 5 - The Lilt in a Final Bar (Op. 41#3/I, m. 226)

Allegro molto moderato, 3/4

The image shows a musical score for four staves, labeled VI, VII, VA, and C. The music is in 3/4 time. The score spans two measures, 216 and 226. Dynamics include *p*, *pp*, and *mf*. A bracket under measure 226 is labeled 'm. 226'.

Consistent metrical displacement

Typically melodic rhythm, harmonic rhythm, and rhythmic articulation are in metrical congruence. The rhythmic motion which activates all the strands of a musical fabric commonly reinforces as well as articulates the metricality of the flow.

In Example 6, for instance, quickening of the harmonic rhythm in measures 3 and 4, and of the viola articulation in the same bars, emphasizes normal metrical and supermetrical expectation. The melodic outline itself seems a presentation of the metrical armature. Both melodic and accompanying parts realize quicker motion as the strong barbeat of the fifth measure approaches, the measure which balances the opening in phrase structure.

Ex. 6 - Normal Metrical Congruence of Melodic, Harmonic,
and Accumulated Rhythm (Op. 44/I, m. 1 into 5)

Allegro brillante

The image shows a musical score for four staves: Violin I (VI), Violin II (VII), Viola (VA), and Piano (Pf). The tempo is marked 'Allegro brillante.' The score covers measures 1 to 5, with 'm. 1' and 'm. 5' indicated at the bottom. The music features a consistent rhythmic pattern across all staves, with eighth notes and sixteenth notes, and dynamic markings like 'f' (forte) and 'sf' (sforzando).

MR (Melodic Rhythm)	
HR (Harmonic Rhythm)	
AR (Accumulated Rhythm)	

However, a strand of the texture may in a consistent way escape such congruence; it thus hastens or delays unilaterally. Such consistent metrical displacement can affect any strand or strands of the texture. In Example 7, for instance, the melody is presented in consistent afterbeats, always an eighth note later than expected. It has become a slant melody. Its symbol shows displacement direction and distance, in this instance

Ex. 7 - Consistent Metrical Displacement: Slant Melody
in Afterbeats (Op. 44/IV, into m. 225-28)

Allegro ma non troppo, ♩

MEL
→ ♩

VI *p* *cresc.*

VII *p* *cresc.*

VA *p* *cresc.*

C *p* *cresc.*

p con anima *cresc.*

m. 225 m. 228

HR d | d d | o d | d d | d d | d

x x x x x x

Harmonically the eighth-note lag of the afterbeat melody is marked in Example 7 by dissonance where the root change occurs. This clash is a distinctive feature in many slant structures. Its symbol indicates the length of the dissonance: x .

Oblique harmonic rhythm

Typically, harmonic change and more prominent metrical articulation coincide. For instance, metrical expectation is felt acutely crossing each barline; in Example 8 harmonic change is prominent across the barlines.

Ex. 8 - Normal Harmonic Action: Root Change Crossing the Barline (Op. 9/1, m. 1-6)

Quasi maestoso

The musical score for Example 8 is for piano (Pf) and is marked 'Quasi maestoso'. It shows measures 1 through 6 of Op. 9/1. The score includes a 'Pedale m. 1' instruction. The music features a root change crossing the barline. Below the main score, there is a simplified rhythmic diagram with notes and arrows indicating the pulse.

In contrast, a particular effect is felt when metrical progression occurs with no coincident change of harmony. Such harmonic inaction may be normal or anomalous. That involving harmonically expected afterbeats is normal, as in Example 9, where right-hand chords confirm in afterbeats the strong harmonic implications of the bass notes; perceived root change and stronger pulse coincide.

Ex. 9 - Normal Harmonic Inaction: Chordal Afterbeats
(Op. 6/8, m. 1)

Frisch

HR

AR

Schumann's rhythmic practice, however, includes a device in which harmonic rhythm is not synchronized vertically with stronger pulse, a device termed "oblique harmonic rhythm" in this study. There are two forms, harmonic anticipation and implied suspension.

The more common is harmonic anticipation, the upbeat form of harmonic inaction. In Example 10, for instance, root change occurs an eighth note in advance of the expected metrical step across the barline, resulting rhythmically in upbeat into downbeat within a single harmony. A characteristic harmonic obstinacy is felt upon these barbeats as a result of the harmonic inaction.

Ex. 10 - Harmonic Anticipation: Arpeggiation
(Op. 41#2/III, into m. 1, into m. 2)

Presto

VI

VII

VA

C

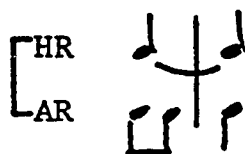
HR

AR

This anomalous formation might conveniently be termed "harmonic syncopation," since its psychological effect has the same vitality, the pull forward, of emphasized upbeats. However, difficulty arises with the word "syncopation," since it is commonly used as a local term to describe not only stressed upbeats but stressed afterbeats as well.¹ Therefore the term used in this study for static harmony in upbeat-to-downbeat situations is harmonic anticipation. Harmonic anticipation is symbolized by a combination of harmonic rhythm and accumulated rhythm into the

¹See examples 1a, 1b, and 1c under "Syncopation" in the Harvard Dictionary of Music, 2nd edition, p. 827. No distinction is made between a stressed weaker beat which pulls forward (upbeat) and that which lags behind (afterbeat). See in this connection the distinction between "stress" and "accent" in the Definition of Terms for this study.

anticipated barbeat or beat, for instance:



The abbreviations HR and AR are bracketed to distinguish this anomalous type from general analytical symbolizing.

Sometimes with harmonic anticipation all of the musical strands are tied across the bar or beat (Ex. 11). This situation is indicated by a double tie in the HR, thus: .

Ex. 11 - Harmonic Anticipation: All-Tied
(Op. 41#3/IV, into m. 1, 3, 5, 7)

Allegro molto vivace, d = ms.



In Schumann's rhythmic practice a construction is found which may at first seem identical with harmonic anticipation but functions instead as a suspension without overt barbeat dissonance. The note establishing root change on the barbeat, at the same time suspending (or retarding) members of the preceding chord, is omitted, leaving only the

implication of a suspension. A simple suspensive implication is found in Example 12. A bass E-flat added on the barbeat of m. 5 would make the suspension overt. The symbol for implied suspension includes literal harmonic rhythm, accumulated rhythm, and implied harmonic rhythm.

Ex. 12 - Implied Suspension (Op. 99/XII, into m. 5)

In Menuett-Tempo, 3/4

HR
AR
IMP/HR

s
sus

Metrical repositioning

Typically, a rhythmic pattern has its characterizing place in the metrical framework. For instance, the lilt of Example 4, m. 8, whose three-beat span fills a measure, again begins upon the barbeat in its reappearance in m. 12. Similarly, the rhythmic motif  introduced in Example 8, m. 3, again spans the first and second beats in bars 4, 5, and 6.

However, a given rhythmic pattern may fall in any metrical position, and a composer may make a point of such

variable positionings. Schumann's "rhythmic mischief" surfaces in such passages as those shown in Examples 13 and 14.

Ex. 13 - Metrical Repositioning (Op. 21/1, m. 1-4)

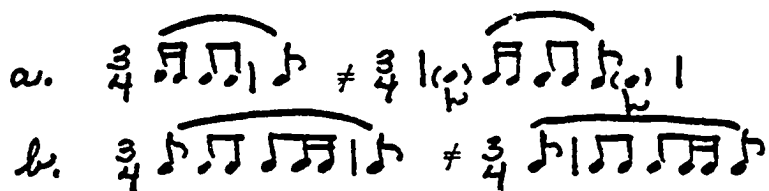
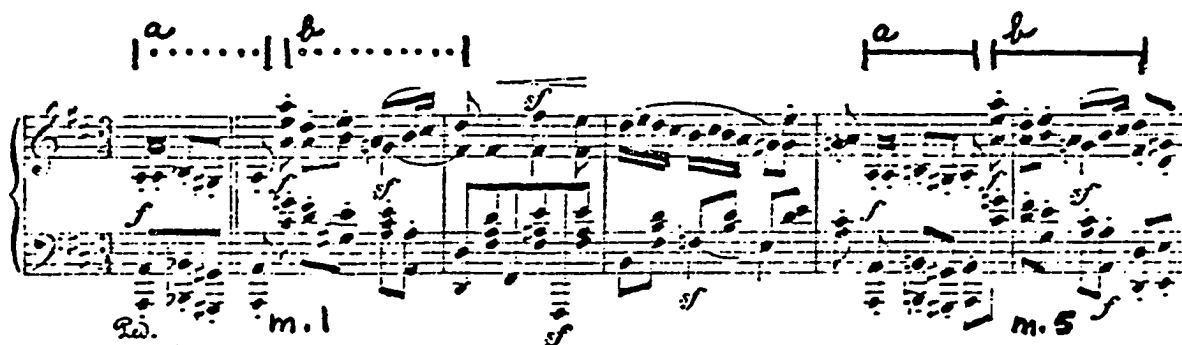
Markirt und kräftig



The symbol |.....| indicates the original form of a motif, with |——| indicating its repetition in a different metrical position. The pattern becomes formally conspicuous only upon its repositioning, hence the solid line for occurrence in metrically contrasting positions.

Ex. 14 - Metrical Repositioning (Op. 21/5, into m. 1-2
cf m. 4-5)

Rauschend und festlich



Hemiolic construction

Typically, harmonic and melodic construction coincide with and reinforce the metrical armature. Such rhythmic routine is demonstrated in Examples 1, 3, 6, 8, and 9. In contrast to those normal formations stands the hemiole, a specific alternative rhythmic grouping which contravenes ordinary metrical congruency within triple meter or triple division of beats.

In hemiolic construction, six impulses which are expected to be two groups of three are constructed instead as three groups of two. Example 15 diagrams this situation. 3/4 and 6/8 are the meters in which hemiolic construction is

most commonly found, though any set of consecutive triplets may be treated hemiolically. The hemiolic matrix of six units is symbolized thus $\lceil \quad \rceil$, whether in a score, in a diagram, or with measure numbers. Interior groupings may also be indicated: $\lceil \lceil \quad \rceil \rceil$. The inflection of hemioles is a separate question from their construction.

Ex. 15 - Normal vs. Hemiolic Construction

Normal Construction

Hemiolic Construction

In overall time span, $6 = 6$

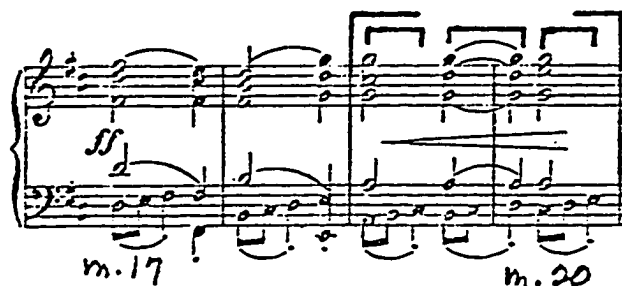
The diagram illustrates the relationship between normal and hemiolic constructions. It is organized into two rows, one for 3/4 time and one for 6/8 time. Each row has two columns: 'Normal Construction' and 'Hemiolic Construction'.
 In the 3/4 row:
 - Normal Construction: Shows a sequence of six eighth notes. The first three are grouped by a bracket with a '3' underneath, and the next three are grouped by a bracket with a '3' underneath. Below these groups is the equation $6 = 6$.
 - Hemiolic Construction: Shows a sequence of six eighth notes. The first two are grouped by a bracket with a '2' underneath, the next two by a bracket with a '2' underneath, and the last two by a bracket with a '2' underneath. Below these groups is the equation $2 + 2 + 2$.
 A vertical dashed line connects the midpoint of the first group in the 3/4 row to the midpoint of the first group in the 6/8 row.
 In the 6/8 row:
 - Normal Construction: Shows a sequence of six eighth notes. The first three are grouped by a bracket with a '3' underneath, and the next three by a bracket with a '3' underneath. Below these groups is the equation $2 = 3$.
 - Hemiolic Construction: Shows a sequence of six eighth notes. The first two are grouped by a bracket with a '2' underneath, the next two by a bracket with a '2' underneath, and the last two by a bracket with a '2' underneath. Below these groups is the equation $2 + 2 + 2$.
 A vertical dashed line continues from the 3/4 row down to the 6/8 row, passing through the midpoint of the first group in the hemiolic construction.

In interior groups, $2 = 3$

In ordinary usage, metrically congruent motion is established before the hemiolic contrast occurs, as shown in Example 16.

Ex. 16 - Normal Metrical Construction Followed by Hemiolic Construction (Op. 21/4, m. 17-18 cf. m. 19-20)

Ballmässig. Sehr munter, 3/4



Summary

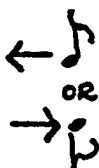
The metrically anomalous types sought in this investigation, and their symbols, are summarized below.



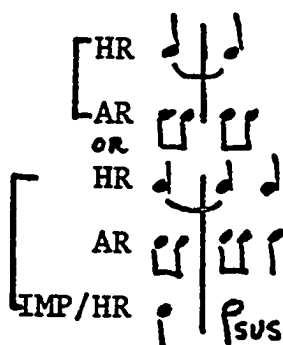
Empty barbeats, in which expected first-beat articulation is replaced by silence.



Lilt formation, in which the third part of a triple division is end-stopped instead of functioning as an upbeat.



Consistent metrical displacement, in which each unit of an element of the fabric, such as a melodic line, falls consistently early or late.



Oblique harmonic rhythm, in which root change does not occur in its metrically expected position:

in harmonic anticipation, root change is early;

in implied suspension, root change is delayed.



Metrical repositioning, in which a rhythmic pattern recurs in a different metrical position.



Hemiolic construction, in which six metrical units are organized according to the alternative grouping from that metrically expected.

Definition of Terms

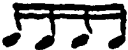
Accent. Metrically expected weight; or, a strong point on its own level hierarchically, around which weaker impulses are grouped. "Accent" is distinguished from "stress," which is added dynamic reinforcement regardless of relative metrical weight.

In this example (=Vol.II,Ex.A2) stress falls on metrically less accented notes in m. 75-76, and on the bar-beat of m. 77, a beat accented on both metrical and supermetrical levels.¹

Op. 5/12, 1st ed.

Vivace, 6/8

¹The study follows the usage of Cooper and Meyer in distinguishing the terms "stress" and "accent": op. cit., pp. 7-8; also, Leonard B. Meyer, Emotion and Meaning in Music (Chicago: University of Chicago Press, 1956), p. 104.

Accumulated rhythm. The overall rhythmic pattern formed by simultaneous strands of musical motion. For example, if  and  are begun simultaneously in the same tempo, their accumulated rhythm is . Abbreviated AR.

All-tied. Bound into the following beat by ties in every textural strand. Abbreviated ALLT.

Beats. Perceptible or imagined recurrent pulses, felt to be relatively equidistant, understood as the basis of a metrical framework.

Barbeat. The first beat in a measure; the beat which represents its bar in the supermetrical structure.

Upbeat. One or several tones which lead or pull forward toward a metrical strong point, at any hierarchical level.

Afterbeat. One or several tones which complete or trail after a metrical strong point, at any hierarchical level.

With "upbeat" and "afterbeat," hierarchical possibilities lead to expansion or contraction of the root word "beat." In this example (=Vol.II,Ex.A6) the last note of m. 212, the eighth note A, is rhythmically an upbeat though strictly only half a beat long and not upon a beat in 3/4. The two eighths G-A form an upbeat into m. 213 on the beat level. The half-note chord (m. 211) is an upbeat into m. 212, while bars 211-12 form an upbeat into m. 213f.

Op. 26/I

Sehr lebhaft, 3/4

[I] [I]

m. 207 m. 213

Clash. Harmonic disagreement in a musical texture as a result of metrical displacement in one or more strands of the texture. The note value of the symbol indicates the duration of the dissonance: $\times$, $\times$, $\times$ etc.

Consistent metrical displacement. The even, unit-by-unit hastening or delaying of a strand or strands of a musical texture; one of the main metrical anomalies investigated in this study.

(The) double tie. The symbol $\smile$, used in the representation of harmonic rhythm to indicate that all strands of the texture are tied.

End-stopped. Having as the last division of its rhythmic unit an afterbeat, not an upbeat.

Harmonic anticipation. See Oblique harmonic rhythm.

Hemiole. General term for a hemiolic incident. See below.

Hemiolic construction. The grouping of six impulses which are expected to be two groups of three into three groups of two; or the opposite, called reverse hemiole.

Hemiolic matrix. The six-part framework upon which the hemiolic phrase, or "gesture," unfolds.

Unanimous hemiole. A rhythmic texture in which all strands exhibit hemiolic construction simultaneously.

Partial hemiole. A rhythmic texture in which one or more of the musical strands exhibit hemiolic construction but one or more strands remain in the expected metrical conformation.

Hemiolic inflection. Rhythmic shaping according to the hemiolic construction, not according to the notated meter. Aurally this constitutes a meter change.

Inflection. The grouping and nuancing of tones for rhythmic intelligibility, either in the aural imagination or in performing.

Metrical inflection. Rhythmic shaping according to differentiated beats of the metrical framework.

Supermetrical inflection. Rhythmic shaping of the larger phrase according to differentiated bars of the supermetrical framework.

Hemiolic inflection. See Hemiole.

(The) Lilt. An end-stopped triple division.

Measure, or bar. The space between two consecutive bar-lines; the basic visual module of meter.

Metrical anomaly. A rhythmic process which in some way contradicts metrical expectation.

Metrical expectation. Anticipation of the unfolding, differentiated regularity of metrical structure and of its perpetuation.

Metrical organization. Measured rhythmic flow in a differentiated pattern. Several types are relevant to this study.

Divisive meter. A rhythmic armature in which bars and beats are divided with consistent symmetry (latent or articulated), usually by twos or by threes.¹ Divisive meter is the basic rhythmic construction for most music of the Classic-Romantic period.

Additive meter. A rhythmic armature in which bars are divided with consistent asymmetry (latent or articulated). Additive meter may seem to combine two or more divisive meters, hence the term "additive." For example:

$$5/8 = 2/8 + 3/8 \text{ or } 3/8 + 2/8$$

The asymmetry often exists primarily on the bar level, the beat divisions being regularly divisive.

Multimeter. Unpatterned changing meters or metrical flux; plastic flow of metrical construction employing a standard unit of time, notated or understood. For example, with the eighth note remaining constant, 2/4 into 3/8 into 7/8.

Polymeter. Simultaneous use of different meters, each represented by its meter signature.

Metrical flexing. A brief change of meter with a return to the original, prevailing metrical organization. For example:

15 m. in 3/4 - 1 m. in 2/4 - 48 m. in 3/4

¹Conventionally, 4 = 2+2.

Oblique harmonic rhythm. A rhythmic construction in which unanimous root-change is dislocated relative to its metrically expected position. There are two forms in Schumann's music:

Harmonic anticipation. The form of oblique harmonic rhythm in which unanimous root-change is metrically premature. Abbreviated HANT.

Implied suspension. A form of oblique harmonic rhythm based upon normal chord-suspension formation, in which root change with suspension is implied at a strong metrical point and followed by its normal resolution, although the suspensive pitch is absent. Root change is unanimous and is metrically delayed. Abbreviated IMP/SUS.

Polonaise cadence. A cadential treatment characteristic of the Polonaise in which root position tonic harmony is postponed until the third beat of the measure. Abbreviated POLO.

Rhythmic intention. The rhythmic Gestalt of a musical situation; intelligible grouping of a whole musical texture, perceived either aurally or in the imagination. Rhythmic intention refers to the overall coherence of durational strands.

Supermetrical organization. Phrase structure by measure-groups; grouping by bars rather than grouping by beats (metrical organization). Sequence of the measures and to a certain extent formal function within such phrase-

groups is symbolized by open-bracketed Roman numerals, [I] indicating a strong bar.

Triplet. Aurally, any triple division, regardless of congruence or non-congruence with metrical expectation.

Further Abbreviations and Symbols

HR	Harmonic rhythm
IMP/HR	Implied harmonic rhythm
MR	Melodic rhythm
OL	Overlapped
P ^o , S ^o	Primo part, Secondo part in four-hand piano music
LH, RH	Left hand, right hand in keyboard music
=	Indicates equality, either of time span or of inflection within that time span. Read "equals."
≠	Indicates inequality, either of time span or of inflection within that time span. Read "does not equal."
m. 15 ⁱ	Indicates a measure number in a first ending.
m. 16 ⁱⁱ	Indicates a measure number in a second ending.

CHAPTER II

RELATED LITERATURE

Biographical and Historical Materials

To gain a broad understanding of Schumann's life and times was imperative because of the specific relationship of Schumann's music to his life experiences. As he wrote to Clara in 1838:

I am affected by everything that goes on in the world and think it all over in my own way, politics, literature and people That is why my compositions are sometimes difficult to understand, because they are connected with distant interests; and sometimes striking, because everything extraordinary that happens impresses me and impels me to express it in music.¹

How literally he meant this statement has only recently been explored. The allusiveness of Schumann's music, it now seems, goes far beyond simple programmatic elements.² That surface framework of personal and literary reference is important not only in itself but beyond itself in such technical creative matters as thematic shaping and reshaping, key choices, and elaborate anagrammatic messages.

¹Chissell, Schumann (1st ed.), p. 60.

²See Eric Sams, "Schumann and the Tonal Analogue," Robert Schumann: The Man and His Music, ed. Alan Walker (New York: Harper & Row, 1974), pp. 390-405, and other detailed articles by Sams listed in this chapter under "Performance Concerns."

Biographies of Schumann

Of the eleven biographers consulted, only Wasielewski¹ had close personal contact with the composer, though Niecks'² father played in the Düsseldorf orchestra before, during, and after Schumann's conductorship. Biographies by Fuller-Maitland³ and by Patterson⁴ reflect the public idolization of Schumann's widow Clara in the British Isles. Both Bedford⁵ and Boucourechliev⁶ give a detailed European political and social background for the Romantic movement and for the Schumanns' private and public lives, while Basch⁷

¹Wasielewski, Life, 1858.

²Frederick Niecks, Robert Schumann: A Supplementary and Corrective Biography, ed. Christina Niecks (London: J. M. Dent & Sons Ltd., 1925).

³J. A. Fuller-Maitland, Schumann (London: Sampson Low, Marston, 1888).

⁴Annie W. Patterson, Schumann (London: J. M. Dent & Sons Ltd., 1st ed. 1903; revised 1934).

⁵Herbert Bedford, Robert Schumann: His Life and Work (London: Kegan Paul, Trench, Trubner & Company, Ltd., 1925 and 1933; reprinted, Westport, Conn.: Greenwood Press, 1971).

⁶Andre Boucourechliev, Schumann, trans. Arthur Boyars (New York: Grove Press, 1959).

⁷Victor Basch, Schumann, A Life of Suffering, trans. Catherine Alison Phillips (New York: Tudor Publishing Co., 1936).

focuses on psychological and aesthetic elements. Schauffler¹ and Chissell² are more objective than previous biographers concerning Clara Schumann and her influence on her husband's music. Much previously unavailable material--manuscripts, diaries, and correspondence--is incorporated in the large-scale biographical and philosophical study by Boetticher.³ This new information is reflected for the English-speaking public in Abraham's "Robert Schumann" entry in Grove's V.⁴ There are also two collections of essays which contain biographical as well as analytical material, one edited by Abraham,⁵ the other by Walker.⁶

¹Robert Haven Schauffler, Florestan, The Life and Work of Robert Schumann (New York: Henry Holt & Company, 1945).

²Joan Chissell, Schumann (London: J. M. Dent and Sons, Ltd., 1968; 2nd rev. ed., 1977). Both editions furnish references for this study.

³Wolfgang Boetticher, Robert Schumann: Einführung in Persönlichkeit und Werk (Berlin: Bernhard Hahnefeld Verlag, 1941).

⁴Gerald Abraham, "Robert Schumann," Grove's Dictionary of Music and Musicians, ed. Eric Blom (5th ed.; London: The MacMillan Press Ltd., 1954) v. 7, pp. 603-640.

⁵Gerald Abraham (ed.), Schumann: A Symposium (London: Oxford University Press, 1952).

⁶Alan Walker (ed.), Robert Schumann: The Man and His Music (New York: Harper & Row, 1974).

Biographies of Clara Schumann
and other contemporaries

Clara Schumann has received voluminous biographical attention. Works consulted include those by Litzmann,¹ Harding,² Clara's grandson Ferdinand,³ and Sir George Grove.⁴ The extensive correspondence between Clara and Brahms, excerpted and translated by Litzmann,⁵ has been useful; however, if Litzmann had included more technical details from their interchange concerning Clara's edition of Schumann's works, published by Breitkopf and Härtel between 1881 and 1893, his volume would have been more useful to this study.

The close relationship of Brahms to the Schumann family, in both musical and personal ways, is documented by

¹Berthold Litzmann, Clara Schumann: An Artist's Life, trans. Grace Hadow, 2 v. (London: MacMillan & Co., 1913).

²Bertita Harding, Concerto (London: George Harrap, 1962).

³Ferdinand Schumann, Reminiscences of Clara Schumann as found in the diary of her grandson, trans. and ed. June W. Dickinson (Rochester: Schumann Memorial Foundation, 1949).

⁴Sir George Grove, with an interpolation by Franklin Taylor, "Clara Schumann," Grove's V.

⁵Berthold Litzmann (ed.), Letters of Clara Schumann and Johannes Brahms, 2 v. (New York: Longmans Green and Co., 1927; reprinted, Vienna House, 1971).

Eugenie Schumann,¹ Florence May,² Schauffler,³ Geiringer,⁴ Radcliffe,⁵ and James,⁶ in materials ranging from memoir to scholarly study.

Biographical material was also consulted regarding composers whose lives or works touched Schumann significantly: Schubert⁷; Mendelssohn⁸, whose polished musician-

¹Eugenie Schumann, The Schumanns and Johannes Brahms, trans. Lincoln McVeagh (New York: The Dial Press, 1927).

²Florence May, The Life of Johannes Brahms, 2 v. (2nd ed. rev.; London: William Reeves, 1905).

³Robert Haven Schauffler, The Unknown Brahms (New York: Dodd, Mead and Company, 1933).

⁴Karl Geiringer, Brahms, his life and work, trans. H. B. Weiner and Bernard Miall (London: Allen and Unwin, 1936; revised and enlarged, 1948).

⁵Philip F. Radcliffe, "Johannes Brahms," Grove's V, v. 1, pp. 870-903.

⁶Burnett James, Brahms: A Critical Study (New York: Praeger, 1972).

⁷Maurice J. E. Brown, "Franz Schubert," Grove's V, v. 7, pp. 536-571; and Arthur Hutchings, Schubert (London: J. M. Dent and Sons, 1973).

⁸Heinrich Eduard Jacob, Felix Mendelssohn and His Times, trans. Richard and Clara Winston (Englewood Cliffs: Prentice-Hall, Inc., 1963); Eric Werner, Mendelssohn, A New Image of the Composer and His Age, trans. Dika Newlin (New York: Free Press of Glencoe, 1963); and Percy Young, "Felix Mendelssohn," Grove's V, v. 5, pp. 675-706.

ship Schumann admired and envied; Liszt;¹ Berlioz;² and Chopin.³

Hauptmann's dialectical theory of music had no direct effect on Schumann's practice; nevertheless, writings by and about this influential colleague of Schumann's at the Leipzig Conservatory give valuable insight into contemporary opinion of Schumann's music.⁴ Other violinists besides Hauptmann were involved to varying degrees with Schumann: Wasielewski, concertmaster at Düsseldorf under Schumann and Schumann's first biographer;⁵ Lipiński, to whom Opus 9 is dedicated;⁶ Paganini, whose musical portrait appears in Opus 9 and whose Caprices are the basis for Opp. 3 and 10;⁷

¹Louisa Middleton and Francis Hueffer, rev. by Humphrey Searle, "Liszt," Grove's V, v. 5, pp. 256-316.

²Leon Vallas, "Hector Berlioz," Grove's V, v. 1, pp. 653-673.

³Arthur Hedley, Chopin (London: Dent & Sons, Ltd., 1947; reprinted New York: Collier Books, 1962); and Arthur Hedley, "Frederic Chopin," Grove's V, v. 2, pp. 252-267.

⁴A. Maczewsky, "Moritz Hauptmann," Grove's V, v. 4, pp. 138-39; and Moritz Hauptmann, The Letters of a Leipzig Cantor, ed. Alfred Schone and Ferdinand Hiller; trans. and arr. by A. D. Coleridge; 2 v. (London: Novello, Ewer, 1892; reprinted, New York: Vienna House, 1972).

⁵Sir George Grove, "Joseph W. von Wasielewski," Grove's V, v. 9, pp. 188-89.

⁶Czeslaw R. Halsi, "Karol Lipiński," Grove's V, v. 5, pp. 251-52.

⁷Olga Rudge, E. Heron-Allen, and Eric Blom, "Niccolò Paganini," Grove's V, v. 6, pp. 489-94.

Spohr, many of whose compositions Schumann reviewed, sometimes mentioning rhythmic experiments;¹ and Joachim, early a protégé of Mendelssohn, and a close friend as well of the Schumanns and of Brahms.²

Schumann's critical writings

Schumann's idiosyncratic critical style as editor of the NeueZeitschrift für Musik both reveals and obscures his strong musical opinions. "The best fugue," he wrote regarding Mendelssohn's Opus 35, "is one that the public takes for a Strauss waltz."³ Of the three collections of excerpts from Schumann's articles which were consulted,⁴ that edited by Plantinga is particularly useful because the editor examines the music reviewed by Schumann as well as the reviews themselves.

¹Paul David, "Louis Spohr," Grove's V, v. 8, pp. 13-19; Louis Spohr, The Musical Journeys of Louis Spohr, trans. and ed. Henry Pleasants (Norman: University of Oklahoma Press, 1961); and Curt Sachs, Rhythm and Tempo (New York: W. W. Norton & Company, 1953), p. 334.

²Paul David, "Joseph Joachim," Grove's V, v. 4, pp. 642-43; W. W. Cobbett, "Joachim Quartet," Grove's V, v. 4, pp. 643-44; Briefe von und an Joseph Joachim, gesammelt und herausgegeben von Johannes Joachim und Andreas Moser, 3 B. (Berlin: Julius Bard, n.d.); and Letters to and from Joseph Joachim, selected and trans. Nora Bickley (London: MacMillan and Co., 1914).

³The Musical World of Robert Schumann: A Selection from Schumann's Own Writings, ed. Henry Pleasants (New York: St. Martin's Press, 1965), p. 124.

⁴On Music and Musicians: Selections from Robert Schumann's critical writings, trans. Paul Rosenfeld, ed. Konrad Wolff (New York: Pantheon, 1946); Henry Pleasants (ed.), Musical World; and Leon B. Plantinga, Schumann as Critic (New Haven: Yale University Press, 1967).

Schumann's times

The temper of the early 19th century is relevant to the study; it is treated in Pinson's study of the cult of the grotesque;¹ by Brion in a literary-philosophical work;² in Loesser's sociological study;³ and in the central portion of Schonberg's essay on pianists.⁴

Furthermore, the development of the waltz craze in Vienna and its spread through European society directly concerns this study. Schumann enjoyed a lifelong intoxication with waltzes. He was imaginatively struck by Weber's Invitation to the Dance.⁵ He reveled in Schubert's waltzes, both two- and four-hand sets.⁶ Some of his very earliest

¹Patricia Testerman Pinson, "The Shattered Frame: A Study of the Grotesque in Nineteenth Century Literature and Music" (unpublished doctoral dissertation, Ohio University, 1969).

²Marcel Brion, Schumann and the Romantic Age, trans. Geoffrey Sainsbury (New York: The MacMillan Company, 1956).

³Arthur Loesser, Men, Women, and Pianos (New York: Simon and Schuster, 1954).

⁴Harold C. Schonberg, The Great Pianists from Mozart to the Present (New York: Simon and Schuster, 1963), pp. 89-230.

⁵Wasielewski, p. 41.

⁶Bedford, p. 93; and Abraham, Grove's V, v. 7, p. 605.

variations¹ were based on Schubert's "Sehnsucht" Waltz, Op. 9/2. Waltz-like pieces and themes abound in his music, from the ABEGG theme of Opus 1 to the four-hand ball scenes of Opp. 109 and 130. Carl Reinecke tells of the Schumanns, at home in the 1840s, waltzing "with the most unbridled abandon."²

Vienna had a distinct musical character in Schumann's lifetime; furthermore, the popularity of the Viennese waltz in Europe amounted to a frenzy. The city's musical as well as political history is outlined by Gartenberg.³ Various aspects of the waltz are discussed by Fantel,⁴ Nettl,⁵ Sachs,⁶ and Carner;⁷ also, collections of waltz

¹Listed among early unpublished works: Walker (ed.), Robert Schumann, p. 455.

²Schauffler, Florestan, p. 196.

³Egon Gartenberg, Vienna: Its Musical Heritage (University Park: Pennsylvania State University Press, 1968).

⁴Hans Fantel, The Waltz Kings (New York: William Morrow & Company, 1972).

⁵Paul Nettl, The Story of Dance Music (New York: Philosophical Library, 1947).

⁶Curt Sachs, World History of the Dance, trans. Bessie Schonberg (New York: W.W. Norton & Company, 1937).

⁷Mosco Carner, "Waltz," Grove's V, v. 9, pp. 165-72.

scores by the elder Strauss¹ and by Lanner², Schumann's contemporaries, have been consulted.

Manuscript studies and manuscripts

Roesner's meticulous 1973 study of Schumann manuscripts³ deals with autograph sources of eight large works, offering also extensive diplomatic transcriptions. Further primary manuscript resources used in the study include a facsimile edition of sketches and score of the Symphony in B^b, Opus 38,⁴ and Xerox copies of various stages of the Piano Concerto, Opus 54: Schumann's manuscript of the 1841 Phantasie which became the first movement of the Concerto (this score including revisions and the addition, in 1845, of an Andantino and Rondo);⁵ and a fair copy, but incompletely edited, of the revised full score.⁶

¹Johann Strauss, Sr., Denkmäler der Tonkunst in Österreich, Jg. XXXV/2, Band 68 (1928).

²Josef Lanner, Denkmäler der Tonkunst in Österreich, Jg. XXXIII/2, Band 65 (1926).

³Linda Correll Roesner, "Studies in Schumann Manuscripts: With Particular Reference to Sources Transmitting Instrumental Works in the Large Forms," 2 v. (unpublished doctoral dissertation, New York University, 1973).

⁴Robert Schumann, Symphony/Opus 38, facsimile of the manuscript in the Library of Congress (New York: The Robert Owen Lehman Foundation, 1967).

⁵Courtesy of Malcolm Frager.

⁶Ms. #20433, Staatsbibliothek, Berlin.

Analytical and Theoretical Materials

Pertinent to the study were specific mention of Schumann's rhythm as a stylistic factor, and certain theoretical treatises on rhythm.

Descriptions of Schumann's rhythmic style

Critical comment on Schumann's rhythmic style is liberally quoted here, since such discussion bears directly on the study.

Both Hadow and Mason, writing half a century after Schumann's death, found the composer's rhythmic effects still "modern" and capricious. Hadow mentions

. . . his frequent use of syncopation, sometimes picking out the melody for emphasis, sometimes retarding it to half-speed, oftener traversing [thwarting or opposing] the rhythm altogether ¹

Mason, admiring Schumann's "fertility of rhythms,"² describes the composer's rhythmic attitude as

a constant tendency to emphasize the metre by slight but systematic deviations from it, such as syncopation and the shifting of motives into artificial relations to the measure, and the simultaneous use of two or more metrical schemes at once.³

¹W. W. Hadow, "Robert Schumann and the Romantic Movement in Germany," Studies in Modern Music, v. 1 (London: MacMillan and Company, 1893-94; reissued, New York: Kennikat Press, 1970), pp. 213-14.

²Daniel Gregory Mason, The Romantic Composers (New York: The MacMillan Company, 1906), p. 144.

³Ibid., p. 120.

Mason also speaks of sonorous effects which are accomplished by rhythmic means:

. . . entrances of chords before we expect them, delays of the expected ones At the beginning of the Kreisleriana he keeps the right hand half a pace ahead of the left, thus producing great richness of tone.¹

Fuller-Maitland, long an admirer of Clara Schumann's playing and (through her interpretations) of her husband's music, writes in some detail concerning rhythmic effects in certain chamber works:

The rhythm, so pleasantly halting, of the next variation relies for its charm on the fact that the first note of each triplet is held over from the last ²
[Variations for Two Pianos, Two 'Cellos and Horn, no opus number]

. . . a hymn-like section, each note of which, given out by the piano, is anticipated in the strings, so that a feeling of syncopation is produced, and continued perhaps a little longer than might be desired.³
[Fantasiestücke for Piano, Violin, and 'Cello, Opus 88]

Schauffler, writing well into the 20th century, is particularly intrigued with Schumann's rhythm, commenting

¹Ibid., pp. 121-22; and Schauffler, Florestan, p. 493.

²J. A. Fuller-Maitland, Schumann's Concerted Chamber Music (London: Oxford University Press, 1929), p. 9. A companion booklet deals in the same style with the piano music: J. A. Fuller-Maitland, Schumann's Pianoforte Works (London: Oxford University Press, 1927).

³Fuller-Maitland, Chamber Music, p. 21.

typically:

We find the composer at his rhythmic sport, making 3/8 time sound with 2/8.¹ ["Des Abends," Op. 12/1]

With delightful originality, he enhances the asymmetry by starting the same phrase successively on different parts of the measure.² [Stücke im Volkston, Op. 102/1 and 3]

He makes 3/4 time sound with 2/4, subtly and excitingly playing off the metrical stress against the natural motive stress.³ [Sonata in F# Minor, Op. 11/IV]

Schauffler diagrams the rhythmic similarity of the theme which opens the E^b Symphony, Op. 97/I (with its "deft syncopations"⁴) to the second theme of the Piano Concerto, Op. 54/III, saying of the latter:

The signature is 3/4; but he has none the less managed to make the music sound like 3/2 As there is nothing here for the theme to syncopate⁵ against, all hints of the 3/4 rhythm are lacking.

That Schumann's rhythmic effects are independent of medium is suggested in the similarity of comment by Symposium contributors whose critical responsibilities are divided by medium. A brief cross-selection follows:

¹Schauffler, Flöreſtan, p. 318.

²Ibid., p. 489.

³Ibid., p. 491.

⁴Ibid., p. 411.

⁵Ibid., p. 428.

. . . an opposition of 6/8 and 3/4 meters¹ ["The Chamber Music"]

. . . frequent cross-rhythms, syncopations, and irregular accentuations² ["The Piano Music"]

. . . conflict of cross-rhythms (3/2 against 2/2)³ ["The Orchestral Music"]

. . . the curious cross-rhythms⁴ ["The Works for Solo Instruments and Orchestra"]

More recently, Chissell finds "frequent rhythmic surprises" in Schumann, surprises linked to his love of the extraordinary:

. . . syncopations, misplaced accents, deliberate confusion of duple and triple meter.⁵

Rosen characterizes the rhythmic forms of Romantic music, and Schumann's in particular, as "not syntactical . . . but cumulative in their effect . . . , no longer synthetic but additive."⁶ This adds a rhythmic dimension to a long-standing complaint about Schumann's compositional methods. This complaint was brought to a focus by Hadow's attack in 1893 on Schumann's melodic structure as "Discrete"

¹A. E. F. Dickinson, Schumann: Symposium, p. 167.

²Kathleen Dale, Schumann: Symposium, p. 21.

³Mosco Carner, Schumann: Symposium, p. 229.

⁴Maurice Lindsay, Schumann: Symposium, p. 248

⁵Joan Chissell, Schumann Piano Music (London: BBC Publications, 1972), pp. 8-9.

⁶Charles Rosen, The Classical Style (London: Faber and Faber Limited, 1971), p. 453.

rather than "Continuous" like the admired Beethovian model.¹

Longyear, however, in a lengthy discussion of Schumann's place in the development of German Romanticism, finds his rhythm a "driving force," commenting:

Schumann's masterly use of syncopation, hemiola, rhythmic displacement, polyrhythm, and syncopated harmonic rhythm makes him a master of rhythm comparable only to Beethoven, Berlioz, Brahms, and Stravinsky.²

Rhythmic theory, history, and analysis

Smither's treatise on 19th- and 20th-century rhythmic theories, especially his translation and discussion of portions of three theoretical texts more or less directly connected with Schumann, was of particular value to this study.³ The three theorists are Marx, Weber, and Hauptmann. Marx has time and place contemporaneousness with Schumann: his compositional text was published in 1832 in Leipzig, where Schumann was living, and gives a picture of the general understanding of rhythm considered necessary for a composition student at that time.⁴ Schumann himself, how-

¹Hadow, Studies in Modern Music, p. 213. Schauffler discusses the effect of this attack in Florestan, pp. 488-90.

²Rey Longyear, Nineteenth-Century Romanticism in Music (Englewood Cliffs: Prentice-Hall, 1969), p. 123.

³Howard Elbert Smither, "Theories of Rhythm in the Nineteenth and Twentieth Centuries with a Contribution to the Theory of Rhythm for the Study of Twentieth Century Music" (unpublished doctoral dissertation, Cornell University, 1960).

⁴Adolf Bernhard Marx, Allgemeine Musiklehre (Leipzig: Breitkopf & Härtel, 1832). All citations are from Smither.

ever, turned to Weber's more extensive and more theoretical work¹. (published in Mainz in several editions between 1817 and 1832) in an autodidactic effort after his lessons with Dorn were suspended. The present system of using Roman numerals to indicate chordal analysis dates from Weber's writings.² In the early 1840s, Schumann and Hauptmann were colleagues briefly at the newly organized Leipzig Conservatory. Schumann was acquainted with Hauptmann's involved, philosophically-derived theories,³ which, however, he considered "unmusical."⁴ Hauptmann played the violin; he was a witty but sharp foe of equal temperament, pianos, and any blurring of clear formal outlines. Nevertheless he was one of the first to recognize and acclaim Schumann's achievements in large forms, particularly the string quartets and symphonies.

Gurney's⁵ rhythmic approach (1880) is presumably

¹Gottfried Weber, Versuch einer geordneten Theorie der Tonsetzkunst, 4 v. (Mainz: B. Schott's Söhne, 1817-1821; 3rd ed. Mainz: B. Schott's Söhne, 1830-1832). All citations are from Smither.

²Thurston Dart, "Notation," Grove's V, v. 6, p. 123.

³Moritz Hauptmann, Die Natur der Harmonik und der Metrik; zur Theorie der Musik (Leipzig: Breitkopf & Hartel, 1853). All citations are from Smither.

⁴Niecks, Corrective Biography, p. 292.

⁵Edmund Gurney, The Power of Sound (London, 1880; reprinted, with an introduction by Edward Cone, New York: Basic Books Inc., 1966).

closer to Schumann's than is ours. Gurney directs attention to aural experience rather than to notation; he values surface cogency in all aspects of the musical fabric.

Resurgence of interest in rhythmic research in this century is evidenced by Sachs' general history of musical rhythm (1953).¹ Cooper and Meyer's pioneering treatise on the analysis of rhythm is a methodological as well as a theoretical work.² Meyer's earlier investigation of the role of expectation in music³ and his later collection of analytical essays⁴ were also useful to the present study. Particularly valuable has been Meyer's concept of a composer's constraint levels, as presented and discussed in a seminar on the nature of style and style change.⁵

¹Curt Sachs, Rhythm and Tempo (New York: W. W. Norton & Company, 1953).

²Grosvenor Cooper and Leonard B. Meyer, The Rhythmic Structure of Music (Chicago: University of Chicago Press, 1960).

³Leonard B. Meyer, Emotion and Meaning in Music (Chicago: University of Chicago Press, 1956).

⁴Leonard B. Meyer, Explaining Music (Berkeley: University of California Press, 1973).

⁵Leonard B. Meyer, S. L. E. P. Seminar, University of Oklahoma, Jan. 22-26, 1979.

Two basically Schenkerian studies, by Pierce¹ and by Yeston,² view rhythm as an aspect of tonal form. "Syn-copation" is a term avoided in the present study because of inadequacies in the general use of the word (see p. 17). However, Yeston's perceptive definition takes into account not only the durations involved but also multiple implications of temporally positioned pitches.

Collins' work on hemioles³, though not dealing with Schumann's stylistic period, provides historical perspective on hemiolic practice. Collins warns that the realities of performance and the realities of notation must be carefully distinguished, and that their relationship may not be obvious to generations removed from the contemporary aural tradition.

Several other doctoral dissertations deal with rhythm in ways pertinent to the present study. Rittenhouse's

¹Anne Alexandra Pierce, "The Analysis of Rhythm in Tonal Music" (unpublished doctoral dissertation, Brandeis University, 1968).

²Maury Yeston, The Stratification of Musical Rhythm (New Haven: Yale University Press, 1976).

³Michael Bruce Collins, "The Performance of Coloration, Sesquialtera, and Hemiolia [sic] (1450-1750)" (unpublished doctoral dissertation, Stanford University, 1963); and "The Performance of Sesquialtera and Hemiolia in the 16th Century," JAMS XVII(1964), pp. 5-28.

study of rhythm in the Brahms symphonies documents the frequency of metrical anomalies similar to Schumann's in Brahms' rhythmic habit.¹ Glusman necessarily deals with rhythm in tracing the development of the lyric piano piece.² Shifts in attitudes toward rhythm in the 19th century are probed by Perkins.³ McNab focuses on Mozart and Schumann in documenting major changes in rhythmic handling as the "Romantic" composers succeeded the "Classicists."⁴ Finally, an effort to bridge the gap between philosophical and musicological procedures is Hackman's dissertation on the concept of meter.⁵ Symbolic logic, language constructs,

¹Robert John Rittenhouse, "Rhythmic Elements in the Symphonies of Johannes Brahms" (unpublished doctoral dissertation, University of Iowa, 1967).

²Elfriede Glusman, "The Early Nineteenth-Century Lyric Piano Piece" (unpublished doctoral dissertation, Columbia University, 1970).

³Marion Louise Perkins, "Changing Concepts of Rhythm in the Romantic Era: A Study of Rhythmic Structure, Theory and Performance Practices Related to Piano Literature" (unpublished doctoral dissertation, University of Southern California, 1961).

⁴Duncan Robert McNab, "A Study of Classic and Romantic Elements in the Piano Works of Mozart and Schumann" (unpublished doctoral dissertation, University of Southern California [DMA], 1961).

⁵Willis H. Hackman, "A Clarification and Reconstruction of the Concept of Meter for Music-Structural Rhythmic Analysis Following Philosophical-Analytical Paradigms" (unpublished doctoral dissertation, George Peabody College for Teachers, 1975).

and analytical models are unfamiliar ground to many musicians; Hackman shows how they may be useful. His point of departure is the explanation of meter by Mitchell, by Creston, by Cooper and Meyer, and by Forte. The symbols of "clarification and reconstruction" he develops analyze meter as it is generally understood and used, revealing hitherto unimagined possibilities within the system.

Time as a Philosophical Idea

A number of works on the concept of Time were consulted as a foundation for speculation on rhythmic matters, speculation based on an effort to widen the perspectives of this study beyond current 20th-century views of meter, rhythm, and time organization in music. The Voices of Time¹ is a wide-ranging collection of writings since the pre-Socratics on the idea of Time; included is an essay by Dürr concerning specifically musical temporal organization.² Whitrow³ has summed up for the general reader contemporary

¹J. T. Fraser (ed.), The Voices of Time (New York: George Braziller, 1966).

²Walthur Dürr, "Rhythm in Music: A Formal Scaffolding of Time," Voices of Time, pp. 180-200.

³G. J. Whitrow, The Nature of Time (New York: Holt, Rinehart and Winston, 1972).

man's relationships to Time; Cleugh's work,¹ of a more specialized philosophical nature, summarizes early 20th-century thought on the subject. Langer² is particularly cogent dealing with music. Fraser, in a recent speculative work,³ ventures that music may be "the art of arts . . . primarily because it embraces all levels of temporality."⁴ Kubler⁵ deals with the style development in the visual arts throughout the history of human time, finding the idea of unified style periods inadequate.

Rhythm and Meter in Poetry

The rhythmic analysis of music, since the time of Aristoxenus, has often been based upon the groupings suggested by poetic scansion. Several works dealing with verse rhythm were consulted, though poetry does not demonstrate the multi-linear aspect of music. The expected uni-

¹M. F. Cleugh, Time and Its Importance in Modern Thought (New York: Russell & Russell, 1937).

²Suzanne Langer, Philosophy in a New Key (Boston: Harvard University Press, 1948); also, Feeling and Form (London: Routledge and K. Paul, 1953).

³J. T. Fraser, Of Time: Passion, and Knowledge (New York: George Braziller, 1975).

⁴Ibid., p. 411.

⁵George Kubler, The Shape of Time: Remarks on the History of Things (New Haven and London: Yale University Press, 1962).

linear principles are found in Chapman¹ and in Prall;² in addition, Prall treats pauses in a poetic line as measurable durations unacknowledged in normal scansion. Both writers deal with metrical anomalies used for rhythmic effect. Close analogies to musical techniques are found in poet Gerard Hopkins' procedures of "sprung rhythm"³; this rhythmic formulation transfers without loss into a multi-linear musical texture, through the concept of accumulated rhythm.⁴ The gradations of stress in poetry which the philologist Jespersen suggests⁵ have both rhythmic and metric parallels in music.

Performance Concerns

To perform is to realize in sound the import of

¹Raymond Chapman, "Rhythm and Metre," Chap. 8, Linguistics and Literature (New York: Crane, Russak & Co., 1973), pp. 85-99.

²D. W. Prall, Aesthetic Analysis, intro. Arthur Berger (New York: Thomas Crowell Co., 1936; Apollo edition, 1967).

³Gerard Manley Hopkins, "Author's Preface," Poems of Gerard Manley Hopkins (London: Oxford University Press, 1948), 3rd Edition, pp. 5-10.

⁴See definition, p. 26.

⁵Otto Jespersen, "Notes on Metre," in The Structure of Verse: Modern Essays on Prosody, ed. Harvey Gross (Greenwich, Conn.: Fawcett Publications, 1966), pp. 111-130.

music's structure. Cone¹ and Stein² both make a point of the inextricable blending of practical and theoretical considerations. Goldstein³ deals with specific passages conspicuous in Schumann's rhythmic practice; however, making only cursory attempts to explain how to deal with these puzzles in performance, he says that "rhythmic natures feel these things instinctively without talking about them." Several other writers also treat specific passages in Schumann's music from the performer's viewpoint. Fox Strangways, concerned with phrasing, verbalizes a 20th-century attitude toward meter and barlines.⁴ A detail significant for performance practice is the judgement of Artur Schnabel that

the second theme of the Finale of Schumann's Piano Concerto, ostensibly in 3/2, is not only written, but meant to be heard in a syncopated 3/4. Schnabel requested conductors to beat 3/4, and not 3/2, for this passage ⁵

¹Edward T. Cone, Musical Form and Musical Performance (New York: W. W. Norton, 1968).

²Erwin Stein, Form and Performance, foreword by Benjamin Britten (New York: Alfred A. Knopf, 1962).

³Walter Goldstein, "The Rhythmic Tricks of Chopin and Schumann," MTNA Proceedings, 1924, pp. 63-73.

⁴A. H. Fox Strangways, "Phrasing," Music and Letters, IX (1928), p. 1-8.

⁵Konrad Wolff, The Teaching of Artur Schnabel (London: Faber and Faber, 1972), p. 97.

Schumann's pedalling and pedal notation, as well as Clara Schumann's sometimes cavalier editorial treatment of them, are discussed by Wolfram.¹ An important metronome marking in Opus 54 is examined by Frager.²

A link with Schumann performance tradition is provided by Fanny Davies,³ an English pupil of Clara Schumann. Particularly illuminating is meter change in the satirically accurate notation of a misguided pupil's rendering of "Aufschwung," Op. 12/2.⁴

Among the historically oriented books on performance concerns which were consulted, Ferguson's⁵ contributes pertinent ideas on rubato and the metronome as well as a few examples of Schumann's rhythmic notation, while Dorian's⁶

¹Victor Wolfram, "The Sostenuuto Pedal," Arts and Sciences Studies no. 9 (Stillwater: Oklahoma State University, 1965).

²Malcolm Frager, "The Manuscript of the Schumann Piano Concerto," Current Musicology, 15/1973, pp. 83-87.

³Fanny Davies, "About Schumann's Pianoforte Music," Musical Times, LI (1910), pp. 493-95; and "On Schumann--and Reading Between the Lines," Music and Letters, VI, (1925), pp. 214-23.

⁴Fanny Davies, "Between the Lines," p. 219.

⁵Howard Ferguson, Keyboard Interpretation from the 14th to the 19th century (London: Oxford University Press, 1975).

⁶Frederick Dorian, The History of Music in Performance (New York: W. W. Norton & Company, 1942).

includes a chapter on Schumann dealing mainly with programmatic elements. The latter's viewpoint is considerably deepened by Sams' more recent research into Schumann's use of codes and ciphers.¹

Several dictionary articles by Donington² were of particular help in clarifying performance assumptions, and his book on Baroque string practice³ added to historical information on attitudes toward hemioles in the metrical era.

¹Eric Sams, "Schumann and the Tonal Analogue," Robert Schumann: The Man and His Music, ed. Alan Walker (New York: Harper and Row, 1974), pp. 390-405. This chapter was preceded by a series of periodical articles: "Did Schumann use ciphers?", Musical Times 106 (Aug. 1965), pp. 584-91; "Schumann and the cipher: letters and comments, Temperly and others," MT 106 (Oct. 1965), pp. 767-770; "The Schumann Ciphers," MT 107 (May 1966), pp. 392-93; "The Schumann Ciphers: A Coda," MT 107 (Dec. 1966), pp. 1050-51; "Why Florestan and Eusebius?", MT 108 (Feb. 1967), pp. 131-32; "Politics, Literature, and People in Schumann's Opus 136," MT 109 (Jan. 1968), pp. 25-27; "The Tonal Analogue in Schumann's Music," Proceedings of the Royal Musical Association, 96 (1969-1970), pp. 103-17; "A Schumann Primer?", MT 111 (Nov. 1970), pp. 1096-97; and "Schumann and Faust," MT 113 (June 1972), pp. 543-46.

²Robert Donington, "Articulation," Grove's V, v. 1, pp. 235-36; "Expression," Grove's V, v. 2, pp. 984-91; and "Phrasing," Grove's V, v. 6, pp. 719-23.

³Robert Donington, String Playing in Baroque Music (London: Faber & Faber Ltd., 1977).

Weingartner's detailed suggestions for the performance of the four Schumann symphonies (translated by Krueger)¹ show that this experienced conductor felt it necessary in some cases to change Schumann's score to avoid rhythmic pitfalls.

Three of the writers already cited in the analytical and theoretical section repeatedly emphasize performance responsibilities: Meyer, Hackman, and Yeston.

Barnett² approaches directly the problem of performance; he contributes a major perception, that notation is not primarily a set of directions to the performer, but a way of expressing a musical idea--a distinction uncommonly made. It is particularly appropriate for Schumann's music.

Summary of Related Literature

The survey of relevant literature was of wide scope, covering biographical and other historical data; analytic and theoretical writings; philosophical inquiry into the

¹Richard Rankin Krueger, "Weingartner's Suggestions for the Performance of the Symphonies of Schubert and Schumann: A Translation of Ratschläge für Aufführungen Klassischer Symphonien, Band II: Schubert and Schumann" (unpublished doctoral dissertation [DMA], University of Washington, 1970).

²David Barnett, The Performance of Music (New York: Universe Books, 1972).

nature of Time; consideration of poetic rhythm and meter; and the performer's concern with rhythmic matters. The survey did yield a broad perspective on Schumann's anomalous rhythmic practice. However, it did not reveal any comprehensive or synthesizing treatment of his metrically anomalous procedures, nor specific performance guidelines for such situations.

CHAPTER III

REPORT ON EMPTY BARBEATS

Schumann writes a rest on the first beat of a bar in two distinct ways: as silence thwarting expectation in an established momentum, and as silence beginning metrical motion. In addition, barbeats which are almost empty share many of the rhythmic effects of wholly empty barbeats. Examples for this chapter are found in Volume II, Appendix A.

Thwarted Expectation

This way of using an empty barbeat depends upon an established momentum whose expectation is thwarted by the barbeat rest.

Single empty barbeats

Schumann's empty barbeats may appear in isolated instances, as in Example A1, where a single empty barbeat sets off the B-A-C-H fugue subject from its continuation. With subsequent entries, that barbeat is articulated by counter-material as in m. 4.

Consecutive empty barbeats

Consecutive barbeats may be empty (Exs. A2 and A3). Example A2 shows supermetrical bars [III] and [IV] of a

four-bar transition empty; the consecutive empty barbeats of Example A3 fall on bars [VI] and [VII] of the final phrase of the piece.

Empty barbeats in alternate bars

Sometimes empty barbeats are found in alternate bars, as in Example A4, where the weaker bars of a four-bar retransition begin with rests.

Empty barbeats in phrase extension

An empty barbeat which becomes in fact an extended empty bar is the result of phrase extension by means of a Grand Pause (Ex. A5). This is Schumann's most normal use of the anomaly. He also writes an empty barbeat for the first bar of a two-bar phrase extension (Ex. A6).

Variety of supermetrical position

As bars are not alike supermetrically, so each barbeat has its functional position in the phrase structure. This colors metrical comprehension of empty barbeats as well. In Example A2, for instance, the successive empty barbeats are felt as heavy-light. Stress and accent operate the same way at the supermetrical level as at the metrical. Thus there is great variety of rhythmic import among empty barbeats, as illustrated in Example A7.

Variety in cadential passages

Expectation of firm barbeats is particularly strong in the area of a final cadence. The establishing example for this anomalous type (Ex. 2, p. 10) shows Schumann's play with this expectation.

Other cadential maneuvers are found as well. Example A8 shows an empty barbeat after four measures of tonic harmony in a final cadential progression. In Example A9, the bar of the empty barbeat goes beyond melodic completion of the final Polonaise cadence. Schumann evidently reconsidered this whimsical effect, as the ending bar was deleted and the final chord of the Polonaise cadence filled out for the second edition. See Example B32 for the revised ending. Example A10 also involves a Polonaise cadence, though here an empty barbeat falls on bar [VIII] of the phrase, the weak final cadence bar.

Alternate empty bars can also accomplish phrase augmentation, as in the extended cadential tonic of Example A11. In aural fact, the "empty" barbeats of this example are only empty of articulation, not of sonority, since pedal binds the final seventeen bars of the piece.

Variety in clarifying bars: with lilts, hemioles,
and waltz caesurae

Empty barbeats previously full

Occasionally Schumann, after writing an ordinary non-empty barbeat (often at a cadence point), will return to the same material with a silence punctuating that barbeat (Ex.A16a, b, and c). A subtle example of an initially-full, subsequently-empty barbeat occurs in Opus 92, m. 89 cf. m. 208, not shown; another may be seen in the Faust overture, m. 1 cf. m. 8.

Empty barbeat at a mid-phrase metrical flexing

The empty barbeat of Example A17 defines the return to 3/4 meter after the flexion of a single bar of 2/4.

Initial Silence

The second main use of empty barbeats does not depend on established metrical momentum. Initial silence represents a shaping power which inflects the musical material in the balance of its bar and phrase.

Initial empty barbeats

A silent opening is far from unique in Schumann's practice. Example A18 shows a broad, highly displaced melody springing from the initial empty barbeat of a piano piece. In Example A19, an empty barbeat initiates metrically displaced chords in the brief introductory bar of an overture. The initial empty barbeat of Example A20 also opens an introduction. In Example A21 the empty barbeat

sets off the five-note motto for the movement and the entire sonata. Bar 1 is supermetrically an upbeat bar. In the absence of a stabilizing initial barbeat, the opening shown in Example A22 presents a brief problem of ensemble coordination. Schumann's initial empty barbeat begins a fugal subject in Examples A23 and A24; by contrast, Example A25 begins a short character piece in a collection meant for teaching purposes.

Works with multiple initial empty barbeats

Some works give unusual thematic prominence to initial empty barbeats. In Example A26, the first three phrases of a scherzo movement begin with empty barbeats. The same patterned construction is found later in the movement, m. 31, 36, 41 and m. 92, 97, 102. Example A27a, b, and c shows initial empty barbeats prominently shaping thematic material in three of the four movements of Opus 47. Openings of the first and of the third movements of Op. 41#1 are empty on the barbeat (Ex. A28a, c); the second movement has an unusual internal repetition, featuring an empty barbeat preceding the return of the introduction (Ex. A28b¹, b²).

Empty barbeats after a fermata

The silent barbeat after a fermata is a rhythmic situation somewhat similar to that of an opening empty barbeat. Momentum has been lost; rhythmic progress must be

started anew, though something of the overall effect of previous motion is still felt. In Example A29a, the empty barbeat begins afresh the brisk motion which has been immobilized by fermatas. This maneuver is particularly unexpected since the empty barbeat earlier (m. 131) in a similar passage was approached with the full ongoing momentum of unabated sixteenth notes (Ex. A29b). This example may be compared with Example A27a, which shows a slow introduction coming to a halt with a fermata before the Allegro. There is no resumption of a previous tempo; the empty barbeat initiates the tempo change. Example A30 shows two instances in which an empty barbeat, coming after a fermata, is itself marked with a fermata.

A riddle based on empty barbeats

Variation form allows Schumann to play with the structural and rhythmic significance of empty barbeats in an almost verbal way. Example A31 shows a 48-bar theme for variations, nineteen of whose barbeats are empty. The rhythm at the beginning is easily misread; ignoring the initial empty barbeat, which represents a strong bar supermetrically, makes the phrase structure awkward at the least. Succeeding variations support a reading of the empty barbeats as the strong elements of the rhythmic armature. Variation III shows this particularly well (Ex. A31b); the melody here sounds so natural that it seems likely Schumann began with

it and worked from that basis to accomplish the rhythmic whimsy of the movement as it stands.

Almost Empty Barbeats

Related rhythmically to empty barbeats are certain almost empty barbeats, where the expected metrical weight of the barbeat is not fully satisfied. This happens in several ways. A barbeat, though articulated, may be texturally very thin (Ex. A32); or a barbeat, though sonorous, is not freshly articulated because all strands are tied (Ex. A33); or a barbeat, though articulated in the accompaniment, is empty for the melodic voice (Ex. A34), a construction rather common in Schumann's practice; or an empty barbeat, though articulated, is not unsonorous because of the pedaling (Ex. A11). The symbol (▲) designates a barbeat almost empty.

Findings

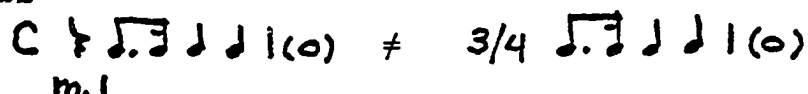
An empty barbeat, "an accent . . . which is unheard",¹ is the simplest of Schumann's anomalous types to identify. Distinct rhythmic processes underly the surface phenomenon. With an empty barbeat the strongest portion of the metrical scaffolding may seem to be removed. In actuality, only its articulation in sound is missing. Its

¹Cooper and Meyer, p. 139.

organizational function and its duration remain unimpaired.

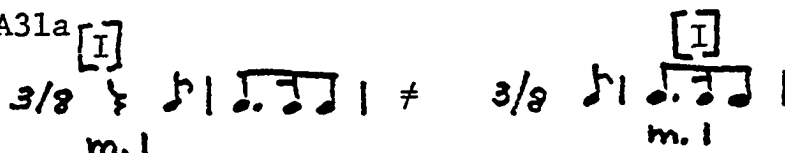
The barbeat's organizational function is an inflective one, both at the beat grouping (metrical) level and at the bar grouping (supermetrical) level. Schumann's inaudible barbeats are as inflective as those which are heard. For example, at the metrical level:

Ex. A21



and at the supermetrical level:

Ex. A31a



The quality of the silence in an empty barbeat is therefore as variable formally as its articulation would have been.

As for an empty barbeat's duration, the rest which replaces possible articulation lasts at least the prescribed time span. In addition, since the felt strength of a beat influences its actual length, an agogic factor is involved, a factor as variable as the acuteness of surprise at the barbeat's emptiness. This agogic aspect is discussed in more detail in relation to performance practice in Chapter X. The expressive weight of an empty barbeat may extend its actual duration in the same way that special significance

in an articulated barbeat takes more time.

Thus, though nothing may seem to be happening with an empty barbeat, it is actually functioning both expressively and structurally. These two functions make it possible for Schumann to write a sophisticated rhythmic play such as that shown in Example A31, which depends upon a performer's understanding of the rhythmic context.

Schumann's empty barbeats occur in fast and in slow tempos; in short and in long pieces; in music for domestic use and in symphonic works; in strophic forms, in sonatas, and in fugues. The device seems to be an organic part of his rhythmic-metric procedures. Usually, the silence beginning on the barbeat is only a small proportion of its bar length, though it may be extensive, as with a Grand Pause.

Empty barbeats occur under two distinct circumstances: in the course of a phrase or section, or to initiate a movement or major sectional division. An empty barbeat which occurs in the course of a composition takes advantage of metrical momentum for its effect of thwarted expectation. Extra attention is called to that barbeat; its strength is felt even without its articulation. The phrase function of that bar is also felt on the silent beat. An empty barbeat which initiates a movement, begins a new tempo, or establishes a new meter is primarily an inflective

influence. Articulation of the balance of the bar is shaped as if the strong barbeat were manifest.

Thinly scored, pedaled-over, or tied-into barbeats, that is, almost empty barbeats, also call attention to felt recurrent barbeats, the basis of metrical structure. In addition, Schumann frequently writes the type of almost empty barbeat in which, though the barbeat is articulated in the accompaniment, the melody rises from a barbeat rest.

CHAPTER IV

REPORT ON LILT FORMATION

The lilt is an end-stopped triple division, found typically within the beat or within the bar in Schumann's music. Its third division is an afterbeat, not an upbeat leading forward. Lilts are sometimes unequivocal, sometimes rhythmically ambiguous in Schumann's writing. Examples for this chapter are found in Volume II, Appendix B.

Distinct Lilt Formation

Lilts in a melodic line

Commonly, a melodic lilt comes at a phrase ending or creates an inner-phrase articulation. The melodic lilt is often but not always followed by a rest (Ex. B1). In Example B2 the first, second, and fourth lilts are followed by rests; the third is tied over to the next beat. Inner-phrase articulation is sometimes created by consecutive melodic lilts, as in Example B3. Example B4 also shows four melodic lilts. The first two are distinctly end-stopped in the melody, in spite of upbeats in the bass; in the last two, lilt function is attenuated increasingly as the cadence approaches. Such ambiguity is indicated by .

Schumann's "pathétique" style is shown in the melodic lilt of Example B5. In contrast, a playful filling out of the lilt span is found in Example B6.

Not all voices need be involved in the lilt formation; the rhythmic texture is not necessarily homogeneous, as is seen in Example B4. In Example B7, consecutive soprano lilt spans are connected by upbeat bass links; the end-stopping rest is within the bar of the lilt. In Example B8 the pre-barline rest clarifies the whole rhythmic texture.

Lilts are found in a fugue subject in Example B9, upon the first beat of m. 2 and m. 3. The first beat of m. 4 is predominantly a lilt in spite of the hemiolic scale. Schumann also uses the lilt as a variational device in a children's sonata; the theme is in the alto of Example B10.

A melodic lilt may be tied over to the next bar or beat without losing its essential end-stopped character. The factors in Example B11 which allow this (the lack of harmonic change over the barline into m. 4, ties at that point in three of the instruments, and the unruffled continuation of the viola figure across the bar) also provide a context in which the lilt's effect on supermetrical progress may be observed. Since a lilt binds its whole triplet, here a bar, into one sense group, the bar as a stride of the supermetrical motion is brought to the fore. The barbeat so lightly articulated in m. 4 is supplied with

more weight by the listener's metrical expectation.

The bunching up of rhythmic flow in lilt formation is emphasized in Example B12, with consecutive melodic but disjunct lilts.

Lilts in the bass line

Although many bass lilts do fall on phrase endings (Ex. 5, p. 12 shows a prominent instance), it is not uncommon for them to make up the interior phrase span. These lilts patently emphasize the stride of the supermeter.

Example B13 shows bass lilts in every bar, though the melody has lilts only for phrase endings (alternate bars). The lilt pattern is even more waltz-like in the two lower voices of Example B14 from m. 5.

Bass lilts are in evidence in every bar of Op. 6/2, which is shown in its entirety in Example B15. The bass rhythmic pattern of m. 15-23 may be regarded as an extreme lilt, binding through the final eighth note of each bar. The pianistic breaking of the octave on the third beat suggests that the pattern is a variation of the bass in the early bars. However, some rhythmic ambiguity is present; the latent upbeat is felt, and Clara Schumann acknowledged it in the Instructive Edition by a pedal mark binding the third beat of m. 16 into m. 17.

A division of rhythmic function develops in Example B16 between bass and soprano. Together they make a normal feminine phrase ending in m. 18; but in the repetition in the minor mode, m. 19, the bass becomes a lilt.

The question of upbeat vs. end-stopping is raised by the bass of Example B17. The stressing of the third beats emphasizes forward progression; however, the two-bar slurs in the bass suggest that lilt formation is functioning at least in alternate bars (m. 26, 28 etc.).

Lilts in waltz accompaniment patterns

The traditional waltz accompaniment pattern is a lilt. There are many variants; a common one is seen in the middle voices of the previous example, B17. In a waltz accompaniment the rhythmic pattern  need not be simply repeated notes. In the next three examples (B18, B19, and B20) the figure develops some melodic value.

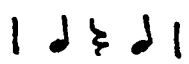
An unexpected chordal use of this figure in a work otherwise in strict contrapuntal style is shown in Example B21. The opening of this fugue is seen in Example A24.

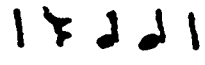
A programmatic use of the accompaniment figure

 is found in Example B22, in conjunction with very long tied melodic notes. The figure is left to mark the motion, echoes of the ball, when the Grossvater theme trails off (m. 64 into m. 65), the clock strikes 6 a.m. (m. 58-69), and the postern's horn call fades into the dis-

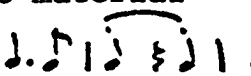
tance (m. 70-84). In nineteen bars the figure is used as a lilt; but to make the final cadence, the two quarter notes are upbeats into the last bar (m. 87-88).

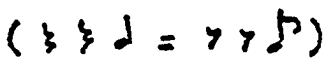
A familiar form of the waltz accompaniment pattern, , is seen in Example B23, with tenuto signs over the second and third beats. This particular passage is hazardous in performance, because the second-beat tenuto coupled with the longer note of the melody on that beat tends to give greater weight to it, as if it were the bar-beat.

Another form of the waltz accompaniment is this open-work pattern: . It occurs in the LH of Piano I in Example B24. The accompaniment is clearly end-stopped, in spite of the tyings in the melody.

A more anomalous form of the lilt is an accompaniment figure which articulates only the third part of the triplet division: . Context is important; it will show whether that last-minute fillip in the accompaniment belongs to the previous beat (lilt formation), is an upbeat, or functions ambiguously somewhere between. For instance, in Example B25a a melody is accompanied by the waltz pattern . Later in the movement (Ex. B25b), accompanying the same melody, the middle voices fall only on the third part of the triplet, retaining lilt function.

The beginning of a long passage utilizing this accompanimental pattern  is shown in Example B26. The formation is found in every bar from m. 4-28 (in violin and 'cello, as shown), as well as in violin double stops from m. 32-44.

Example B27a and b traces a developmental process leading to otherwise enigmatic orchestral chords in Opus 54/III, m. 275 and 277. The original thematic material shows upbeats to a lilt (m. 188 into m. 189): . That rhythmic pattern appears later in the orchestral accompaniment of developmental soloistic passagework (m. 266 into 267, etc.). In m. 275 and again in 277, the isolated string chord on the third beat of the bar represents a vestige of the lilt, its end-stopped third beat. This is the same rhythmic pattern shown in Examples B25b and B26.

In compound duple meter, the same pattern may occur twice in a bar  = , as in Example B28 in 6/8. Example B29 (=B5) shows it twice in a bar in a meter functioning as 6/4 although literally alla breve (m. 31, the last bar of the example). The pattern is prominent in the following passages of this overture. In connection with this same pattern, a technical feature for the pianist (LH crossing and recrossing RH) is found in Example B30.

The opening of a lengthy example of the same accompanimental pattern in alternate bars, prominent since they

occur in the bass, is shown in Example B31. The passage extends from m. 33-116; of the two-bar segments, only the first--m. 33-34--does not show the bass lilt pattern.

Cadential forms of the lilt

Lilt formations at cadence points may fall either on the strong bar of the cadencing group (bar [III] or [VII] supermetrically) or on the weak bar (bar [IV] or [VIII] supermetrically). On the weak bar, it represents end-stopping on two levels, the metrical and the supermetrical.

Schumann uses a type of cadence common to the Polonaise both in works of ethnic character and in works of a completely abstract nature. In the Polonaise cadence, the root-position tonic chord is delayed until the third beat of the final cadence bar. Sometimes dominant harmony is prolonged, sometimes a pre-dominant chord begins the cadencing bar. In any case, the effect is to extend actual accomplishment of the cadencing farther into the bar than usually expected. The Polonaise cadence exhibits end-stopping on both metrical and supermetrical levels.

Schumann's revision of the ending of Op. 6/9 results in the terminal lilt of a Polonaise cadence (Ex. B32). See Example A9 for the original version. In Example B33, the one-bar Polonaise cadence completes two bars of hemiolic construction; Example B34 also shows a Polonaise cadence, this one neatly rabbeted onto the preceding hemiolic pair

of bars. The impulse which initiates the cadential lilt in Example B35 runs, in 3/4, for five beats of dominant harmony before it settles to the tonic in a Polonaise cadence. This makes an end-stopped pattern of double the usual length. This passage immediately precedes the passage shown in Example B31. An orchestral Polonaise cadence is shown in Example F50.

Lilt formation cadencing in the waltz caesura pattern (Exs. B36 and B37) comes at internal cadences rather than at a final cadence, since the pattern entails upbeats into the following section. The lilt in such a case falls upon the strong bar of the cadence group. This contrasts with the supermetrical position of the Polonaise cadence, shown in Examples B32 through B35.

There are also lilt cadences which show Schumann's tendency to fill up metrical spans with articulated motion. Examples B38 and B39 have this characteristic rhythmic fullness.

Lilts in an imitative texture

Schumann occasionally uses, in imitative passages, short lilt motifs led into by an upbeat. Some of these passages are very brief; some involve extensive canon. The lilts themselves do not overlap, being self-contained within the bar or beat; but because of the upbeat beginnings, there is divided rhythmic function in the texture on the third

division of the triplets; the upbeat comes at the same point in the metrical frame as the lilt's end-stopping. Example B40 shows a short imitative passage with the melodic motif of upbeat into lilt. Example B41 shows the beginning of a long canon with the tied-into lilt prominent.

Mutability in Lilt Formation

The preceding examples should not lead to the conclusion that Schumann's lilt procedures are usually clear-cut. Many of them are ambiguous, often elegantly so. They slip easily toward, into, and away from upbeat constructions along a continuum of many gradations. There are several reasons for such ambiguity.

A basic cause is that normal rhythmic-metric momentum constantly pulls against an end-stopped lilt formation. In Example B42, for instance, the normal rhythmic pull is reinforced by pitch repetition across the opening barline and into each of the two succeeding beats, negating or at least balancing the lilting slurs. The harmonic rhythm also fails to support end-stopping within the beat. In the cadence bars the upbeat pattern is completely ascendant. The slurred lilt of this example is ornamental, not structural.

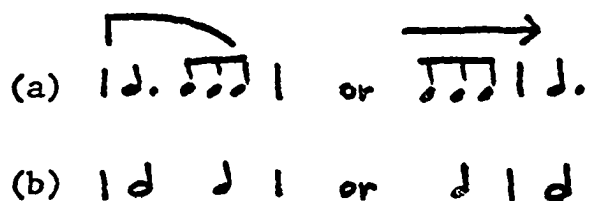
Another reason for ambiguity in lilt formation is that phrase-span expectation tends to suppress lilt within a phrase but to reinforce them at phrase endings. Example

B43 shows this force in action, as it is only at the phrase endings (mid-m. 2, mid-m. 4) that overt lalts are felt, and then, since the melody comes to rest, only in the accompaniment.

The hocket-like lalts in the string parts of Example B44 also show the effect of phrase-length expectation. The three eighth-notes are an upbeat pattern in the piano; they are more self-contained in the violin and 'cello, though not wholly; they sound most end-stopped at a phrase ending.

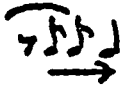
A melodic slur adds an additional ambiguity to Example B45. The rhythmic pattern  occurs in the melody five times in the eight bars shown. There is no question that it makes phrase-ending lalts in m. 3, 5, and 7; but the slur in m. 1 is unexpected and suggests initial lilt articulation, set off from the on-going melodic shape. How much it should be set off, particularly relative to the lilt accompaniment, remains a question.

An intricate rhythmic play with lilt and non-lilt formations is shown in Example B46. Schumann uses two rhythmic patterns melodically; each has a lilt form and each has an upbeat form:



The first pattern, (a), is clearly a lilt in m. 4, but not in

m. 2, 3, 6, and 7; and possibly a lilt in m. 10, 12, and 14, considering phrase structure. This pattern occurs six times in the final eight bars of the piece, and is not end-stopped in any of them. The second pattern, (b), is probably not a lilt in m. 9, 11, or 13, which are phrase beginnings; it is possibly a lilt in m. 15, probably a lilt in m. 16. An unexpected bass appearance of this pattern, very probably a lilt, is found in m. 25 at the return of the opening material.

Example B47 shows how easily a normal double-upbeat pattern,  (m. 64), slips into a pattern with end-stopped afterbeats,  (m. 66).

The siciliano pattern in particular mutates freely from lilt into upbeat and back again, as shown in Example B48. The phrase structure influences the sicilianos in m. 2 and m. 10 to lead into the next bar; but it influences the same rhythmic pattern in m. 16 to behave like a lilt. Those in m. 4 and m. 12 remain ambiguous.

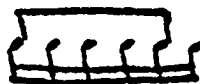
Another type of ambiguity arises when the lilt formation occurs in a series of suspensions, as in Example B49. The end-stopped third division of a lilt is usually light rhythmically; but when that same note, tied across the bar, creates dissonance for the next lilt suspension, a conflict in function exists. Either sonority decision is incomplete, whether to lighten the third division because of the lilt,

or to emphasize it to prepare for the following dissonance.

When tied-across melodic lalts are involved with hemiolic harmonic or textural movement, as in Example B50, complex rhythmic decisions must be made. Discussion of this example in the context of Schumann's rhythmic habit is postponed to the section on "A Characteristic Pattern" in Chapter VIII.

A Notational Oddity

Example B51 shows a sensitive if inaccurate notation for a lalt-related rhythmic formation. The melodic notes, though shown as a duplet in even eighth notes, are not even but fall into a triple division, as indicated by the sixteenth note notation:



However, the sixteenth notes themselves are grouped, from the beginning of the piece, in triplets:



The result is a notated melodic rubato.

Findings

Lalt formation is end-stopping in a triple metrical division. The rhythmic impulse of the bar or of the beat is dammed up within itself, to spill forward only as the result of momentum at the next higher metrical level. At the lalt level itself, forward motion is experienced as slightly bunched rather than as smooth flow. This rhythmic effect is clearest where the lalt is followed by a rest, or

is itself a final cadence. Beyond such definite circumstances, lilt formation presents a complex rhythmic play.

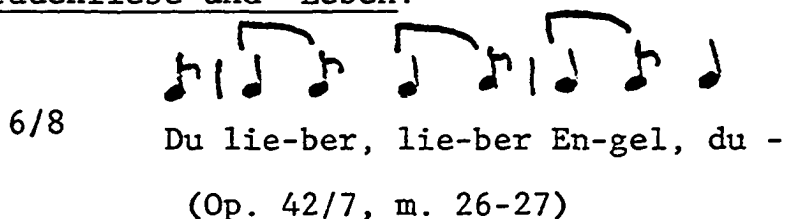
One reason for its complexity is that rhythmic latency, the potential for different groupings within the on-going flow, is particularly rich in possibilities with triple divisions. Even normal triple motion is subject to interplay among possible groupings. A non-barbeat in duple meters may have only two possible relationships to the barbeat: upbeat (normal momentum), or afterbeat (end-stopped). In triple meters, on the other hand, there may be double upbeats to a barbeat (normal momentum); upbeat and afterbeat surrounding a barbeat (normal momentum); or a double afterbeat trailing a barbeat (lilt formation).

Since both normal and anomalous latencies are ever-present, lalts in triple divisions slip easily into upbeat formations, and vice versa. Furthermore, there is no unequivocal way to gauge the proportion of "pulling forward" relative to "hanging back" in ambiguous cases. Schumann exploits this mutability, with shifting proportions of upbeat function relative to end-stopping. The texture may show divided functions, as well, where an end-stopped member of a lilt coincides with an upbeat.

Among the anomalous types investigated in this study, only lilt formation outlines the boundaries of a metrical module, binding it within that frame. The structural func-

tion of the initiating pulse remains normal; the anomaly consists of extending the ordinary grouping control of that pulse (barbeat or beat) to an extreme in the afterbeat direction. Thus while the leading edge of a lilt is normal, its trailing edge is anomalous, pulling against metrical expectancy.

This somewhat bunched effect, highlighting the metrical module, is familiar in vocal settings with a triplet background for trochaic words, such as this passage from Schumann's Frauenliebe und -Leben:



The end-stopped lilt, lingering on the first syllable of "lieber" and "Engel," with the subsequent late and light second syllable, seems simply on the rhythmic plane more expressive than a duple division with end-stopping:



The lilt effect is common in German folk- and art-song; it may have subconsciously influenced the rhythms of Schumann's instrumental music.

A lilt formation forces an incisive leading edge upon the subsequent main pulse, as well, by depriving it of upbeats. This effect calls attention to the modules of the

next higher level of metrical organization. Thus whole-bar lalts emphasize the framework of barbeats in the phrase structure, while whole-beat lalts emphasize the framework of beats in the bar structure.

Schumann's lalts are found not only picturesquely in short waltz pieces, but in large works of serious import: a symphonic first movement, a fugue on B-A-C-H, the overture to a tragic opera, and the first movement of a string quartet. Their tempos range from Sehr Rasch to Ziemlich Langsam. Their functions range from thematic to ornamental. They involve one voice, several voices, or a whole texture. They appear in the melody or in a great many varieties of accompaniment patterns.

Schumann's lalts are unrestricted as to formal position. They fall upon strong or weak beats and upon strong or weak bars; they begin a phrase, continue it or end it.

Cadence forms of the lalt include the Polonaise cadence (with the lalt on the final weak bar) and the waltz caesura pattern (with the lalt on the strong bar of an internal cadence), in addition to cadences which Schumann typically fills out to the third (final) beat. The Polonaise cadence exhibits not only end-stopping within the bar, but the extreme end-stopping of the phrase as well. It shows Schumann reluctant at times to come to a cadential halt before the energy generated by the barbeat in its

specific supermetrical position has been articulated out to its furthest division. Unusually conspicuous manifestation of metrical differentiation in sound results.

Three substantial movements in particular are exemplars of thematic lilt treatment: Op. 41#3/I (Theme I); Op. 54/III (Theme II); and Op. 97/I (Theme I). The latter two cases are discussed in connection with Schumann's characteristic rhythmic pattern , in Chapter VIII.

CHAPTER V

REPORT ON CONSISTENT METRICAL DISPLACEMENT

Any part of the musical fabric may be metrically displaced; that is, it may occur earlier or later than expected relative to the metrical frame. An intensification of such anomalous displacement is found when a linear component of the fabric is consistently early or late for an appreciable length. This creates a consistent slanted effect between the displaced factor and the metrical structure. Examples of consistent metrical displacement for this chapter are found in Volume II, Appendix C.

Single Strand Displacement

Slant melody

Schumann sometimes presents a melody first in its normal form, then in its displaced form, as in Example C1a and b. On the other hand, the slanted form of a melody may be its only form, as in Example C2, in which, as in the previous example, each note of the melody lags after its expected metrical arrival. Only in the final bar, m. 57, does the melody fall upon a main beat.

For the inflection of a melody, it is important to

determine whether the displaced notes constitute a series of upbeats or a series of afterbeats. In Example C1, comparison of the displaced with the original form leaves no doubt as to the afterbeat construction. In Example C3 such comparison confirms upbeats. Slant melody in afterbeats in an inner voice is shown in Example C4.

Another type of melodic displacement, in which the consonant melody tone is delayed by a chromatic neighboring tone in the same voice, is found in Example C5. This is a doubly decorative procedure.

Displacement of octaves or unisons

Octave or unison afterbeats as an accompaniment or as double outlining of a melody are usually not anomalous and are ordinarily not conspicuous rhythmically: see Example C6. But in some circumstances the filling out becomes less normal.

When the sonority of the displaced strand is not broken by rests but is sustained, the clashes characteristic of slant structures may be formed. Example C7 shows the melody as a two-voice octave outline with consecutive afterbeats. At first, harmonic common tones and the broken accompaniment pattern operate to avoid overt clashes, but scale-wise motion in m. 33 and 34 brings about the piquant dissonant effect. These dissonances caused by the slant fall upon the main beats. On the other hand, in Example C8, the

dissonances fall between the main beats; the lowest voice, which initiates the octave, moves in consecutive upbeats.

Though usually the octave displacement halves the duration between initiating pitches, occasionally there is a different time relationship. Example C9 shows triple rhythmic presentation and quadruple pitch-level presentation of a slanted melody without dissonance, in which the RH middle note of the triplet probably will predominate aurally.

An extreme case of elapsed time units for a slant melody is shown in Example C10; the melodic line moves mainly in half notes (Violin I), the piano RH reinforcing those pitches at the lower octave five eighth notes later, sometimes six.

Suspensions in a series

A series of suspensions or retardations creates a slant structure, anomalous compared with rhythmic routine but familiar in early 19th-century practice. Thus the excerpt shown in Example C11 is not particularly Schumannian except in the length of the passage: there are fifteen consecutive bass suspensions, giving the impression of an extended slant structure in the LH.

The composer's idiosyncratic sounding of a dissonant note simultaneously with its resolution is seen in the three retardations into the cadence of Example C12. The violin

creates a delayed slant melody at the same time as its routine presentation in the piano's soprano voice.

Displacement as imitation

Sometimes octave displacements acquire some imitative melodic character, as a result of contrasting timbre of the participating parts, or of the emphatic nature of the melodic gesture doubled by the displacement.

Two examples are given. In Example C13 a melodic chord outline (B-flat, D-flat, G-flat) is initiated in the piano LH and imitated a half-note later. This is an unusually long time lapse for consistent displacement. In Example C14 the piano's soprano and bass lines are displaced by a quarter note lapse in the violin and 'cello respectively. The potential clashes are minimized by the common tones between chords, but dissonance is nevertheless heard on the barbeats beginning with m. 412, as the 'cello lags with its harmonic change. This passage, eight bars long, is of unusual length for non-thematic use of the displacement technique.

Slant bass

Schumann's displaced basses are called a "chasing bass" by Goldstein.¹ The bass may be either early (Ex. C15)

¹Walter Goldstein, "The Rhythmic Tricks of Chopin and Schumann," MTNA Proceedings, 1924, p. 69.

or late (Ex. C16a). In the latter case, the bass also appears briefly in a more normal placement, upon the beats although introduced by grace notes (Ex. C16b, m. 21-24).

Slant bass sonority

Sometimes the line made by the lowest notes, the aural bass, is displaced consistently, whether or not it is the linear bass voice. These occasions show Schumann arranging the pitches of his accompaniment patterns in a purposely contra-metrical way. Examples C17, C18, and C19 show various forms of delay for the bass sonority. Sometimes the bass sonority is articulated only by pedaled grace notes (Ex. C20).

"Normal" vs. Anomalous Displacements

Within Schumann's stylistic tradition, not all displacements have the same rhythmic-metric effect, though all are strictly anomalous relative to metrical expectation. Harmonic context in particular influences whether and to what degree a displaced construction sounds anomalous.

Every anomalous construction intrinsically includes an element of surprise. Therefore all displacements of the essential, conspicuous, harmony-establishing parts of the fabric (usually soprano and bass) are anomalous. These displacements are anomalous whether they come earlier or later than expected.

With less essential parts, the situation is somewhat different. Where the harmonic armature of the fabric seems complete at the onset of a metrical division, any afterbeats within that harmony will be construed only as the filling out of an already understood musical circumstance. Consequently, consonant afterbeats, however displaced, are not heard as anomalous. Only when such afterbeats add an unexpected harmonic element do they function as anomalies.

Example C21, from a piece featuring constant consistent displacements, illustrates several facets of these principles. First, there is the unremarkable character of accompanimental afterbeats consonant within their framework (see the RH parts of both P^0 and S^0 parts, m. 1-7). The dissonance of the passing tones is not created by the slanted structure but by the chromatic nature of the melody (LH, P^0). In contrast, the clashes often associated with consistent metrical displacement do result from the slanted harmonic overhang at the end of m. 7 and within m. 8. The avoidance of a clash by the use of a rest is seen on the barbeat of m. 8, S^0 , RH part. Finally, when the afterbeat procedure involves the melodic line itself, the thirty-second note displacement which was normal at the beginning of the piece becomes anomalous, as in m. 35-38 (RH, P^0).

Multiple Strand Displacement

Duet displacement

Two voices may share the displacement. The beginning of a conspicuous example is shown in Example C22. Both top voices are displaced in an afterbeat design for fifty-one bars of the fifty-five-bar piece. These voices function in several ways. One, then the other, carries the melody; they produce points of imitation; briefly they are compressed into one voice; they duet; finally they become accompaniment for a tenor melody. Some slanted displacement is maintained throughout.

Afterbeat displacement of accompaniment

Harmonic filling out in afterbeats (Ex. C23) may, strictly speaking, be anomalous compared to the simplest rhythmic routine. But such usage is hardly an anomaly in the compositional practice of Schumann's time. Examples C24, C25 and C26, however, show exceptions. When the off-beat accompaniment springs from an empty barbeat, and the melody does not begin until after the accompaniment pattern is established, the initial instance is distinctly anomalous (Ex. C24). Occasionally, the afterbeat accompaniment is so dramatized by a sudden change of texture, dynamics, and melodic importance that it seems the displacement of an on-the-beat formation. Example C25 shows an initial form and its

changes. Occasionally, a component of unfolding afterbeat harmony will be held over when the next chord begins, creating the dissonances characteristic of slant structures (Ex. C26).

Slant harmony

Afterbeats that reinforce a harmonic change already felt are not anomalous, as noted above; but the early onset of a characterizing portion of a harmonic change is anomalous. The term "slant harmony" is used for this upbeat construction, and also for those rare instances where afterbeat harmony as it unfolds does not simply fill out a chord already aurally understood, but creates instead an unexpected harmony. Three examples, C27, C28, and C29, show Schumann's typical slant harmony with clashes.

The relation of slant harmony to harmonic anticipation (see "Harmonic Anticipation" in Chapter VI) is sometimes ambiguous. In harmonic anticipation, the whole chord anticipates the beat; the chord is accomplished, with no sense of unfolding or slanting the harmonic progress. In slant harmony, only a portion of the harmonic change is out of phase; the slanting of harmonic progress is noticeable. Example C30 shows an ambiguous case. Bars 90 and 91 include some slanted passing tonic triads over the dominant pedal point; only when the bass E^b, tonic, falls upon the barbeat of m. 92 is root change felt and the preceding sixteenth-note chord understood as harmonic anticipation.

Slant harmony can also be created melodically. It is a device particularly characteristic of pianistic thinking, since the tertial formations lie conspicuously under the hand for either chordal or arpeggiated treatment. A striking rhythmic-metric effect is produced when the gradual unfolding of a harmony takes place in successive upbeats: . Example C31 shows this device in a short salon piece; Example C32 shows it in the finale of a "grand sonata."

Slant harmony can also be suggested by melodic amphibrachs. For instance, though harmonic change is pre-saged in the upbeat third and sixth eighth-notes of the bar in Example C33, accomplishment of the root change and its rhythmic weight seem to coincide with the metrical structure. This unfolding of the harmony toward the metrical emphasis is the distinction of slant harmony as compared with harmonic anticipation. In the latter, root change is completed all at once, before the metrical emphasis. The amphibrachs in this example include both early and late displacements. Non-metrical beaming, as in this example, is discussed in Chapter IX.

Displaced waltz accompaniment pattern

Among many inventive waltz accompaniment procedures in Schumann's writing are some pattern displacements. Example C34 shows the beginning of a lengthy passage in which

the standard waltz accompaniment comes consistently two beats early. It may be that the striking displacement of the accompaniment was planned as camouflage for the Beethoven melodic quotation (from the "Emperor" Concerto, Op. 73/III). In Example C35 the lowest (bass) sonority comes, not on the expected barbeat, but rather on the second beat as it did in Example C34. But this displacement is reversed; instead of the bass being two beats early, it appears one beat late.

Displaced pedal point structures

The look on the page of consistently displaced pedal points or pedal chords can be misleading, especially if there is no diacritical indication of the rhythmic function of the displaced tones. Analysis is necessary not only of local melodic and harmonic structure but also of preceding rhythmic formations for clues as to afterbeat or upbeat functioning. Afterbeats are seldom anomalous, while upbeats which are anticipations tied over may be; they call attention to themselves, and in addition often have extra emphasis in the form of dynamic stress markings.

In Example C36a, inflection of the consistently displaced pedal point probably follows the rhythmic construction of the melody. Schumann pushes this logic through to an unusual cadence (Ex. C36b).

With the displaced chords of Example C37, the swells

of m. 1 and 2 indicate upbeat and afterbeat:



The displaced pedal chords (four voices) in m. 3-4 begin with the same formation but are followed by afterbeats:



Slant Texture

In the ensemble compositions, beginning with Opus 38, Schumann takes advantage of increased textural possibilities by writing certain displaced structures that would be unidiomatic or impossible on the piano. Rhythmically, the procedures are the same as those developed in his earlier works; they are now, however, cast for the capabilities of multiple players.

For instance, displacement of one of the lines in melodic octaves can be further differentiated by instrumental color, as between clarinet and piano in Example C38. The norm and its displacement may take place at the unison, as in both the slant melody and slant bass of Example C39. Schumann also writes displacement by choir, as in Example C40, where the clashes which might result from such consistent anticipation are avoided by rests in the winds. Clashes are formed, however, between winds and strings in Example C41. Occasionally the simultaneous use of a melody

and its slant version forces a peculiarly rugged character upon a passage, as in Example C42.

Consistent Displacement in Variation Movements

Consistent metrical displacement might be expected as a standard variational device. Although some of Schumann's variation movements do feature the technique, his treatment of the device is not mechanical. Three examples are given.

The first shows the transformation¹ of a celebrated theme of Schubert's, the "Sehnsucht" Waltz (Ex. C43a), into a self-sufficient character-piece (Ex. C43b). The five falling scalewise notes of Schubert's melody may be seen in the soprano-alto duet of the first four bars of Schumann's variation, whose thirds, except for the initial tied dissonant upbeat, are consistently off the beat. The bass is also consistently early, and the number of all-tied barbeats adds to the thoroughly anomalous rhythmic character of this piece.

The theme of a second example also drops scalewise, this time from dominant to tonic (Ex. C44a). Its third variation (Ex. C44b) is styled in consistent afterbeats in a metamorphosis of the filled-out drop of a fifth.

In a third example, the original bass motto (Ex. 45a) is not changed in the variation (Ex. C45b); the displacement

¹This variational connection is discussed by Chissell, Piano Music, p. 69, and by Dale, Symposium, pp. 39-41.

occurs in the accompanying chords, which are not only placed very late in each bar, but are also tied over, creating clashes and presenting on the tied chord an enigmatic stress indication.

Patterned Consistent Displacement

Another type of consistent metrical displacement is found in Schumann's rhythmic practice: displacement not unit by unit (per eighth note or quarter note, for instance) but on a larger basis, such as phrase beginning by phrase beginning. This type of consistent occurrence is called "patterned" in this study.

At phrase beginnings

A tied melodic anticipation at phrase beginnings is a particularly common form of consistent displacement. Example C46 shows six of the ten slanted phrase beginnings in this 25-bar piece. Dissonance on the barbeat is a feature of the instances shown. Similar but consonant tied upbeat phrase beginnings are found in Op. 6/11, not shown.

Patterned displacements also appear in afterbeats. Example C47 shows the initial phrase openings in a piano sonata movement; the same construction occurs in m. 21, 23 and 53, 55; a related pattern is found in m. 13, 15, 17, etc.

Patterned displacements are not limited to the melody. In Example C48a the tied pattern begins with the bass, into alternate bars. Beginning with m. 68 (C48b), the alto

has the tied anticipations, every bar. By the last bars of the passage the tied anticipations occur in an exposed position every half-bar (C48c).

In an accompaniment

Tied patterned upbeats also occur unobtrusively in accompaniment figures, as shown in Example C49, m. 4 in the viola. The construction shown continues, twice in a bar, through m. 15, and an openwork version of it appears, also twice per bar, in m. 20-27.

In accumulating harmony

Patterned consistent displacement also occurs with accumulating harmony. An unusual case is seen in Example C50. Beginning into m. 253 of Example C50a, two-beat harmonic anticipation occurs every four bars. It is a basic pattern in this lengthy developmental section of the movement, m. 253-326. That it may represent slant harmony rather than harmonic anticipation is suggested in the bars leading to the cadence of the section, shown in Example C50b. The clashes characteristic of slant structure have been avoided before this point by rests; see, for instance, the rests filling out the bars after tenuto chords, m. 316 and 318. But the harmonic conflict is heard for a half-note duration, on beats two and three of bars 324 and 326. It may be spec-

ulated that Schumann heard metrically congruent HR for the whole passage, with many two-beat clashes in the piano part.

Consistent Displacement Relative to Rubato Traditions

Strict rubato

Some of Schumann's slant passages seem to be explicit notation of the older performance tradition of rubato, the embellishment of a passage of even notes by playing each note of the series consistently earlier or later than expected. In Example C51, the displaced notes are more easily inflected by the pianist, who plays the steady eighth notes in the LH, than four bars later by the violinist, who has no such steadying factor within his responsibility. In Example C52, the afterbeat displacement is initiated by an appoggiatura on the barbeat of m. 14, in the varied repetition of a phrase begun four bars earlier.

Free rubato

The type of rubato which is understood as a rhythmically free rendering of a strictly notated passage is also represented in Schumann's writing. However, he sometimes notates such passages with idiomatic accuracy, as in Example C53a and b. The displaced bass, m. 3f, throws the rubato into particular relief. Clara Schumann's footnote in the Instructive Edition regarding the tenor voice of Example C53b directs that "these triplets must coincide with

the 'Pseudo-triplets' of the right hand."

Ambiguities Involving Slant Structures

The presence of a common tone between chords in an area of consistent displacements urges analytical care with passages like Example C54, m. 4-7. Whether the third of the eighth notes of m. 4, 5, and 6 is considered part of the previous or part of the succeeding chord will change its inflection in performance.

Both Opus 4/III (excerpt shown in Ex. C54) and the Scherzo originally intended for but never published with Opus 14 (excerpt shown in Ex. C33) are studies in slant and anticipatory structures. Their entire texts repay attention. Such a detailed study is beyond the scope of this research; however, one factor is clear even in a less thorough scan: Schumann uses both metrically-divided and phrase-divided beaming for slant structures. Since metrically-divided beaming is the norm for routine structures as well, the beaming is not a reliable indicator of rhythmic intent.

A mark of dynamic stress on a displaced component tends to stamp it as an anticipation, rather than as an after-beat whose weight presumably comes from the preceding pulse. Yet Schumann was far from consistent in providing clues for understanding his rhythmic structures.

Another source of ambiguity is the visually uninterpreted nature of much consistent displacement. Example C55

illustrates this situation. Several of the possible rhythmic interpretations of the displaced chords are indicated below the example.

Special Cases

Several passages show particular evidence of Schumann's inventiveness in using consistent metrical displacement.

Reversal of voices in displacement pattern

Example C56 shows a playful disruption of the pattern of slant bass afterbeats, in the displacement on every fourth beat of the top voices instead of the bass.

Displacement of a secret voice

A displacement unique in musical literature is shown in Example C57: the initiating tones for a displaced melody are notated but not played, unheard except in the imagination. This passage is visible illustration of the conscious reality of metrical displacement to Schumann.

Purposeful inconsistent unpatterned displacement

Another piece, Opus 16/8, must be mentioned as a unique case. Its carefully planned inconsistent and unpatterned metrical displacements show how aware Schumann was of rhythmic craft. Supporting a melody which has a monotonously repetitive rhythmic motif and standard harmonic

implications, the accompaniment unfolds continual displacements which defy categorizing. The treatment of this theme illustrates the thwarting of metrical expectation, since with each melodic repetition the timing of the accompaniment is somewhat different. This changes the harmonic meshing as well, sometimes resulting in intersecting harmonic planes most unusual in 1838.

To juxtapose the different versions of the opening four bars gives some sense of the situation (Ex. C58). The opening melodic phrase appears seven times in the movement, with the accompaniment no two times exactly alike.

It may be that further knowledge of Schumann's use of ciphers and other extra-musical compositional devices, a subject currently pursued by Sams,¹ will clarify the seemingly gratuitous displacements of the bass of this movement's main theme. As it stands, it seems to be Schumann's protest against mechanical repetition for the sake of filling a predetermined form. It is an embodiment of constant freshening of musical possibilities even within a regular and repetitious melodic-harmonic framework.

Findings

Metrical displacement, the positioning of a musical factor earlier or later than expected in the metrical frame-

¹See footnote on Sams' articles, p. 55.

work, is a technique common in Schumann's rhythmic practice. Consistent metrical displacement is an intensification of this process. In consistent metrical displacement, a counterpointing takes place between those strands of the texture which are congruent with the metrical structure and a strand or strands which are non-congruent. A common result of part of the fabric being thus out-of-phase is a series of momentary dissonances, or clashes. These harmonic clashes continuously highlight the time lag involved in the asynchronization.

Harmonic progression which may be otherwise routine is considerably enriched by such clashes resulting from consistent displacement. However, not all displacements involve clashes. Several factors may obscure or eliminate the expected dissonance. One such factor is long harmonic rhythm, with surface rhythmic activity within the frame of an extended chord. Another is harmonic change involving common tones in such a way that the overhang of the displaced factor creates no dissonance. A third is the use of rests to avoid actual aural dissonance, a usage which also dissipates to various degrees the expectation of dissonance. Finally, instrumentation affects the aural reality of slant structures, with sustained-tone instruments (winds, strings, brass) producing a different effect from the percussion instruments, most particularly the piano. The quick decay of percussive

tone blurs characteristically the series of dissonances formed in a slant construction.

Consistent displacement emphasizes by repetition the unexpected positioning. Such emphasis is more than simply multiple displacement. It creates for the listener a whole slant structure, i.e., a notable portion of the fabric which is out of phase metrically with the rest. In extreme cases, the whole fabric is for a time out of phase with metrical expectation. A slant structure may be the only manifestation of its material, may be a concurrent embellishment of the basic material, or may be a variational form of material previously heard in metrical congruence.

When strands of the fabric are counterpointed uniformly against their metrically expected position, the meter is inflectionally dominant. The displaced structure does not represent an equally self-sufficient metrical design which is out of synchronization with the notated meter; it never challenges the supremacy of the metrical structure. Whether premature or delayed, the displaced factor is established as and maintains the character of a displacement.

Any strand or strands of the texture may be consistently displaced. Occasionally Schumann uses consistent metrical displacement as the basic constructional device for an entire piece or section; but often the technique lasts only long enough to be noticed.

The factor(s) displaced may occur either earlier or later than expected. Upbeat displacements (earlier) are always anomalous; afterbeat displacements (later) are not anomalous unless they occur in an essential structuring line (usually bass or soprano) or introduce an unexpected element such as harmony other than the prevailing implication.

Schumann makes liberal use of a special form of slant bass called slant bass sonority. In this technique the melodic outline made by the lowest bass notes is metrically displaced although the actual bass voice may not show consistent displacement.

Schumann's use of slant structures in ensemble works adds, to the slant procedures earlier established, displacement by instrumental choir, or by unison or octaves, in ways inappropriate or impossible in solo works. Such slant texture begins with Opus 38.

Consistent displacement is found in Schumann's variation movements, but rarely as a technique directly applied to a theme. Commonly, thematic metamorphosis takes place first; the resulting variation shows displacement as a device in the presentation of the new form.

Schumann uses not only note-by-note or beat-by-beat consistent displacement, but also patterned displacement, in which the consistency is found at the bar, phrase, or

other wider distance. Some consistent displacement resembles strict rubato procedures, while some patterned displacement accurately notates a type of free rubato.

In Schumann's work there are two imaginatively unique passages relating to metrical displacement. One shows the consistent displacement of an unsounded, "secret" voice (in Opus 20); the other shows purposefully inconsistent displacement (in Opus 16/8). Schumann's "secret voice" passage (Ex. C57) demonstrates that for him consistent melodic displacement was a conscious technique.

CHAPTER VI

REPORT ON OBLIQUE HARMONIC RHYTHM

Root change may be dislocated relative to its metrically expected position. The more common form of such oblique harmonic rhythm is harmonic anticipation, with premature root change. Schumann also writes an idiomatic form of delayed root change, implied suspension. Examples for this chapter are found in Volume II, Appendix D.

Harmonic Anticipation

Root change which does not coincide with the metrical frame but is effected earlier creates the anomalous construction called "harmonic anticipation."

Types of harmonic anticipation

Schumann's harmonic anticipations occur in three different forms, depending on textural conformation leading into the metrical emphasis: repetition, pitch change, or all-tying.

Repetition into barbeat or beat. In the simplest type of harmonic anticipation, articulation on the barbeat or beat repeats the anticipatory material (Ex. D1).

Pitch movement into barbeat or beat. In a somewhat more complex type, there is pitch movement into the barbeat or beat, though no root change. The pitch movement sometimes involves figuration upon the chord framework (Ex. D2); sometimes arpeggiation--either a flourish (Ex. D3), or a melodic arpeggio (Ex. D4); or sometimes scales. Scalewise motion may be consonant on the barbeat, as in Example D5, or dissonant on the barbeat, as in Example D6. In score, six bars earlier than Ex. D5, there is no root change into the anticipatory harmony, though it is more common for a different chord to precede harmonic anticipation. Arpeggio motion in the bass results in a change of inversion. In Example D7 a first inversion changes to root position; in Example D8 a second inversion changes to root position. Sometimes soprano, bass, and accompanying parts all change position within the chord, without changing the effect of harmonic anticipation. Example D9 shows this construction.

All-tied into barbeat or beat. The extreme form of harmonic anticipation involves a texture in which all the strands are tied into the metrical emphasis; consequently no fresh articulation whatsoever marks that barbeat or beat (Ex. D10). However, an ensemble form of this all-tied construction may show figuration within an all-tied framework (Ex. D11).

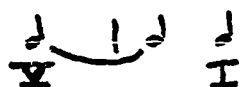
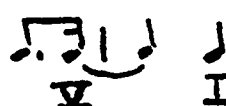
Composite anticipation. A texture showing significant pitch movement (melodic motion), less significant pitch movement (arpeggiation, tremolo, ostinato or pedal point, etc.), and some tied strands as well, is also found (Ex. D12). This composite formation, while fairly frequent in the ensemble works, also occurs in the early solo piano pieces (Ex. D13).

Formal positioning of harmonic anticipation

At beginnings. Harmonic anticipation is often found at the beginnings of phrases, sections, or entire pieces. Its character is sometimes fairly routine, as in Example D14, where only a dominant to tonic would have been more ordinary. But there are also less ordinary occurrences, as shown in Example D15 with an initial polychord, and in Example D16, where implied suspension is harmonically anticipated in a polychord. Initial harmonic anticipation occurs in the symphonies (Exs. D17 and D18); in solo piano music (Exs. D15 and D8); and in small ensemble music as well (Exs. D4 and D6). Harmonic inaction in incipits is such a common structure in Schumann's writing that it is discussed as a mannerism, pp. 130-31.

At the recapitulation. Harmonic anticipation can blur the structural downbeat when it occurs at the point of recapitulation (Ex. D19).

At the cadence. Harmonic anticipation can also prevent normal harmonic-metric congruence at a cadence point. In Example D20, both dominant and tonic harmonies are anticipated. In Example D21, the last four chords of the cadential progression are all-tied across the barline. Schumann also uses harmonic anticipation in a cadence cliché whose form is as follows:

common MR	
HR	
or	
HR	

This cadence is illustrated in Examples D22 and D23.

In a transition phrase. Harmonic anticipation dramatizes enharmonic change in the transition phrase shown in Example D24.

In mid-phrase. Harmonic anticipation not only punctuates phrase beginnings and endings, but also occurs in the middle of the phrase. The passage shown in Example D25 is essentially a seven-step descending scale in each four bars, ornamented by harmonic anticipation across three successive barlines. Another mid-phrase harmonic anticipation is shown in Example D26; the sf sign is a clue to an anticipatory construction here.

In a modulating phrase connection. Schumann also uses harmonic anticipation for a connector in phrase extension, as in Example D27, where a 2+2-bar construction is rabbeted by means of the chord anticipation into two modulating bars which lead into the following similar six-bar phrase.

Into a meter change. A number of all-tied harmonic anticipations are found into the barbeat at a meter change. The change may be for a brief interpolation, or may be a change permanent for the rest of the movement.

A metrical interpolation is itself an unsettling of expectation; to have no fresh articulation on the first barbeat of the new meter intensifies the anomaly (Ex. D28, into m. 20). In another occurrence (Ex. D29), the barbeat of the measure of metrical flexing is all-tied in a harmonic anticipation, while the barbeat of the measure resuming the established metrical motion is empty.

The meter change at a section beginning also may show harmonic anticipation. In Example D30 the all-tied barbeat at the return to a previous meter and tempo presents problems in ensemble coordination since no player articulates the downbeat for the tempo return. In contrast, in Example D8 only the high parts are tied at the new meter where a new section begins.

In variations. Some harmonic anticipation is found in Schumann's themes for variations, and a few variations themselves exploit the technique. In general however this is not a prominent procedure.¹

In Opus 13:

An unobtrusive non-progressive structure is found in the Tema of Op. 13, into m. 11. This factor is lost to subsequent variations except in Étude X (Var. VIII). However, harmonic anticipation is conspicuous in Étude VII (Var. VI), whose opening is shown in Example D31. In the Finale, a 12-bar passage which includes two unexpected harmonic anticipations in incipits of the main Finale theme (into m. 98 and into m. 106) was excised from the Second Edition.

In Opus 41#3/II:

The theme of this movement features all-tied harmonic anticipation into m. 14, 15, 16; 24, 25; 32; and 46, 47, 48 (Ex. D32). These anticipations are maintained in Variation I; lost in Variation II; subsumed in Variation III into complete suspension patterns except into m. 192, the final cadence of the variation; and do not appear at all in the final variation with coda.

In Opus 121/III:

The harmonic anticipation which begins the Theme of this movement (Ex. D33) also begins subsequent variations (into m. 25, 49, and 79), with the exception of the slant formation into m. 106.

Into each beat; into the mid-bar beat. Harmonic anticipation leads into other metrical points of emphasis besides the barbeat. Each beat may be anticipated harmonically

¹The striking exception occurs in Op. 41#2/II, "Quasi Variazioni," m. 17f; the passage, discussed as a mannerism, is shown in Example D87.

(Exs. D34, D35, and D36), and, in duple meters, the middle of the bar may be anticipated (Ex. D37). Example D38 shows a complex interaction of harmonic, rhythmic, and metrical factors. It gives the aural impression of harmonic anticipation twice per bar, though the root changes only once in each measure. The anticipated harmony going into m. 109 is reminiscent of the augmented sixth of the section opening; although the B-flat of the preceding chord is still sounding across this barline, it is effectively obliterated by the stressed repetition of the phrase beginning.

Harmonic anticipation with common structures

With grace notes. Schumann uses grace-note chords for harmonic anticipation in inventive ways. Example D39 has graces after the barline. In Example D40 the anticipation is not only stressed, but also all-tied into the barbeat along with the common tone from the previous chord. Example D41 shows one of the striking pianistic effects of the Schumann literature. An imaginative use of the pedal, with an all-tied pianississimo anticipating chord, produces an idiomatic sonorous effect. The impossible swell to the barbeat should be noted.

With polychords. The premature factor in harmonic anticipation is not necessarily a simple chord structure but is sometimes a polychord. A mixture of tonic and dominant

is most common (Ex. D15). Example D42 shows a section opening with an implied V_7+I ; the root of the dominant is articulated on the barbeat, emphasizing V against the tonic pedal point.

The premature entrance of tonic into a cadence in which dominant is suspended across the cadential barline creates an unusual polychord in Example D43. Of the harmonic strata, V_7 lasts longer than expected, while I appears earlier than expected.

A different complexity is seen in Example D44. The basic construction is tonic harmonic anticipation. Chordal ornamentation utilizing the V_7 (harmonized changing tones around the tonic note) results in a polychord into and on the barbeat. This harmonic anticipation is tempered by expectation of routine V-I across the barline. From this viewpoint the RH chords on the fourth beat of m. 18 and on the succeeding barbeat are essentially multiple appoggiaturas. The specific handling of dissonance in the opening section of this piece (Ex. C46) strengthens the aural impression of appoggiaturas.

Within hemiolic construction. The middle span within hemiolic construction sometimes exhibits harmonic anticipation (Ex. D45). When the hemiole is supermetrically out of phase,¹ the rhythmic intention of the anticipation is

¹See the discussion of out of phase hemiolic construction, Chapter VIII.

seen most clearly. The normal accent of metrical expectation highlights the upbeat quality of the preceding pulse, the anticipation.

Instrumental articulation style is sometimes an important factor for rhythmic inflection. Example D46 shows hemiolic construction, in normal supermetrical position, whose central inner span takes on the character of harmonic anticipation partly because of the bowing emphasis on the slurred barbeats of m. 39, 41, 43, and 45.

Further discussion of harmonic anticipation in the middle of hemiolic construction is found in Chapter VIII, "A Characteristic Pattern".

In the middle of the siciliano pattern. The initiating chord of harmonic anticipation may come in the exact middle of a triplet span, reinforcing the short middle note of a siciliano motif (Ex. D47). There the siciliano lasts one beat. In Example D48, the sicilianos bisected by harmonic anticipation span one bar.

With change of mode. Harmonic anticipation involving not root change but change from minor to major mode, in conjunction with an inversion change implying root movement without supplying it, is found in Example D49.

In the style of a fanfare. Fanfare-like motifs which involve no root change across a barline are frequent

in Schumann's writing regardless of medium. The military influence is evident in Example D50, the beginning of a long section with repeated harmonic anticipations in a March for piano; in Example D51, the horn announces the arpeggiated fanfare, and pianos and 'celli repeat that material. Schumann's most celebrated fanfare opens his First Symphony; harmonic anticipation leads in the simplest way into m. 1 and m. 3 in all three versions: published version (shown in Ex. D52), sketch, and original full score.¹ Harmonic anticipation in a fanfare-like flourish occurs not only in a single note, in chords, or in arpeggios but also with a scale line (Ex. D53).

With the Neapolitan chord. The anticipated harmony is sometimes a Neapolitan sixth chord (Exs. D54 and D55).

With ambiguous common tones. A subtle use of harmonic anticipation in which the device seems retroactive is found, in which an assumed harmonic context for a single pitch is proved unwarranted. Example D56a provides an instance: the opening E-flat is assumed to be the root of the tonic triad, after the E-flat major cadence of the preceding movement. However, its arpeggiated unfolding shows it to be the third of c minor. The aspect of harmonic anticipa-

¹The history of the three versions is discussed by Brian Schlotel, "The Orchestral Music," Robert Schumann: The Man and His Music, ed. Alan Walker (New York: Barnes & Noble, 1972), pp. 281-82.

tion is clearer in a subsequent passage (Ex. D56b).

Wide anticipation. Most of Schumann's harmonic anticipations take a negligible portion of the preliminary bar for the premature factor. It is rare for the anticipation to involve more than one beat before the barbeat. However, there are a few examples in which the onset of the anticipation comes two beats before the barbeat. Examples D57 and D58 are typical. Example C50a shows material which seems to be two-beat harmonic anticipation but which is subsequently shown to be slant harmony.

Dynamic markings with harmonic anticipations

Though harmonic anticipation does occur without any marks of dynamic emphasis, it is common for the construction to carry them. Dynamic reinforcements (sf, f, sfz, >, and so forth) is found either upon the anticipating factor (Ex. D59) or upon the metrical emphasis (Ex. D50). Occasionally both the upbeat and the barbeat are marked for emphasis (Ex. D60).

Another way of emphasizing the barbeat is to make it the focus of a swell (Exs. D61[=D55] and D1). In Example D62 an *appoggiatura* on the barbeat further reinforces accent at that point. The swell in these three examples is a performance directive. But the swell is also used by Schumann as a psychological accent on the barbeat where literal

accomplishment is impossible. This effect, significant in assessing the rhythmic function of Schumann's device of harmonic anticipation, is seen in Example D63.

Relation of harmonic anticipation to slant structures

Harmonic anticipation represents upbeat slant constructions pushed to an extreme, where the root change is felt to be completely effected at some point before the bar-beat or beat. Therefore, the rhythmic motifs which are a seedbed for slant processes also produce harmonic anticipations; these constructions slip easily one into the other. In Example D64, for instance, the momentarily ambiguous slant beginning of the doubled melody (soprano and tenor, into m. 1 and into m. 5) gives rise to total harmonic anticipation into m. 9. Example D65 shows an initial slant chord formation becoming total harmonic anticipation, into m. 9 and following.

Special cases

Antiphonal treatment. Example D66 shows the beginning of an extended passage in which short phrases featuring harmonic anticipation are used antiphonally.

Impossibly stressed barbeat. An apparently impossible accentual directive in Opus 20 in Clara's Instructive Edition (Ex. D67a) is in fact careless layout; the stress

falls one note later in the Werke (Ex. D67b) in a case of simple all-tied harmonic anticipation. However the swells of Example D41 and D63 do create an impossibly stressed bar-beat.

Combined with slant bass. In Example D68, harmonic anticipation is combined with slant bass construction. The ties across the barline highlight both anomalous processes.

Dissonant harmonic anticipation. In Example D69 (=D55), ornamental chromatic dissonance occurs at the beginning of the harmonic anticipation, at mid-bar 146 and mid-bar 150 in the LH of the piano part and in Violin II. It does not vitiate the sense of root change on the second beat.

Bypassing dominant in a cadential progression. Example D8 shows a I_6^4 chord going directly to I_5^3 with harmonic anticipation, a situation which telescopes the normal cadence pattern. A greatly augmented version of this bypassing of the dominant harmony is found in Example D70, with four measures of D_6^b leading into D^b in root position on the bar-beat of m. 121.

An exotic final cadence. Example D71 shows harmonic anticipation at mid-bar of a final chord not specifically ethnic nor modal but certainly picturesque: $III_\sharp$ locally, $V_\sharp$ of the opening key. Schumann's title for the piece is "Sizilianisch."

A programmatic inconclusive cadence. In Example D72, not only is the chord which is anticipated harmonically an unexpected one (IV₆ after V₇) but the tonic is never reached. The title of this piece is "Child Falling Asleep," (Kind im Einschlummern).

Exploitation of tonal ambiguity. An ingenious probe of positioning possibilities involving harmonic anticipation and suspension is shown in Example D73a, b, c and d. What at first appears to be simple harmonic anticipation (into m. 1) is discovered to be a striking suspension (m. 2); three other versions of the phrase opening are shown, each unique in rhythmic conformation, each taking advantage of prior aural experience with the anticipation-turned-suspension.

Supermetrical harmonic anticipation

In Schumann's rhythmic practice, not only are metrical downbeats affected by harmonic anticipation, but normal structural jointures also receive that subtilizing treatment. When the anticipatory harmony extends beyond one bar and is couched in multiples of the bar, this procedure constitutes supermetrical harmonic anticipation.

Example D74 (=D70), cited in connection with bypassing dominant harmony in a cadential progression, illustrates such supermetrical harmonic anticipation. The harmony is motionless for four bars of a transition leading to a theme which begins with the same chord. X in the diagram indicates

the structural downbeat:

D74

Thematic Rhythm 2/4

Harmonic Rhythm

Supermetrical harmonic anticipation also occurs with introductory material at the beginning of a movement, as in Examples D75 and D76, diagrammed below.

D75

TH R 6/8

HR

D76

TH R 2/4

HR

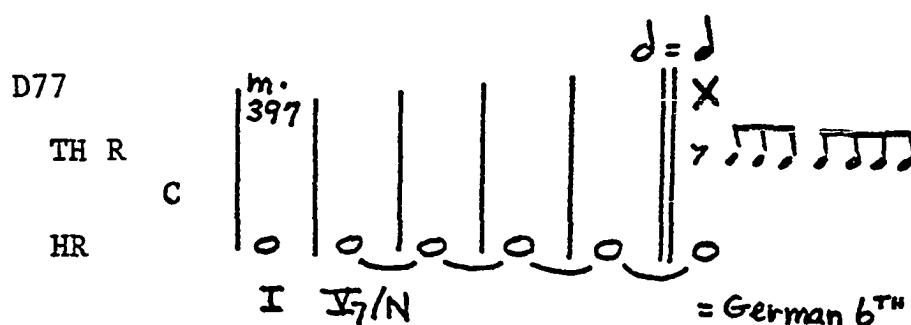
Opus 130/1 shows the same opening situation, diagrammed below but not shown in the examples:

TH R 3/4

HR

A prominent instance of supermetrical harmonic anticipation is shown in Example D77, the onset of a metered cadenza. Several unusual features are present. The cadenza

rises from a flourish on V_7 of the Neapolitan chord, a distinct stylistic contrast with the I_6 cadenza springboard of the Classical concerto. The arpeggiated flourish itself begins on bar [II] of an expected four-bar phrase (see phrase lengths: m. 389-92; 393-396; 397-). The Neapolitan chord is aimed for through its V_7 , and it is achieved in m. 391 and 395; it is aimed for but never reached the third time (m. 397f). Once the cadenza flourish is launched, the V_7 formation becomes an augmented sixth. Its resolution into I_6 (m. 403) is on a weak, not a strong bar of the thematic portion of the cadenza. Furthermore, the structural downbeat of m. 402 is blurred by harmonic inaction, as shown in the diagram:



Finding such conspicuous instances of supermetrical harmonic anticipation in Schumann's works reinforces a general impression of his predilection for noticeable, purposeful harmonic inactivity. Such inactivity throws the metrical structure into high relief.

Implied Suspensions

The concept of implied suspension clarifies certain constructions in which the aural impression of motion across a barline, upbeat to barbeat, in the absence of harmonic movement and sometimes in the absence of any movement whatsoever, is enigmatic. Schumann himself has shown his derivational procedure for an implied suspension. The material of Example D78a gives rise, in another piece, to a rhythmically transformed version (Ex. D78b) in which the suspensive note is missing; it is, however, present (bass B-flat on the barbeat, m. 465) in the final appearance of this theme (Ex. D78c).

An attractive example of implied suspension is found in Example D79. The motion of the tenor into m. 320 supplies expectation of similar articulation into succeeding bars. These all-tied barbeats seem incomplete; they await something. If a bass note D were added on the barbeat of m. 321 and E in m. 323, more normal suspensions would be formed; bass arrival at B one beat sooner in m. 322 and at C# in m. 324-27 would accomplish the same completing effect.

In similar fashion, in Example D80 the unbroken triplet movement leading to m. 27 provides an aural expectation; in this case not suspensions but four consecutive double retardations are formed.

Schumann wrote one cadence which, from the point of view of construction, is a combination of suspension and implied suspension (Ex. D81=D51). Without the bass note of Piano II on the barbeat of m. 227ⁱ & ii, the suspension would be only implied. It is a curious detail, considering the preceding bass doublings in the two piano parts. The Theme for these variations shows a normal suspension at this cadence. In the same work as revised for two pianos only, a cadence is found which combines an implied suspension with the cadence cliché formation (Ex. D82).

Comparison of Harmonic Anticipation
and Implied Suspension

Implied suspensions and harmonic anticipations have different rhythmic functions, though in both there is no overt root change across the barline, and in both there is the sense of emphasis by default upon the barbeat. In implied suspension, the chord before the barline is expected to progress across the barline, to change root on the barbeat. That root change is delayed, at least on the surface. In harmonic anticipation the chord before the barline is itself the chord expected on the barbeat, arriving prematurely. A diagram will clarify these constructions.

With harmonic anticipation,

a chord arrives here . . . 

though it is not
expected until here, . . . 
where the weight of the
root change is felt
metrically.

Only one chord is involved; it appears prematurely in the metrical flow, forming harmonic rhythm tied across the barline.

HR 

With implied suspension,

a chord arrives here; . . . 

its harmony extends
across the barline . . . 

whereupon it resolves
to a second chord, here, . . . 
as if it had been suspended
on the barbeat

though the pitch which would
have suspended it is missing (p)

Two chords are involved; the first normally would progress to the second on the barbeat, but is delayed in a structure that implies suspension. Literal harmonic rhythm appears tied across the barline, because the suspensive note is not overt; but the function of the passage gives no impression of incompleteness.

Literal HR 

Implied HR 

sus

Implied suspension is not a rigorously developed technique in Schumann's habit; it depends, as do all implications, to a great degree on context. Nevertheless its function is separate from and complementary to the device of harmonic anticipation. "Normal" suspension is a device controlling formation of harmonic delay in a specific way. Schumann's innovation lies in a revitalization of the suspension cliché by omission of the most firmly expected element of the construction, the note that creates dissonance. He assumes an inflectional understanding of the procedure on the part of performers.

The result of oblique harmonic rhythm, either as harmonic anticipation, or as implied suspension, is a contrapuntal relationship of harmonic rhythm with metrical structure.

Manneristic Oblique Harmonic Rhythm

Schumann's rhythmic practice shows frequent idiomatic usage of two particular formations of oblique harmonic rhythm, usage frequent enough to constitute mannerism. They are the patterning of all-tying, and harmonically static incipits.

Patterns of all-tying

Consecutive all-tied barbeats. Any one all-tied barbeat is metrically anomalous since it suppresses the nor-

mal overt articulation of the barbeat. For there to be a series of all-tied barbeats seriously compounds the anomaly, as the main joists of the metrical framework are missing from the structure.

An example of consecutive all-tied barbeats notorious among pianists is the passage shown in Example D83. In the forty-bar section, there are only four articulated barbeats (marked X). Three of these (the first, second, and last) have normal harmonic change across the bar. The third is articulated by chord repetition. Consequently there is no root change for the barbeat chord in 37 bars of the 40-bar passage. There are 15 consecutive all-tied barbeats, then 7, then 7 again, then again 7 in this anomalous section.

Another passage, less well-known, has by far Schumann's greatest number of consecutive all-tied barbeats: twenty-three (Ex. D84).

Other patterns of all-tied barbeats. All-tied barbeats also occur into alternate rather than into consecutive bars. This formation sometimes leads to consecutive all-tying.

A passage with many similarities to Examples D83 and D84 is shown in Example D85. All-tied barbeats in alternate bars begin the passage. Though in fact no more than three consecutive barbeats are all-tied seriatim, the all-

tied rhythmic effect characterizes the section.

In another instance (not shown in the examples), the all-tied barbeats of Opus 41#1/I up to the Recapitulation are given below; alternate occurrence is bracketed, consecutive occurrence is circled in the diagram.

Op. 41#1/I,
Allegro, 6/8 (begins m. 34 after the Introduzione)

into m. $\overbrace{37, 39, 41;}$ $\overbrace{45; 69, 71, 73, 75,}$
 $\overbrace{77, 79;}$ $\overbrace{96, 98;}$ 120; $\overbrace{124, 126, 128,}$
 $\textcircled{130^i-136^i};$
 $\textcircled{130^{ii}-132^{ii};}$ $\overbrace{136^{ii}, 138^{ii}, 140^{ii};}$ 148;
 $\overbrace{152, 154, 156, 158, 160;}$ $\overbrace{166, 168;}$
 $\overbrace{174, 176;}$ $\overbrace{202, 204, 206;}$ $\overbrace{224, 226}$

All-tied barbeats occur in other patterns besides alternation. In Opus 61/II, Trio II (2/4), they are found at intervals of four measures: there are ties into m. 227, 231; and 283, 287. The all-tying into bar [VIII] of eight-measure phrases is found in Opus 88/IV (2/4) into m. 108, 116 and 132, 148. All-tying into the second measure of four-bar phrases is found in Opus 120/III (3/4) into m. 66, 74, 82, 99, and 106ⁱ.

There is, therefore, as demonstrated, a good deal of formal variety in the patterned placement of all-tied barbeats.

Consecutive all-tied beats. An extension to the next lower metrical level of the rhythmic processes involved in all-tied barbeats is seen in consecutive all-tied beats. Example D86 shows a lengthy example. In this passage there are twenty-nine, then sixteen, then fourteen consecutive all-tied beats. The four articulated beats of the passage are marked by arrows. While Example D86 represents an extreme, it is not an isolated experiment in Schumann's practice. Other conspicuous passages with consecutive all-tied beats may be seen in Opus 5/7, into m. 9-12 and 21-24; in Opus 17/III, into m. 27-29 and 84-86; and in Opus 22/I, m. 59-61.

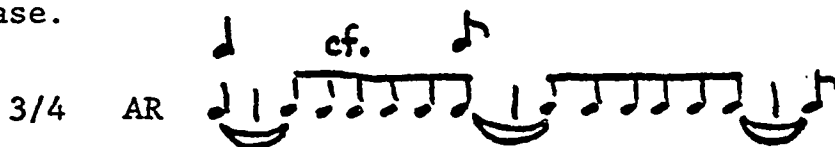
All-tying in duple meter. Though Schumann's all-tying most frequently involves triple divisions, Example D87 shows consecutive all-tied barbeats in C.

All-tying in ensemble works. There are fewer completely all-tied barbeats in Schumann's ensemble music than in the solo works. Examples D88a and b demonstrate one reason. The opening of a Trio section (Ex. D88a) shows the soloistic approach in spite of involvement of all the instruments: its rhythmic formulation could have been for solo piano. But with more performers to articulate the metrical structure, a variant such as that shown in Example D88b is possible. The passage no longer has wholly all-tied barbeats,

yet the rhythmic structure and character are not materially changed.

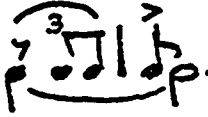
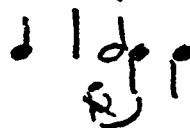
Harmonically static incipits

Schumann frequently writes no change of root across the initial barline of phrases, sections, or movements. These incipits are articulated but occur without harmonic progression. All-tied examples represent an extreme as in the harmonically complex opening shown in Example D89; but there are many simple instances like Example D90, in which the upbeat, implying tonic harmony, leads into tonic across the barline. Opus 26/I has a particular concentration of this construction. Seven sectional openings with harmonically static incipits are shown in Example D91. It is instructive to notice the means by which Schumann sometimes makes certain that an accent on an all-tied barbeat will be felt. For instance, in Example D89 the difference in the all-tied upbeat's note value at the end of m. 1 as compared to the opening, into m. 1, skilfully creates a metrical propulsion that continues through subsequent all-tied barbeats of the phrase.



The rhythmic variety in Schumann's treatment of static incipits is suggested in the following listing selected from examples of the six anomalous types. The ac-

cumulated rhythm (AR) is given; in every case the harmonic rhythm is tied across the barline.

Example		Meter	AR
A32	into m. 123	2/4	
B48	into m. 62	C	
C28	into m. 9	6/8	
D45	into m. 9	3/4	
E29	into m. 22	C	
F58	into m. 1	3/4	

Static incipits usually represent harmonic anticipation, though a notable example of implied suspension at many phrase beginnings is found in Opus 26/I, into m. 87 and following (Ex. D83).

Findings

Oblique harmonic rhythm counterpoints actual root change against its metrically expected position. Both of its forms call attention to a barbeat, or less often to an interior beat, by default. In harmonic anticipation, the root change is accomplished earlier than its metrically expected point. In implied suspension metrical momentum, in

conjunction with characteristic melodic and harmonic factors, implies a barbeat root change which would suspend the barbeat chord; actual root change is delayed. Schumann's implied suspensions give the impression of an instinctive rather than a conscious device. Anticipatory oblique constructions are far more frequent and more thoroughly developed in Schumann's rhythmic practice than delaying constructions.

Schumann's harmonic anticipations have three basic forms, depending on the articulation between the anticipation and its expected metrical onset. This area may show simple repetition, pitch movement of various kinds, or no overt motion whatsoever (all-tied).

Harmonic anticipation occurs singly but also lends itself to both consecutive and patterned use. Thematically it is particularly conspicuous in patterns of phrase beginnings, where the blurring of the barbeat makes a point not only of the strength of the barbeat in a bar but of the strength of the first bar in a phrase-group. The device is used in solo and ensemble music, in large works and small. Its use may be thematic, incidental, or (less often) variational.

Schumann uses harmonic anticipation in a variety of formal positions. It may begin a phrase, section, or movement; it may occur mid-phrase or transitionally; or it may

be involved in a cadence. It may even introduce a meter change, a point where metrical establishment would particularly benefit from a clear structural downbeat on the barbeat. Also conspicuous are Schumann's uses of harmonic anticipation on a large scale (supermetrical harmonic anticipation) to lead to points of structural downbeat, whether recapitulation, cadenza, or main thematic section following an introduction. Punctuation by root change is evidently not essential to formal satisfaction at such a point. Perhaps the anticipating of harmonic change even enhances the tension released at the recognizable formal jointure.

Many of Schumann's harmonic anticipations occur in connection with certain general constructions such as grace notes, polychords, the siciliano rhythmic pattern, mode change, common chord tones, and the Neapolitan chord. Fanfare-like flourishes are also conspicuous.

The length of the anticipation is usually one beat or less; however it ranges from the negligible length of a grace note to two-thirds of a triple metered bar, and supermetrical anticipations may involve several bars. Anticipations longer than a bar have special formal significance; such supermetrical anticipations are not uncommon at major formal junctures, where they tend to separate awareness of the ingredients of a normal structural downbeat effect.

Harmonic anticipation occurs without added dynamic

emphasis, with emphasis on the upbeat, or with emphasis on the downbeat. Occasionally both upbeat and downbeat carry additional stress markings. Barbeat emphasis is less apt to be a stress marking than a swell peaking at the barbeat. Schumann's stress markings in connection with tied harmonic anticipations are not always literally possible.

Harmonic anticipations are particularly prominent in certain works due to the rhythmic structure of their themes:

Op. 11/I	Allegro vivace, into m. 53f
Op. 26/I	several sections, into m. 1f
	into m. 87f
	into m. 253f
	into m. 341f
Op. 41#2/I	Allegro, m. 34f
Op. 41#3/IV	into m. 1f
Op. 44/III	Scherzo, into m. 1f
	Trio I, into m. 45f
	Trio II, into m. 123f
Op. 44/IV	into m. 22f
Op. 47/II	Trio II, into m. 153f
Op. 124/15	into m. 1f

Relation of oblique harmonic rhythm
to slant harmony

Harmonic anticipation is in a sense total slant harmony: $HR \leftarrow$. It carries the slant process beyond its limit. With slant harmony, as discussed in the chapter on consistent metrical displacement, some essential, clinching aspect of the root change does not join the anticipation but waits to punctuate the main metrical pulse. This slant texture is divided in accomplishing the root change; some of it comes

too early and needs overt corroboration upon the strong metrical impulse. On the other hand, with harmonic anticipation the root change is accomplished all at once--simultaneously in the whole texture, but earlier than the strong metrical impulse where it is expected. In the absence of chord change there (and, with all-tied anticipation, in the absence of any articulation whatsoever on that beat), metrical expectation furnishes an accent.

The sense of root change in some cases is ambiguous; slant structures may mutate toward harmonic anticipation and vice versa. Schumann's rhythmic flow often includes both types of displacement if one or the other is prominent thematically.

Implied suspensions are also in a sense total slant harmony: $HR \rightarrow$. Ordinarily slant harmony does not operate on the afterbeat side of the barbeat: if the ear accepts even one note on the barbeat as representing a whole chord, then that chord's filling-out in afterbeats is normal non-progressive procedure. There is, however, one familiar common-practice structure which divides the texture in the accomplishment of root change, delaying a portion of it while accepting aurally the impression of root change on the strong beat. This is the suspension. The previously prepared dissonance is rhythmically strong on the metrically strong impulse, resolving to a weaker beat. With Schumann's

innovation of implied suspension, voice leading and other factors seem to prepare a suspension; but the note or notes which would normally both accomplish root change and make the held-over chord members dissonant is missing. The sense of accent on the barbeat comes not only from metrical expectation but also from the expectation of dissonance on the barbeat. The chord of resolution then follows, as if a portion of it had been suspended.

With slant structures, a series of brief harmonic clashes are possible, emphasizing the continuing divided nature of the harmonic progression. Such clashes do not occur with oblique harmonic rhythm, which moves in harmonically complete vertical blocks that are dislocated relative to the metrical frame.

Relation of oblique harmonic rhythm
to metrical inflection

Schumann's oblique harmonic rhythm does not seem to suggest establishment of a self-sufficient metrical scheme in conflict with the notated meter, or to reconstrue an anticipating beat within a multimetric procedure. His diacritical marks confirm metrical normalcy in spite of the dislocation of harmonic change. These oblique techniques accomplish the intensification of normal metrical processes.

There are important rhythmic implications in the fact that harmonic anticipation is found in the middle in-

terior division of a few instances of hemiolic construction. Schumann has taken pains to indicate the inflection in some of these cases, an inflection at odds with the hemiolic construction.

Metrical inflection is easily accomplished with those oblique structures which have some articulation on the barbeat or beat. For all-tied examples the performer must devise some acoustical reflection of metrical differentiation. Passages of consecutive all-tied beats represent the extreme of Schumann's use of this anomaly; the metrical frame controls a fabric which at no point overtly reinforces the metrical armature. Inflection becomes an important concern with this and the following anomalous types. It receives increasing attention as well as discussion in the chapter on performance.

CHAPTER VII

REPORT ON METRICAL REPOSITIONING

There are two types of metrical repositioning in Schumann's practice: that which involves the overt repositioning of a pattern already established, and that which is intrinsically repositioned compared to a metrically natural rhythmic placement. The symbols used for metrical repositioning reflect the relationship between the two types. Two kinds of blunt-end brackets indicate the passages involved. A rhythmic pattern in its establishing form, or its repetition in an equivalent metrical position, is marked thus:

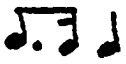
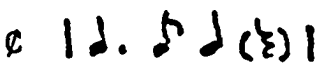
[.....] . A repositioned pattern is shown thus , whether it has been overtly repositioned in the metrical frame, or exhibits intrinsic metrical repositioning. For easier identification, the rhythmic pattern under scrutiny is also given in note values with its example, since the range of complexity and construction detail is so wide in this category. Examples for this chapter are found in Volume II, Appendix E.

Repositioning of Melodic, Harmonic, and Rhythmic Motifs

The device of metrical repositioning is found most often as a manipulation of one melodic voice. Its effect

ranges from a mild ruffling of the metrical flow in triadic arpeggiation (Ex. E1), to the ingenious punning on pitch, articulation, and rhythmic patterns of Example E2, to the contrapuntal extremities of Example E3, where the three notes heading a fugato subject are overlapped in entries after one beat for a close stretto. The device may appear in the main thematic material (Exs. E2 and E3) or elsewhere (Ex. E1).

Occasionally the harmonic pattern is the conspicuously non-congruent factor (Ex. E4). A striking instance is shown in Example E5, where repetition of the three-member chord pattern V-I-VI falls in varying positions in the duple meter. Another example may be seen in the opening of Opus 130/6 (not shown).

A rhythmic rather than primarily melodic pattern is sometimes the subject for metrical repositioning. The rhythmic canon in Example E6, for instance, places the stronger middle note of the amphibrach pattern upon either beat and upon either half-beat in the duple measure, thus emphasizing the regular shifting of metrical function. Schumann's metrical manipulation of rhythmic motifs seems sometimes a casual technique, as in Example E7, where  falls on the second or on the third barbeat of the phrase, with contrasting supermetrical positions. On the other hand Schumann makes a point of the metrical difference between 

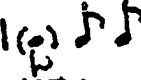
and  in the Allegro of Opus 92, whose opening bars are shown in Example E8.

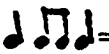
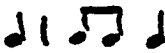
Overtly Repositioned Patterns

By far the most numerous examples of metrical repositioning in Schumann's music occur with some type of repetition which repositions a pattern already heard.

Relation of pattern to metrical frame

A pattern subject to repositioning fits either evenly or unevenly into the metrical structure. To fit evenly, a pattern equals the length of one of the structural spans of the meter: a beat, a bar, or the expected phrase length. However, the pattern need not, and often does not, simply fill that span's linear visual boundaries. For example,

in 2/4,  = 1 beat; the pattern may occur as 
 or 
 or 
 or 
 or even 
 etc.;

in 3/4,  = 1 bar; it may occur as 
 or 
 or 
 etc.

In general, metrical repositioning of evenly fitting patterns seems less unusual than that of unevenly fitting patterns; in the latter the unevenness is usually emphasized by repositioning. At the supermetrical level, an evenly fitting phrase-pattern which is repeated and thus repositioned does not seem anomalous: it exhibits one fundamental type of formal progression, "phrase with answering phrase." To fit unevenly, a pattern's length is:

- smaller than one beat;
- larger than one beat but smaller than one bar; or
- larger than one bar but smaller than the expected phrase length.

In the examples which follow, the listings are arranged in each section according to the pattern's fit relative to beat, bar, and phrase. Even and uneven constructions are found as follows:

Even Fit

Ex. E9a -
Pattern fits the beat.

Ex. 10a -
Pattern fits the bar.

Uneven Fit

Ex. E9b -
Pattern is smaller than the beat.

Ex. 10b -
Pattern, larger than the beat, is smaller than the bar.

x: Repositioned pattern keeps upbeats.

y: The downbeat onset of the motivic pattern is blurred by harmonic anticipation.

(No anomaly here)

Ex. E11

Pattern, larger than the bar, is smaller than the expected phrase length.

Relation of repositioning to the formal frame

The repositioning of a pattern occurs formally in one of three ways:

- consecutively, following directly upon the pattern;
- comparatively, occurring after an interpolation; or
- overlapping, occurring as imitation.

In any of these three circumstances, the original pattern fits, as above, evenly or unevenly into the metrical frame.

Examples of these constructions are found as follows:

Consecutive Positioning

Even Fit

Ex. E12a -

Pattern fits the beat.

x: repetition within one instrumental line

y: ensemble version, repetition with changed instrumentation

Ex. E13a -

Pattern fits the bar.

(No anomaly here)

Uneven Fit

Ex. E12b -

Pattern is smaller than the beat.

Ex. E13b -

Pattern, larger than the beat, is smaller than the bar.

Ex. E14 -

Pattern, larger than the bar, is smaller than the expected phrase length.

x: 6-beat phrases

y: 3-beat phrases

Comparative Positioning

Even Fit

Ex. El5a -
Pattern fits the beat.

x: wide separation, piano
part
y: narrow separation

Ex. El6a -
Pattern fits the bar.

(No anomaly here)

Uneven Fit

Ex. El5b -
Pattern is smaller than
the beat.

Ex. El6b -
Pattern, larger than the
beat, is smaller than
the bar.

Ex. El7 -
Pattern, larger than the
bar, is smaller than the
expected phrase length.

Overlapping Positioning

Even Fit

Ex. El8a -
Pattern fits the beat.

Ex. El9a -
Pattern fits the bar.

(No anomaly here)

Uneven Fit

Ex. El8b -
Pattern is smaller than
the beat.

Ex. El9b -
Pattern, larger than the
beat, is smaller than the
bar.

Ex. E20 -
Pattern, larger than the
bar, is smaller than the
expected phrase length.

A metrically even imitation distance counteracts the asymmetry of uneven patterns, as in Examples El9b and E20.

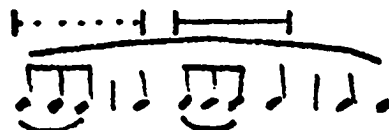
A model of repositioning for one pattern

A common rhythmic motif in Schumann's writing is

 . A few of its metrical positionings are shown
as follows:

Consecutive positioning, in 3/4

Ex. E21 -
Op. 97/II, into m. 33

Comparative positioning, in C

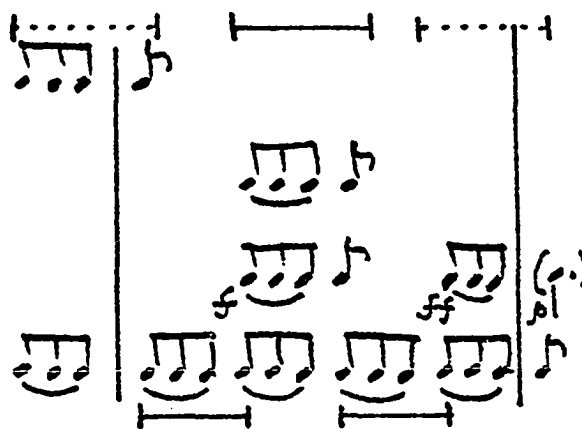
Ex. E22 -
Op. 115,

into m. 7 (9, 22)

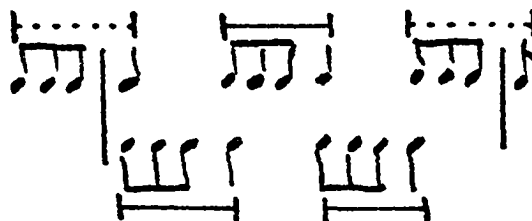
m. 13 (15, 20)

m. 23 (24)

m. 25-26

Overlapped positioning, in C

Ex. E23 (=E19b)
Op. 85/7,
into m. 39-40

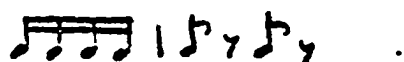


This same motif is featured in 6/8 meter in Example B42, a passage which combines aspects of stretto with aspects of hocketing. Such a structure in which the imitating voice has an incomplete entry is fairly frequent in Schumann's writing; see Opus 105/I, m. 32f; Opus 82/4, into m. 12, 13; and Opus 99/XII (Abendmusik), into m. 37, 38.

Intrinsically Repositioned Patterns

Intrinsic metrical repositioning is less noticeable than is the type which depends upon repetition and repositioning for its effect. Directly convincing in performance, the repositioned aspect is often apparent only to the analytic eye.

In intrinsic metrical repositioning, the motif in its actual metrical placement seems to contradict a more "natural" position, more natural on the basis of agogic structure, pitch level arrangement, harmonic emphasis, or other such characteristics of the musical material. For example, it is metrically anomalous for the quickest moving notes to fall on the strongest beats, which are points of relative repose in a metrical flow. The bass figure in Example E24 illustrates this rhythmic principle. Such a pattern would fall more naturally into this metrical frame:



Sometimes Schumann will give the more normal form as well, but later than the original appearance. This procedure differs from the repositioning of an established motif. For instance, the lilt formation found in Example E25, m. 26, shows intrinsic repositioning since the longest note falls on the beat traditionally weakest. But when Schumann repositions that abnormal pattern, presenting it now in its more normal form (and in this case interrupting the original form by imitation after one beat), the intrinsic repositioning of

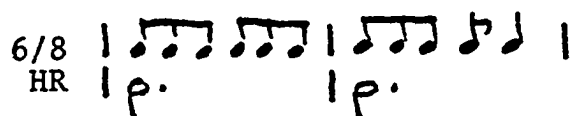
the first version becomes vividly evident.

Several further examples of intrinsic repositioning follow. In the first three eighth notes of Example E26, the visual triadic outline is non-congruent with the metrical frame; consecutive repositioning is also found with this theme. The slur pattern of Example E27 suggests 6/8 meter. However, the notated meter is 3/4, and 3/4 metrical shaping is reinforced by the swells in m. 11 and m. 12. Example D18 has shown the opening presentation of this thematic material. The stylistically "natural" position of harmonic progression may be contradicted as well as that of rhythmic motifs. Schumann makes such a point in Example E28. Instead of the more normal arrangement 6/8 I | IV V | I he writes 6/8 | I IV | V I | , over a tonic open fifth double pedal point.

Normally the point of harmonic change is the point of heavier metrical emphasis. This normalcy is contradicted in Example E29, where for three bars the barbeat falls between chord changes. Furthermore, the barbeat is at neither end of the sequential melodic scale pattern. In Example E30, the metrical position of the scalewise melody could not have been predicted simply by its linear shape. A more normal placement would bring the scale's top note (tonic, in its first appearance) on a barbeat:



The implied harmonic changes would more normally fall upon the barbeats:

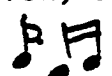


Schumann's actual placement follows neither normalcy.

Comparative Metrical Repositioning With Larger Formal Significance

In several works the repositioning of a thematic pattern helps to clarify formal outlines.

In Opus 7

The dipping pattern  permeates Opus 7. In most of the piece, the pattern is placed so that metrical accent falls on the higher note (m. 3f) but in a contrasting section (m. 173f) metrical accent falls on the middle ornamenting note:  (Ex. E15b).

In Opus 13

Here Schumann had the problem of organically tying together this set of variations with its Finale, a Finale with a commanding new theme only loosely connected with the original Tema. His solution was to use, in the developmental section of the Finale (m. 50f), a repositioned form of the original Tema. In its half-measure displacement, this theme links the Finale to the whole, but does not assume supremacy over the Finale's own theme. The original Tema, Finale opening, and displaced Tema are shown in Example E31a, b and c.

In Opus 97/II

The original form of the theme of this movement exhibits intrinsic metrical repositioning (Ex. E32a, into m. 1). The longest note of the opening thematic arpeggio does not fall upon the metrical accent, which would seem the natural position. Instead, it falls upon the second beat of the 3/4 bar. After nine repetitions of the original rhythmic placement, Schumann overlaps the pattern by one beat (Ex. E32b, m. 11), which places the longest note on the third beat of the bar, an even more anomalous situation. Only very late in the movement, just preceding the form-delineating cadence before the coda, is this theme presented in its natural position (Ex. E32c, into m. 113). It comes as the last entry in a three-entry stretto; the climactic effect of the stretto is enhanced by this achievement of the most normal metrical form of the theme.

In Opus 120/I

The melodic substance (in violins I, violas, flutes and oboes) of the first bar of the Lebhaft, striking thematic material, is repositioned after m. 121 as weak-bar punctuating linkage in a new theme (Ex. E33a and b). The sense of a new section with organic connection to the old is reaffirmed with this change of supermetrical placement.

Manneristic Metrical Repositioning

Schumann's idiomatic use of metrical repositioning is apparent in two ways. To shape melodic material first in a duple frame, then triple (or vice versa) is basic metrical reordering, a specialized maneuver of metrical repositioning. The other habitual compositional ploy is close stretto, the vertical overlapping of a motif in metrical positions contradicting the strong and weak accents of its initial placement.

Duple/triple versions of the same material

With Schumann, the compositional device of casting material in both duple and triple metrical molds frequently involves a change of note values in adjusting to the new metrical frame. One of his clearest examples is found in the Prelude and Fugue of Opus 68, whose openings may be compared in Example E34a and b. However, the variant does not always appear in the same work. As shown in Example E35a and b, a theme from a solo piano piece has been recast for a symphonic movement. Both meters are duple, but the earlier version (Opus 16/8) is in compound duple motion, the later (Opus 38/IV) in simple duple. The thematic relationship shown in Example E36a and b is an important clue in decoding the rhythmic intent of the theme with its all-tied barbeats. These themes, also, belong to two separate works, the coda material of one providing material for an inter-

mezzo section in the other.

In Example E37a and b, the material which is cast in contrasting metrical forms occurs in different movements of a concerto. Functioning as linkage in both cases, the material has more lyric importance in its original occurrence in the second movement than in its subsequent appearance in a developmental passage of the third movement. This theme is transformed simply by metrical change; there are no other developmental adjustments.

The flexibility of Schumann's rhythmic augmentation technique is apparent in Example E38 as well as certain duple/triple metrical adjustments necessary to the augmentation. Example E38b shows irregular augmentation of a portion of the theme marking the Recapitulation, then a reversion in mid-phrase to the original rhythmic form. Another variant, a brief quotation, appears in the third movement (Ex. E38c).

More commonly, introductory material cast in one metrical shape becomes the main thematic material in the contrasting meter (Ex. E39).

These few instances can only intimate the extent of rhythmic transformation of themes in Schumann's compositional practice, in which translation of duple into triple forms or the opposite is a prominent feature.

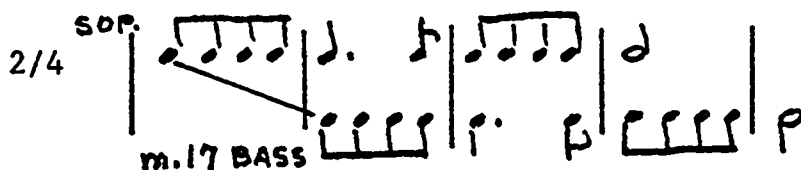
Close stretto

Imitative writing is common in Schumann's style,

from brief points of imitation to thoroughly developed fugues. A mildly imitative texture was congenial to him from the beginning, a technique directly derived from improvisatory procedures; but he also engaged in serious contrapuntal study three distinct times in his creative life. A fairly detailed account appears in Roesner's Studies.¹ He hoped in 1845 to interest Härtel in publishing a new critical edition of Bach's Well-Tempered Clavier. He planned also an instruction book on fugal writing, based partly on Marpurg and Cherubini but also on his own studies.²

His sketches show numerous attempts to combine thematic materials imitatively, attempts sometimes discarded, sometimes barely visible in the final form. Of canonic passages retained in a final version, many have an engaging spontaneous quality and seem scarcely anomalous metrically, as in Example E40, outlined in Figure E40 below. The imitation of the highest voice by the lowest, after one bar, shows only supermetrical repositioning and presents only the simplest rhythmic problems for the performer.

Fig. E40 - Imitative Textures (Op. 9/14, m. 17-21 etc.)

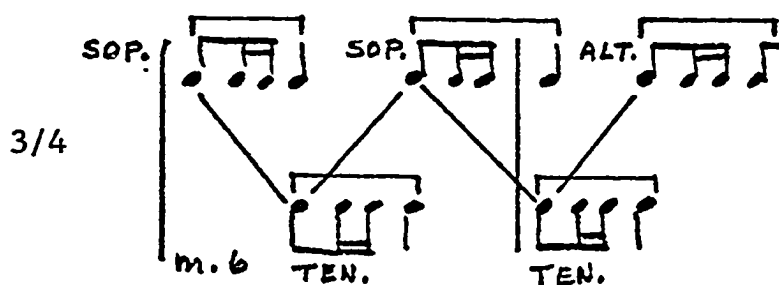


¹Roesner, v. 1, pp. 27-49.

²Ibid., pp. 41-42.

However, Schumann also wrote motifs in imitation whose overlapping is metrically conflicting (Ex. B33, Fig. E-B33).

Fig. E-B33 - Imitative Textures (Op. 2/5, m. 6-7)



Both the brief imitation shown in Example and Figure E25, and the five-bar canon of Example and Figure E41, each with imitation after one beat, display Schumann's close stretto technique.

Fig. E25 - Imitative Textures (Op. 9/1, m. 27-28)

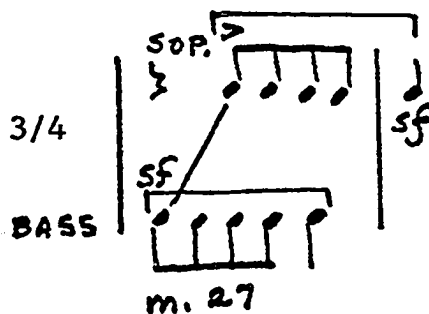


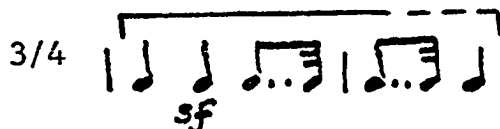
Fig. E41 - Imitative Textures (Op. 6/16, into m. 9-14)



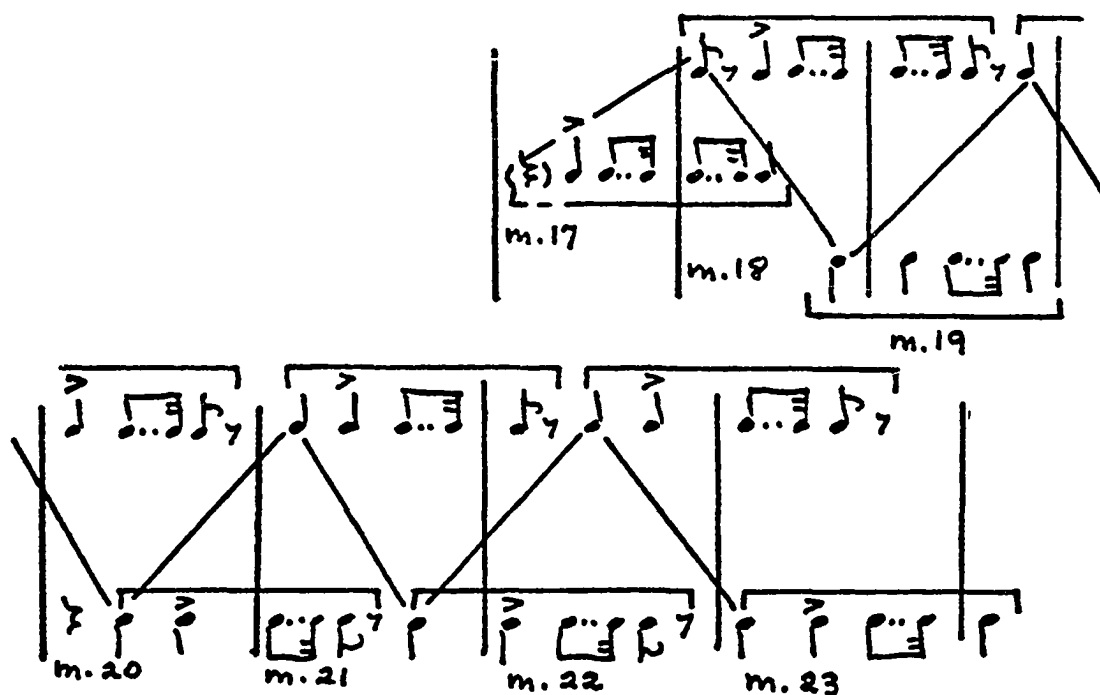
The motif of Example E42, presented initially in imitation with entries every bar, gives rise to a less symmetrically constructed stretto passage, as shown in Figure E42.

Fig. E42 - Imitative Textures (Op. 4/I, motif from m. 3; stretto outline, m. 17-23)

Motif, for symmetrical entries in m. 3,4,5,6

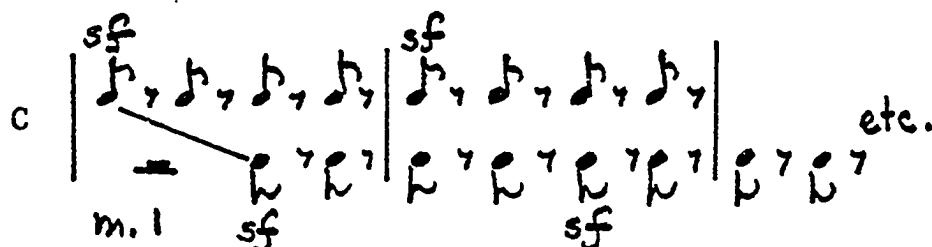


Asymmetrical entries, m. 17f



Much of Schumann's stretto texture occurs in triple meter with entries on each of the three beats. Overlapped metrical repositioning occurs also in duple meters, however, as shown in the chordal canon of Example and Figure E43.

Fig. E43 - Imitative Textures (Op. 13,
Etude IV=Var. III, m. 1-2f)



The stretto examples given up to this point are all written for solo piano. Metrically repositioned stretto entries also occur in Schumann's ensemble music. In Example E44, the motif which is used imitatively is a two-bar pattern which first occurs three times consecutively as bars [III] - [IV], [V] - [VI], and [VII] - [VIII] of Theme I of the movement. Its rhythmic character is firmly established before it is used imitatively (see Fig. E44a).

Fig. E44a - Derivation of Stretto Motif
(Op. 41#1/I, m. 34-41)

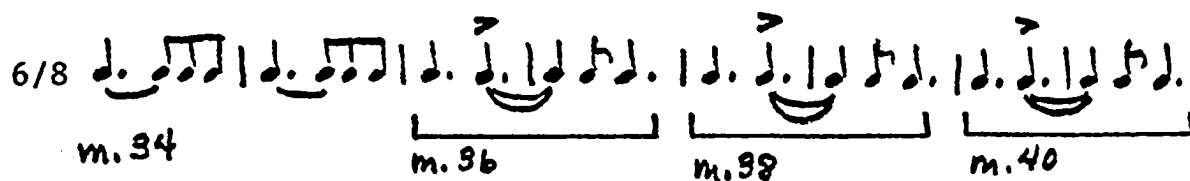
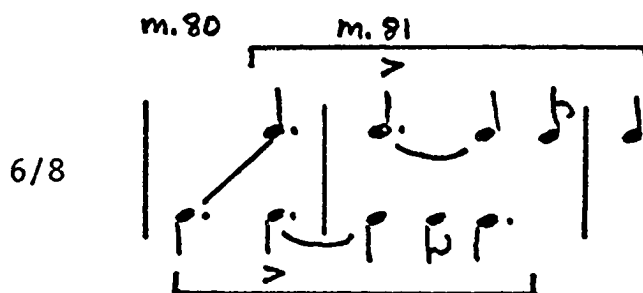


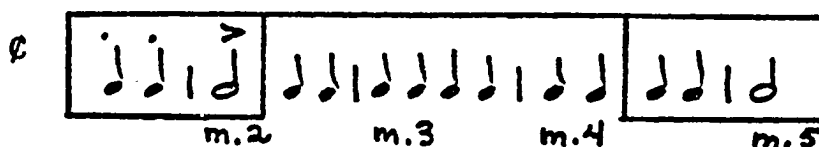
Figure E44b outlines the overlapping of this motif, an overlapping which is exploited in bars 80-91, a sizeable span.

Fig. E44b - Imitative Textures (Op. 41#1/I,
stretto outline of m. 80-81,
the basis for m. 80-91)

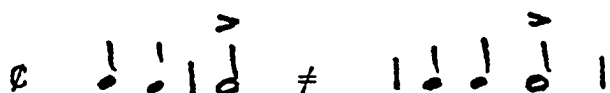


A more complex imitative scheme involves the main theme of another ensemble movement (Ex. E45a). This theme begins and ends with the same rhythmic motif. A pitch adjustment reminiscent of prescribed academic treatment for a tonal answer in a fugue is seen, comparing the opening and the cadencing of this theme. When this rhythmic motif occurs in the presentation of the whole theme in its original metrical setting, it is indicated within boxes with a connecting line, as in Figure E45a.

Fig. E45a - Derivation of Fugato Subject and
Stretto Motif (Op. 44/IV, into
m. 2-5)



Late in the movement, this theme becomes the subject of a fugato. The framework of the fugato exposition is unremarkable metrically, with entries into bars 249, 253, 257, and 263. But some of its closely related counter-material exploits the aural non-equity of contrasting metrical placement of the motif:



The repositioned version occurs in material which, except for the motif itself, is thematically amorphous; in these cases the beginning and ending motifs are bracketed, not boxed, and are connected by a broken line in both Figure and Example E45. The repositioned version also occurs in a complete entry of the subject, displaced by half a bar (m. 259-62). The three-note motifs in this case are boxed and connected by a broken line. Metrical repositioning in close stretto gains another dimension in this passage through the formal double entendre of the motif: "My end is my beginning." The central portion of this rhythmic sport is diagrammed in Figure E45b and shown in score in Example E45b.

Fig. E45b - Imitative Textures (Op. 44/IV,
into m. 249-64)

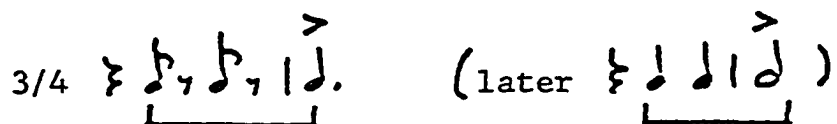
The diagram illustrates imitative textures across five measures (m. 249 to m. 264) in a common time signature (C). The textures are as follows:

- ① PIANO RH:** Starts at m. 249 with a motif of eighth notes. It is boxed and labeled m. 249.
- ② VIOLIN I:** Starts at m. 252 with the same motif, boxed and labeled m. 252. A dashed line below it indicates **VIOLIN II** also plays this part.
- ③ 'CELLO:** Starts at m. 255 with the motif, boxed and labeled m. 255. Below it, the **PIANO RH** part is shown, which is boxed and labeled **PIANO RH** and **PIANO RH+LH** at m. 260.
- ④ VIOLIN I + PIANO RH:** Starts at m. 261 with the motif, boxed and labeled m. 261. Below it, the **'CELLO + PIANO LH** part is shown, which is boxed and labeled **'CELLO + PIANO LH** and **m. 264**.

The diagram uses a dashed line to separate the upper staves (Piano RH, Violin I, Violin II, Cello) from the lower staves (Piano RH+LH, Cello+Piano LH). Arrows indicate the flow of the music and the imitative entry of each instrument.

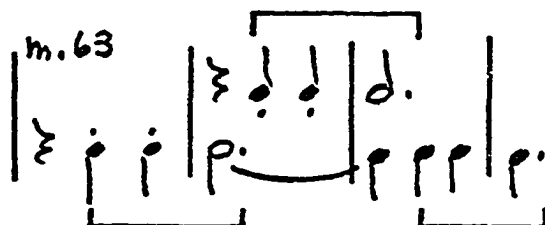
The last movement of the Piano Quartet, Op. 47, is an outstanding example of tight stretto writing. The motif is announced at the beginning of the movement (Ex. and Fig. E46a).

Fig. E46a - Derivation of Stretto Motif
(Op. 47/IV, m. 1-2)



It is developed, at one bar intervals, in metrically congruent though supermetrically non-congruent imitation, m. 63f (Ex. E46b).

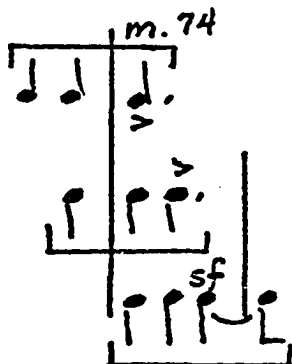
Fig. E46b - Imitation After one Bar (Op. 47/IV,
m. 63f)



Leading into m. 74, the imitative texture becomes turgid.

Each entry announcing the motif in its original metrical position sets off two followers, at one-beat intervals (Ex. E46c).

Fig. E46c - Imitative Textures (Op. 47/IV, showing
the contrapuntal context of the bar-
beat, m. 74 etc.)



This crowded stretto pattern is heard going into m. 76, 78; 107, 109; 126, 128; 141; 248; 268, 270; 283, 285, and 287. The three-entry pattern is expanded with the addition of a fourth entry, again at the interval of one beat, in the strettos found into m. 132, 134, 136, 138, and 140; the subject is now a rhythmic motto, its pitch relationships altered (Ex. E46d). The four-entry strettos beginning into m. 235, 237, and 239 retain the original melodic shape of the subject (Ex. E46e). Even the fairly detailed outline given here does not exhaust Schumann's stretto maneuvers in this Finale. It is no accident that this movement has an insistent quality.

Special Cases

A five-member pattern in 6/8

Although in general the Paganini caprices which Schumann used as the basis for the studies of Opp. 3 and 10 are quite straightforward rhythmically, an exception is found in Opus 3/4. Example E47 shows the uneven pattern of five eighth notes, which appears five times in consecutive repositioning with an accompaniment which emphasizes the rhythmic play.

Metrical repositioning in an unmetered passage

Example E48 shows repositioning within the beat as beat succession remains steady though meter is eschewed.

Metrical repositioning in rhythmic diminution

Diminution of a melody in triplets into duple subdivisions results in a specialized kind of metrical repositioning. In Example E49, the C# originally stressed and bearing a secondary accent is now unstressed and in an even less accented location.

A construction pun

The addition of a phrase's opening material as a half-measure prefix to its recapitulation creates metrical rhythmic play in Example E50.

Lengthy canon

Schumann sometimes carried canonic writing to an extreme. Example E51 shows the opening of an *étude* in which two voices are in strict canon for 111 bars. Since the imitation distance is one bar, metrical position is not changed with the device; but for the follower, the super-metrical placement is the reverse of that for the leader.

Overlapped motto themes

In several works, Schumann combines themes in the popular knowledge, or quotations of his own themes, with the prevailing material of a piece. These thematic overlappings constitute an unpredictable and ingenious style of quotation.

The Grossvater or Kehraus tune, described in a note (in Opus 9/21, m. 51) as a "17th century theme," occurs first

in his works in Opus 2/12 (Ex. E52). This tune, with its two sections contrasting both in meter and tempo, was the traditional last-dance music at a ball. Example E53 shows the overlapping of phrase-bar [VII] of Schumann's Papillons theme (Opus 2/1) with phrase-bar [I] of the triple-metered portion of the Grossvater theme, both apparently strong bars. The two themes continue out of supermetrical synchronization, with adjustments, variants, and thematic disintegration. Papillons extends through m. 68. Grossvater is recognizable through m. 66, and its harmony for a fresh repetition is recognizable through m. 68. The imitative distance, which is maintained, is six bars.

In Opus 9/21 another overlapping occurs, the Grossvater theme combined with one of its own independently-developed variants. Its interruption occurs into m. 51 (see Ex. E54), which is phrase-bar [III] of the already established variant. By m. 59 the interruption has prevailed upon the phraseology, and the overlapping ceases.

Overlapping of originally strong with originally weak bars occurs less often. A derivative of the Papillons theme of Opus 2 overlaps itself after one bar in Opus 6/3, m. 9 and 10 (Ex. E55); other overlapped entries occur at a distance of two bars where the supermetrical wrench is not so great (m. 15, 17; m. 23, 25; etc.). That same derivative is overlapped in its phrase-bar [III] by phrase-bar [V] from a theme originally from Opus 9/19 (m. 47, shown in Ex.

E56). The overlap is repeated in m. 55 with the bass maintaining ascendancy.

Changing meter to avoid changing accentual position

Example E57 shows a one-bar meter change which preserves the metrical position of a rhythmic motif relative to strong and weak beats. This situation is the opposite of metrical repositioning, in which maintaining the meter changes the accentual placement of a rhythmic motif. The example is significant in its implications, which are discussed further in the "Findings" for this chapter.

Rhythmic modulation through metrical repositioning

The meter change shown at m. 25 in Example E58 at first accomplishes the same purpose as that in Example E57: it preserves the metrical placement of a rhythmic pattern. After the position of the pattern is established in the new duple meter, the position is reversed (m. 29) as the thematic norm for the movement. This example also is of particular value in determining Schumann's rhythmic intentions; it is discussed further in the "Findings."

Relation of Hemiolic Construction to Metrical Repositioning

Many hemiolic examples fulfil the structural criteria for overt metrical repositioning. Example E59 demonstrates the constructions involved. The bass pattern  is established on the barbeats of m. 17 and 18. In this

particular case intrinsic metrical repositioning is already functioning since the quicker motion is on the stronger beat, but this factor is immaterial to the hemiolic construction.

In the following two bars a truncation of the pattern, , occurs three times consecutively, thus in three different metrical positions:    | . Are such hemioles a sub-category of metrical repositioning? Example E59 would seem a typical, if rather mild, instance of metrical repositioning if it were not for a widespread 20th-century performance tradition concerning the inflection of hemioles. This tradition mandates that where hemiolic construction is found, inflection should follow the hemiolic construction rather than the notated metrical structure. Aurally, therefore, hemiolic inflection results in a meter change.

Inflection for metrical repositioning in general is discussed in the "Findings" below. But although many examples of hemiolic construction show overt metrical repositioning, the investigator was reluctant to consider the subsuming of the entire category of hemioles into the other anomalous type before Schumann's treatment of hemioles should be isolated and analyzed. Therefore the establishment of hemiolic construction as a separate metrical anomaly was maintained, and the problem of hemiolic inflection postponed, until Schumann's hemiolic practice as a whole was examined in Chapter VIII.

Findings

The compositional device of metrical repositioning is in evidence in Schumann's works from Opus 1 to the end of his production. It is a major reason for the impression of rhythmic-metric complexity in his music. It preserves thematic and motivic unity while avoiding the monotonous predictability of general metrical congruence. Though occasionally used as a formal or developmental factor, it is pervasive as a general unifier.

There are two forms of metrical repositioning, overt and intrinsic. The repositioning which overtly relocates motifs is more conspicuous both aurally and visually than is intrinsic repositioning.

Patterns for overt repositioning may fit metrical and supermetrical modular lengths evenly or unevenly. Their repositioning may occur consecutively, comparatively, or imitatively (overlapping); all three forms are well developed in Schumann's practice. Occasionally the harmonic progression or a rhythmic motto is the conspicuously repositioned factor, but the bulk of Schumann's overtly repositioned examples show melodic manipulation in passagework, in thematic construction, and in imitative textures involving metrically anomalous entries. There is also a large number of hemiolic examples, considered in detail in the next chapter. In the late works the device of overt repositioning becomes particularly prominent in thematic construction, especially in Opus 102 and Opus 131.

Two forms of overt metrical repositioning are Schumann mannerisms. The first is the appearance of thematic material in both duple and triple metrical molds. Very seldom is only the metrical framework changed; there are usually adjustments in pitch and/or note values so that the procedure becomes an organic thematic metamorphosis. The second is stretto after one beat or after one bar, the most conspicuously anomalous repositioning on metrical and super-metrical levels. The fourth movement of Opus 47 in particular is a tour de force of close stretto.

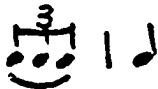
Intrinsic repositioning is a more subtle form of the same rhythmic-metric procedures manifested in overt repositioning. Intrinsic repositioning gives the initial presentation of musical material a metrical character in contradiction to its "natural" conformation. It does not depend upon aural recognition of pattern repetition and consequent aural comparison with the earlier form. Schumann demonstrates in several cases his awareness of the nature of intrinsic repositioning by making a formal point of a pattern's later occurrence in a more normal placement.

Probing the question of the inflection of repositioned patterns in Schumann's music may well begin with the general phenomenon of musical inflection. The rhythmic grouping of tones around points of accent in some ways parallels syllabic accentuation in words. A clause spoken as follows, for example, would be difficult to understand:

"COMplete works for Piano soLO, eDITed ACcording to maNU-
scripts and PerSONal reCOLlections BY ClaRA SchuMANN."
Grouping around accent--"inflection"--is a basic condition
for aural communication.

However, musical motifs, unlike polysyllabic words, have no single "correct" rhythmic shaping. The existence of a rhythmically "natural" inflection for a given motif does not in any way prevent its occurrence in anomalous rhythmic placement. Any given rhythmic pattern may fall in any metrical position; that is, any point in a motif is capable of becoming the accented spot as the organizational focus of the other components. This potentiality is the basis for the repositioning reported in this chapter.

Typically, in metrical music a preponderance of surface constructions are congruent with the metrical organization. In these normal circumstances, metrical inflection is so basic to a musician's habit that it operates unremarked. Assumptions about the energy patterns of a metrical flow on several hierarchical levels shape comprehension of the motifs, and this comprehension is reflected in performance nuancing. Dynamic discretion is, of course, indispensable in accomplishing this metrical focussing action. As Berry comments: "No meter at any level calls for crude, overt accentuation, except in parody; at no level is the analysis of metric structure to be understood as suggesting gratuitous intensi-

fication of any attack."¹ But responsibility to inflect "correctly" a simple pattern such as this:  is easily carried out. And, whether in such a natural position or in a less natural position, the original form of a motif is inflected according to the conventions of metrical notation. Metrical notation reflects metrical expectation, which in turn reflects metrical experience. Thus the character of a motif is established not only mathematically but also aurally by the notation.

What happens to that character when a motif is repositioned? There are two possibilities: that the established inflection is maintained, regardless of metrical position (like verbal accentuation, a solution which is also a possibility in music); or, that repositioning results in reinflection according to the new metrical position (a musical possibility, but a verbal possibility only in the case of single syllable words which could intelligibly receive metrical emphasis or not). Can it be determined which of the alternatives was Schumann's intention? Not positively; but in the context of Schumann's use of the conventions of metrical notation in instrumental writing over a thirty-five year period, conjecture has a relatively reliable foundation.

There are literally thousands of passages in Schumann's writing where inconspicuous pattern repositioning

¹Wallace Berry, Structural Functions in Music (Englewood Cliffs: Prentice-Hall, 1976), p. 336.

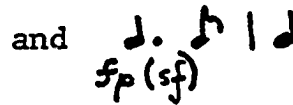
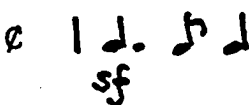
results, in the opinion of the investigator, in automatic reinflection as the score is read in the aural imagination. Like the speaking of prose to Molière's Bourgeois Gentilhomme, basic metrical nuancing is an habitual presupposition to a musician, even for mildly non-congruent constructions. This mental action of inflecting and reinflecting can be demonstrated through Example E9b, where it would hardly be suggested that the E^b -G- B^b broken triad should maintain its thetic rhythmic shape up the arpeggio because it began that way. On the contrary:



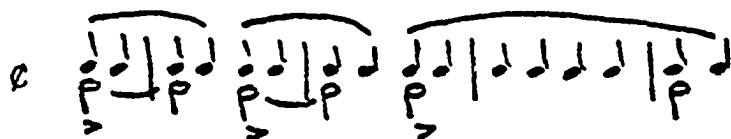
The mental action of reinflecting seems to give a twist or wrench to the pattern, causing it to be shaped or bent around a different note as main accent. The accents themselves are differentiated in a multi-level metrical hierarchy; hence there are multiple possibilities for repositioning and for reinflection. Significantly, the musical imagination tends to conserve recognition of the original pattern despite the wrench of reinflection. The basic profile of the material does not cease to exist, since pitch contour and durational proportions remain; but these structures are inflected according to the new metrical placement. Pattern recognition is essential to the sense of rhythmic play experienced with the device.

There is no evidence in Schumann's practice to suggest that any different process is taking place with more conspicuous repositioning, as in the material of Example E10b,y or as in the primary thematic use of the device in Example E2. The slurs in both examples and the staccatos in the latter encourage pattern recognition in the new metrical position, but do not challenge reinflection. In Schumann's practice in general, sometimes the change of nuance in repositioning seems merely conciliatory, a mild accommodation of a motif's characteristic elements to their unfamiliar metrical position (Ex. E16b); sometimes the formal shape of a theme depends upon the reinflection (Exs. E34, E17); sometimes the effect is vigorous syncopation (Exs. E10b,y and E29); and sometimes saturation by a single motif appearing in many metrical positions makes the changing energy patterns of the metrical flow particularly noticeable (Exs. E18a and b show differentiation within the bar, while E20 displays super-metrical differentiation). In every case there occurs a counterpointing of metrical structure with other bases of structuring: pitch conformation, rhythmic figure, harmonic pattern, and so forth. Metrical inflection enhances and dramatizes the non-congruencies rising from repositioning.

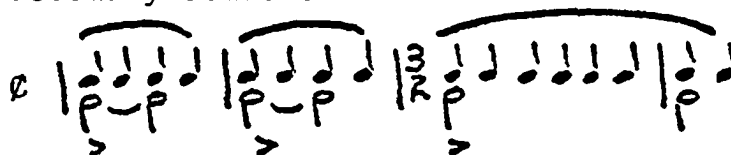
Doubts however at times arise with some diacritical indications, dynamic markings that may seem to dispute the dominance of metrical inflection. For instance, in Example E8 should the patterns



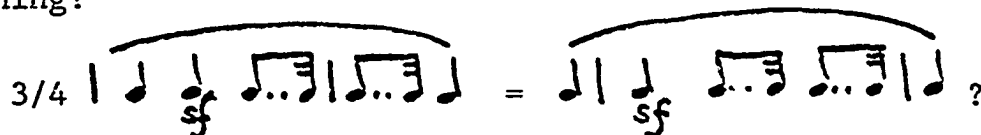
be read as rhythmic-metric equivalents to the ear? And in the intrinsically repositioned patterns of Example E29, did Schumann, out of consideration for the less sophisticated notational practice of his time, "put his barlines in the wrong place" for the pianist, so that what he notated thus:



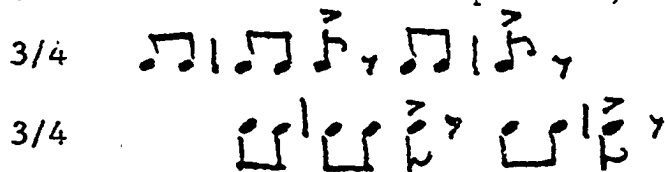
should actually sound thus?



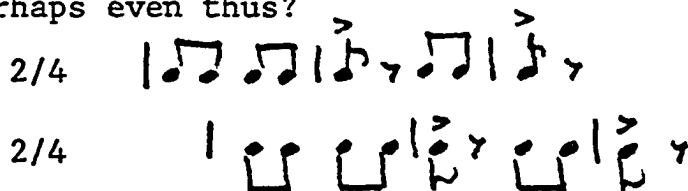
Should the doubt be extended to the initial occurrence of a pattern? For instance, is Example E42 mis-barred from the beginning?



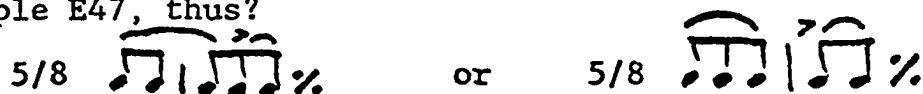
Carrying the assumption further, should overlapping meters be presumed for the canon in Example E41, thus:



or perhaps even thus?



Should Schumann have used an additive meter signature for Example E47, thus?



These questions probe the relative strength of motif structure or motif stress vis-à-vis metrical position as inflective agents in Schumann's notational practice.

In the judgement of the investigator, the rebarred alternatives above are not the rhythmic-metric equivalents of Schumann's published forms. Yet these situations do have a unique character as compared with routine metrical inflection of congruent material or compared with less striking examples of reinflection for repositioning. They seem to be palpable evidence of the functional difference between "accent" and "stress." Inflection, the grouping of a cluster of tones relative to a multi-level accentual frame, is a regional action. Stress, on the other hand, may reinforce any point in the rhythmic flow, whether more or less accented; it is a local action. This functional difference in turn casts doubt upon the supposition that metrical accent is the result merely of recurrent dynamic emphasis. This is a significant performance concern; it is discussed in some detail in Chapter XI.

When Schumann's barring is respected as indicating the primacy of metrical inflection, stress marks aid in the pattern recognition which makes repositioning a rhythmic sport. Characteristic dynamic stresses do not destroy the metrical armature, though they often dramatize the friction of the pattern's new placement. A heightened friction is also felt with intrinsic repositioning, which gives a general

impression of more precarious rhythmic balance, of greater intensity compared to more stable formations. Without metrical inflection (that is, with rebarring according to the more natural rhythmic placement) these structures would lose their sensation of risk and daring.

The actual effecting of metrical accent is not well understood. It is discussed in more detail in Chapter XI. Again it must be emphasized that recommending metrical inflection in no way advocates rude, vulgarized, or mechanical accentuation. Metrical nuancing can take place with the utmost delicacy; the influence of metrical organization does not result in forced outlining of the armature, nor does it compete with stresses on their own terms of dynamic level. Berry, in an analysis of accentual criteria, suggests "a variety of discreet ways" by which metrical structure may be made distinct.¹

A different way of approaching the inflectional problems of repositioned patterns needs to be examined here. It is sometimes proposed that the source of the sense of play with patterns inflected non-congruently with the meter (with aural meter change, in other words) is that established inflectional expectation is pleasantly thwarted for the listener, in whose mind the established metrical motion persists. This procedure is very like poetic metricality,

¹Berry, pp. 336f.

which is uni-linear and maintains the accepted accentuation of multi-syllabic words. Part of the rhythmic pleasure of a plastic line, say of iambic pentameter, is that the verbal accentuation does not slavishly follow the expected metrical organization. Thus in the final lines of Shakespeare's

Sonnet #94:

For sweetest things turn sourest by their deeds;
Lilies that fester smell far worse than weeds.

the general metric pattern does not force "lilies" to be reinflected as liLIES. The rhythm of its foot is considered to be reversed, one of the common flexibilities found at the beginning of a line of iambic pentameter.

Several responses may be made to the application of this rhythmic solution to Schumann's music. The first is that a very limited amount of overt consecutive non-congruent metrical motion can occur without the original metrical expectation being lost, either in poetry or in music. The fundamental pattern needs constant refreshing if it is to be a referential structure. In addition, clear metrical reinflection in music is wholly convincing, even if it is preceded by a contrasting metrical scheme; the listener is more apt to accept the altered shaping as a meter change, than to continue to expect a nuancing which goes unaffirmed in the continuing motion. So the restriction of brevity is a fundamental restriction on the suggested procedure, and

would exempt Schumann's repositioned passages of any length from effectively making use of such a reading (such as Ex. E43, extended metrically anomalous canon; and Ex. E51, extended supermetrically anomalous canon). Also, such a reading would not be applicable to passages which begin musical motion, for the anomaly would be taken as the norm (as in Exs. E9b, E14x, and E17). Furthermore, such a reading disregards the rhythmic whole in a texture where pattern repositioning occurs simultaneously with constructions continuing the established metrical motion (Exs. E2, E15a,y and E19a). Most important, applying the policy of motif inflection over metrical inflection would wreak havoc with many of Schumann's passages which only become clear in their rhythmic intention if metrical inflection is honored. For instance, maintaining motif inflection would nullify the formal point made in the three-voice stretto of Example E32c; would make the main theme of Example E33 unintelligible and destroy the rhythmic dénouement accomplished as the Introduction closes into the movement's Exposition; would make the duple/triple procedure shown in Example E37 meaningless; and would confuse the structural downbeat at the formal return shown in Example E50. In short, Schumann apparently does not intend aural meter change for motif repositioning; he evidently does expect his barlines to have an overt effect on the inflection of the musical material, whether that material is congruent or non-congruent

with the meter. He has demonstrated that when the inflection of a motif is to be preserved in a potentially non-congruent position, he will notate a meter change (Ex. E57).¹ He has also demonstrated his deliberate reversal of established motif inflection, in Example E58; the reversal is accomplished through the inflectional demands of metrical notation.

Another approach may be appropriate to that rhythmic solution which advocates maintaining motif inflection while the "old meter runs in the mind." There is the possibility that a semantic confusion exists in this verbalization of what happens with the inflection of repositioned motifs. For instance, in Example E10b,y, the three-chord figure is patently the subject for some "rhythmic mischief," in Schauffler's phrase.² A spirited reading of the three-bar phrase will probably emphasize the figure's repositioned beginnings:

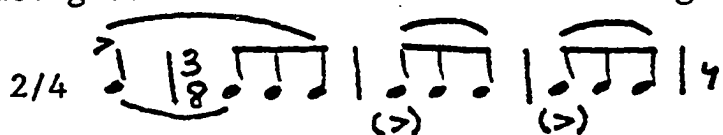


and it may be thought that such a reading preserves the metrical shape of the motif in its new placements. Yet does

¹His general use of meter change is discussed in Chapter IX.

²Schauffler, Florestan, p. 315.

this in fact give the same effect as rebarring?



The investigator suggests that, instead, the felt discrepancies between these two versions provide a further demonstration of the difference between accent and stress. It is also conceivable that to say "During the repositionings, the old meter runs in the mind" is an attempt to describe the action of reinflection which has been so laboriously outlined above. Expressing the aural reality of music accurately is unavoidably difficult.

Schumann's assumption of metrical reinflection for metrical repositioning is sometimes the fundamental if transparent premise of a serious passage, and sometimes the basis for good-natured rhythmic foolery. Whatever the affective character of these passages, there is no indication in his scores that he expected motif inflection to dominate metrical inflection. So, with the question of hemiolic inflection held in abeyance until Chapter VIII, the investigator concludes that the device of metrical repositioning in Schumann's usage indicates the primacy for inflective purposes of differentiated metrical organization. The metrical inflection of metrically non-congruent patterns enhances the conflict of constructions, increasing the sense of tension or complexity in such passages.

CHAPTER VIII

REPORT ON HEMIOLIC CONSTRUCTION

Hemiolic construction is a major component of Schumann's anomalous rhythmic-metric practice. This anomalous type is characterized by surface motivic construction which contradicts the expected metrical grouping of six impulses. Examples for this chapter are found in Volume II, Appendix F.

By far the more frequent form in Schumann's writing shows three duple inner groups where two triple inner groups were expected (hemiole). However, the other possibility, two triple inner groups where three duple groups were expected, does occur (reverse hemiole). Example Fla shows hemiolic construction; Flb shows reverse hemiolic construction.

In unanimous hemiolic construction, all strands of the texture exhibit the anomalous division (Ex. Fla). In a partial hemiole, one or more strands of the texture maintain the expected division, in structural contradiction to the anomaly (Ex. Flb).

To simplify recognition of hemioles in the examples and in measure references, hemiolic construction is marked with gapped brackets, thus: $\lceil$ $\rceil$. These brackets

indicate where the span of six occurs, in either hemiole or reverse hemiole. The groups within the hemiolic matrix are marked with brackets, thus:  (hemiole) or  (reverse hemiole). These inner groupings may or may not exactly contain the motivic gesture of the rhythmic patterns, just as the hemiolic gesture often does not exactly equal the bracketed hemiolic matrix.

Bases for Anomalous Inner Grouping

Hemioles are constructed both with overtly repositioned patterns and with less obvious anomalously grouped material. Schumann's hemioles show a preponderance of conspicuous repositioning.

Repetitive patterns

It is usually a complex of factors, not just one, which draws attention to hemiolic grouping. Only the most salient features of inner division are listed here; they are sometimes supported, sometimes opposed by other aspects of the structure.

Repeated rhythmic motif (Ex. F2)

Repeated harmonic progression (Ex. F3)

Repeated register change pattern (Ex. F4)

Unanimous sequences (Ex. F5)

Oblique wedge formation (Ex. F6)

Two-note slurs, hemiole beginning on
the barbeat (Ex. F7)

Two-note slurs, hemiolic melody beginning
with the second inner group (Ex. F8)

These repetitions need not be carried through exactly. In Example F9a, the second and third inner groups of the melodic sequence are contiguous, forming one scale line, while the first includes an harmonic embellishment which is not replicated. Furthermore, it is the harmonic rhythm which separates the third inner group from the second. Nevertheless the hemiolic effect is strong. In a cadential variant of this hemiole, Example F9b shows the third inner group of the melodic sequence inverted, with melodic shortening; the harmonic rhythm also moves more quickly in the third inner group. Schumann in one case cast as a hemiole the motto in falling fifths which was always a message to Clara; see Example F10, m. 86-87.

Less obvious anomalous grouping

It is more difficult to categorize these hemioles; each occurrence sets its own pattern. Often the common factor is simply sonority onset at the hemiolic time interval. Sometimes the accompaniment of such a melody will show repositioned pitch patterns.

Harmonic movement with each inner group (Ex. F11)

Scalewise melody, beginning with a consonance (Ex. F12)

Scalewise melody, beginning with a dissonance (Ex. F13)

Hemiolic melodic profile with
arpeggiated accompaniment shift (Ex. F14)

A particular hemiolic profile occurs again and again, an archetypal hemiole in melodic-rhythmic structure. There are numerous variables in its harmonic treatment, phrase placement, and articulative rests. A simple form is shown in Example F15. Schumann uses this pattern so frequently that it constitutes a mannerism. It is discussed more fully under that heading.

Variety in Formal Treatment

Schumann's hemioles are not restricted to any particular formal area: The circumstance of hemiolic potential is simply triple metrical division--of the bar, of the beat, or of the half-beat.

Hemioles to begin

Historically, hemioles have most often been a change in metrical motion already under way; however, Schumann does not hesitate to begin either a short piece or a substantial symphonic movement with hemiolic motion. Example F14 shows unanimous hemioles to begin, and Example F13 shows partial hemioles to begin. In both cases the hemioles are thematic.

Hemioles in relation to the cadence

A hemiole may close into the cadential tonic (Ex. F3), or may precede an embellishing cadence, then a full cadence (Ex. F16). The hemiolic construction may occur within the cadential tonic harmony itself (Ex. F17). The hemiolic length may coincide with cadential chords $I6-V_7-I$ ₄ (Ex. F18), or with $II6-V_7-I$ ₅ (Ex. F19). A specific division of this category is the Polonaise cadence, in which the tonic is delayed until the second half of the third hemiolic inner group (Ex. F20). The Polonaise cadence is discussed as a lilt formation in Chapter IV. The waltz caesura cadence, with its upbeats into the following phrase, is also a form of lilt and of hemiolic construction. In this construction the cadence is accomplished at the beginning of the second inner group (Ex. F21).

Expansions of the hemiolic pattern

The boundaries of a hemiolic gesture are not necessarily the six units of its basic metrical module. There may be an upbeat into each inner division (Ex. F5); or the hemiolic matrix may be preceded by a complete anomalous grouping which is an upbeat, as in Examples F22 (hemiole) and F23 (reverse hemiole). There may be an extra anomalous group following the hemiolic matrix, as in Examples F24 (solo piece) and F25 (ensemble piece). There may be two added anomalous groups (Ex. F26). In this particular

case, the additional groups break the metrical framework, creating a bar of unacknowledged 4/4 meter in the otherwise 3/4 progress. In one case, a hemiolic passage has both an extra upbeat group and an extra afterbeat group, shown in Example F27.

Hemioles of less than a bar in length

The full hemiolic pattern may span less than a bar but more than a beat (Ex. F28). Each of these hemioles has an appended extra anomalous group as well.

Consecutive hemioles

Although isolated hemioles do occur in Schumann's writing, it is more common for him to repeat hemiolic construction consecutively for a conspicuous length of time. Example F29 shows twelve consecutive hemioles.

Hemioles metrically out of phase

The hemiole usually begins with a strong beat; therefore it is usual for hemiolic construction which is the length of a bar to occur between barlines, that is, to be in phase metrically. However, this is not always the actuality. The accompaniment of Schumann's *étude* on Paganini's Caprice #2 features many hemioles crossing the barline, one of which is shown in Example F30. Another example of crossing the barline with hemiolic construction (Ex. F31) shows the hemiole as counter-melody to an established fugue subject.

Hemioles supermetrically out of phase

The hemiole normally begins with a strong bar:

Phrase-bars [I] - [II] not [II] - [III]
 3/4 

When the hemiole begins with a weak bar, it is out of phase supermetrically. A substantial number of Schumann's hemioles are placed thus out of phase with the supermetrical structure. Example F32 shows a typical case:

 [II] - [III]
 m. 10 - 11

Example F27 is also out of phase, as follows:

 [IV] - [V] - [VI] - [VII]
 m. 28 - 29, 30 - 31

Example F33 shows an out of phase hemiolic pattern in a canonic piece. See the soprano:

 [II] - [III]
 m. 6 - 7

When the tenor, following at the interval of a bar, begins

the hemiole, it is in phase:

$$\begin{array}{ccc} \boxed{\text{III}} & - & \boxed{\text{IV}} \\ \text{m. } \lceil 7 & - & 8 \rceil \end{array}$$

Overlapped hemioles

As shown in the preceding example, some out of phase hemioles occur in the course of overlapping hemiolic construction, in rhythmic stretto. With these overlapped hemioles, the interior groups are not synchronized vertically. The imitating hemiole begins at the mid-point of the initial hemiole, and one or the other is necessarily out of phase.

Example F33 has shown overlapped hemioles in strict imitative writing, but the structure more normally occurs as brief developmental imitation in a piece of lyric character (Ex. F34):

$$\begin{array}{ccccc} \text{m. } \lceil 13 & \rceil \lceil 14 & \rceil \lceil 15 & \rceil & \\ & \lfloor & \lfloor & \lfloor & \times \end{array}$$

Schumann's sketch for Opus 97/I¹ shows a similar thematic imitation beginning in m. 58 in a voice which was not retained for the final version but whose rhythm is still visible, both in m. 61 and in the imitation of the second phrase by winds from m. 63f.

¹Roesner, v. 1, pp. 211-12, 225-26; v. 2, p. 6.

In the examples of overlapped hemioles found in the searches, the initiating hemiole is out of phase half the time. Schumann evidently felt that either supermetrical position was adequate to establish a phrase for imitation.

Thematic and non-thematic hemioles

When a theme begins with a hemiole, hemiolic character is necessarily prominent in that piece. Initial thematic hemioles are shown in Examples F13, F14, F15, and F8. What may seem to be a thematic hemiole in Example F11, m. 205-212 (solo part), is in reality a developmental variant of the lilt formation of the theme's inception, shown with its upbeats into m. 189 (orchestral strings). Thematic reverse hemiole beginning a piece saturated with the device is shown in Example F35. Another conspicuous occurrence of reverse hemiole at the beginning of a movement is found in Example F36.

However, a hemiole may occur somewhat later in a theme and still constitute an intrinsic part of the thematic material. Such non-initial thematic hemioles are shown in Examples F37, F38, F39, and F40.

Hemiolic elements may be strong from the beginning although not part of the melody, as in m. 1-2 and 5-6 of Example F41. Also, hemiolic elements may be absent at the beginning but figure strongly in developmental areas, as in Example F34.

On the other hand, hemiolic construction may appear almost incidentally, not greatly influencing the rhythmic character of a movement, as of Opus 17/III in which Example F12 appears.

Hemiolic waltz bass variants

In some cases Schumann avoids the cliché of a waltz accompaniment pattern by resorting to hemiolic construction. Opus 9/1 shows a particular concentration of these maneuvers. A few of those strategies are shown in Example F42, including the rare slant hemiole of F42c and d.

Special Cases

Hemiolic heterophony

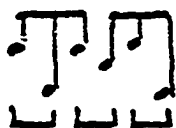
Occasionally a hemiolic accompaniment pattern will follow a melody in a way reminiscent of heterophonic techniques, though less random. Schumann wrote two variants of the passage shown in Example F43a, both involving alternative beat divisions, with the heterophonic treatment of the theme intact (Ex. F43b and c).

Nested hemioles

Nested hemiolic construction occurs when a hemiole contains within itself two or more quicker hemioles. Though the phenomenon is not frequent in Schumann's writing, Example F44 is not a unique instance. The construction

may be outlined as follows. The first six eighth notes in the right hand part of m. 20 and of m. 24 constitute the matrix for hemiolic construction. Their pitch pattern contradicts the metrical frame of triplets:

written



a metrically
more normal
alternative

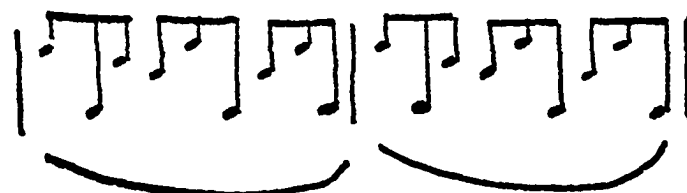


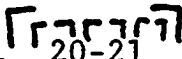
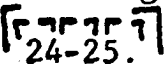
The hemiolic pattern is repeated twice, forming three consecutive hemioles in eighth notes in m. 20-21 and again in m. 24-25. Simultaneously, the six quarter-note beats of m. 20-21 and of m. 24-25 also constitute the matrix for hemiolic construction. In the eighth notes, their pitch pattern contradicts the 3/4 metrical armature:

written



a metrically
more normal
alternative



Thus three complete hemioles are seen to be nested inside one large hemiolic construction, in m.  20-21 and in m.  24-25.

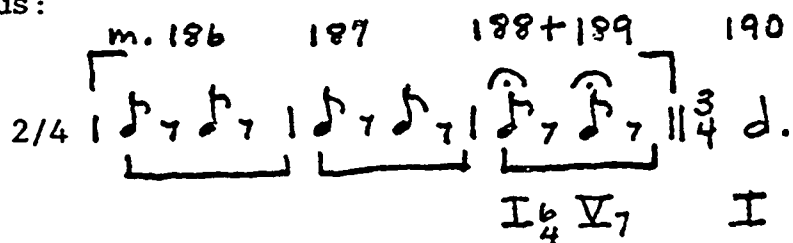
Brief cadential meter change following a hemiole

The cadential area is often the site of Schumann's anomalous procedures. In two instances (Exs. F45 and F46), a pre-16 hemiole in 3/4 closes into duple meter before coming to rest on tonic in a resumed 3/4. The eight quarter-notes of duple meter make two bars of C in Example F45, but four bars of 2/4 in Example F46. In both cases, the interpolated meter is entirely contained within the phrase. Such rhythmic embellishment supports Schumann's harmonic embellishment of the standard cadential chords. But from the standpoint of rhythmic gesture the inserts of differing metrical organization function differently in these two examples.

In Example F45 the meter change is accomplished through $\text{d.} = \text{d}$. This results in a symmetrical eight-bar phrase into the cadence (m. 84 into 190), with $C = 2 + 2$. The duple metrical division creates a slowing of motion into the cadential tonic.

Example F46 is especially significant in that the meter change is for the purpose of accomplishing true hemiolic inflection. The quarter note remains stable into the meter change. The third of the new duple groupings has a written-out augmentation. Schumann might have notated

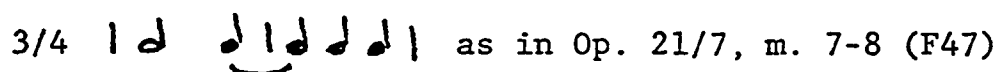
it thus:



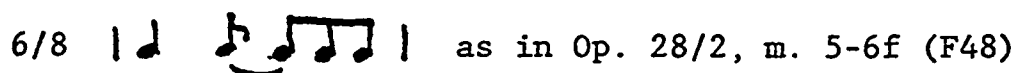
Hemiolic Mannerism: A Characteristic Pattern

A certain pattern of rhythm in a melodic phrase is found often in Schumann's music, so often as to be apparently a favored structuring of triple motion to which he turned easily and habitually (Ex. F15). The pattern involves grouping by twos within a triple framework, and is clearly related to hemiolic construction, though the harmony and other factors may reinforce or may contradict the hemiolic formation.

A simple form of the pattern is shown in Example F47 in 3/4:



Example F48, in 6/8, shows the pattern used three times consecutively:



A relative equivalency of two bars of 3/4 to one bar of 6/8 (or other structural parallels) is assumed. For easier pattern identification, subsequent figures are given in 3/4.

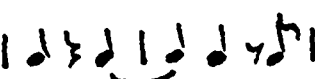
The sense of upbeat into the following material may

be heightened by dotting which is followed by the quickest motion leading across the barline:

3/4  as in Op. 9/19, m. 1-2 (F49);
Op. 97/I, m. 1-2 (F14); and
Op. 54/III, m. 205-206f (F11)

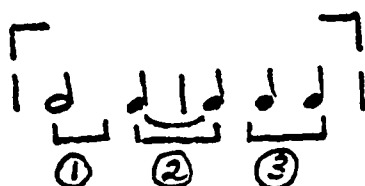
The articulation in sound may vary. Three variants are shown:

3/4  as in Op. 12/2, m. 2, 4 (F40)

3/4  as in Op. 9/19, m. 57-58f (F50)

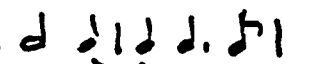
3/4  as in Op. 54/III, into m. 189-190f (F11)

If the pattern is considered as the three inner groups of a hemiole,

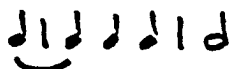


then a further variance is found in the specific division of the hemiole which begins the melodic phrase. The melody may begin:

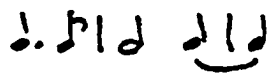
with the 1st inner group

3/4  as in Op. 9/19, m. 1-2f (F49)
and in Op. 97/I, m. 1-2f (B51)

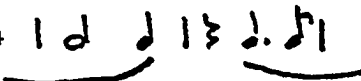
with the 2nd inner group

3/4  as in Op. 12/4, into m. 61-64 (F51)

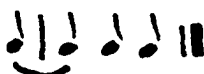
with the 3rd inner group

3/4  as in Op. 54/III, into m. 229,
into m. 231 (F52)

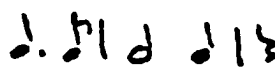
Another variant involves the possibility of the pattern's division between two phrases, so that its first bar, as the third bar of the supermetrical phrase structure, falls into a lilt, and its second bar is an upbeat bar:

$[III] - [IV] - [I] \text{ or } [V]$
3/4  as in Op. 124/4, m. 3-4, 5-6 (F53)

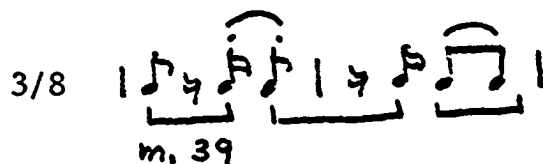
In a few cases, the pattern itself cadences, as shown in the Polonaise cadence of Example F54:

3/4  as in Op. 120/III, Trio,
m. 111ⁱ-112ⁱ (F54)

The apotheosis of waltz rhythm, as exploited in Ravel's La Valse in the 20th century (Ex. F55), shows particularly clearly in Schumann's characteristic pattern of Example F56:

3/4  as in Op. 109/8, S^o RH, into
m. 59, 61, 63 etc. (F56)

An openwork variant of the pattern, which has short upbeats to both second and third inner groups, is found in Example F57, twelve times consecutively in the Secondo part, m. 39-64.



In Example F58, the simple basic pattern first forms a suspension upon its tied-over barbeat (into m. 40--see the Bassoon part, with F on the first beat), but four bars later it only implies a suspension (into m. 44).

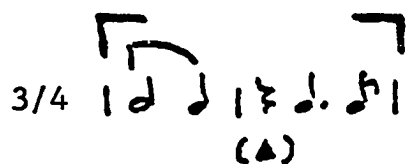
Other occurrences of this pervasive melodic/rhythmic pattern have been shown in Examples F16 (m. 106-107); F20; F21; F30; F34; F37; F38; F39; F40; and F44 (soprano, m. 16-17). In addition, the pattern is suggested between bass and tenor voices of Example F29, m. 88-91, and m. 94-99; then in the alto melody, m. 106-109.

Relation to other anomalous types

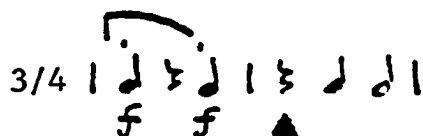
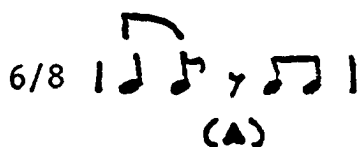
The characteristic structural pattern discussed in this section is basically hemiolic, but the examples show the influence of all but one of the six investigative types. Only consistent metrical displacement is not represented.

The empty barbeat and the lilt are often found together in the characteristic pattern, the barbeat rest (or sometimes an almost empty barbeat) punctuating the

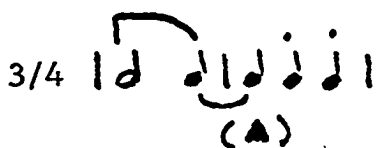
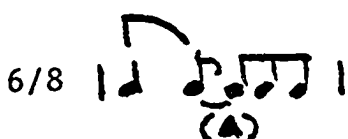
lilt formation:



F53 - Lilts m. 3, 5; (▲) m. 4, 6

F21 - Lilt m. 24, ▲ m. 25ⁱ

F40 - Lilt and (▲), m. 2, 4

F54 - Lilt tied over (▲) into a Polonaise cadence, m. 111ⁱ-112ⁱ; lilt tied over, cadencing after the characteristic pattern, m. 110ⁱ-111ⁱ

F37 - Tied-over lilt, violin m. 2, 5; piano m. 7

or

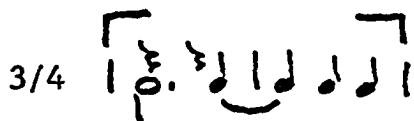


F49 - Tied-over lilt, m. 1-2

Harmonic anticipation may occur within the second inner group of the pattern: with many repetitions, as in Example D86, into m. 60 etc.; with emphasis by a sudden dynamic drop on the barbeat, as in Example F59, m. 21-22; or with sf on the anticipation itself, as in Example F60, m. 159-60. Implied suspension is found within the second inner group in Example F16, into m. 105 and 107.

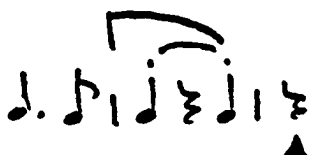
Metrical repositioning is apparent in the partial hemioles of Examples F22, F13, and F1b; the unanimous hemioles of Examples F1a, F5, and F27; and the nested hemioles of Example F44, m. 20-21, 24-25. Metrical repositioning is particularly noticeable in overlapped hemioles, as in Example F34, m. 13-14-15, and also in metrically out of phase hemioles, as in Example F30, into m. 36.

In the instances above, the rhythmic formulation of the characteristic pattern, once manifested thematically, is stable. There is one of Schumann's themes, however, which shows an unique flux of rhythmic construing. In Theme II of Opus 54/III, the characteristic pattern is used initially as a thematic harbinger (shown in Ex. F61a) in the transition passage leading to the theme itself:



F61a - Solo piano LH, m. 181-82, 183-84

The hemiolic construction is counteracted by the pitch contour of the solo piano RH, which peaks mid-hemiole. The theme itself is first presented in the strings, beginning with the upbeats of the third inner-group of the pattern:

3/4  F61b - strings, into m. 189
and alternate bars thereafter

The first bar of the pattern is an openwork lilt, followed by an empty barbeat. This is La Valse form of the pattern (Exs. F55 and F56). It is repeated eight times, without, however, any upbeats leading into the piano soloist's version of the theme, its ninth appearance.

With this solo entrance the articulative style becomes sustained; the swell into the barbeat at mid-hemiole (into m. 206) suggests that the middle inner group of the unanimous hemioles are propulsive, upbeat to downbeat within themselves, certainly no longer lilt.

3/4  F61c - solo piano, m. 205-206 ...
etc.

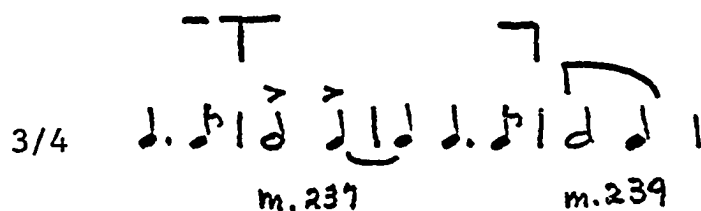
bass: b a# g#

These swelling passing chords and the sustained style help to call attention to the three-note falling scale motif which is prominent in this theme. This motif, binding the bass of m. 205-206, the soprano of m. 207-208, etc., is actually the monotheme of the concerto as a whole (see Op.

54/I, m. 4).

Metrical repositioning is particularly noticeable in the piano part of the succeeding passage, where the orchestra reverts to the lilt form of the theme (Ex. F61d). This piano figuration creates almost empty barbeats where the original presentation had wholly empty barbeats (m. 190 cf. m. 214).

Schumann's adroit development of this thematic rhythmic pattern continues in m. 229-31 etc., where the sustained form is followed by the filled-in lilt form in the same phrase (Ex. F61e):



In a development of this theme, the two-beat upbeat pattern of the theme gives rise to slant harmony, as shown in Example C50 and discussed on p. 98. The openwork lilt form of the theme is heard developmentally in the orchestra (Ex. C50, into m. 255 and following).

Schumann's treatment of this theme from Opus 54/III illustrates rhythmic mutability for a single theme, as his treatment of the characteristic pattern shows rhythmic mutability for a single construction. It is apparent that the characteristic rhythmic pattern has a range of latencies, all to some extent anomalous, which Schumann uses either

consistently or mutably.

The Inflection of Hemiolic Constructions¹

On the basis of construction alone, hemioles are a sub-division of the category of metrical repositioning, and they include both overt and intrinsic forms. Yet a performance tradition of some standing, which requires a hemiole to be inflected according to its own construction thereby countermanding the notated meter, must be probed. This tradition of hemiolic inflection may seem to be confirmed by the cases of hemiolic stress marks, sforzandos, circumflexes, etc. as in Examples F62 and F29, which call ready attention to the anomalous construction. However, in Schumann's hemiolic writing there are factors, both formal and diacritical, which contradict hemiolic grouping and suggest metrical inflection instead.

Indications of formation or position

Certain aspects of Schumann's formation of hemioles and his placement of them in the metrical or supermetrical framework have a bearing on the question of inflection.

¹It has been assumed throughout this investigation of the intended inflection for Schumann's hemiolic constructions that the alternatives are either hemiolic inflection or metrical inflection; a musical texture presents a unified rhythmic Gestalt. A divided inflection for a divided texture is theoretically a possibility, but only in ensemble music. This is demonstrated and discussed in its relation to Schumann's music in Chapter XI.

Metrical factors in partial hemioles. The existence of partial hemioles is in itself a significant factor. If Schumann had written only unanimous hemioles, the question of inflection would have been less complex and possibly more difficult to reconstruct at a century's distance. But the proportion of partial hemioles in his writing is large compared to the number of unanimous hemioles. In the texture of a partial hemiole, those elements which make it partial are the elements which reinforce the notated meter.

Accompaniment patterns reinforce the meter:

- the accompaniment divides the 6/8 bar into halves in Example F40, m. 5 and 6
- the viola pitch pattern repeats with each bar in Example F63, m. 153-56
- the accompaniment divides the 6/8 bar into halves, even though mid-bar is marked by a rest, in Example F37, m. 2, 5, and 7
- the waltz-like accompaniment pattern repeats in each bar in Example F64
- the bass marks each barbeat, while a bar-long rhythmic pattern occurs in the melody, in Example F56, m. 59-60

Pitch climax reinforces meter:

- accompaniment patterns reach their height at mid-hemiole in Examples F65, m. 8; F66, barbeat of m. 8; and F61a, barbeat of the Piano RH, m. 182 and 184

Melodic sequences reinforce meter:

- the bar-long sequenced pattern of the melody in Example F67, m. 5 and 6, contradicts the hemiolic accompaniment

Harmonic rhythm reinforces meter:

- the harmony changes at mid-hemiole, half-way through the second interior group, in Example F19, barbeat of m. 8
- a suspension occurs at each mid-hemiole of a series in Example F34

Static harmony in unanimous hemioles. A certain number of Schumann's unanimous hemiolic formations have no root change whatsoever to reinforce the hemiolic grouping, as in Examples F49 and F68. Harmonic change is a powerful hemiolic factor, and its absence dilutes the sense of non-congruency in this anomalous construction.

Placement of hemioles in relation to the bar. The "normal" hemiolic matrix is usually two bars, one bar, or half a bar long, positioned clearly within its metrical frame. In these positions the question of inflection is the question of whether or not to honor the alternative groupings (three duplets where two triplets were expected, or vice versa). But Schumann occasionally places hemioles where their alternative inflection would be a major disruption to the rhythmic flow. For example, in Example F30, into m. 36, a hemiole crosses the barline, resulting in the barbeat falling at mid-hemiole. In another instance,

Example F69, the onset of the hemiole is ambiguous. Hemiolic inflection begun on the second beat of m. 54 would throw the balance of the passage into confusion. The hemiole in Example F28 spans two beats of a three-beat bar; even more anomalously, these are the second and third beats.

Placement of hemioles in relation to the supermetrical structure. The existence of supermetrically out of phase hemioles (see p. 183) calls hemiolic inflection into question, since the phrase structure will supply a sense of downbeat at the mid-point of the second hemiolic inner grouping.

Also significant is Schumann's use of overlapping hemioles (see p. 184), since the onset of the second hemiolic pattern itself counteracts the alternative inflection. Of Schumann's stretto hemioles, some begin in phase and some begin out of phase; there seems to be no preference. This apparently indicates that to the composer the whole hemiolic stretto construction is subject to metrical inflection as a matter of course.

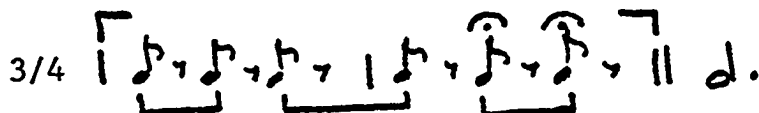
In examples of overlapping hemioles, Example F33 shows the soprano beginning out of phase in a canonic piece; Example F34 shows the out of phase bass as follower in the imitation; in Example F70 the out of phase bass leads into the stretto.

Example F71 is somewhat more complex. The out of phase hemiole in the melody is accompanied by two-bar

motivic phrases which overlap at one-bar intervals, a strongly metrical inflectional clue.

Slant hemioles. Usually Schumann's overlapped hemioles have the same material in leader and in follower. However, in Example F72 the overlapped hemioles are of completely different rhythmic profile and function, one melodic, the other a manipulation of the waltz bass pattern. Such overlapped hemioles are in fact slant hemioles. They would have no congruent equivalencies in sixes, were they to be given hemiolic inflection. It is likely that metrical inflection prevails.

Meter change for hemiolic inflection. In Example F46 Schumann uses hemiolic material consecutively under two different meter signs. The unanimous hemioles of m. $\lceil 180-81 \rceil$ and m. $\lceil 184-85 \rceil$ are in $3/4$ meter. The hemiole of m. $\lceil 186-187-188+189 \rceil$ is in $2/4$, a bar for each inner division with the third division augmented, a written out ritard. If m. $\lceil 180-181 \rceil$ and $\lceil 184-185 \rceil$ were inflected according to their hemiolic construction, there would have been no need to change meter for m. 186-189; the score could have remained in $3/4$ notated as follows:



That Schumann did not notate it thus, but changed meter for just one of the hemiolic constructions, points strongly to an assumption that he expected metrical inflection to be maintained in all cases, whether the construction be congruent or not.

Rhythmic momentum relative to hemiolic construction.

By performance tradition, much of the effect of rhythmic refreshment with hemiolic inflection is the result of established metrical momentum pulling against the brief hemiolic occasion. Three factors in Schumann's hemiolic practice are relevant to the question of momentum.

First, Schumann is not sparing of consecutive hemioles. The construction is a characterizing, not a contrasting construction in many cases. Of unanimous consecutive hemioles, the following are prominent examples:

Op. 16/5	m. 86-109	12 hemioles	(see Ex. F10 and F29, continuous examples)
Op. 21/3	m. 103-138	18 hemioles	(a portion shown in Ex. F73)
Op. 63/II	m. 38-43	4 hemioles	(see Ex. D46)
Op. 85/9	m. 39-62	12 hemioles	(portion shown in Ex. F57)

Of partial consecutive hemioles, the following are prominent examples:

Op. 6/6	m. 28-39	12 hemioles	(end of this passage shown in Ex. F5)
Op. 12/1	m. 1-36	36 hemioles	(beginning shown in Ex. F13)
	m. 39-74	36 hemioles	
	m. 77-88	12 hemioles	
Scherzo, Anh. Op. 14	m. 64-71	8 hemioles	(see Ex. F43)
	m. 80-91	6 hemioles	
	m. 96-103	4 hemioles	
Op. 28/2	m. 5-15	11 hemioles + overlap	(portion shown in Ex. F34)
Op. 109/8	m. 59-70	6 hemioles	(beginning shown in Ex. F56)

In addition, there is the almost total saturation of the 478 bars of the original Presto of Opus 22 with hemiolic formations, some unobtrusive, some predominant (portion shown in Ex. F41).

Second, Schumann is willing to begin rhythmic movement with the hemiolic anomaly. Already cited are these examples:

Op. 9/19	unanimous hemiole	(Ex. F49)
Op. 12/1	partial hemiole	(Ex. F13)
Presto, Anh. Op. 22	partial hemiole	(Ex. F41)
Op. 68/15	unanimous hemiole	(Ex. F15)
Op. 97/I	unanimous hemiole	(Ex. F14)

Third, Schumann writes hemioles which have the briefest possible establishment of the normal metrical motion--a quarter note upbeat plus the barbeat. This oddity is seen in

Op. 6/10 reverse hemiole (Ex. F35)

Op. 120/I reverse hemiole (Ex. F36)

In the first case above, the intent of the quarter note upbeat, otherwise enigmatic, seems to be to signal that the rhythmic organization is indeed in 3/4, in spite of non-congruencies. In the latter case, furthermore, the upbeat is all-tied across the barline, hardly a momentum-establishing procedure.

If differing hemiolic and metrical inflections were maintained with extended passages of consecutive hemioles, the long-term repetition would dull the contrast. Similarly, to begin with an anomaly does not present it in an anomalous light. Nor is metrical refreshment accomplished with the norm scarcely declared before the differing metrical organization sets in. In these three ways Schumann's practice regarding rhythmic momentum seems to support general metrical inflection.

Diacritical indications

In addition to the constructional indications discussed above, a variety of inflectional clues are found

in the score notation.

Mid-hemiole emphasis. A mark of dynamic emphasis in any strand of the texture at the exact mid-point of a hemiole (half-way through the second inner group for a standard hemiole, upon the middle of the second group of three for a reverse hemiole) reinforces the metrical framework. Such emphasis is a reminder of metrical inflection, and suggests highlighting of the non-congruency by utilizing both stress and accent in a metrical inflection of hemiolic material. Examples are given of various accent markings found at mid-anomaly:

f	Ex. F40, m. 5, 6
sf	Ex. F65, m. 8
~	Ex. F74, m. 10
~	Ex. F75, m. 778
Λ	Ex. Fla, m. 38 to 39
Λ Λ	Ex. F61c, m. 205-206
Λ Λ	Ex. F36, m. 2, 3 (reverse hemiole)
sf p D	Ex. F59, m. 21-22 (emphasis by sudden dynamic drop: "reverse" emphasis)
>	Ex. F73, m. 123-26 etc.

Slurs marking half-hemioles. Slurs marking half-hemiole lengths reinforce the meter rather than the hemiolic construction, as in Example F57 in the Primo part, m. 39-40.

Bowings. A strongly anti-hemiolic bowmark is shown in Example B27a, m. 189, 191, etc. It binds the first and third beats under one stroke, as a lilt. See also Example F61d. The construction is thematic and permeates the section. In another instance, Example D46, m. 39, 41, etc., the bowing articulation in violin and cello counteracts hemiolic inflection by emphasizing the barbeats in mid-hemiole.

Lack of hemiolic highlighting. Throughout the era of metrical music, to change the inflective organization within a bar from the prevailing metrical motion is no light matter. Some diacritical indication to support the performer's recognition of the anomalous construction might be expected. Yet in many cases Schumann lends the hemiolic pattern no specific diacritical support.

This is particularly obvious in Opus 97/I, whose opening is shown in Example F14. The main thematic material is hemiolic and begins immediately in m. 1-2. There are only twenty measures free from hemiolic construction before Theme II enters in m. 95. Yet the first **>** on the second inner group of the pattern does not occur until m. 49-50; the first sf in a similar place occurs in m. 113, after the appearance of Theme II; the first circumflexes outlining each note of the main theme come in m. 157-58 (Ex. F60). Even at the recapitulation, m. 411-12, there are no dynamic

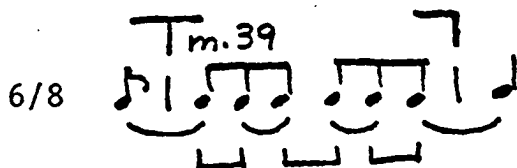
marks to emphasize the hemiolic formation.

Use of stress markings. Schumann's stress marks are variable in relation to the metrical framework and in relation to hemiolic construction. Example F76 shows several kinds of rhythmic highlighting with > ; in m. 63-66, > marks the second member of triple division, metrical construction; in m. 67-68, the duple hemiolic strides are emphasized; in m. 69-70, with the same construction as in the two previous bars, the main metrical beats are emphasized. In the slant hemioles shown in Example F42c, every beat of each bar carries extra stress in the LH. In an already displaced hemiole shown in Example F30, a circumflex marks the second hemiolic inner group, which here comes as upbeat to the barbeat. In Example F14 the stresses fall on hemiolic afterbeats, the middle one of which is on a metrical downbeat, until the cadence bar, m. 397.

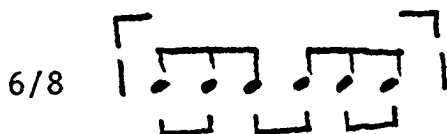
In short, the stress mark in itself is not a reliable guide to overall inflection. It is used to emphasize upbeats as well as to re-emphasize points of metrical accent. The stress mark does not create inflection.

Use of beaming. Schumann beams hemioles, which are by definition metrically non-congruent constructions, both metrically and non-metrically. His beaming practice in general is discussed in Chapter IX. Three examples of metrical beaming with hemiolic construction are shown.

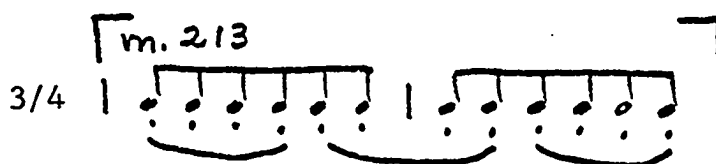
Example F5 shows metrical beaming for a hemiole with an upbeat into each inner group:



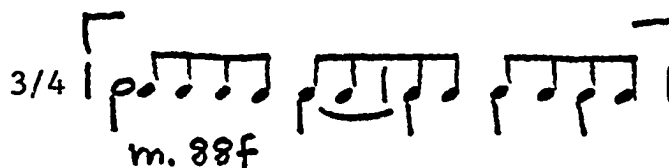
In Example F22 metrical beaming divides the middle inner group with its hemiolic broken octaves:



The figurational passage whose beginning is shown in Example F6ld is beamed metrically while slurs show its hemiolic construction (solo piano, RH):

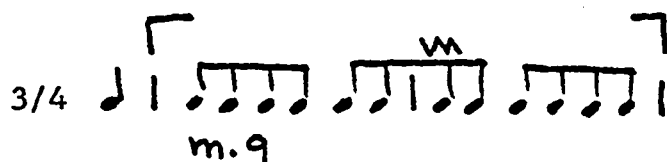


Non-metrical beaming draws visual attention to the non-congruent construction. Sometimes there is no diacritical stress marking at the mid-point of the second inner group, as in Example F29:

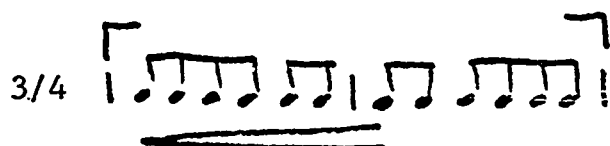


yet it is not uncommon for there to be such metrical

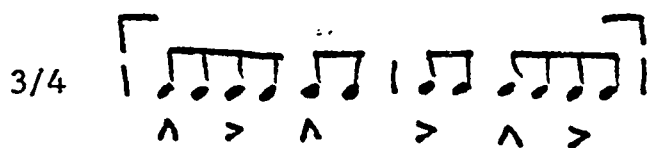
reinforcement, as with the mordent in Example F74:



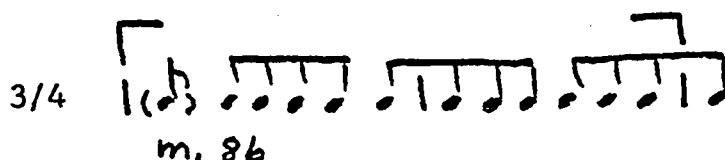
and the swell in Example Fla:



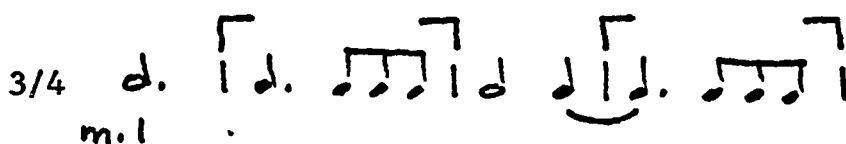
In Example F77, beamed like Example Fla, circumflexes and stress marks alternate in the six-beat hemiolic matrix:



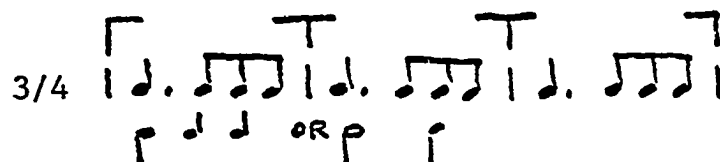
In Example Fl0, the hemiolic beaming spans the falling-fifth motto, fitting the bar in an unusual way, a way that precludes hemiolic inflection:



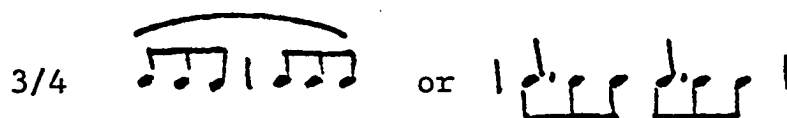
With reverse hemioles Schumann is more likely to use non-metrical beaming, which reflects upbeats and phrase separations. There is little chance of metrical misunderstanding either in isolated measures (Ex. B11, m. 2 and 4):



or with a repeated hemiolic pattern in a standard triple-meter frame (Ex. B47, m. 2, 3, 4 etc.; esp. m. 34-38; and Ex. B15, passim):



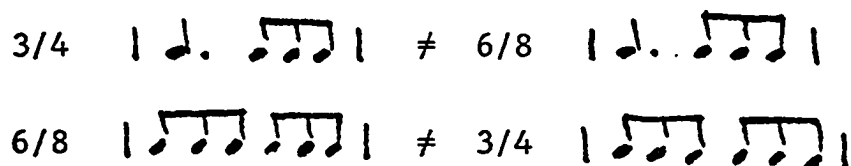
But difficulties may rise when the anomaly is visually pervasive (Exs. F35 and F36):



or when, though the beaming is metrical based, it is on the level above the anomaly (Exs. Flb, m. 9f and F78):



In general, Schumann uses non-metrical beaming in reverse hemioles to point out phrase grouping, not to change metrical inflection. The meter is expected to shape the whole:



Choice of rest values. It is sometimes suggested as a practical aid to hemiolic inflection that a conductor beat the hemiolic time rather than the notated meter in those passages. This is a common approach to Opus 54/III¹ and to a lesser degree to Opus 97/I and Opus 120/I. However, the notation of rests in a score may be considered some degree of evidence that Schumann wanted tacet players in an ensemble to keep their place through a hemiolic passage according to metrical inflection, since his rests in these places invariably show metrically normal values.

	<u>Metrical rests</u>	not <u>Hemiolic rests</u>
Ex. F35, 3/4		
m. 1,3	♩. ♩	♩. ♩.
m. 2,4	♩ ♩ ♩	♩. ♩ ♩
m. 8	♩ ♩ ♩	♩ ♩ ♩ ♩
Ex. F1b, 3/4		
into m. 9	♩ ♩	♩ ♩.
Ex. F39, 3/4		
m. 5-6	— —	— ♩ ♩ —
Ex. F14, 3/4		
m. 2,3	♩ ♩ ♩ ♩ ♩ ♩	♩ — — ♩
(in Trom. & Timp.)		

In long hemiolic passages with each hemiolic spanning two bars, there is no indication in the rests that anything other than normal metrical inflection is operating. In Example F61, for instance, to indicate whole rests as Schu-

¹See Arthur Schnabel's objection to this practice, p. 53.

mann does reinforces the notated meter; to accomodate hemiolic inflection and keep the ensemble together those rests would have been .

Choice of note values. With note values the situation is somewhat different. In most cases the hemiolic note values which call a performer's attention to the anomalous structure give few clues as to inflection. However, in the case of the melodic hemiole of Opus 12/2 (shown in Example F40), there is direct evidence of Clara Schumann's practice, through her student Fanny Davies.¹ To give this passage hemiolic inflection is evidently to distort the composer's intention. Davies' notation satirizing what Clara called an "undelicate" rendering of the passage changes meter to 3/4 for the hemiole.

Conclusion regarding inflection of Schumann's hemioles

In view of the factors in Schumann's rhythmic practice, both formal and diacritical, which support metrical inflection of hemiolic structures or make hemiolic inflection impractical, Schumann's hemioles are considered to be subject to metrical inflection.

¹Fanny Davies, "On Schumann--and Reading Between the Lines," Music and Letters, VI (1925), p. 219.

Findings

Hemioles are, by historical development and by continuing usage, anomalous. Whether in 15th-century mensural notation or in modern metrical scores, they imply a change from a norm. In metrical music, hemioles make aurally manifest a mathematical phenomenon. Though twos are non-congruent with threes in an isometric system, their groupings will coincide as sixes when the interior groupings are arranged as follows:

$$3 + 3 = 2 + 2 + 2$$

A hemiolic construction shows the metrically unexpected grouping. Since the normal and the alternative divisions coincide in sixes, whether the construction is a hemiole or a reverse hemiole the core of this rhythmic/metric manipulation is stable. This core is the hemiolic matrix.

Schumann's hemioles are quite freely constructed, though the hemiolic matrix of six impulses is usually patent. Hemioles are sometimes prefaced by a single upbeat or an entire preliminary group of the anomalous length; there may also be an extra anomalous group or two appended. Thus the hemiolic gesture is not confined to the hemiolic matrix. Inner group construction shows a great deal of variety. Schumann's hemioles rise in a spontaneous way from the metrical flow, and are dovetailed into the armature in varied and un-selfconscious ways. They give the impres-

sion of a natural rhythmic manifestation, not a "technique."

Hemiotic construction is a major rhythmic feature of Schumann's writing. His hemiotic habit is already well developed in Opus 1, and its practice lasts to the end of his productive life. He wrote hemioles in four-hand waltzes for Hausmusik, in strict contrapuntal works, in chamber music, and in symphonic movements. Some of his hemioles are thematic, some accompanimental, some transitional; some are prominent, some are off-hand.

Hemiotic construction may involve all strands of the musical fabric (unanimous hemiole) or fewer than all the strands (partial hemiole). Schumann's hemioles are more often partial than unanimous. As with metrically repositioned formations, hemiotic formations in general show overtly or intrinsically repositioned material.

Triple motion is the basic condition for hemiotic formation. Therefore most hemioles are found in $3/4$, $3/8$, $6/8$, or (less frequently) $6/4$ meters. Yet Schumann does not confine himself to using the divisions and subdivisions expected from the meter signatures. He freely uses compound divisions and subdivisions in simple meters, resulting, for instance, in prominent hemiotic construction in a $2/8$ meter which is written in triplets as if it were $6/16$ (Ex. Fl3).

Hemiotic construction may occur as an isolated instance, as a sporadic feature, or as a major rhythmic characteristic which saturates a movement. Consecutive

hemioles are not uncommon, and are sometimes carried to great lengths. Pieces and sections begin with hemiolic movement often enough for it to be no novelty. Relative to the cadence, hemioles may precede the final tonic; may incorporate the cadential chords within the hemiole; or may complete the cadence within the hemiolic pattern with upbeats leading out of it.

Hemioles occur both in phase and out of phase with the metrical and with the supermetrical structure. They are also overlapped in a hemiolic stretto, with one voice out of phase. Such overlapping negates the possibility of hemiolic inflection throughout the texture. Schumann's most complex hemiolic construction is a nested hemiole, in which one large hemiolic structure includes three smaller hemioles within its span.

The inflection of hemioles is a separate question from the matter of their construction. Significant is Schumann's actual practice with regard to the formal placement of hemioles and to their diacritical notation. Structures like partial hemioles, slant hemioles, overlapped hemioles, and nested hemioles; hemioles out of phase metrically or supermetrically; the frequent use of hemioles to initiate rhythmic motion; and lengthy passages of consecutive hemioles, all make it highly unlikely that Schumann intended hemiolic inflection for hemiolic construction. Performance ramifications are discussed in Chapter XI. Apparently, when Schu-

mann did intend hemiolic inflection he accomplished it by a notated meter change (Ex. F46). Furthermore, in their diacritical indications many of Schumann's hemioles display factors contradicting hemiolic inflection. These include various types of mid-hemiole dynamic emphasis, bowing marks, slur groupings, and note- or rest-values which reinforce the metrical structure. Therefore, considering Schumann's hemiolic practice as a whole, it may be concluded that his hemioles were intended to be resolved in performance by metrical inflection. The ubiquitous characteristic rhythmic pattern  confirms that impression. This basically hemiolic pattern is a rhythmic form within which the lilt, empty barbeats, harmonic anticipation and implied suspension lie latent.

Metrical inflection, when applied to hemiolic construction, functions both to reconcile the non-congruencies in the sense of placing the whole fabric into one rhythmic frame, and to enhance the aural effect of resolute resistance on the part of the non-congruencies.

CHAPTER IX

REPORT ON OTHER ANOMALOUS FEATURES

Though the types originally established for the investigation were relatively comprehensive of Schumann's anomalous rhythmic-metric practice, in the searches several other vagaries were found. They are discussed by category below. Examples for this chapter are found in Volume II, Appendix G.

Metrical flexing

Normal metrical motion may be flexed by a brief inset of a non-compatible meter, returning then to the original motion. Such an interpolation may seem an insert notationally, but it is part of the organic flow of the musical idea. Sometimes Schumann indicates the new meter signature in the score, sometimes not.

With metrical flexing, beat length is maintained. Consequently the anomalous bars are of an unexpected length. This situation should be distinguished from supermetrical asymmetry, in which it is the phrase length, in terms of the number of equal-length bars, which is unexpected.

Example G1 shows a metered one-bar flexing:

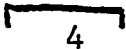
Op. 12/4 3/4 - 1 bar of 2/4 (m. 68) - return to 3/4

though it is bar [III] of a three-bar phrase (Ex. G3a). In its Second Edition, revised by Schumann, this movement is the fourth rather than the third; it is now metered in 2/4, with one bar of 2/4 equalling two of 6/16. Bar 8, the equivalent of the earlier m. 15, is still 6/16 long but now this equals only half a bar; it is not remetered (Ex. G3b). In Clara's keyboard edition the meter is 2/4 as in the Second Edition, but m. 8 is now metered anomalously in 1/4 (Ex. G3c).

In Example G4 it seems likely that m. 101 is metrical flexing, with the beat length stable:

Op. 9/1 3/4 - 1 bar of 4/4 (m. 101) - return to 3/4

Bars 120 and 128, however, represent simplistic alternative motion (discussed on p.226); the bar length is stable.

Clara confirms this reading in the Instructive Edition where she adds brackets to these bars thus:  .

Unmetered Passages

Considering the number of pieces Schumann named "Fantasie," unmetered improvisational passages are remarkably rare in his work. Those that do occur are of three types: a flourish on dominant harmony leading into a new section or recapitulation (that is, cadential, cadenza-like); a display of special pianistic effects, with intricate fingering, tied and pedalled sonorities, interlocking of

hands, or hand-over-hand continuity; or a recitative, sometimes solely melodic, sometimes punctuated by chords.

Inflectional intent in unmetered passages may be unclear except in context. For instance, in Example G5 the motto ABEGG, completed in the unmetered bar, is certainly to be inflected to match the original presentation of the theme, albeit slower:

$$\begin{array}{cccccc} 3/4 & \text{♩} & \text{♩} & \text{♩} & \text{♩} & \text{♩} \\ & A & B & E & G & G \end{array} = \begin{array}{cccccc} & \text{♩} & \text{♩} & \text{♩} & \text{♩} & \text{♩} \\ & A & B & E & G & G \end{array}$$

The subtle ties and pedal make this passage thoroughly unusual. Another kind of context is important in Example G6. The pun on a Baroque I6 in a recitativo phrase ending ⁴ is dependent on the performer's recognition of the style which Schumann satirizes. In Example E36, inflectional grouping in the unmetered bar is accomplished on the basis of successive equal-length beats, in spite of metrical non-congruencies in the last seven groups of eighth-note triplets.

However, unmetered passages can present less easily resolved inflectional problems, as in Opus 8, m. 1 (Ex. G7), where the shape of the whole-note motto is far from clear:

$$\begin{array}{ccccccc} \text{♩} & \text{♩} & \text{♩} & & & & \\ \text{♩} & \text{♩} & \text{♩} & & & & \end{array} = \begin{array}{ccccccc} [I] & & & & & & \\ \text{♩} & \text{♩} & \text{♩} & \text{♩} & ? & \text{♩} & \text{♩} & \text{♩} & ? & \text{♩} & \text{♩} & \text{♩} & ? \end{array}$$

This opening Prestissimo, notated in one measure three scores long, presents the motto and other material in bravura improvisational flourishes.

Other instances of unmetered passages are described below:

- Op. 1/Var. IV m. 19, transition to Finale; V_7 flourish with trill
- Op. 2/12 Finale, m. 86; immediately preceding the final cadence, a special effect in pianistic sonority, letting tied notes of a V_7 chord up one by one
- Op. 3/1 Opening and ending bars, arpeggios and scales on tonic harmony; these flourishes, however, originated with Paganini, Schumann making only minor changes
- Op. 14/IV m. 325, extended bar of chords tremolando, closing into a return of the theme
- Op. 15/13 m. 12, recitative style with imitative entries, diminished sevenths closing into a return of the opening on V_2
- Op. 16/2
 (1st Ed.) m. 120, ad libitum, short bass recitative, an embellishing melodic connection to the following phrase
- Op. 17/I m. 128, short cadenza, V_7 with tonic pedal, coming to a full halt with a fermata before the upbeat into a new section; disjunct both melodically and metrically

Paradoxically, the long passage marked "Quasi cadenza" which ends Op. 22/IV is completely metered, as is the cadenza-like material into m. 25f in Op. 28/II. There are, moreover, no unmetered cadenzas in Schumann's concerto-like works. In Opus 54 (Piano Concerto) the first movement cadenza is fully metered, and in the third movement a cadenza is camouflaged and fully accompanied (m. 835-58). The solo cadenzas in Opus 129/III ('Cello Concerto), Opus

131 (Fantasy for violin and orchestra), and Opus 134 (Allegro with Introduction, for piano and orchestra) are all metered; and the often improvisational character of Opus 92 (Introduction and Allegro Appassionato, for piano and orchestra) does not prevent its complete metering. A short and rare example of a solo cadenza in an ensemble work is the unmetered flute cadenza leading into the recapitulation of the Finale of the Symphony in B^b (op. 38/IV, m. 173). The temporal freedom of the passage begins in m. 167, and a horn fanfare, metered, precedes the unmetered flute figures.

Compound Motion Within Simple Meters

Schumann uses not only extensive triplet beat division in simple meters (see Exs. G8a, b and G9), but triplet sub-division as well (as in Exs. G10 and G3b). Sometimes there is overt conflict with the expected beat divisions for the meter (Ex. G8b), but as often, the meter might just as well indicate compound motion; for instance, the entire piece whose beginning is shown in Example G9 moves in 6/8 in spite of its 2/4 meter.

With compound sub-division, the situation is different. There is no standard meter sign to indicate 18/16 with three beats to a bar, two triplets per beat; nor 24/16 with four beats to a bar, two triplets per beat.

In Schumann's instrumental music,

2/8 meter may indicate 6/16 motion, as in Op. 12/1

2/4 " " " 6/8 " " Op. 61/II, Trio I

2/4 " " " 12/16 " " Op. 21/8;
Op. 32/III;
Op. 118c/III

3/4 " " " 9/8 " " Op. 4/VI;
Op. 11/I, Intro.

3/4 " " " 18/16 " " Op. 10/2

♩ " " " 6/4 " " Op. 81, m. 27f

C " " " 12/8 " " Op. 63/I, m. 84f;
Op. 111/I;
Op. 133/II

C " " " 24/16 " " Op. 13/Var. II;
Op. 26/IV

On the other hand, Schumann does use compound meter signatures in the normal way. A few examples are given:

Duple compound: 6/8 as in Op. 1, Finale; Op. 4/II;
Op. 5/5 (2nd Ed.); Op.
5/12 (1st Ed.); Op. 6/6;
Op. 12/2; Op. 28/II;
Op. 60/V

6/4 as in Op. 9/12; Op. 61/I, Intro.

Triple compound: 9/8 as in Op. 1/Var. IV; Op. 118c/II;
Op. 133/III

Quadruple compound: 12/8 as in Op. 4/IV; Op. 13/Var. IV;
 Op. 17/III; Op. 41#2/II;
 Op. 124/14

12/16 as in Op. 5/6 (1st Ed.); Op. 5
 /10 (1st Ed.); Op. 126/VI

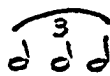
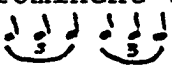
Polymer

Schumann occasionally notates two different meters simultaneously; in all cases bar=bar, and in most cases beat=beat as well.

In the earliest instance, 2/4 and 6/8 are combined throughout two variation-movements of Opus 5 (Exs. G11 and G12). Both the bass motto and the Romanza theme, given at the beginning of the work, are in 2/4. Since both bar lengths and beat lengths are congruent in the mixed meters, the conflict occurs within the beat. However, it is a conflict barely activated. In Example G11, 6/8 is established aurally in the first six bars, with no hint of metrical complications. Conflicts--2x3--occur within 16 beats out of a possible 64; see m. 7 in the example. In Example G12, conflict is even less evident to the ear. Articulated conflicts fall on only two beats of a possible 32 (m. 6, second beat and m. 7, first beat); and motion in m. 2, second beat, shows alternate rather than conflicting division.

A polymer also occurs in a symphony after well-established momentum. In Opus 61/IV, the prevailing C coexists with 3/2 in bars 451-506. Example G13 shows the

staggered onset of the new meter. Here, though bar=bar, beat≠beat. Metrical conflict within the bar is minimized in this movement, not so much by avoiding simultaneous duple and triple divisions of the bar as by the clear ascendancy of the melody, whether in 3/2 or in $\emptyset$; the alternative division is accompanimental. A metrical outline of the movement follows.

- $\emptyset$ m. 1-450 with many bars dividing the beat into triplets,  (for example, m. 46f), but no meter change
- $\emptyset+3/2$ m. 451 - VI and II go into 3/2, "L'istesso tempo" (that is, keep the bar length)
- $\emptyset+3/2$ m. 453 - Vla & 'C, Fl, Ob, Cl & Bn go into 3/2, "L'istesso tempo"
- $\emptyset+3/2$ m. 474 - winds revert to $\emptyset$
- $\emptyset+3/2$ m. 476 - VI and II revert to $\emptyset$
- $\emptyset$ m. 507 - Vla & 'C revert to $\emptyset$
- $\emptyset$ m. 560 - prominent bar-wide triplets,  but no meter change
- $\emptyset$ m. 571 - prominent triplets within the beat, , but no meter change
- $\emptyset$ m. 581 - prominent bar-wide triplets, no meter change
- $\emptyset$ m. 587-89 prominent half-note motion into the final cadence

NB: Double bass, brass, and percussion instruments never change to 3/2 meter, although particularly in m. 560-70 their predominant motion is in half-note triplets, functionally 3/2.

Other examples, not shown, of notated polymeter may be found in Opus 16/8, basically in 6/8, where the LH melody moves in 2/4 m. 25-48 (bar=bar and beat=beat); and in the original Presto for Opus 22, basically in 6/16, where the RH moves in 2/4 m. 195-202 (again, bar=bar and beat=beat). Schumann quotes from Beethoven's "Kreutzer" Sonata, Opus 47/III, Presto, in this movement. (Compare Beethoven m. 62f with Schumann m. 183f and m. 195f.) This source may have a metrical as well as thematic aspect, since Beethoven interpolates seven, then thirteen measures of 2/4 into his 6/8 movement.

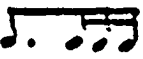
A puzzling inconsistency is apparent in Schumann's use and non-use of polymeter. Passages similar to those in polymeter are not notated that way; furthermore there seems no pressing notational necessity for the polymeters that do exist.

Special Uses of Alternative Divisions

Alternative divisions of the bar or beat may be either "simplistic" or "blurring."

Simplistic alternative motion

Schumann uses unanimous unexpected metrical division (duple where triple is expected, triple where duple is expected) very briefly for certain formal effects. These groupings typically lead into a prominent cadence (Ex. G14), or alter the motion as a cadential tonic chord is being filled

out (Ex. G15). Though the procedure is usually briefly used, sometimes it is quite extended and not confined to the cadence area; Example G16 shows a sixteen-bar passage of the simplistic alternative motion. In Example G17, Schumann plays with the rhythmic difference between 6/8  and (2/4) , not simply an augmentation. These unexpected divisions are sometimes marked with a slur and number, but sometimes they go unremarked in the score.

Sometimes the notated meter is itself aurally unexpected. Though the meter of Example G18 is 2/4, from the outset this piece moves as if it were in 12/16 with four triplets per bar. Not until m. 96, the pre-cadence bar, are there four even sixteenths per beat, normal division for the notated meter.

Blurring alternative motion

Schumann also uses unexpected divisions simultaneously with expected divisions of the metrical module. At its most common tempo, this blurring technique, keeping the larger spans of the meter clear, creates a humming, filled texture in which the conflicting divisions do not war but seem to fog the rhythmic space. Such blurring is useful to Schumann in an accompaniment when the melody remains unequivocally normal metrically, as in Examples G19 and G20.

Simplistic and blurring alternative motion

One early piece, Opus 9/5 ("Eusebius"), is a tour de

force of both simplistic and blurring anomalous divisions (Ex. G21). Uncharacteristically, the melody is more anomalous than the accompanying voices. There are only five metrically normal bars in the thirty-two bar piece: m. 4, 8, 16, 24, and 32. A mathematical scheme of the notated divisions within a bar shows the variety of rhythmic structures:

Metrically Normal

4x1, as in m. 4

Metrically Anomalous

7x1,	as in m.	1
7x2,	"	2
7x4,	"	5
(5+3)x2,	"	9
(5+3)x3,	"	11
(5+2)x3,	"	12
(5+3)x4	"	19
+		
2		
(5+2)x2	"	20

"Eusebius" is a successful experiment Schumann never duplicated.

Unconventionally Notated Ties, Rests, and Notes

The score of the second Scherzo originally intended for Opus 14, a movement never published with its parent sonata, contains several unusual notational features: indeterminate ties, lack of rests or notes to fill the space following those ties, and an unstemmed note (see Ex. G22, into m. 31, 35, 39, and 43). Because of the spacing, the sense of meter remains undisturbed even in a cursory reading, in spite of the absence of "proper" ties or rests.

The indeterminate ties are, prophetically, Debussyan; the use of space as elapsing time, and the unstemmed note, look even further into the 20th century. Now Schumann's meaning seems clear, but such vagaries caused him trouble in 1835. Opus 14 was originally planned to include two scherzos. The publisher persuaded Schumann to omit them both and publish the remaining three movements as a "concerto without orchestra." This scherzo was the one not restored to the sonata for its second edition in 1853.

Another instance of inaccurate rest values is seen in the unmetered motto shown in Example G5, where a quarter rest lasts the length of a whole note.

Non-Metrical Beaming

Less unconventional notationally than stemless notes or trailing ties, non-metrical beaming is nonetheless noticeably anomalous in Schumann's period. Metrical beaming is the norm. It groups visually the metrical modules on various levels. Such outlining makes for quick comprehension in reading. It also tends to reinforce the simplest forms of metrical inflection, due to the articulative convention of assuming stress at the beginning of a group.¹ Beams of bar

¹Robert Donington, "Phrasing," Grove's V, v. 6, p. 720.

length (as in Ex. C44b, LH, m. 1-5, 7-8):



or beat length (as in Ex. C44a, RH, m. 1):



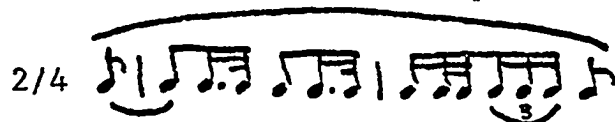
or beat division length (as in Ex. C16a, RH):



are the norm. Even in an unmetered passage, normal metrical beaming of beats suggests beat inflection, overriding metrically non-congruent pitch patterns (as in Ex. E48):



Furthermore, metrical beaming is of considerable help in an initial deciphering of passages of any rhythmic complexity, such as the melodic line of Example C46:



Metrical beaming presents options to the composer in the choice of level to emphasize visually. Not only is the stress scheme affected, but in some cases the beaming affects the harmonic sense of a passage, as Donington has pointed

out in one of Schumann's bass lines:



(from Opus 12/5, m. 11-12)

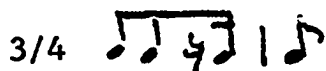
The composer's method of writing in groups of two notes instead of four [as in the first example above] seem[s] to indicate an alternation of the tonic and subdominant harmonies of C minor, whereas if the passage were played as in [the second example above] the effect would be that of a single C minor harmony.¹

Schumann's score is shown in Example G23. Even metrical beaming, in short, is not a mechanical procedure but is part of a composer's complex effort to communicate the musical nature of a passage through notation.

Metrical beaming can be, however, a visual misrepresentation of rhythmic grouping. In Example C44a, for instance, each sixteenth note belongs aurally to the next note, rather than to the preceding note with which it is beamed:



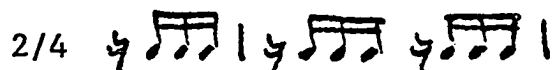
Non-metrical beaming may be used in some cases to represent such upbeat-to-downbeat grouping, as with the first note under the beams in Example G24:

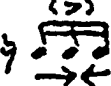


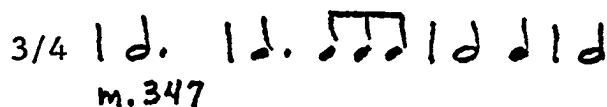
¹Robert Donington, "Phrasing," Grove's V, v.6, p. 720.

This inability of metrical beaming to suggest the connection of upbeats forward to their downbeats is a major reason for non-metrical beaming in Schumann's notation.

Many examples seem quite routine; for example, the beaming in Example D27 for the pianist's RH, m. 461f:

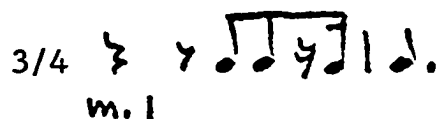


indicates not a triplet grouping, but a weak sub-division upbeat to the stronger sixteenth note following it: . The inflection remains metrical, though the beaming is non-metrical. A similar situation is found in non-metrically beamed eighth notes on the second page of Example F6:

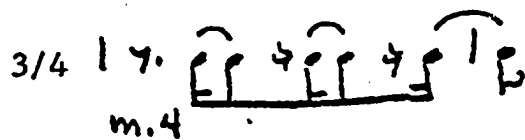


Bar 348 remains inflectionally in 3/4, though out of context it may look like a bar metrically beamed in 6/8.

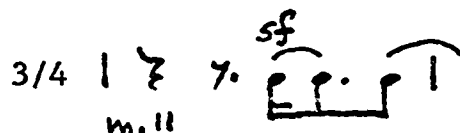
Similar non-metrical beaming to bind an upbeat to its downbeat looks more anomalous with only two equal notes, as in Example B46:



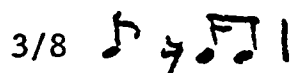
or with unequal note values, as in the following three examples, B6:



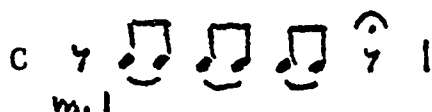
A26:



and B41 (in the bass, m. 1f):



The enigmatic notation of Example A19 may be construed as an ingenious solution for notating consecutive stressed upbeats tied to emphatic downbeats:



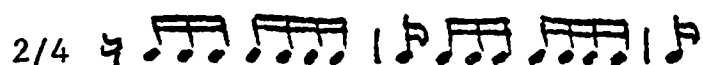
The alternative of using quarter notes rather than tied pairs of eighth notes implies a rather different rhythmic effect:



A second purpose of non-metrical beaming is to clarify phrase separation. Again, some occurrences are so common as to seem routine, as in Example B23, into m. 2f:

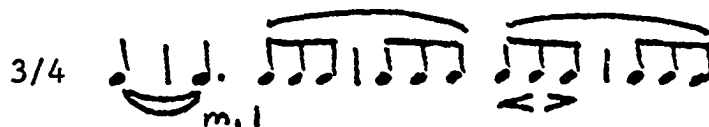


and in Example C52, m. 11-12:



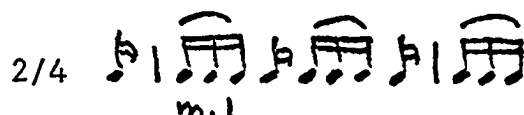
Examples D18 and E27 (from the opening of the same symphonic movement) show non-metrical beaming both for legato upbeats

and for phrase separation:

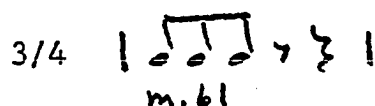


Inflection of the extended passage remains in 3/4; this is confirmed by the swells in m. 2f.

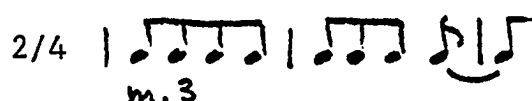
Third, non-metrical beaming may reinforce legato and suggest a lightening toward the final note in a phrase ending, as in Example D31:



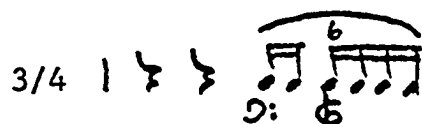
B22:



and D64, m. 4:



Fourth, Schumann makes occasional use of non-metrical beaming in a piano piece to indicate the division of a passage between the hands, as in Example B22, m. 85:

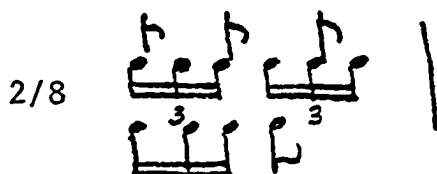


Finally, non-metrical beaming may be used to make immediately noticeable important pitch constructions which have some degree of metrical non-congruency. In Example F41, for instance, the RH eighth note beaming from m. 3-4 points

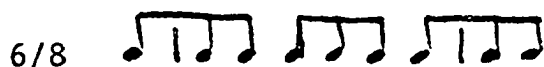
up the hemiolic scalewise melody:



and in Example F13, the accompanying voices are metrically grouped on beams but the hemiolically constructed melody is flagged non-metrically:



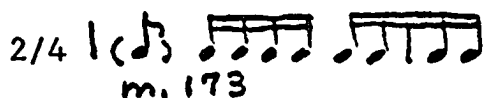
Usually Schumann's non-metrical beaming does not cross the barline. However, the beam in Example F41 follows the melody across one barline (m. 3-4 and m. 7-8), and others cross the barline in highlighting construction repetitions, as in Example C33. Here the triad outlines are inflected as amphibrachs:



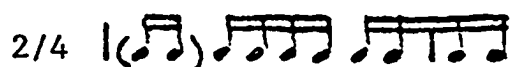
In Example C15 the LH has an anticipatory slant pattern:



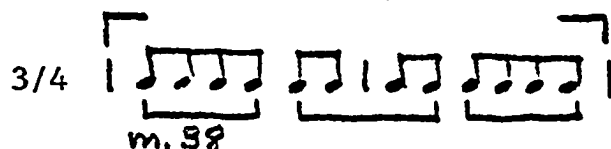
In Example E15b, the four-note pitch pattern constitutes a rhythmic pun on thematic material from the beginning of the piece which was beamed metrically, m. 3f:



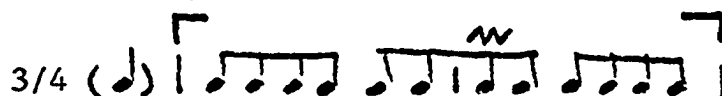
In Example E18a, the imitative pattern enters every half-beat, consequently with fluctuating inflection:



Non-metrical beaming to point out hemiolic construction is of two kinds, that which includes a break in the middle of the second inner group, as in Example Fla:



and that in which the middle inner group is beamed as a whole, as in Example F74:



Schumann's hemiolic beaming is further discussed in Chapter VIII.

Some of Schumann's non-metrical beaming, particularly that for emphasized, bound-forward upbeats and that for construction visibility, performs the same function as some slur markings. In his later works the slur is more apt to be his notational choice.

The proportion of non-metrical beaming in Schumann's works is very small compared with that of metrical beaming used in conjunction with slurs or other diacritical marks to indicate phrase connection and initial stress.

Notational Contradictions

Impractical stresses

Schumann sometimes uses a stress mark in conjunction with ties in a contradictory way. For instance, it is impossible on the piano to play an accent written over a chord all of whose members are tied (Ex. G25). Accents over a tied melody note appear in Example G26. The height of impossibility in this regard is reached in m. 74 of Example G5 (ABEGG motto).

These are apparently deliberate markings; Schumann must have meant something specific by them. In Example G5 the accentual effect may be materialized by an acoustical phenomenon: the ability of well-tuned piano strings to accomplish palpable swelling of a single tone within a tied chord as a lower chord member is released. In Example G26 Schumann may have meant the keyboard effect of Bebung, a relatively practical matter. But these solutions do not bear upon the stress marks of Example G25, where the chord is all-tied across the bar and the added stress falls on the barbeat. In the context of the metrical framework, such stress markings seem reinforcement of the "internal weight" of the barbeat, whether supported or unsupported in articulation or sonority intensification. An agogic adjustment seems the performer's main resource for this accentuation. Ramifications of this performance option are discussed in Chapter XI.

Impractical swells

Another literal impossibility is shown in Example G27: a swell peaking upon a barbeat where the whole texture consists of a chord for the piano with all its members tied across the bar. Another instance is shown in Example D41, m. 37. Again, Schumann's purpose seems to be a deliberate emphasizing of the barbeat. The impractical stress and swell markings are psychological directives, with, presumably, a real outcome. The intent of Schumann's notation is clear, though performance problems remain.

Findings

The searches revealed eight metrically anomalous procedures in addition to the established investigative types. Their occurrence is reviewed below.

Metrical flexing

Schumann's rare instances of metrical flexing break the mold of divisive meter, the standard both for his music and for his time. With divisive meter, the measure lengths which constitute the supermetrical strides are all of equivalent size: bar=bar in terms of the number of beats. With Schumann's flexing, the bar length is changed, usually quite briefly, but enough to break the supermetrical momentum and produce an effect of rhythmic plasticity.

Sometimes the inset bars are longer than the estab-

lished normal bars, sometimes shorter. Usually the beat is to be maintained throughout the flexing, though a case could be made in Example F45 for one bar of $3/4$ in m. 87 equalling half a bar of the common time in m. 88-89. Whatever the equivalency link, within each bar of the changed meters metrical inflection seems to be unimpaired.

All of Schumann's metrically flexing inserts give some flexibility near a cadential punctuation; all are organic parts of a phrase length. They show formal loosening or tightening in pre-cadential motion.

Though the flexing procedure is anomalous outside the divisive metricalities of the main anomalous types investigated, Schumann did not develop a multimetric style characterized by metrical fluctuation, nor did he repeat metrical combinations consecutively (such as $\frac{3+2}{8}$ as a standard motion) to effect a consistent additive scheme. His experiments with metrical flexing were phased out by 1845; after that he evidently found enough freedom within the conventional divisive system.

Unmetered passages

Schumann's scanty use of unmetered passages suggests that an extended unmetrical improvisational style was ungenial to him. His rhythmic thought could usually be captured within a metrical frame, given the flexibility of tempo-modifying marks, such as accelerando, ritardando, the

fermata, and brief fresh tempo indications such as Poco Adagio. He did not develop a non-metrical rhapsodic style to contrast formally with a metrical style, although the early Opus 8, by consensus a weak work, is an attempt in that direction. Though he did write graceful embellishing *rosalias* which take time in a melodic line and to that extent bend the metrical armature, unmetered flourishes in his solo works and unmetered solo passages in his ensemble works are quite rare. Significantly, all the cadenzas in his concerto-like works are metered.

Compound motion within simple meters

Schumann's use of simple meter signatures to notate compound motion both within the beat and within the half-beat indicates a strong sense of metrical armature as the framework for ornamental embellishment. This ornamentality of his rhythmic sense differs from the embellishing of the metrical framework provided by the anomalous investigative types; it has the more conventional character of filigree or passage-work, and is usually metrically congruent (see Exs. G9 and G10). It confirms the primacy of the metrical armature for his musical thought. It is anomalous neither metrically or rhythmically, but it is unusual notationally.

Polymeter

All of Schumann's few examples of polymeter are very mild experiments. All involve the opposition of duple and

triple divisions, mostly of the beat but in one case of the bar; all have clearly differentiated melodic and accompanimental functions within the texture, which suggest which metrical division should exercise inflectional control; all occur at a quick enough tempo to minimize metrical conflict and relegate this vagary of notation to the category of blurring alternative motion.

Special uses of alternative divisions

Schumann's treatment of simplistic alternative motion at cadences shows that he occasionally felt the need for some deliberate breaking of rhythmic expectation in the cadential area. Normal beat division was not always enough to bring the motion to a satisfying halt. Even so he maintains bar lengths, and often beat lengths as well, in these written-out broadenings.

Where, extremely rarely, he writes a more extended passage in the alternative motion (as in Ex. G16), formal differentiation is apparently the purpose. Here, again, the bar lengths remain undisturbed and even beat organization is maintained, the alternative motion being confined to beat division.

These procedures are metrically congruent on the levels of bar and of beat, consequently not anomalous in the same sense as the investigative types. Blurring alternative motion also keeps the larger spans of meter and supermeter clear.

In Example G21 ("Eusebius"), which displays both simplistic and blurring alternative motion, there is never any blurring of the barbeats, though the beat span is sometimes and the beat-division often abrogated. This strengthens the impression that the larger metrical modules represent the armature for Schumann's rhythmic thought, whether normal or anomalous.

Unconventionally notated ties, rests, and notes

Schumann's unconventional notation in the way of indeterminate ties, lack of rests to fill metrical spaces, and a note without a stem (all appearing in one movement unpublished during his lifetime) does not interfere with the conventional metrical framework, which is assumed and supplied by the performer in these cases.

Non-metrical beaming

Schumann's beaming is usually metrically divided, that is, conventional. When he does use non-metrically divided beaming, the intent seems to be to bind upbeats to their downbeats; to clarify phrase separation; in a piano piece, to show division between hands; or to point out non-congruent constructions. There is no evidence that non-metrical beaming is expected to change normal metrical inflection.

Notational contradictions

In piano music, stresses on tied notes (or chords) and swells peaking on all-tied barbeats seem to be psychological directives; they call for reinforcement of the "internal weight" of the barbeat, whether supported or unsupported in the sonority at that point. Schumann's impractical stress and swell notation strengthens the impression that he felt meter as an active agent, not as a passive framework.

Overview

Most of Schumann's anomalous metrical practice outside of the investigative types fits into the divisive metrical scheme in common use early in the 19th century. One exception is metrical flexing, a change in the length of the supermetrical modules as a result of brief multimetric procedures. Its purpose is not the consistent asymmetrical motion of combinational meters, but flexibility of phrase gesture. It is an infrequent feature in Schumann's writing. The other exception is found in unmetered passages; this free improvisatory style also is found infrequently, mainly in early solo works.

Of the other vagaries found, Schumann's mild polymeters represent blurring alternative division in divisive meter; with compound motion within simple meters not only does bar=bar but beat=beat and often half-beat=half-beat, all of which presuppose divisive metrical organization; non-

metrical beaming is used for articulative effect or to draw attention to non-congruent construction, but does not disturb the divisive framework; contradictory notation which calls for impractical swells or accents is not a literal demand but seems to be reinforcement of the normal intentional metrical effect of barbeat or beat.

The overall view shows how strongly Schumann's rhythmic-metric practice is rooted in normal divisive metrical procedures.

CHAPTER X

RECONSTRUCTING SCHUMANN'S RHYTHMIC-METRIC PRINCIPLES

In order to reconstruct Schumann's fundamental rhythmic-metric principles, it is necessary to ask just what aspect of the rhythmic flow is aberrant in the metrical anomalies treated in this study.

Anomalous Processes

The term "metrical anomaly" often presumes some non-congruence of surface patterns of the music with the metrical structure. Such structural non-congruence does characterize the majority of Schumann's anomalies. Consistent metrical displacement, for instance, may shift a melodic line early or late for its entire length; thus melodic structure is counterposed to metrical structure. If an harmonic change is hasty, harmonic rhythm is non-congruent with the metrical frame. When a rhythmic pattern is repeated in a contrasting metrical position, the metrically inflective twist highlights the structural non-congruency. The essence of the hemiole is the encasement of its non-congruent structure within metrically compatible boundaries. These procedures are all structurally anomalous.

However, the lilt is not anomalous in this way. Its structure is congruent with the metrical frame, since it outlines a metrical module (a bar or a beat). Its anomalous behavior is found rather in its rhythmic function, since its third division does not ease metrical flow onward in the normal way by acting as upbeat. Therefore the lilt is anomalous functionally, not structurally; and it is thus anomalous only on its own metrical level. A lilt does not disturb the rhythmic normality of the next higher level of motion.

Metrical flexing as an anomalous structure breaks, on the supermetrical level, the normal divisive metrical system in use in Schumann's time. The bar-long supermetrical modules are of an unexpected length, but within the anomalous bars a divisive metrical structure is still in control. Schumann is even able to use the felt weight of an empty bar-beat in a too-short bar to bend the established momentum, or at the end of a too-short bar to resume the established meter. The barbeat is strong and the beats differentiated whether in a flexing or in an established, normative metrical frame. Thus metrical flexing is normal functionally, and anomalous structurally only at the supermetrical level.

Another type of metrical anomaly is demonstrated by the empty barbeat. It, like the lilt, falls congruently with the meter: whatever its length, it falls upon the strongest beat of a bar. The empty barbeat, therefore, is

not anomalous structurally. Its rhythmic function, also, is unimpaired. The barbeat silence takes time, is expressive, may support upbeats and/or afterbeats, and inflects the balance of the bar as if there were sound at that point instead. But there is no sound on that beat, in frustration of expectation. Its anomalousness lies in its lack of sonority as a carrier of metrical accent. Anomalous sonority is a factor, albeit somewhat diluted, whenever the barbeat (or at the next lower level, the beat) is almost empty. In all-tied constructions, whether isolated or patterned, this is particularly obvious since there is no re-sounding of the barbeat. Also, consistent displacement often results in a series of almost empty metrical points anomalous in this sense.

The sense of anomalous emptiness is not confined to sonority. With harmonic anticipation and implied suspension, the barbeat may be newly sounded but since it carries no harmonic change it is lacking a normal propulsive factor of metrical motion. This emptiness of harmonic progression is most clear with harmonically static incipits. Here the barbeat may be empty only of harmonic motion. Its texture may be as full as the rest of the phrase, and it may be melodically active; yet to establish the metrical momentum for a piece across the initial barline demands an additional solidity or emphasis even when the notated structures do not supply it. An affective lack of harmonic progression at a

metrical strong point results from and is complementary to the structural non-congruence of oblique harmonic rhythm. Also, though the onset of hemiolic construction is usually normal structurally, functionally, in sonority, the exact mid-point of some hemioles is almost empty of sonority or of harmonic change or of both.

The relationship of structural anomaly to functional anomaly remains to be considered. Certain clues have already been pointed out. Schumann's impractical swells to or stresses on an almost empty barbeat indicate that these passages function in a rhythmically normal way. The absence of harmonic action on the metrical impulse or the absence of motivic onset does not preclude the felt action of metrical inflection; that impulse can even support extra emphasis. Indeed it appears that a structural profile which is out of phase with the metrical frame is always shaped by the meter in Schumann's writing. His positioning of hemioles has demonstrated that he expected them to be inflected metrically. Further, the structural non-congruencies of consistent displacement in no case were found to countermand metrical inflection. In fact the "syncopated" effect of displacement would be lost without the active functioning of the metrical norm. It is conceivable that the absence, or at least the ambiguity of such metrical expectation in longer unmetered improvisatory passages, and the consequent difficulty for Schumann of notating what he wanted under those circum-

stances, led him to abandon the "phantasieren" style early, and subsequently to meter all of his cadenza passages. Both forms of oblique harmonic rhythm decorate and do not destroy the metrical armature. In sum, metrical expectation on all levels and its inflectional satisfaction are functioning normally with the overwhelming bulk of Schumann's structural and sonorous anomalies. Only the lilt and metrical flexing escape, each briefly and on a single metrical level.

Metrical inflection reflects cyclical energy patterns within the metrical system: possible upbeat to beat to possible afterbeat, at various levels. It reconciles non-congruencies to the metrical armature without sacrifice of their salient constructional features. This procedure provides a considerable enrichment of compositional options, adding wide-ranging contrapuntal possibilities between metrical structure and all other bases for structuring without losing the coherence of metrical motion.

Theoretical Conclusions

Evidently it was Schumann's intention that his rhythmic-metric anomalies serve as embellishment and reaffirmation of the divisive metrical system normal in the early 19th century. Metrical inflection is his primary rhythmic assumption. Just as passages of metrically congruent rhythmic patterns are inflected metrically, so passages of metrically non-congruent patterns are inflected metrically. Inflection

is the agent by which meter both dominates other structures, and dramatizes their relationship to it.

Verbalizing the primacy of metrical inflection in this way integrates Schumann's routine and anomalous rhythmic procedures under one fundamental principle. It also emphasizes an important aspect of Schumann's rhythmic instinct: his anomalies depend to an unusual degree upon a sense of active meter. The metrical framework must be very strong to support without damage to itself the non-congruencies laid upon it: strong not simply in a static, non-brittle, passive sense, but with a palpable action, bracing itself so to speak against the non-congruencies with which it is overlaid. The frequency of Schumann's anomalies and the length to which he carried severely non-congruent procedures (such as extended consecutive all-tying of bar-beats and beats) suggest the degree to which he felt meter to be an active agent rather than a passive place-keeping convention.

In this reliance upon a powerful dynamics of meter, Schumann closely resembles Beethoven. Although Berlioz, Chopin, Liszt, Mendelssohn and others used many of the same anomalous techniques to some extent, the spirit of Schumann's anomalies springs from the same sense of metrical vigor which animates Beethoven's on-beat dissonances and "total syncopations."

It is the theoretical conclusion of this study that Schumann's characteristic metrical anomalies are intended to confirm meter, not negate it; and that he evidently felt vividly the functional rhythmic differentiation inherent in metrical structure, independent of overt articulation, as the basis for creating his anomalous passages.

CHAPTER XI

IMPLICATIONS FOR PERFORMANCE

The theoretical solution to the problem of Schumann's rhythmic intentions in anomalous passages is almost a truism. His music presumes metrical inflection, both in normal and in anomalous passages; further, the more extreme the anomaly, the more actively must metrical inflection counter-balance it. It follows that metrical inflection is the primary resource for the performer. Unfortunately, arriving at this comprehensive theoretical solution does not solve the practical problems at the same time.

To be sure, a reminder of the strength of Schumann's metrical armature may help a performer feel empty barbeats more emphatically, and make him more aware of the super-metrical context of lilt. It may sensitize him to the need for an unequivocal metrical frame for otherwise rhythmically unbalanced passages of consistent displacement. It may also call attention to the many less conspicuous occasions of non-congruencies which call for metrical reinflection, adding to the appreciation of their rhythmic play. All of these awarenesses result in performance of more rhythmic vividness. Yet those passages did not present pressing problems before.

The acute difficulties, and performer's misgivings, have arisen in other areas: with metrical instability in close stretto; with the inflection of hemiolic passages; and with extreme examples of oblique harmonic rhythm, particularly extended passages in which the displacements are unopposed. In these three circumstances, Schumann's rhythmic intentions seem to conflict with widely current performance traditions of long standing.

Conflict with traditional performance expectation is apparently the source of much of the dissatisfaction with Schumann's rhythmic effectiveness. So these questions must be asked: in what way do the requirements of Schumann's rhythmic style conflict with current performance traditions, and, are there more appropriate precedents for the performance of this music? This discussion necessarily involves consideration of inflective techniques. Particularly with all-tying, 20th-century performance tradition seems to have placed such restrictions on a performer's options in effecting metrical inflection that he faces apparent impossibilities. For instance, how can a performer make a strong beat where that beat is not articulated? A performer will be wholly convinced of Schumann's rhythmic intentions only when they seem both authentic and feasible. It is presumed that Schumann meant his ideas to be feasible. Thus both historical and instrumental perspectives in the areas of conflict

must be explored.

Toward an Authentic Performance Style

The realization that Schumann's style must be reconstructed by the 20th-century performer is a necessary background for the specific stylistic matters with which this chapter is concerned. Even for pianists there is no direct line of aural tradition, though some of Schumann's keyboard works have been a repertory staple for about a century.

Schumann is without a doubt a Romantic composer; yet what is generally considered the "grand Romantic style" of pianism came, not from Schumann's writing years but from later in the century, particularly from the tastes and teaching studios of Liszt and Leschetitsky. The bulk of Schumann's recital repertory was composed before 1840. Notably, the convention of the piano "recital", an entire program by an unassisted soloist, was an innovation circa 1840.¹ Significantly, the virtuosic style was distasteful to the Schumanns. Clara, who lived for forty years after her husband's death, was less than tactful about these temperamental differences: "Before Liszt, people used to play. After Liszt, they pounded or whispered. He has the decline of piano playing on his conscience."² She herself

¹Loesser, pp. 367-71.

²Schonberg, p. 223.

was a conservative, a classicist among the great pianists of the century.

It is not generally realized that Clara's mature playing style was guided not by her husband (there are painful anecdotes concerning his dissatisfaction with her playing) but by Joachim and Brahms, colored also by her life-long veneration for Mendelssohn as a consummate musician. However, Clara was logically considered the authority concerning her husband's music. As an illustration, the flamboyant young virtuoso Paderewski played Schumann's music in London in the early 1890s with little success, "for Clara had accustomed the British public to a restrained almost rubatoless Schumann."¹

As for her editions of Robert's music, it is necessary to distinguish between the Complete Edition (edited by Clara and Brahms, published by Breitkopf and Härtel between 1879 and 1893) and the Instructive Edition of the piano music alone, "based on the manuscripts and the personal tradition of Clara Schumann," which appeared in 1887. There are noticeably more diacritical markings in the Instructive Edition, some beamings and other details are changed, and Clara's editorial pedallings and tempo markings sometimes vary widely from the original indications. Her tempos are

¹Ibid., p. 229.

both faster and slower than his.¹ Clara's opinion, of course, does carry weight, particularly for rhythmic specifics like the inflection discussed on p. 212. But even Clara and her students are not completely reliable sources for an authentic general performance style.

Schumann's orchestral works have suffered from both rhythmic and scoring misunderstanding. The later three symphonies did not enjoy the quick acceptance of the Symphony #1 in B-flat, Op. 38, the most straightforward both formally and rhythmically of the four; it went from its 1841 premiere under Mendelssohn to forty-two performances in the next eleven years, during Schumann's lifetime. The Symphony in C, Op. 61, has been the most neglected of the four. Its first movement main theme shows intrinsic metrical repositioning, since the longest note is consistently upon the second beat of the 3/4 bar. Specific metrical anomalies are conspicuous also in the Symphony in E-flat, Op. 97 and in the Symphony in D Minor, Op. 120. The first movement of Opus 97 is almost wholly permeated by the hemiolic main theme, while the material of the introduction of Opus 120, which gives an eye-impression of 6/8 motion in conflict with the 3/4 of the signature, recurs cyclically in the symphony.

¹Brian Schlotel, "Schumann and the Metronome," Robert Schumann: The Man & His Music, ed. Alan Walker (New York: Harper & Row, 1974), pp. 110-15.

Both Mahler¹ and Weingartner made revised versions of all four symphonies in an attempt to brighten the scoring. Weingartner's extensive changes are primarily for balance, but he does not hesitate to reposition motifs in the bar when he considers them rhythmically ineffective. For instance, in Op. 120/I, m. 206, he brings violins and violas one beat earlier, not only standardizing the construction to match m. 132 but giving the barbeat more emphasis.²

The renowned opening bar of the Manfred Overture, Op. 115 (Ex. A19), has generally been considered rhythmically enigmatic. Fortunately it is brief, and does not shadow the overall effectiveness of this work.

The idea of standard repertory in public concert life has given the illusion of an unbroken performance tradition for Schumann's works. But today performers are chronologically further removed from Schumann than Schumann was from Bach. Though today's performers still learn to "count" the divisive metrical system of the common practice period, they are inevitably influenced by the way rhythmic processes and attitudes have changed from the early 19th to the late 20th century.

¹Mahler's touching-up of the symphonies was never published but exists (according to Schlötel, p. 315) in actual changes in the score and parts Mahler used, available on rental from Universal Publishers.

²Krueger, pp. 105-106.

Changes in Metrical Presumptions

Divisive metrical organization was, with rare exceptions, the temporal organization of Western music for more than three hundred years. This divisive meter, with its implicative barlines, was simpler than earlier multi-metric and polymetric styles; developing with tonality, it helped to make longer musical spans psychologically effective. Cooper calls this meter "classical rhythm." With its

strong accents in regular recurrence that pervade and regulate the entire fabric, [it] became the matrix for rhythmic development in all music from c. 1600 to c. 1900.¹

This metrical system is first of all a rhythmic organism and only secondly a mathematical structure. The mathematical scheme is a theoretical device, an intellectual fixative for the evanescence of the musical reality. Mathematical meter can be reduced to, and taught by, rule; but metrical rhythm cannot, since it deals with a range of multi-level grouping possibilities.

Before Beethoven, meter as a metrical system and meter as a rhythmic organism seemed evenly counterpoised. But with Beethoven, who used total syncopation and other devices putting metrical presumptions to proof, a sense of rebellion against meter surfaced, rebellion against what was

¹Grosvenor Cooper, "Rhythm," Harvard Dictionary of Music, 2nd Edition, p. 731.

called "the tyranny of the bar-line." Such rebellion was apparently a factor in changing concepts of accentuation and rhythmic process which culminated in a plurality of rhythmic-metric styles in the early 20th century. In the 1970s divisive meter survives with vitality in the conservational mainstream of Western art music and in various urban folk musics. It is, however, only one of a variety of 20th-century rhythmic approaches, rather than the basic rhythmic presumption. Metricality now includes fully-developed divisive and additive schemes, free multimetrics, and contrapuntal polymetrics related to pre-1600 styles; also, non-metrical structures and chance rhythmic procedures are in use. However, many symbols of divisive metrical notation (the barline and meter signatures, for instance) remain useful in notating other kinds of temporal organization. Indeed, this notation made it possible to develop other metrical procedures consciously. Thus the visual ordinariness of a Schumann score in the 20th century tends to camouflage stylistic change between his time and the present.

When attitudes toward meter change, traditions of reading a score alter as well. A score itself may not reflect such alteration in any way. An example is the shift

of viewpoint toward barbeats shown in the following quotations:

The chief part [barbeat] is distinguished before all others. We give it an accent, whereby it is produced with greater force, and is made impressive to the ear, as it has hitherto been conspicuous to the eye. Its recurrence, therefore, must always be perceptible.¹

Metrical accent, or the "first of the bar", . . . is only implicit; to insist upon it is to vulgarize the music.²

There is no style of music, apart from tunes of the greatest obviousness, in which it is safe to trust the normal bar-lines as a sufficient indication of where the true accents fall.³

Meter is a measure of rhythm. It has no rhythm of its own; it only appears to have when rhythmic pulse coincides with the metric points. Strong and weak beats occur wherever the musical line places them, regardless of meter.⁴

Such juxtaposition over-simplifies an extremely complex change of attitude; the evolution of one stylistic tradition into another is a ragged process. Yet evidence from many different sources, in spite of many contradictions, seems to bear out the generality. It is easy for the 20th-

¹Adolf B. Marx (1795-1866), cited in Smither, "Theories," p. 17.

²A. H. Fox Strangways (1859-1948), "Time," Grove's V, v. 8, p. 475.

³Eric Blom (1888-1959), "Bar," Grove's V, v. 1, p. 420.

⁴Vincent Persichetti (1915-), Twentieth Century Harmony/ Creative Aspects and Practice (New York: W. W. Norton & Co., 1961), p. 213.

century performer to be almost blind to meter signatures:

It is not surprising that musicians usually ignore the time signatures.¹

and deaf to bar-lines:

Music is written within bars as a design may be drawn on squared paper; the squares are rubbed out and the bar-lines are not heard.²

The result is loss of the powerfully inflective rhythmic structure these notational symbols were, in the early 1800s, assumed to represent.

Tracing in any detail the shifting of metrical presumptions from Schumann's time to the present is far beyond the scope of this study. A general outline, however, may put into perspective some viewpoints which appear to be obstacles to carrying out Schumann's rhythmic intentions.

Inflective Tyrannies

Metrical presumptions in the 19th century must be reconstructed mostly from theoretical treatises, since composers rarely verbalize their working assumptions; notation is precise only up to a point; and performance itself was ephemeral before the development of sound recording techniques. These treatises are not only informative in themselves but also had wide pedagogical influence. There is

¹A. H. Fox Strangways, "Time," Grove's V, v. 8, p. 471.

²Ibid., p. 470.

consensus, among the 19th-century theorists consulted for this study, as to the necessity of an underlying metrical framework. Their explanations of it, however, differ in important ways. The relationship of rhythm to meter is particularly significant.

Hauptmann and Gurney, in fact, seem to define metrical inflection in their statements of the fundamental nature of a metrical framework:

Music in its rhythmically moving course cannot do without metrically regulated support. The rhythmical phrase derives its meaning in art from metre, in vocal music as well as instrumental.

-Hauptmann, 1853¹

It will be readily understood that the complexities of rhythm in Music are not only not incompatible with the simple regularity of the main rhythmic basis, but are really only possible through its existence.

-Gurney, 1880²

Gurney later verbalizes the effect called "conciliatory metrical inflection" in this study. He is drawing a parallel between antique verse forms and music:

The most fundamental fact in all metre must be a fixed scheme of recurrences, underlying lines which are perceived as sufficiently congruent with it for departures to be accepted by the ear with a pleased feeling that its own intuitive sense of the ideal regularity is still in a manner dominating throughout.³

¹Moritz Hauptmann, Die Natur der Harmonik und der Metrik, Leipzig, 1853; 2nd ed., 1873; trans. W.E. Heathcote (London, 1893), p. 282. Cited in Perkins, "Changing Concepts," p. 124.

²Gurney, p. 137.

³Ibid., p. 439.

There is no hint of metrical oppression in these viewpoints. Yet much of the musical thinking of the late 19th century and into the 20th is concerned with "freedom" from aspects of meter perceived as monotonous and tyrannical. The strength of meter as a rhythmic premise is often obscured by the semantics of rebellion. What is the source of this "tyranny of the barline" or "tyranny of the bar"?

It may be conjectured that the tyranny was felt in detailed, over-elaborated codifications of meter which reduced to rigid rule the elastic rhythmic life of the metrical armature. The writers of composition texts seemed to value a strict metrical congruency in construction and, concurrently, to disregard musical attractiveness. Accentuation was particularly subject to such organizational strictures. That this codification was often presented with the most benign of pedagogical intentions did not mitigate its oppression. Marx, for instance, details accentual differentiation within the bar in these terms:

In doubly combined measure, for example the 12/8, we can distinguish three accents we have in the first place, actual chief parts (marked with three accents); then ex-chief parts which had been chief parts in the 6/8 measure (marked with two accents); and lastly ex-chief parts of the 3/8 measure (marked with one accent).

-Marx, 1832¹

¹Marx, Allgemeine Musiklehre, 6th German edition (Leipzig, 1857), pp. 133-34; as trans. by George Macirone, General Musical Instruction (Boston, [1854?]) pp. 43-44; cited in Smither, "Theories", p. 18.

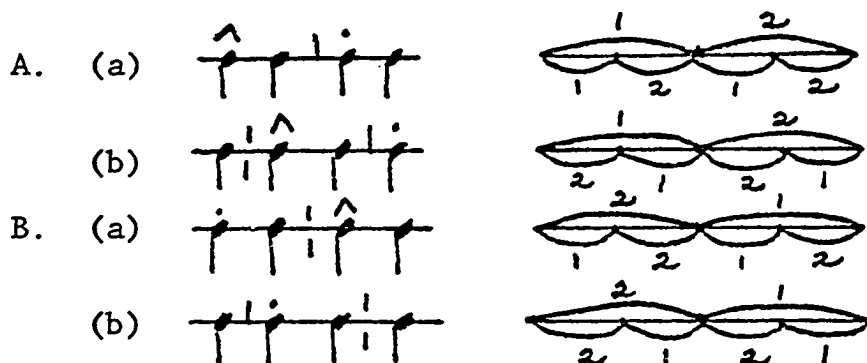
He goes on to apply this gradation of prescribed accent, derived from metrical position, to further sub-divisions of the beat; the examples finally show, for instance, five precise gradations of accent within one bar of common meter, not including the "least preferable" notes of all which have "no accent." Marx does allow some relaxation of accentual rule in fast tempos, but the general impression is of a rigid terracing of accent in every bar according to the metrical frame.

It is not unusual for treatises on music theory to make laborious reading. The difficulty of representing in words what a musical ear hears is apparent in all of the theoretical treatises consulted for this study. Sometimes, ironically, the finer the musical perception, the more opaque its verbal expression. For instance, Hauptmann's treatise,¹ published in 1853, explains divisive metrical rhythm in minute detail as a self-generating organization in which motifs are accentuated according to Hegelian dialectical construction. This work repays patience; yet many found it unreadable. Joachim confessed to Schumann that he could not get past the first thirty pages. Schumann did not get that far: "It is not musical at all," he said.² Yet

¹Moritz Hauptmann, Die Natur der Harmonik und der Metrik (Leipzig, 1853); 2nd ed., 1873; English translation as The Nature of Harmony and Metre by W. E. Heathcote (London, 1893). All quotations are taken from Smither, "Theories."

²Niecks, p. 292.

Hauptmann, in his forbidding lists of metrical analyses, deals with the same rhythmic life that animates Schumann's scores. This somewhat abridged listing of Hauptmann's "Accents of the Twice-Two-Timed Metre"¹ gives a glimpse of his logical struggle:



Thus over-zealous codification of basic premises was evidently a factor in giving a general impression of meter as unmusical "rules." Another factor may well have been the artificial character of melodic examples constructed to illustrate theoretical points. Marx is neither the first nor the last textbook author to offend in this way. The general impression is that of a pedantic expectation of regularity and congruency at the expense of musical life. Such stricture inevitably aroused a great deal of opposition.

¹Hauptmann, cited in Smither, "Theories", p. 63.

In any case, by 1873 when Lussy's practical treatise for effective performance was published,¹ deviation from metrical accentuation is openly valued as escape from the tyranny of the bar. Lussy's work, widely admired and used in conservatory classes, is in the general tradition of the Piano Schools earlier in the century: Hummel's (1828), Kalkbrenner's (1830), and Czerny's (1839). But Lussy develops a subtilizing hierarchy of accentuation in which metrically expected accent is subordinate always to "logical" formal accent, which in turn is always subordinate to "expressive" accent.

Lussy says that metrical accent appeals to the instinct: "Because of it the listener instinctively taps his foot, moves his head, etc., at regular intervals."² The second type of accent, which he calls "accent rythmique," is intellectual rather than instinctive; by "rythmes" he means symmetrical phrase lengths.³ The third type of accent is expressive accent, "accent pathétique," which "will always take the lead and rule over the others."⁴ Although Lussy

¹Mathis Lussy, Traité de l'expression musicale; accents, nuances et mouvements dans la musique vocale et instrumentale (Paris, 1873); its 14th edition was published in 1911. References are to the 4th edition (Paris, 1882) which was translated by M. E. Glehn as Musical expression (London, 1892). All quotations are taken from Smither, "Theories."

²Lussy, cited in Smither, "Theories," p. 84.

³Ibid., p. 85.

⁴Ibid., pp. 85-86.

does give extensive rules for metrical accentuation (thirteen of them, beginning with "1. The first note of every bar should be accented"¹), this acknowledgement of an underlying metrical frame seems pale compared to the eloquence of his description of expressive accentuation:

Listening once more we shall notice that there are some notes on which the artist concentrates his whole energy, bringing them into relief by dwelling on them and enforcing them with all his strength; and we shall feel that these exaggerated notes are independent both of the accented notes which mark the bar and of those which define the rhythm [the phrase]. There is no coincidence, no regularity about them, they destroy the metrical and rhythmical accents, and thereby acquire additional force and brilliancy.

The performer will exhaust all his energy and enthusiasm to express them. His passion and excitement will carry us on breathless, till with one supreme effort he pours forth the utmost fire of his soul, and then his voice dies away and sends a thrill through the audience. This we will call . . . the 'pathetic or expressive accent' ²

The notes which are to receive this expressive accent are those chromatic to the key, highest in the phrase, syncopated, long, dissonant--in short, the irregular ones. The performer must examine the piece to discover these exceptional, unexpected features.

The implication is clear. Metrical accents are not "real"; the "real" accentuation comes from other factors, including melodic, harmonic, agogic, and tonic (pitch)

¹Ibid., pp. 88-93.

²Ibid., p. 85.

structures but excluding metrical structure.

This shift toward the over-riding effectiveness of irregular factors is carried even further by Riemann,¹ the most widely influential theorist and musicologist of the turn of the century. Riemann emphasizes the "dynamic curve" rather than the terraced accentuation of A. B. Marx, timing (agogics) to clarify metrical structure, the normalcy of four- and eight-measure structural units, and above all upbeat rhythmic forms. Riemann finds beginning-accented forms, whether in groups of notes, bars, or groups of bars, "unsatisfactory" artistically.² To him a second bar is heavier than a first, because it is the "answer" to what came before; a fourth bar is heavier than a second, and the eighth bar heaviest of the phrase, according to a hierarchy based upon upbeat functioning.³

Early in the 19th century, relative weights of bars in the supermetrical structure were assumed to parallel the

¹Hugo Riemann, major pertinent works: Musikalische Dynamik und Agogik (Hamburg, 1884) and System der musikalischen Rhythmik und Metrik (1903). All quotations are taken from Smither, "Theories."

²Riemann, Dynamik; discussed in Smither, "Theories", p. 191.

³Riemann, System; from Smither, "Theories", p. 231.

thetic accentuation within the measure.¹ This shape is completely reversed with Riemann. He consistently emphasizes upbeat formations at all levels, and all but obliterates initially-stressed structures in his analyses. He undertakes a thorough revision of slur notation to reflect rhythmic groupings inclusive of their upbeats, carrying many slurs across barlines in contrast to earlier notational practice. Eighth and sixteenth notes in his rhythmic examples are often beamed according to their phrase-grouping, cutting across metric boundaries. Riemann's insistence on upbeat formations in supermetrical structure extends to re-numbering the bars of any opening phrase which seems unequivocally thetic. In such a case he considers the piece to begin with [II], the second (heavier) bar, or possibly with [IV] or [VI], counting back from [VIII] which is the heaviest.² He

¹Gottfried Weber, whose treatise Schumann studied as a text, devotes some attention to supermetrical structure. He says of this "higher symmetry" that

the measures are distinguished from one another in such higher rhythms, in respect to their greater or less internal weight or accentuation, in the same way as the parts of measures are distinguished among themselves; i.e., the heavy or accented measures assume a prominence above the lighter, as do the heavier parts of the measure above the lighter.

-Weber, cited in Smither,

"Theories," pp. 31-32.

²Riemann, System, discussed in Smither, "Theories," pp. 231 and 239-42.

does not hesitate to re-bar and re-meter passages where a composer has "mistakenly" notated a heavy bar to begin, as in the opening of the third movement of Mozart's Sonata in G, K. 283:

a.

a. Barring Mozart's, slurs Riemann's¹

b.

b. Rebarring and remetering Riemann's¹

¹Riemann, System, quoted in Smither, "Theories," pp. 234-35.

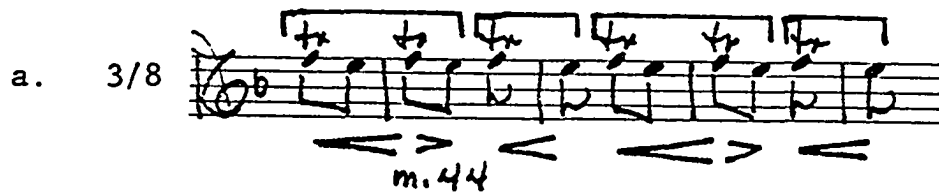
c.

c. Mozart's score, Urtext¹

Riemann is, however, concerned with the conservation of some fundamental metrical concepts. For instance, a swell toward the barbeat as the point of most intensity appears constantly in his analytical examples. Sometimes it over-rides non-congruent pitch structure in favor of metrical structure, implying a conciliating metrical inflection, as

¹W.A. Mozart, Sonatas and Three Fantasias for Piano, Urtext (Scarsdale, N.Y.: Edwin F. Kalmus, n. d.).

in Beethoven's Sonata in d, Op. 31#2/III:

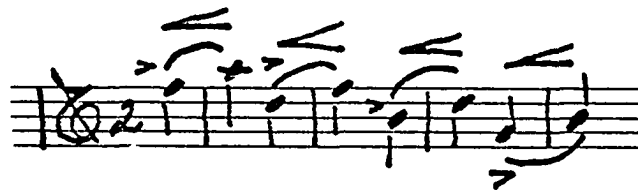


a. Beaming, bracketing and swells Riemann's¹



b. Beethoven's score, Urtext²

But he avoids deciding the relative weight of motif stress and metrical accent when they do not coincide:³



except for quick passagework, where, he says, motif stress

¹Riemann, System; cited in Perkins, pp. 172-73.

²L. van Beethoven, Piano Sonatas, Urtext (Munich: G. Henle, n. d.).

³Riemann, Dynamik und Agogik; discussed in Perkins, pp. 166-67.

is the stronger.¹

Through Riemann's influence several "modern" attitudes toward rhythm and meter gained wide acceptance. Most important to the study is the idea that downbeat beginnings, at metrical or supermetrical levels, are at best vulgar; upbeats are considered more aesthetically satisfying. Riemann gives a strong impression that the notation of earlier music is, at the least, misleading where it is not simply wrong; the "true" meter and the "real" rhythmic shape must be honored instead of the notated forms. Thus by the early 20th century metrical notation had lost much of its earlier inflective significance. D'Indy writes in 1912:

Most frequently, the first beat of the bar is rhythmically a weak beat; many errors and misinterpretations could be avoided by the adoption of this principle.²

The inflective purpose of the barline is particularly obscured when there are extremely short notes on the barbeat or where no overt accentuation is possible, as with rests or tied-over notes. Aurally these are "concealed barlines."³

¹Ibid., p. 167.

²Vincent D'Indy, Cours de Composition Musicale (Paris, 1912), v. I, p. 27; cited in Perkins, p. 229.

³Smither, "Theories," p. 433.

And Smither notes in Schönberg's early atonal style (c. 1908-1916) a

tendency to use bar lines seemingly as a matter of convenience (without rhythmic significance) ¹

The new attitudes are also reflected in the closely related area of performance style: under the guidance of Leopold Auer (1845-1930) several generations of string players learned to minimize the difference in rhythmic effect between down-bow and up-bow with rhythmically neutral "continuous" strokes. Another aspect of this neutralizing of metrical inflection occurs with a composer's demand for consecutive downbows, as in the opening of Stravinsky's "Dance of the Adolescents" from The Rite of Spring.

With many 20th century composers, the subjugation of metrical inflection where there is any non-congruency seems to be complete. Smither comments that

irregular structures have become common, as has the tendency to use time signatures and bar lines without apparent aural significance.²

Inflection is assumed to follow any patent structure except the notated metrical structure. "Meter," as Persichetti puts it, "has no rhythm of its own."³

¹Howard Smither, "Rhythm," Dictionary of Contemporary Music, ed. John Vinton (New York: E. P. Dutton, 1974), p. 618.

²Ibid., p. 619.

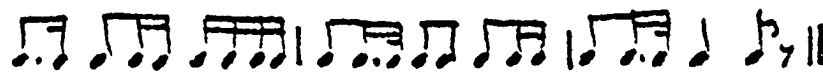
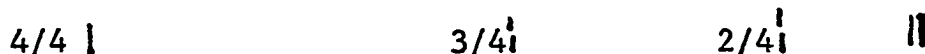
³Quoted at more length on p. 260.

But this approach is also applied to the older music. In 1928 Fox Strangways could suggest in analyzing a passage by Schumann which rhythmically is not completely straightforward:

Let us write out treble and bass separately but without the barlines, which only confuse The barline, which is the visible sign of the framework,¹ is apt to be misleading as to the real metre

And interpretational re-barring of passages by Mozart, Beethoven and others is epidemic among writers on music. Sometimes the new barlines involve the whole texture at once, as in the following cadential passage for which Cone gives two alternatives to Chopin's barring, alternatives based on harmonic change. This rebarring is to reveal what he calls "concealed cross-rhythms." The characteristic rhythmic-metric effect of the Polonaise cadence is lost in both alternatives:²

Chopin, Polonaise in A, Op. 40#1, m. 86-88

Chopin, AR:	3/4		
Cone	3/4		
Cone	4/4		

m. 86

¹Arthur Henry Fox Strangways, "Phrasing," Music and Letters IX (1928), 3-4.

²Edward T. Cone, Musical Form and Musical Performance (New York: W. W. Norton, 1968), p. 45.

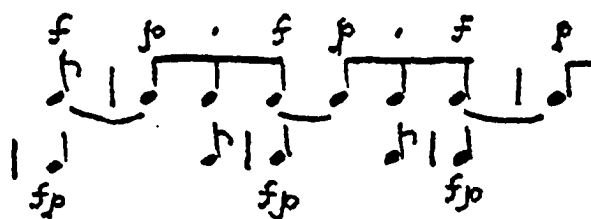
Sometimes the result of the re-metering is a polymetric texture with non-simultaneous barlines, as in the following Mozart passage for which Stein suggests three different meters whose beats and even bars are staggered.¹

Mozart, String Quartet in D Minor, K. 421/IV, Var. II

Violin I

Mozart, 6/8

Stein, 3/8



Violin II

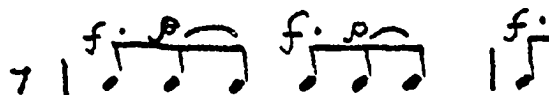
Mozart, 6/8

Stein, 12/16 (4)



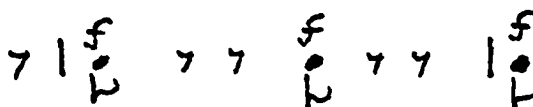
Viola

Mozart, 6/8
(unchanged)



'Cello

Mozart, 6/8
(unchanged)



Stein comments:

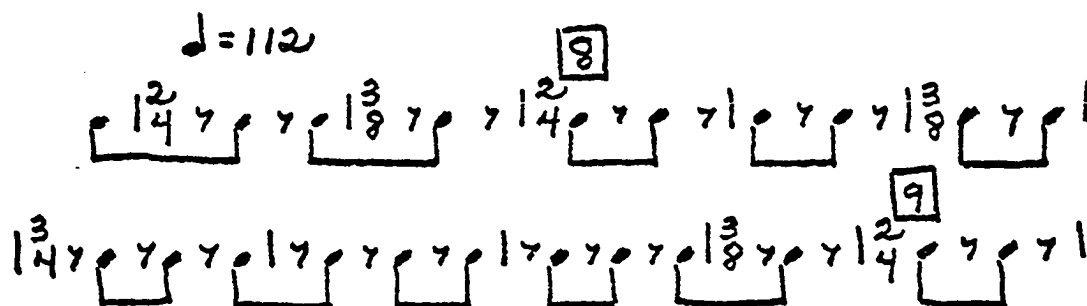
Dynamic marks are sometimes used for indicating the rhythm [evidently he means "metrical accent"]
It is the cross rhythms of the violins that must be phrased distinctly, that is, independently.²

¹Erwin Stein, Form and Performance (New York: Alfred A. Knopf, 1962), p. 62.

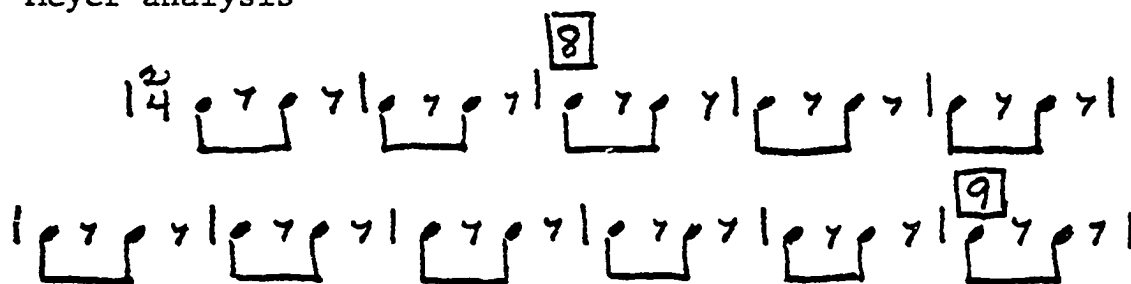
²Ibid., p. 61.

Re-metering a composer's notation in order to honor non-congruent melodic, harmonic or rhythmic structures is a curiously inconsistent practice. It takes for granted the inflective purpose of the barline in order to cancel the inflective purpose of the barline. As a paradoxical result of this notational ambiguity, not only are passages by Mozart and Chopin subject to rebarring because of their irregular structures, but multimetrical 20th-century passages are rebared because of their regular structures.

Stravinsky, "Soldier's March," L'histoire du soldat (bass)



Meyer analysis¹



¹Leonard B. Meyer, Emotion and Meaning in Music (Chicago: The University of Chicago Press, 1956), pp. 119-20. Meyer makes a valid point as to the regularity of structure in the bass patterning. However, motivic structure does not automatically set the inflection. See "Findings," Chapter VII.

Thus motivic structure seems to be a commonly accepted basis for inflection, particularly for notationally non-congruent structures. Cone, speaking directly to performance concerns, sees

a new, looser, sometimes almost anti-metrical principle For many later [20th-century] composers, abstract meter seems not even to exist; what meter there is expresses itself only through the actual rhythmic motifs of the musical surface and hence is in a state of constant flux.¹

Thus the revolt against the "tyranny of the regular" has succeeded. An age when divisive meter was the inflective standard, so powerful that it could be called tyranny, has given way. But when 20th-century performance practice affects the performance of early 19th-century music, the new tradition becomes a "tyranny of the irregular."

To apply the new tyranny to Schumann's music is an anachronistic misunderstanding which drains his rhythmic formations of vitality and tension. He developed his own ways of coping with metrical expectation, the invisible but audible force which made his irregular constructions so strikingly effective. Such "tyranny" was, to Schumann as to Beethoven and Schubert, an ally.

The Concept of Metronomic Time

Another important factor in the stylistic distance

¹Cone, p. 82.

between the 20th and the early 19th centuries is the development of a concept of musical time as metronomically measured. The equality of metrical beats in succession was, before the advent of Maelzel's pirated pendulum device (patented by him in 1816), a matter of the performer's felt judgment, not of scientific accuracy. When the two differ, which is "correct"? Romanticists and modernists tend to answer that question differently, although the generalization obscures abuses in both directions.

In 1963 critic Schonberg ventures, speaking of pianists, that

it can safely be stated that only within the last fifty years has there been such a thing as the concept of a basic metrical pulse and a sobriety in the use of such expressive devices as the ritard, accelerando, rubato, and dynamic extremes--not to mention fidelity to the printed page.¹

Chopin's flexible playing of his own mazurkas (see p. 5) must have been metrical, but not metronomic. And when Clara Schumann prepared her Instructive Edition of her husband's piano works, she used a watch with a second hand, not a metronome, to settle on the MM numbers.² Her difficulties even with this way of sampling musical motion suggest that her playing was not basically metronomic.

¹Schonberg, p. 132.

²Schlötel, "Schumann and the Metronome," Schumann, ed. Walker, p. 111.

Gurney, well after the metronome was in general use, comments on the flexibility of "definite rhythm":

I must especially warn the reader against confounding definite rhythm with anything like metronomic and mechanical divisions of the time. For when insisting on the place of the rhythmic factor, I have been sometimes met by such examples as performances of national music by Hungarian performers, which, it was alleged, are not in definite rhythm. But definite rhythm, in my sense, is perfectly compatible with a large amount of swayings and humourings of the pace. The sense of its strictness consists, not in perceiving a mechanical identity of length in the bars and in their corresponding subdivisions, but in perceiving that the music has ribs, and where they are ¹

Schumann undoubtedly took for granted a flexibility both of and within a metrical framework that is foreign to 20th-century musicians. Cooper and Meyer, for instance, look upon the armature of barbeats as stable:

Accented beats differ from unaccented ones in that their placement in the series of beats tends to be fixed and stable. Specifically, in order to obtain the desired impression of grouping, the performer often slightly displaces unaccented beats in the temporal continuum so that they are closer in time to the accents with which they are to be grouped than if he had played them with rigid precision But accented beats seem never to be so displaced.²

As Fox Strangways sees the metrical "grid" (see p. 261), it is not only rigid but primarily a convenience to display surface rhythmic groupings. Grid-meter, however accurate, is eye- not ear-meter.

¹Gurney, p. 155.

²Cooper and Meyer, p. 8.

Music psychologists, notably Seashore but many others as well, recognized that musical "beauty" somehow escapes from the grid's rigidity. Seashore was forced to devise a theory of artistic deviation, deviation not only in timing but in pitch, sonority, dynamic level, and so forth, to explain experimentally documented performance fluctuations, aberrance from the presumed standards supplied by notation.¹ Yet a metronomic metrical norm, which Seashore rightly assumed to be unmusical, is itself a misrepresentation of the rhythmic nature of meter as an organizing system. Rhythmic meter not only measures, it differentiates beats, sub-divisions of beats, and bars as well. The metronome does not and can not differentiate.

The Relation of Accent and Stress to Inflection

The actual effecting of metrical differentiation, however, is imperfectly understood. There are two² traditional ways to mark a beat for emphasis: dynamic stress and agogic stress. Differentiated dynamic stress has been

¹Carl E. Seashore, In Search of Beauty in Music (New York: Ronald Publishers, 1947).

²There is a third way sometimes mentioned: tonic (pitch) stress. It rarely competes independently for bar-beat weight in a consistent way, so is neglected in this discussion. The Scherzo of Schumann's Piano Quintet, Op. 44/III, shows some effect of tonic stress at both low and high terminals of the thematic scales (opening shown in Ex. E30).

generally considered the primary method of creating metrical differentiation. It has been assumed, for instance, that dynamic stress on every third note in a series, thus:



will establish triple meter thus:



Consequently the "real" barlines are presumed to precede such regular stresses. The concept of grid-meter, with exactly measured beat- and bar-lengths, reinforces reliance on graduated dynamic levels to communicate metrical differentiation. From this point of view, consistent non-congruencies which are stressed would accomplish an aural shift in the metrical organization.¹ A series of hemioles would fall into this category. Patterned non-congruent stress, as in Example D10, would suggest additive rather than divisive meter (in this case $\frac{3+2+3}{4}$ or $\frac{3+3+2}{4}$) in this approach; and consecutive all-tied barbeats would negate the placement of the barline, as in Example D84. Goldstein is only one of many writers to conclude that Schumann has notated an impossibility in this passage and others like it; the barring, he believes, is at

¹Perkins states unequivocally ("Changing Concepts of Rhythm in the Romantic Era," p. 205) that "if the discrepancy between rhythmical and metrical accentuation is consistently maintained within a phrase or larger section of a composition, the metrical scheme of accentuation will seem to the auditor to shift, which will, in fact, have taken place, although the composer may not have given any notational indication of a new metrical scheme."

odds with the aural reality:¹

Bowed or wind instruments might bring it ["this syncopation"] out as intended, and pianists occasionally make the attempt by pantomimic suggestion or by use of a well-known damper-pedal trick, or by both, but the notation is somewhat futile for a percussion instrument, the music being accepted by the ear as



But is the sense of barbeat dependent upon stress, that is, upon differentiated dynamic levels? Weber² thought not; and Gurney³ thought not. The only necessity is an "internal weight"; the barbeat is a "strong place." Their insight is confirmed in the 20th-century laboratory, where graduated dynamic stress, in spite of long historical

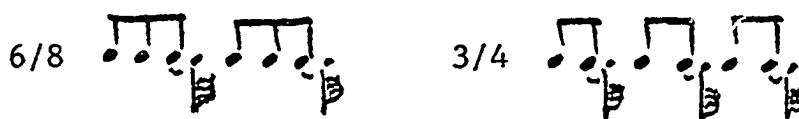
¹Walter Goldstein, "The Rhythmic Tricks of Chopin and Schumann," MTNA Proceedings, 1924, pp. 71-72.

²"What is here said of heavy and light parts of the measure is not to be so understood as that a so-called heavy or strong part of the measure must really in all cases be delivered more heavily and strongly (more forte) than the so-called light or weak part; we here speak rather of an internal weight which our rhythmical feeling spontaneously gives to every heavy time [beat]" Weber, Theorie; cited in Smither, "Theories," p. 31.

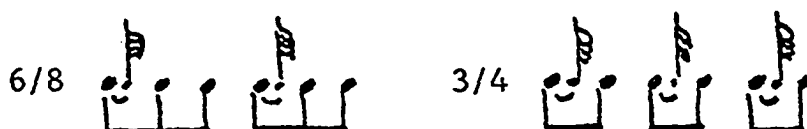
³"I use the term strong places to express that particular sense of recognition which is felt, e.g., in music at the first beat of a bar, whether the note receives the emphasis of extra loudness or not. How thoroughly the differentiating quality of the stimulus which occurs at that place and no other is recognized . . . is shown by the physical impulse to mark it with a beat or tap. just as much as if it were brought out to the ear by extra loudness" Gurney, p. 438.

dependence upon it to differentiate metrical beats, has been proven to make distinctions very inefficiently. For instance, a sound actually ten times louder than a control sound is subjectively perceived as only twice as loud.¹

Since metrical "internal weight" is not, then, necessarily an accent of dynamic stress, is it an accent of lengthening--an agogic accent? Riemann, who devoted much attention to agogic accent, considered it especially important in organ music, where there is no way to make dynamic accents to clarify metrical organization. He solves the commonly presented problem of six eighth notes which need to be communicated as 3/4 or as 6/8 in two ways, either lengthening the last note in each beat group:



or lengthening the first note in each beat group:²



For Riemann, timing adjustments are also connected with dynamic change, so that crescendos hasten and diminuendos lag. Metronomic time to him is unmusical.³

¹Paul Zukofsky, "The Psychophysics of Musical Performance," Hi-Fi/Musical America, 28/2 (Feb. 1978), MA10.

²Riemann, Dynamik; cited in Smither, p. 189.

³Ibid., p. 191.

Nearly a century after Riemann wrote, the problem of the performed difference between $3/4$ and $6/8$ has been addressed in the computer laboratory.¹ Some of the findings of that study pertain to the present discussion. First, exactly equal spacing of exactly equal tones can be heard in either duple or triple groupings at will. The implication is that the "internal weight" can be self-induced. This is grid meter, i.e., metronomic time; and it fails to communicate rhythmic-metric motion unequivocally. Further, extremely small differences in timing are perceived as significant by the listener. A difference of one-fortieth of a second is noted without doubt in the establishment of rhythmic grouping, a difference detected not only in the laboratory but under the conditions of live performance. A general report of the study states that

Performers appear to use these small differences to convey information about metric structures Performers appear to be able to control these differences, in some cases to a very remarkable extent and in an indirect way not yet understood.²

Are other factors besides dynamic and agogic accents operating to create the "internal weight" of the "strong places" in a metrical organization? It may be helpful to re-examine the explanatory examples for these two traditional

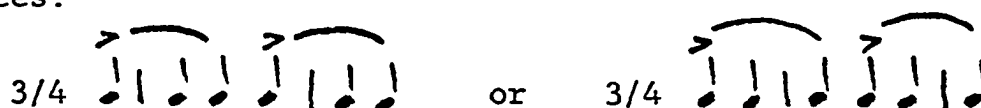
¹Zukofsky, pp. MA8-MA10.

²Ibid., p. MA10.

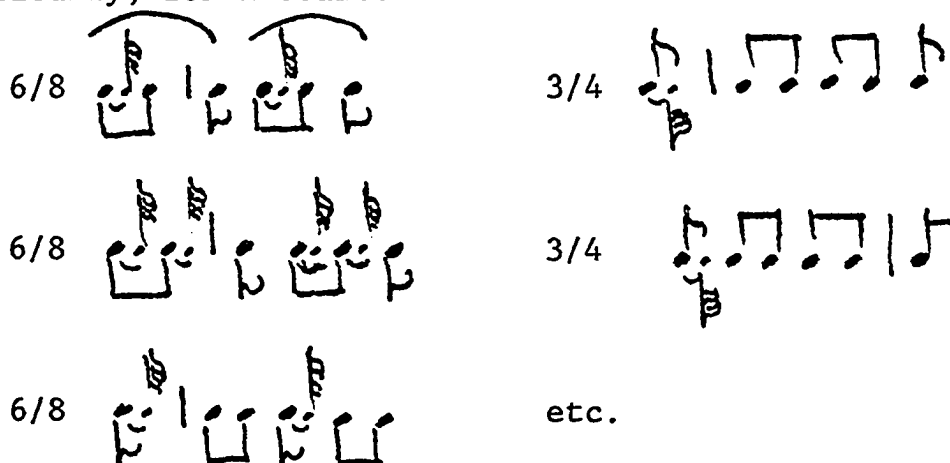
accentuations. On p. 282, dynamic stress on every third note in a series was assumed to establish triple meter thus:



Yet a musician has no difficulty interpreting the following patterns metrically, patterns which also have dynamic stress on every third note but whose barbeats fall in different places:



In the same way, there are more possibilities for agogic lengthening than Riemann prescribes. Not only the patterns he gave (see p. 284) but others as well can be inflected metrically, for instance:



Evidently dynamic stress and timing stress do not in themselves carry metrical accent, even with patterned placement in the metrical armature.

The consistent factor in the accentual schemes given above, whether congruent or non-congruent, has been the grouping effect of the "strong place," the barbeat or beat. This grouping effect is a kind of magnetism, with the strong place as the focal point. As demonstrated, this grouping effect is both independent of and more puissant than either dynamic stress or agogic stress. It is this grouping effect around a point of internal weight which creates rhythm and guides inflection. This grouping effect is an activity of the aural imagination. The composer recognizes this grouping effect when he chooses notational symbols.

Just how this grouping effect creates rhythm and guides inflection is imperfectly understood. Clearly, however, it involves not what is done either dynamically or agogically at single points of time, regardless of patterning, but what is done to shape the whole context of the strong place. Not local stress, but gestural coherence makes inflection. Scholes calls the point of internal weight a "throb,"¹ acknowledging its organic behavior.

The internal weight does something, even if it cannot be conveniently defined: it accomplishes inflection. And inflection is still operating when Schumann writes all-tied

¹Percy A. Scholes, "Syncopation," The Oxford Companion to Music, Tenth Edition, ed. John Owen Ward (London: Oxford University Press, 1970), pp. 1002-1003.

harmonic anticipations, or hemioles across alternate bar or beat boundaries. In some instances he tried to notate such inflection; the enigmatic swells on all-tied barbeats are graphic suggestion of that internal weight. Furthermore, that weight prevents the slippage of the barline from its metrical position, precisely where the composer wrote it. That weight inflects its surroundings, whether or not its point in time is articulated. And, finally, that internal weight makes of the abstract metrical system a rhythmic organization, not a neutral grid of measurement. Schumann's riskiest writing presumes this actively inflective meter.

Melodic Identity in Close Stretto

Much of Schumann's imitative writing, whether formal or informal, is fairly straightforward rhythmically and presents few inflectional problems. But one aspect of his imitative habit is in direct contradiction to a well-established performance approach. In certain passages, such as those shown in Examples E41-E46, the close imitation involves a conspicuous repositioning of the motif, as the subject matter is shifted in relation to the pattern of strong and weak beats.

To the 20th-century performer a considerable barrier to carrying out metrical reinflection in these passages is loss of the melodic character of the motif when it is reinflected. Providing secure recognition of a "subject" wherever

it occurs is considered the foundation of fugal performance. Performance training long has emphasized the importance of establishing the distinct character of a subject, then shaping it distinctly and consistently throughout the contrapuntal texture and throughout the piece. Further, there is no general impression that strettos may upset the inflective integrity of the subject. Canon, fugal stretto, and freely imitative textures are traditionally approached with clarifying intentions, namely, through the use of consistent inflection.

Schumann's diacritical marks seem to support consistent inflection, as well. See, for instance, the stress marks in Example E41, which also call attention to the length of the canon; and in Example E46c, where the third note of the fugue subject, on the barbeat in the first entry, is dynamically incised for each entry.

Yet in performance Schumann's overlappings seem to resist the approach of consistent inflection. If the characterizing rhythmic profile of the motif is preserved, the metrical framework seems crippled, out of synchronization. If, on the other hand, by means of conciliatory inflection the metrical flow is preserved, the motif loses a certain amount of recognizability.

This problem is pressing enough in keyboard works, where one performer is in control of the whole contrapuntal texture. It is significant that Schumann's stretto tech-

niques were developed in the early piano-solo pieces. But the same type of imitative overlapping can create crisis in an ensemble work when the various imitative entries refuse to accommodate rhythmically to each other. This non-accommodation is further evidence that grid-meter is musically impractical. The grid implies that beats and their divisions will line up vertically whether or not the various strands of the texture are grouped alike rhythmically. But the minute differences in timing which help to communicate metrical organization resist lining up in much of Schumann's metrically non-congruent overlapping. In these strettos, entries do not comfortably "fit"; or, if they are forced to fit, they "feel wrong" melodically.

Yet it may be assumed with confidence that Schumann used the device deliberately. The technique is of venerable usage under the term imitatio per arsin et thesin, i.e., "imitation in contrary rhythm"; it is treated in detail in

Marpurg's treatise of 1753-54,¹ which Schumann first studied in 1832 and often consulted later. Schumann also leaned upon the precedent of Bach, particularly in the Art of Fugue, which he copied out early in 1837,² and the Well-Tempered Clavier, to whose study he returned again and again.³

The unease of Schumann's re-inflected stretto entries compared to the unobtrusiveness of Bach's has several causes, some beyond the scope of this study. But it is pertinent that many of Schumann's instances occur in triple meters,

¹Friedrich Wilhelm Marpurg, Abhandlung von der Fuge, trans. Alfred Mann, in The Study of the Fugue (New Brunswick, N.J.: Rutgers University Press, 1958):

"8. If one of two parts written in imitation begins on a strong beat and the other on a weak beat, or vice versa, this is called imitation in contrary rhythm--imitatio per arsin et thesin or in contrario tempore." Mann, p. 151.

"18. The fourth class [of fugues] contains fugues by imitation in contrary rhythm--fuga per arsin et thesin" Mann, pp. 157-58.

"22. Fugues by imitation in contrary rhythm belong properly to the canon. An exchange of strong and weak beats occurs in the entrances of an ordinary fugue only when the theme is to be used in a stretto passage or a canonic passage. There are no regular examples of an ordinary periodic fugue written in this manner." Mann, p. 160.

²Gerald Abraham, "Schumann," Grove's V, v. 7, p. 609.

³Schumann's precedents in Bach's practice are found, for instance, in Volume I as follows: in the fugue in C major, #I, in common meter, incorporating many stretto entries after an interval of one beat, and utilizing each of the four metrical positions in the bar for entry; in the c# minor fugue, #IV in C, in the Tenor entry of CSII in m. 99, the middle entry of a three-entry stretto; and in the B^b minor fugue, #XXII, also in C, where in m. 67-69 there are five consecutive entries after one beat.

where, of beat-position shifts in the bar, there are two "wrong" inflections to one "right," instead of the simple alternative in duple meters of "on the beat" versus "on the off-beat." Schumann was not particularly in sympathy with Mattheson's dictum (1739) that

a fugue should be written in duple meter since it requires a "certain element of seriousness" which is not to be found in the "light, skipping motion" of triple meter.¹

Evidence is found not only in Schumann's own fugues but in his remark on Mendelssohn's Opus 35 (see p. 37). Bach himself avoided the re-inflected entry in triple meters.²

An approach, however, which makes re-inflected entries appropriate as well as practical, in Bach or elsewhere, is to view most of the compressed voices as more ornamental than contrapuntal. They are not conceived as strong independent whole entries, compressed together but each autonomous in its metrical setting; the more turgid the stretto scheme, the more truncated most entries become. Both harmonic and metric control are vested in one leading voice, to which the stretto adds imitative tension. In this light, Schumann's close strettos are performable with metrical and rhythmic comfort. The position of the leading voice is

¹Johann Mattheson, Der voll-kommene Kapellmeister, quoted in Mann, Study of Fugue, p. 151.

²There are none in the simple triple meter fugues of Volume I of the Well-Tempered Clavier (#VI, X, XI and XXI), and only one free double entry quasi stretto in the fugue in compound triple meter, #XIX, m. 25, beat two.

enhanced by metrical inflection in the imitations. Contrapuntal technique unifies the texture motivically; it accomplishes the immanence of the subject. But the framework is inflected homogeneously, and is thus metrically stable.

Special Problems of Inflecting Hemioles

The inflection of hemioles in metrical music is ordinarily an encapsulated problem, since, regardless of the performer's choice among inflectional possibilities, the overall metrical framework is reasserted every sixth unit where the pattern of twos and the pattern of threes again coincide. Though the inflection may be mistaken, it does not cripple the larger motion. But the three possible types of inflection (hemiolic, metrical, or mixed) are quite different from one another in their rhythmic effect. A review of the three options may be helpful.

In hemiolic inflection, the hemiolic inner divisions determine the accentuation, that is, the aurally accepted meter. The six units of the hemiolic matrix, therefore, are inflected thus in the whole fabric:¹

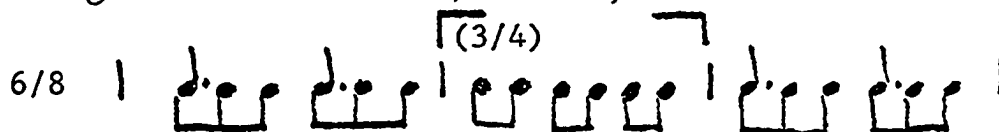
┌ I 2 3 4 5 6 I ┐

¹The overlines show "heavier places" which are not necessarily louder but communicate metrical organization.

Out of context this would be perceived as a triplet with duple sub-divisions, for instance:



Its "true" meter (that is, the aural effect) is, in this case, $3/4$. A piece beginning with such hemiolic inflection would seem to the listener to move in a regular triple meter, with metrically congruent constructions. Context, however, makes such a passage a hemiole; in this case, its setting would be within $6/8$ meter, thus:



Therefore the metrical motion is primarily duple ($6/8$) but the hemiolic bars are in triple meter ($3/4$). This represents an alternative grouping within the anomalous bar. Hemiolic inflection is appropriate in unanimous hemioles for a rhythmic style in which meter follows motivic structure. The metrical shift is perceived in the grouping changes within the anomalous bar(s), as the constant eighth notes move now in normal threes, now in anomalous twos within the framework of sixes.

In metrical inflection of hemioles, on the other hand, the non-congruent inner groupings of the hemiole are inflected according to the meter. The six units of the

hemiotic matrix, therefore, are inflected thus in the whole fabric:

┌ I 2 3 4 5 6 I ┐

Even if the hemiotic motivic pattern is marked by stresses, as shown below, the "heavier places" remain clear as metrical accentuation (stress $\neq$ accent). Reference to context is not necessary to identify this passage to the ear as a hemiole; both metrical frame and non-congruent structures are aurally perceptible.

Accented metrical pattern:

6/8

Stressed motivic pattern:

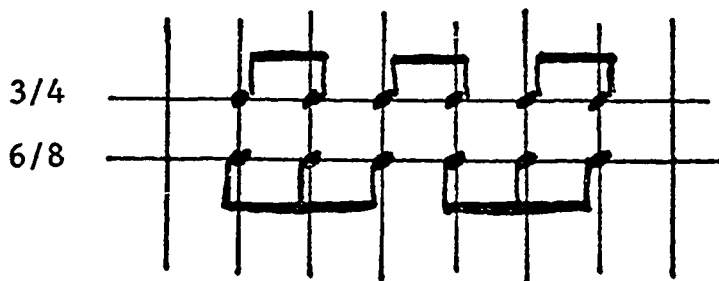


Metrical inflection is appropriate with both unanimous and partial hemioles for a rhythmic style in which notated meter is expected to inflect both congruent and non-congruent structures. There is no feeling of metrical instability or shift in this way of inflecting hemioles. The counterpointing of motivic structure with metrical structure is perceived as rhythmic ornamentation of a solid metrical frame. Added stress may highlight the non-congruencies, but the notated meter remains the "true" meter. A piece beginning with such a conciliated hemiole appears to move in the notated meter from the outset.

With partial hemioles there is a third possibility, mixed inflection, in which the hemiolically constructed strands of the fabric are inflected hemiolically, and the metricaly constructed strands receive metrical inflection. This procedure is practical only with an ensemble, where only one nuancing is the responsibility of any one instrumentalist. It is not practical in a solo keyboard situation because of the unnatural and formidable difficulty for one performer of projecting two co-equal but different metrical shapings.

A constraint upon mixed inflection

The illusion that it is a simple matter for a sole musician to play conflicting meters simultaneously is fostered by two concepts untenable for Schumann's era which have been discussed earlier: the concept of grid-meter, and the concept that added dynamic stress equals metrical accentuation. If these concepts were rhythmically viable, the two strands in the following figure should fit perfectly together vertically, while the metrical groupings should be clear from the independent accentuation.



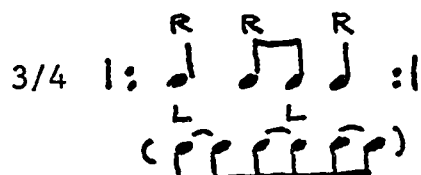
However, in practice, when the whole fabric is performed by one person, one or the other shaping prevails. Inflection will honor either the duple meter or the triple meter; then those interior emphases which are non-congruent are interpreted as stresses ornamenting the accentuation:

Because our minds tend to organize the musical texture in the simplest way, simultaneous musical events will, if possible, be apprehended as having one basic mode of articulation.¹

This reconciliation of internal emphases may be demonstrated by the following time-honored informal experiment.

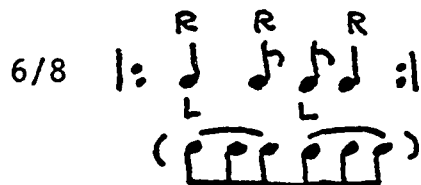
The grid figure above represents one bar of triple meter against one bar of duple meter, i.e. 3x2 within the bar. Let the right hand tap the beats of 3/4, the left hand the beats of 6/8, while the eighth note units are spoken with a non-discriminatory syllable.

Allow the triple meter (RH) to control the whole. The accumulated rhythm is now:



Left hand emphasis on the second beat of the non-congruent 6/8 now creates a stressed upbeat to the third beat of the dominating 3/4.

Now allow the duple meter (LH) to control the whole. The accumulated rhythm is now:



¹Cooper and Meyer, p. 108.

Right hand emphasis on the second and third beats of the non-congruent $3/4$ now creates a stressed upbeat and a stressed afterbeat to the second beat of the dominating $6/8$; or, with the ambiguity of triple divisions, it creates two stressed upbeats, one of an eighth note length leading to the second beat, and one of a quarter note length leading across the bar to the following first beat. At this point it has been demonstrated that "three against two" is musically practical in either a triple or a duple metrical setting, but that their resultant--accumulated--rhythms differ.

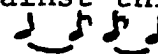
Now attempt divided inflection: that is, set the repetitious pattern in motion with two co-equal meters, RH in $3/4$ and LH in $6/8$. Difficulties will arise. Be patient. Exchange RH and LH patterns if this seems more natural. Be attentive to what happens psychologically as the shaping of co-equal simultaneous meters is attempted.

It will be found that this third step in the demonstration is a mental, hence a practical impossibility. In the endeavor to accomplish true mixed inflection, additional stress will be put on one of the lines mid-bar, usually on the one suddenly perceived as aberrant, anomalous to the meter of the other line. Yet this dynamic reinforcement remains stress, identifiably different from the accentuation which communicates the dominant meter. In other words, when such rhythmically non-congruent figures are attempted simultaneously, the mind understands one in terms of the other, just as in the first two steps of the demonstration. No matter how robust or how subtle the nuancing, the Gestalt will be either triple:



or duple:



There is no way for one musical mind to have a divided rhythmic intention, that is, two co-equal inflections. Hence, a single performer cannot play in two co-equal meters at once. Two against three will always be either $3/4$  or $6/8$  for a soloist.

Further, the non-alignment vertically of simultaneous but different rhythmic groupings can be demonstrated by dividing the accumulated rhythms of the two patterns between two performers, thus:

Performer A	3/4	
Performer B	6/8	

The minute agogic adjustments within the bar for metrical communication will be found to prevent exact synchrony within the bar. Visually, the parts line up vertically; aurally, they do not, unless one strand consents to be inflected by the other, to be in other words conciliated.

Indeed, it is difficult even for two different performers to establish two different inflections except at a tempo where both can feel the large span of six rhythmically enough to divide it with confidence. Schumann's blurring beat divisions in ensemble music make use of this procedure; see, for instance, Examples G19 and G20.

Mixed inflection of alternative groupings, whether in hemiolic proportion or other arithmetical relationship, is an effect more exploited in 20th-century than in 19th-century music. Its use is restricted by the necessity for a dual rhythmic intention, for ensemble instrumentation, and for a tempo facilitating the independent divisions. A conductor may keep the larger framework (with hemioles, the coincidence every six units) stable, and in this way there can be realized a true cross-rhythm. But it may be assumed

that metrical music written for one performer is intended to be uni-metric, with non-congruencies reconciled by the dominant meter.

This is not to say that the non-congruencies become inconspicuous. On the contrary, they are often vividly dramatized by stresses which emphasize the disparity between them and the dominant metrical armature. This is the essence of the syncopative process in metrical music.

Furthermore, it is probable that the uni-metrical but richly anomalous rhythmic textures developed by Schumann in his early piano music (Op. 1 through Op. 23) carry the same rhythmic intent when they are found in later ensemble works, since there is no evidence that he was aware of radically different inflectional possibilities given more than one performer.

It is significant for this study that both the use of a baton, and the role of conductor as separate from orchestral member who also beat time, began only after 1820. Spohr was apparently the innovator. The old ways persisted for a time, with concertmaster or keyboard player leading from his seat in the orchestra, often audibly beating the time. A separate conductor was customary only for vocal works with orchestra. As late as 1835 Mendelssohn shocked Leipzigers not only by conducting the orchestral as well as the choral Gewandhaus concerts, but also by using a baton. Schumann's otherwise enthusiastic review in the Neue

Zeitschrift of Mendelssohn's Leipzig debut notes

For my part, I disliked the conductor's stick in the overture as in the symphony Before Mendelssohn, orchestral works were performed without a time-beating conductor.¹

These practices imply strong conventional assumptions on the part of orchestral musicians as to the nature of metrical rhythm.

The findings of this study strongly suggest that metrical inflection is appropriate for Schumann's hemioles both because of his formal and because of his diacritical treatment of hemiolic constructions. This appraisal is further supported by the impracticality for the piano soloist of mixed inflection for partial hemioles. Schumann's hemiolic custom was thoroughly established in his solo piano writing between about 1828 and 1840, and the scores show no evidence of a change of approach for the later ensemble music. In fact, it is probable that Schumann realized only quite belatedly how restricted a view of the score each member of an ensemble gains from his single part.²

¹Joan Chissell, Schumann (revised edition), p. 37.

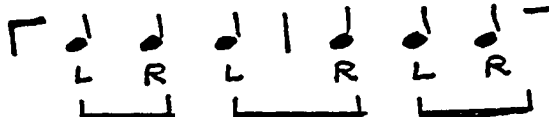
²Five years after the three string quartets were written (and published as parts only) Schumann wrote to the publisher, Härtel:

Would you publish the score of one of the quartets now, and the others later Quartets published only 'in the parts' seem to me like a man who has been quartered; one doesn't know where to catch hold of him.
- Herbert Bedford, p. 153.

Hemiolic dance-step patterns

Another historical fact may have some bearing on Schumann's treatment of hemiolic constructions. The corporeal reconciliation of hemioles to metrical inflection is a distinct feature of the waltz as a dance. Its step pattern is hemiolically non-congruent with the meter regardless of concurrent melodic construction, a characteristic it shares with the earlier minuet:¹

3/4

Minuet:	
Waltz:	

The high incidence of hemiolic constructions in Schumann's waltz-like pieces may well be connected with his early experiences of waltzing, an embodiment of conciliatory metrical inflection.

Hemiolic performance assumptions

For the 20th-century performer perhaps the most serious impediment to inflecting Schumann's hemioles metri-

¹Curt Sachs, Rhythm and Tempo, p. 286.

cally is a well-established scholarly tradition in favor of hemiolic inflection for hemioles wherever they are found--that is, in any style period. It is far beyond the province of this study to trace the history of the rhythmic performance of hemioles, and in any case the hemioles of the metrical era are not comparable to those of mensural music. Yet it may be noted that aural reconstruction of the rhythmic form called hemiole, whether in the 15th century or since 1600, has been often in question in the absence of direct aural tradition. The ambiguity arises because of the continuing difficulty of, first, describing aural reality, and then translating such description back into sound. For instance, musicologists have been in general agreement that the blackened notes of 15th century hemioles indicate a cross-rhythm of "three against two" in a contrapuntal fabric. Yet recent research by Collins¹ suggests that a large proportion of those constructions were in fact "resolved" in practice in such a way that there was no hint of cross-rhythm.

¹Michael Bruce Collins, "The Performance of Coloration, Sesquialtera, and Hemiolia[sic] (1450-1750)," unpublished doctoral dissertation, Stanford University, 1963; also, "The Performance of Sesquialtera and Hemiola in the 16th century," JAMS XVII (1964), 5-28.

The following figure shows the performance convention of fitting "three notes against two."



Semantic misunderstandings in style reconstruction are difficult to avoid.

Twentieth-century musicologists generally assume that the Baroque hemiole, particularly in the body and cadences of the Courante, is to be performed with hemiolic inflection. Donington, one of many commentators, gives unequivocal advice:

To spot a hemiola, notice on which beats the bass carries a change of harmony; if the second 'one' has no change of harmony, a hemiola is indicated. Perform it unmistakably, suppressing the bar-line in the middle as if it did not exist, and accenting the alternate beats strongly to bring out the pattern.¹

Yet the example which follows this quotation shows a chord change on the second barbeat, in the middle of the second hemiolic inner group; it is a partial hemiole; and that second barbeat will certainly receive some metrical impetus.

¹Robert Donington, String Playing in Baroque Music (London: Faber and Faber, 1977), pp. 93-94.

Handel, Trio Sonata in g, Op. 11/8, last movement¹



Donington no doubt means to highlight the non-congruency, but this need not change the meter.

Other 20th-century scholars and critics seem to agree as to aural meter change for hemioles. The contributors to two basic reference works put the matter thus:

Hemiola, hemiolia. . . . in modern terms, . . . three half-notes instead of two dotted half notes. . . . This change from 6/4 to 3/2 or vice versa is found very frequently in the works of Dunstable, Dufay, and other 15th-century composers, as well as in the music of the baroque period. . . . In the 19th century it was rediscovered by Schumann ²

Hemiola/hemiola. . . . The term is also applied by writers of the 16th century to certain rhythmical proportions, corresponding to the triplets of modern music. Thus, three minims, sung against two. . . . The word may also be used for a change in triple time where two bars are made to sound like one bar of three beats of twice the duration, as frequently in Handel's final cadences, thus:³



¹Ibid., p. 94.

²Harvard Dictionary, 2nd ed., p. 382.

³Grove's V, v. 4, p. 237.

For Sachs, the hemiole combats the "tyranny of the bar";

One device to ease the fetters of measure was--once more--the hemiola or alternative subdivision of six units. . . . The $3/4$ changes to a sharply marked $6/8$; . . . two $3/4$ change to one $3/2$.¹

Rittenhouse, also, assumes meter change: "Hemiola . . . contradicts established metric organization Two $3/4$ measures change to one $3/2$ measure"2

Two Schumann themes in particular have drawn comment for their presumed hemiolic meter change. Of the opening theme of the "Rhenish" Symphony, Op. 97/I, Schlotel says:

The Schumannesque syncopation of the first six bars creates the illusion that the music is in a slow $3/2$, but it dissolves in the whirling gaiety of a joyous $3/4$ waltz-rhythm from bar 7.³

The other theme is conspicuous to an even greater extent, the second theme of the Finale of the Piano Concerto, Op. 54/III. An extensive sample of such commentary on the concerto theme follows:

The true metre of this passage is $3/2$ ⁴

¹Sachs, Rhythm and Tempo, pp. 344-45.

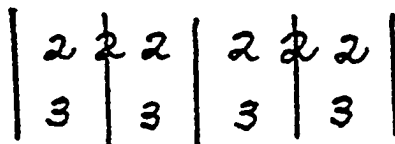
²Rittenhouse, p. 57.

³Schlotel, "The Orchestral Music," Schumann, ed. Walker, p. 297.

⁴Nieman, "The Concertos," Schumann, ed. Walker, p. 254.

Another classic perversity, the time is never accepted by the hearer as written,--that is, in a syncopated three-four. The time is really converted by the ear into a three-two by deleting every other bar.¹

Here . . . 3/4 time is made to sound like 3/2 time the one ¹is superposed upon the other in this tricky fashion:²



[This is] rhythmic sleight-of-hand The signature is 3/4; but he has none the less managed to make the music sound like 3/2 At this point many an orchestral conductor has met his Waterloo ³

The second subject . . . is sufficiently syncopated to create the illusion of converting the 3-4 time into 3-2, so that unfortunately the subtlety of the device can only be fully appreciated on paper, or by watching the conductor's down beat coming off the beat in alternate bars. The ear by itself is all too ready to accept the passage as simple 3-2 time.⁴

Time signatures and bar lines do not always accurately reflect the real metric organization. At times composers have used them . . . as a convenience--relying upon the performer to interpret and communicate the true metric structure. For instance, though the last movement of Schumann's Piano Concerto in A Minor is written in 3/4 time throughout, the melody [Theme II] is so strongly duple on the primary level that the time signature no longer really represents the metric structure The new meter is more like 3/2 (3x2/4) than like the previous organization of 6/4 (2x3/4).⁵

¹Goldstein, p. 68.

²Schauffler, p. 411.

³Ibid., pp. 427-28.

⁴Chissell, Schumann (1st ed.), pp. 174-75.

⁵Cooper and Meyer, pp. 88-89.

These examples illustrate how thoroughly motivic structure has supplanted meter as the primary inflective power.

It is significant that many of the writers who take hemiolic inflection, with its aural meter change, for granted also mention "syncopation." Clearly, if the meter were actually to change, there could be no sense of syncopating, since the "heavier places" of the original meter would no longer pull against the non-congruent hemiolic structure. Evidently it is the wrench of metrical inflection that these writers perceive, not meter change. Chissell aptly describes this rhythmic effect in the "Rhenish" Symphony's opening:

The tug-of-war between duple and triple time--one of Schumann's most subtle experiments with syncopation--gives the movement an extraordinary virility.¹

And one critic has documented how different the effect of syncopative metrical inflection is from that of hemiolic inflection in the disputed Concerto theme:

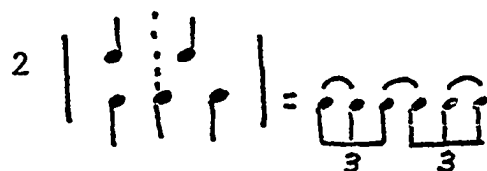
The reader who has felt the charm of the cross-rhythm in the finale of this work will be surprised to hear, from another critic, of the . . . monotonous limping of the second subject.²

Use of the terms "cross-rhythm" and "syncopation" to refer to the effect of metrical inflection with non-congruencies is discussed further in the next section of this chapter.

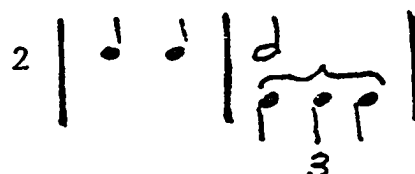
¹Chissell, Schumann (1st ed.), p. 170.

²Fuller-Maitland, Robert Schumann, p. 129.

Finally, an important hint as to the persistence of metrical inflection for non-congruent three-against-two into the last quarter of the 19th century is found in Riemann's strong opposition to it. He recommends that the alternative division of a bar be smooth or "un-syncopated;" he opposes what he calls the "customary" interpretation, as in the following figure whose quarter-note triplet is derived from a "syncopated" tying within two triplets of eighth notes:¹



He recommends, instead, the following derivation of the triplet from a half-note, the equivalent of meter change:²



By this it may be inferred that the earlier performance tradition of conciliatory metrical inflection was still observable in the 1880s, though rhythmic assumptions had already begun to change.

In sum, not only has there been a drastic change in rhythmic assumptions between Schumann's time and ours, but

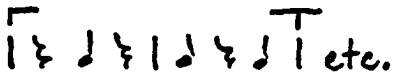
¹Hugo Riemann, *Dynamik*; cited in Smither, "Theories," p. 206. The idiosyncratic metrical signature is Riemann's.

²*Ibid.*, p. 207.

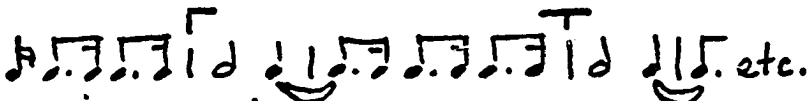
apparently there has been some semantic confusion in analytical description of hemiolic performance. Hemiolic construction is clear to the eye in the score; it is made clear to the ear in radically different ways. Hemiolic inflection, in which structural change creates meter change, is particularly congenial to the experimental directions of much late 19th- and early 20th-century music, but it is not appropriate for Schumann. His hemioles belong to an earlier performance tradition, in which metrical inflection was assumed so strongly that it need not be reaffirmed in the rhythmic constructions of the texture.

In this context Schumann's most extreme hemioles as well as his most extreme oblique harmony indicate the strength of his metrical expectation. How general that tradition of the inflective power of meter was is beyond the province of this study. But there are hemiolic passages in Beethoven¹ and Schubert² where, even with the absence of metrical reinforcement against the non-congruencies, metrical conciliation is evidently called for. Schumann is no more radical than they. He was seventeen when Beethoven died,

¹Beethoven, "Eroica" Symphony, Op. 55/I, development section:
(1803)

3/4  etc.
m. 128

²Schubert, Sonata in D, Op. 53/III, opening:
(1825)

3/4  etc.
m. 1

eighteen at Schubert's death. To him they were the "modern masters."

Conciliatory Metrical Inflection,
An Invisible Tradition

It may well be asked why, if metrical inflection which re-shapes non-congruencies is so natural, common, and essential a process in the performance of metrical music, there seems to be no conspicuous performance tradition supporting it. Why should there be no general term for the practice?

Some 19th-century writers do recognize the phenomenon, but no one defines it; and no one describes it as felicitously as Gurney:

. . . departures [from an underlying "fixed scheme of recurrences"] accepted by the ear with a pleased feeling that its own intuitive sense of the ideal regularity is still in a manner dominating throughout.¹

In the same passage he speaks of "that elastic working of the ear which is entailed in all enjoyment of the metre." Gurney's pleasure in the device is evident; the persuasion of non-congruencies by metrical inflection is perceived as playful, a sophisticated amusement. But he does not name the inflecting action he recognizes.

Whether Lussy recognizes conciliatory metrical inflection is a question. In his rules for metrical accen-

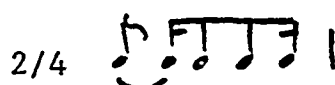
¹Gurney, p. 439.

tuation, combining Rule 7 with Rule 8 leaves unresolved the problem of which of these successive "strongly accented" notes predominates:

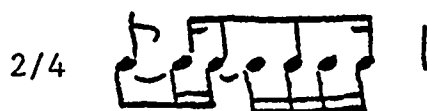
7. Every note, whatever its value, when prolonged through the first note of the bar, or of the following beat, is strongly accented.

8. Every note which at the beginning of a bar, a beat, or fraction of a beat, occurs beneath or above a prolonged note, (incorrectly called a syncopation), or beneath or above a rest, is strongly accented.¹

Most writers deal with specific musical examples rather than the general process of inflection. Marx, for instance, explains how metrical structure influences non-congruencies in this pattern by Mozart:



Neither the parts [beats] of the bar nor the members [beat-divisions] strike the eye; the second, third, and fourth quavers are . . . split asunder and the halves drawn to the following note, until the last half (the last semi-quaver) remains by itself.



Such notes are called Syncopated, and such a rhythmic form a Syncopation.²

The action of one note "drawing" to the next one, the latter

¹Lussy, Traité; cited in Smither, "Theories," pp. 90-91.

²Marx, Allgemeine Musiklehre; cited in Smither, "Theories," pp. 13-14.

having a stronger metrical position, is an action of conciliatory inflection. But Marx's perception leads to neither a definition nor a term for the phenomenon.

Nineteenth-century writers felt little need to point out the primacy of the metrical frame; the "tyranny of the bar" was assumed. But some 20th-century commentators who do describe and advocate metrical conciliation in certain specific 19th-century passages complain of the tyranny of the irregular which has prompted performers to change the aural meter in response to non-congruencies. Thus Lichtenthal says, of several passages by Brahms which show duple constructions in triple meter:

The idea behind it can only be the piquant effect of the musical accent falling each time on another note of the phrase. This is seldom brought out distinctly; one usually has the impression that the performer mistakes the mannerism for a change of time.¹

And Ferguson encourages performers to honor Schumann's metering and barring, in short, his conciliatory metrical inflection:

Schumann has often been reproached for writing in this way, the claim being that the notation only is complex, that the effect to the hearer would be the same if the accents were placed on the beat instead of persistently off the beat, as we find them; and that the thought is therefore not what it appears to be. This frequently expressed judgment should be corrected.²

¹Herbert Lichtenthal, "Musical Interpretation," The Musical Review, IV (1943), 168-69.

²Donald N. Ferguson, A History of Musical Thought (New York: Appleton-Century-Crofts, Inc., 1948), pp. 414-15.

He then prescribes what the performer must do in a specific piano piece--"Des Abends," Op. 12/1, whose opening is shown in Example 13 of this study.

We find a melody moving regularly in 3-8 meter, accompanied by a figure which has six sixteenth notes (two to each eighth note of the melody). This whole substance, it is argued, is thus really in the 3-8 time in which the melody appears to stand. Schumann however wrote the time signature 2-8 at the beginning. That means, if it means anything, that Schumann thought--and intended us to hear--not three but two main beats in the measure. The three eighth notes in each measure of the melody therefore are to be heard as a triplet against those two main beats; and the two main beats in consequence must be just conspicuous enough so that the melody will appear in this somewhat strange and irregular light. This is easily possible, if the performer will give the slight accent which the notation implies to the fourth sixteenth note of the bar (always appearing in the accompaniment). The difference in effect is at once apparent The music . . . instead of being dully sentimental, becomes tense and fluid ¹

Both Lichtenthal and Ferguson explicate but do not define; the lack of a term for conciliatory metrical inflection is apparent. But succinct description of the process is found in an unexpected place, in Sach's discussion of barring Renaissance polyphonic scores for modern performance. He says:

Since our bar lines are not in the original, but are in form and meaning taken from modern music, the answer should be taken from modern scores

The [modern] composer will change the signature where the listener is meant to feel at ease in the new

¹Ibid., p. 415. It is worth mentioning that Clara made that "slight accent" on the second beat overt in her Instructive Edition.

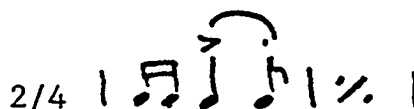
rhythm and accept it as something in its own right. He will not do so when a passage is definitely off-beat, when it antagonizes the original signature and wants to convey this self-willed opposition beyond any doubt. The whipping offbeats in the Eroica . . . would completely lose their unyielding, obstinate character if they were accommodated in a frictionless 2/4 episode. The resistance should be perceived with the eyes as well as with the ears and hence become visible against the bars and the conductor's beat.¹

Sometimes a critic asserts the need for metrical inflection even when such inflection directly contradicts other statements of principle. Stein, for instance, seems to expect an unopposed non-congruency to cancel the unmanifested meter:

A syncopation is felt as such only if the pulse of the regular time remains in being or is somehow implied in the rhythm.²

Yet his performance directive for the following passage, where all surface construction is non-congruent with the meter, gives no reason for here assuming the overriding inflective power of meter:³

Schubert, Moment Musicaux,
Op. 94/4, Trio



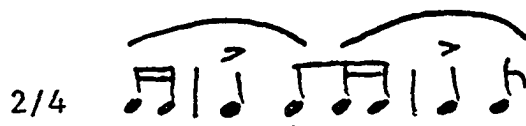
The weak beats are not only stressed but also accentuated, and this circumstance makes it indispensable that the performer should feel distinctly--and not cease to feel--

¹Curt Sachs, Rhythm and Tempo, p. 259.

²Erwin Stein, Form and Performance, p. 43.

³Ibid., pp. 43-44.

the latent 2/4 time; otherwise the music will sound as in this example:



Theoreticians Cooper and Meyer also recognize that meter may sometimes override rhythmic non-congruencies:

On the other hand, meter can apparently be independent of rhythm, . . . in the sense that rhythmic organization can conflict with and work against an established meter While such conflicts of natural rhythmic groups with metric structure constitute disturbances which tend to modify grouping, they need not necessarily result in a change of meter ¹

However, many of their analyses show no rhythmic marking of a barbeat, the metrical inflection being totally negated by non-congruent structures.² Determined non-congruencies which do not suppress the meter completely seem to them "stressed weak beats" or "forced accentuation"³, terminology which reflects strain rather than naturalness.

In general, then, conciliatory metrical inflection has received critical attention only indirectly in the 19th and 20th centuries. It has not been conspicuous as a general theoretical principle, and the performer's experience of actively re-shaping non-congruencies has been infrequently verbalized.

¹Cooper and Meyer, p. 88.

²For example, their primary level grouping in Example 116, barbeats of m. 2, 5; and Example 105, barbeats of m. 1, 3.

³Ibid., p. 88.

Has the term "cross-rhythm" been expected to indicate conciliatory metrical inflection? This seems to be the case for Cone, who, speaking of the early part of the metrical period, mentions "motivic cross-rhythms . . . used to advantage to off-set an otherwise unrelieved squareness."¹ He also finds Beethoven's "cross-rhythms" in the Eroica Symphony so powerful because "the rhythmic surface is here insistently at odds with the prevailing measure."² Fuller-Maitland uses the term "cross-rhythm" of the hemiolic theme in Opus 54/III:

The charm . . . of the cross-rhythm in the second subject of the Finale has never been surpassed in any work of the master's ³

Yet "cross-rhythm" implies independent conflicting inflections, not the unifying result of metrical influence on non-congruencies.

The difficulty of thinking about performance actuality when non-congruencies conflict visually with a metrical framework is considerable. Blom's definition of "Cross Rhythm" is a model of circumlocutionary ambiguity:

An effect of rhythmic complexity . . . obtained . . . by some kind of conflict between what is written on paper in opposition to the metrical motion prescribed by the time-signature and what is intended to be perceived by the hearer who does not see the notation.⁴

¹Cone, Musical Form, p. 66.

²Ibid., p. 72.

³J. A. Fuller-Maitland, Robert Schumann (London: Sampson Low, Marston & Co., MDCCXCIV [sic; 1904?], p. 72.

⁴Eric Blom, "Cross Rhythm," Grove's V, v. 2, p. 541.

Also, the performer receives little guidance from such a description as "this very conflict of metrical pulse and rhythmic accent."¹ Indeed Blom's analyzed examples show, not conciliatory metrical inflection, but surrender to the modern tyranny of the irregular. His "cross-rhythms" are sometimes polymeter,

[Mozart's Sonata in B^b, K. 333] produces in the right hand (bars 2-4) a distinct effect of 6-8 time against the prescribed 3-4, which is maintained by the left ²

sometimes a different meter from that notated, due to the grouping within bars,

[regarding Chopin's Waltz in A^b, Op. 42] The ear may . . . be deceived into grasping a metrical scheme different from that suggested by the signature ³

and sometimes frankly shifted barlines:

[regarding Brahms' Symphony no. 3/I] The phrases are displaced across the bar-lines, everything being shifted back by one beat, so that the main rhythmic accents, which should normally fall on the first beat, become upbeats But this is only what is seen on paper, for the ear receives no impression of anacrusis; if it did, this would not be a case of cross-rhythms ⁴

"Cross-rhythm," then, has not been a consistently clarifying term. Nor has it consistently designated metrical inflection for non-congruencies.

¹Ibid., p. 542.

²Idem.

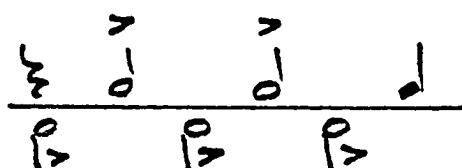
³Ibid., p. 541.

⁴Ibid., p. 542.

Has "syncopation" been a more serviceable word to indicate the power of metrical expectation to inflect non-congruencies? In some cases this seems so.¹ Marx's description of the "drawing ahead" of syncopated notes is a sensitive observation of conciliatory metrical inflection (see p. 312). Marx does not mention any weakening of metrical accentuation in defining syncopation; nor does Weber, whose treatise was Schumann's tutor:

When . . . a musical sound commences with a light part of the measure or with a light sub-division of a part of the measure, and continues on without interruption through the following heavier portion of the measure, so that the last half of this note falls on a heavier portion of the measure than the first half . . . we call this sound a syncopated one, an instance of syncopation.²

With Hauptmann, somewhat later, problems of accentual dominance arise. He says that syncopated contradictions would sound normal if the unsyncopated structure did not occur just before or just after them. He shows what is necessary to make the non-congruencies actually sound syncopated:³



Hauptmann does apparently take for granted that when the two

¹Here only syncopations felt as stressed anticipations are considered; see, p. 17, the reason the term "syncopation" has been avoided in general in this study.

²Gottfried Weber, Theorie; cited in Smither, "Theories," p. 36.

³Moritz Hauptmann, Harmonik und Metrik; cited in Smither, "Theories," p. 73.

accents are juxtaposed, the metrical is ascendant. But he does not state it. His is a slight but important change of viewpoint from that of previous writers, who do not mention any possibility of independent metricality with non-congruencies.

It is difficult to judge the implications of Lussy's statement, "The principal exception to metrical accentuation is syncopation."¹ Its ambiguity has a parallel in the 20th-century reference article which speaks of "syncopation, i.e., a temporary displacement of regular meter and accent."²

The term "syncopation" has special relevance to Schumann's music, if only because it has been used so often in accusations of rhythmic ineffectiveness. Wasielewski, for instance, complained of Schumann's "inconvenient characteristic use of syncopation in the accompanying parts in ensemble playing."³ Wasielewski evidently expected the accompaniment to a non-congruent melodic line to reassert the meter.⁴ This objection is raised again and again. Many

¹Lussy, Traité; cited in Perkins, "Changing Concepts," p. 148 and in Smither, "Theories," p. 121.

²"Rhythm," Harvard Dictionary of Music, 2nd ed., p. 730.

³Niecks, p. 223.

⁴Examples D86 and D10 are examples of Schumann's total syncopation in ensemble works which Wasielewski knew from their earliest performances.

later critics speak of the performer's helplessness in preventing the barline from shifting to conform to the syncopation. Nieman describes one of the notorious examples, in Opus 54/III, thus:

An exhilarating transition flies along . . . into the famous syncopated rhythm beginning the second group, which has caused the downfall of more than one over-confident conductor. It is yet another case, so frequent in Schumann, of seeing the bar-lines in one place and hearing them in another. The true metre of this passage is 3/2 time



. . . and that is what the listener hears, unless he happens to observe the 'clock' of the conductor's baton marking off the 'missing' bar-lines. The problem becomes quite ticklish when, a few bars later, the orchestra become 'listeners', and the pianist syncopates.¹

"Syncopated" hemioles are not the only offenders; series of all-tied beats suffer the same change between intention and audible actuality. Abraham finds insoluble the problem in the opening of the Manfred Overture (Ex. A19):

It begins with one of Schumann's most celebrated mis-calculations: three syncopated chords before any regular beat has been established. (The intention is perfectly clear to the eye; it is never fulfilled to the ear.)²

Fuller-Maitland suggests that there may be some "unconscious" way for performers to carry out the rhythmic intent. He

¹Nieman, "The Concertos," Schumann, ed. Walker, pp. 253-54. This passage is shown in Ex. F11.

²Abraham, "The Dramatic Music," Symposium, p. 262

trusts namelessly in the existence of active conciliatory inflection:

[regarding the string quartet, Op. 41#2/II (Quasi variazioni), shown in Ex. D86] . . . the first variation is spoilt for some people by a rather tiresome habit of Schumann's of tying the last note of one triplet to the first of the next, while there is nothing to recall the normal pulsation of the rhythm, so that there is an effect of syncopation which appeals to the eye rather than to the ear, since if one note were eliminated, the whole section, in this case sixteen bars, would be in perfectly even rhythm, as indeed it sounds to the listener; perhaps some sensitive players may unconsciously interpret the passage so that the syncopated effect is preserved.¹

It is unfortunate that the term "syncopation" has not served to clarify the rhythmic effect called conciliatory metrical inflection in this study. It is metrical conciliation which makes a syncope sound syncopated. If motif onset or motif stress destroys and replaces metrical accent, there is no syncopated effect whatever. The tension of the non-congruence is preserved by metrical dominance.

Some of the confusion in defining metrical conciliation stems from early mis-direction in attempts to define metrical inflection itself. Efforts to codify by means of graduated dynamic accentuation the patterns aurally experienced in rhythmic meter directed attention, unfortunately, to a non-essential aspect of metrical differentiation.

However, metrical expectation is so strong that normal metrical inflection is commonly taken for granted until

¹Fuller-Maitland, Schumann's Concerted Chamber Works, p. 31.

an ambiguous rhythmic circumstance raises doubts. Then there is no convention to fall back upon, no nomenclature, no reliable tradition clarifying metrical inflection and conciliatory metrical inflection in their historical context.

In the reconstruction of an early 19th-century style, conciliatory inflection depends first upon the performer's perception of a metrical rhythmic intention. It results then from choosing, intuitively or thoughtfully, metrical differentiation over surface pattern as the motion control. Carrying out this choice is more complicated than adding local dynamic stress. It involves the shaping of rhythmic groups as a whole, on metrical and supermetrical levels. Metrical notation was originally designed to communicate that shaping. It gradually became transparent on the page as the result of, first, emphasis on dynamics as the meter-producing factor; and, second, the concept of meter as measurement only. Yet mild conciliatory inflection has been and is commonly and spontaneously practiced. It is in the extreme cases that the lack of a term and a tradition leads to confusion.

Under these circumstances the performance action of conciliatory metrical inflection has had little focussed attention. It is a procedure invisible (or, better, transparent) on the printed page except to musical reflection, though the difference it creates aurally is obvious. For the performance of Schumann's music, it is the essential tradition.

Findings

Metrical inflection, conciliatory where necessary, is the key to Schumann's rhythmic forms, both routine and anomalous. The 20th-century performer may be hindered from carrying out Schumann's rhythmic intentions by certain stylistically inappropriate performance assumptions. The impression that there is a direct and unbroken aural tradition for the performance of Schumann's music is misleading; rhythmic-metric concepts have changed drastically in some areas since Schumann's time, and those changes are camouflaged by notational similarities.

Specifically inapt for Schumann's music are presumptions that inflection should follow motivic construction or dynamic stress patterns; that meter involves exact measuring of time relationships; that metrical notation is not a reliable guide to inflection; and that the inflection of hemioles must follow their interior structure, resulting in audible meter change. These impediments impose anachronistic standards upon Schumann's early 19th-century style. They also show a reluctance to accept some logical extremes in Schumann's idiosyncratic practice, and reflect semantic confusion regarding the realities of metrical motion, particularly as to the differing functions of accent and stress. The distinction between accent and stress can be demonstrated heuristically in an experiment which also shows that a single meter controls any texture, however polylinear, which is

played by a single player. This confirms formal and diacritical indications of the same policy in Schumann's hemiolic practice.

Schumann's imitative practice apparently indicates that the rhythmic-melodic character of an imitative subject need not be maintained in a metrically-reversed stretto position; established metrical motion takes precedence in these passages.

Performance hindrances to carrying out Schumann's rhythmic intentions are substantially removed in the light of historical perspective and with an approach that distinguishes aural reality from eye reality. But a persistent problem is the absence of a clearly articulated tradition of metrical conciliation, a relatively unnoticed performance technique easily and commonly employed until severe non-congruency calls specific passages into question.

Practical Conclusions

To carry out Schumann's rhythmic intentions, metrical inflection is the performer's primary resource. Therefore a sense of metrical structuring as an active shaping influence is essential in approaching this music. This sense of active meter must be particularly strong where metrical anomalies occur. Nuancing by conciliatory metrical inflection is the appropriate procedure in these circumstances. It enhances the conflict between surface factors and metrical structure,

resulting in a sense of heightened tension and complexity in the rhythmic flow.

There is no need, however, to exaggerate the metrical frame dynamically in communicating its structure. The performer must feel "internal weight" for metrical strong places, not necessarily dynamic emphasis. Both timing (agogic adjustment) and dynamic stress are freely available to the performer in rhythmic groupings around the strong places, though neither type of emphasis by itself makes a strong bar or beat. Only inflection, the result of intentionally metrical grouping, can do that. Metrical inflection is a regional procedure rather than a local fact like dynamic force or agogic adjustment. Therefore a performer must distinguish in practice between accent and stress.

Special care is needed to honor the metrical framing where metrically weaker divisions receive dynamic incision, and also where there is no overt articulation of strong places within that frame.

Schumann's rhythm needs to be approached as an early 19th-century style, and to be removed from inappropriate 20th-century assumptions, especially those which prescribe inflection change for stressed non-congruencies or for hemiolic construction.

The supermetrical structure must be communicated as well as the metrical structure. Since Schumann's anomalies are ornamentations of the metrical frame, any non-declaration

of the frame throws those constructions into confusion. Further, because of the usually thetic onset of that frame, there is no chance to recover the initial metrical support later in the bar or phrase. It must be firm from the beginning.

Schumann's often complex anomalous rhythmic structures are dependent upon metricality; meter is the simplifying and the dramatizing factor. Performance which communicates the active power of differentiated metricality will communicate Schumann's rhythmic intentions.

CHAPTER XII

SUMMARY OF THE STUDY

Certain of Schumann's metrically anomalous passages have long been the subject of complaint. Throughout this search for the composer's rhythmic intention in such passages, it has been assumed that he did not mean to mystify, and that in the context of his over-all rhythmic practice the function of the oddities would become clear.

To this end, conspicuous vagaries, mentioned by critics and/or initially known to the investigator through performance experience, were separated into six types: empty barbeats, lilt formation, consistent metrical displacement, oblique harmonic rhythm, metrical repositioning, and hemiolic construction. These types were then sought throughout Schumann's instrumental music.

These six types were found to be characteristically frequent; they are also relatively comprehensive of Schumann's metrical irregularities. His use within each type ranges widely in surface detail, in harmonic context, and in formal positioning. The findings of this study indicate that his anomalous rhythmic-metric practice presumes:

- the divisive metrical framework normal in the early 19th century;

- a common metrical basis for both normal and anomalous structures;
- active metrical inflection;
- conciliatory metrical inflection for both structural and sonorous non-congruencies; and
- metrical inflection which functions independently of surface reinforcement or overt articulation at metrical strong points.

The most common anomaly is structural non-congruence, found in consistent metrical displacement, in both types of oblique harmonic rhythm, in metrical repositioning, and in hemiolic construction. Hemioles were found to be a sub-division of metrical repositioning, on the evidence of Schumann's specific handling of them. Empty barbeats exhibit anomalous sonority while remaining functionally normal. Lilt formation is the only functionally anomalous procedure found, and it is rhythmically abnormal on only one metrical level which is contained in a larger, metrically normal frame.

Distinctive features of Schumann's anomalous rhythmic-metric practice include:

- carrying various suppressions of the barbeat to an extreme;
- carrying consecutive repetitions of anomalous procedures to an extreme;
- a tendency to omit overt metrical reassurance in anomalous passages;
- a tendency (balancing the omission of metrical reinforcement at strong points) to extend overt articulation of metrical differentiation to weak levels more normally subsumed by larger motion;

- reliance to an unusual extent upon supermetrical inflection for rhythmic coherence; and
- a characteristic originality of most anomalous passages: the anomalous procedures give a spontaneous impression rather than the impression of the exercising of a technique.

Some other anomalous features were found in addition to the main investigative types. Most are more significant for what they do not do than for what they do. The unmetered passages are not only infrequent and in early works, but they do not occur in the cadenzas, which are fully metered instead. The extremely rare polymetrical passages do not represent a true double-metered technique. There is no question of the standard metrically-based intention of the few unconventionally notated ties, rests, and notes, while the non-metrical beaming is only mildly unorthodox, apparently intended to make metrically non-congruent constructions more visible, not to change their metrical import. Compound motion within simple meters is a much more frequent feature; it takes standard divisive metricality as the basis of its ornamentation. Metrical flexing, however, breaks the frame of normal divisive meter on the supermetrical level; this plasticity is an infrequent occurrence and invariably occurs with pre-cadential motion. Significant among the minor anomalous features are the literally impractical marks of emphasis, such as a stress or a swell marking an all-tied barbeat, which confirm the dominance of the metrical frame in Schumann's rhythmic thought.

The study's theoretical conclusion, therefore, is that Schumann's rhythmic-metric anomalies depend upon and play upon the normal inflective presumptions of divisive meter. By means of metrical inflection the non-conforming character of the anomalies becomes vivid, as in dancing the force of gravity both constrains and intensifies a leap. Consequently, metrical inflection is the performer's basic resource for carrying out Schumann's rhythmic intentions.

But recognizing Schumann's rhythmic intentions does not necessarily solve the performance problems. Particularly with three circumstances--oblique harmonic rhythm with the consecutive all-tying of barbeats and/or beats; close stretto which reverses strong and weak points for some entries, so that melodic identity is diluted; and the inflection of hemiolic constructions-- difficulties arise when performance traditions at variance with Schumann's intentions are followed.

Apparently performers' difficulties with Schumann's anomalous rhythmic style are due to applying anachronistic performance conventions in these passages, and, further, to the lack of an overt tradition of conciliatory metrical inflection. His style must be historically reconstructed. An agogically flexible, non-metronomic view of the metrical framework is appropriate for Schumann's music. Furthermore, changing concepts of rhythm and meter between the early 19th century and the late 20th have eroded the inflective presump-

tions of metrical notation to the point of replacing what was called the "tyranny of the bar" with what might be called a "tyranny of surface factors," factors of motivic construction or of stress patterning. The new tyranny cancels the notated meter with its inflective expectations. But to Schumann, metrical expectation was an ally. In his anomalous procedures he successfully evaded, even took advantage of, metrical "tyranny":

He to whom it will be given to cover and make imperceptible the tyranny of meter in music, will, at least apparently, set this art free ¹

To apply the new tyranny to Schumann's music is an anachronism which drains his anomalies of their dramatic force.

His use of meter confirms a functional difference between stress (dynamic emphasis added to weaker or to stronger points) and accent (metrically-expected differentiation). Also significant is the texturally uni-metrical nature of solo piano music. Schumann's rhythmic style was developed in the piano works of Opus 1 through Opus 23; there is no cultivated polymetric technique in his ensemble music. Nor did he develop multimetric procedures beyond infrequent pre-cadential metrical flexing. Additive meter is entirely absent in his writing. His anomalies are, rather, syncopative, depending upon the underlying sense of

¹The poet Ernst Wagner, quoted by Schumann in his review of Berlioz' Symphonie Fantastique, the lead article of Neue Zeitschrift für Musik, v. 3 nr. 10 (Aug. 4, 1835); cited in On Music and Musicians, ed. Konrad Wolff, p. 170.

normal divisive meter for their effect.

The lack of an accurately-worded tradition of metrical inflection (and of its most noticeable exercise, conciliatory metrical inflection) has contributed to misunderstanding of Schumann's anomalous constructions. Even in his most extreme anomalies, Schumann presumes the inflective regnancy of meter. But it appears that terraced dynamic stress is not the essential factor creating metrical motion, nor is patterned agogic emphasis. Yet clearly the composer is not confined to metrically congruent constructions and processes for his metrical communication; and conciliatory inflection does show where the metrical ribs of the music lie. Even in the late 20th century the phenomenon of such inflection--rhythmic grouping around differentiated points in time--is imperfectly understood.

Certain aspects of this study raise questions which bear further investigation. Perhaps the most obvious concerns the inflection of hemioles. The conclusion drawn in this study is considerably at variance with general assumptions. This suggests a fresh look at the convention, for the metrical era, of hemiolic inflection for hemiolic construction, an investigation alert to the possibility of semantic ambiguity. Non-congruent structure does not necessarily alter metrical inflection. With Schumann, construction details make hemiolic inflection highly improbable. Parallel studies for other early 19th-century composers

would help establish a reliable and more general inflectional guide.

This is only a portion of the need to place Schumann's rhythmic-metric practice in a wider perspective. Schumann relies on metrical expectation to counter-support his anomalies even without metrical reassurance in the texture. Is this idiosyncratic of Schumann or characteristic of his generation? To what extent did Beethoven or Schubert make the same metrical assumptions? In what way was Brahms' rhythmic practice a continuation of Schumann's? What was the inflectional treatment of non-congruencies earlier in the metrical era? Under what circumstances is metrical conciliation assumed in the 20th century?

Another potentially productive direction for further study is into the nature of rhythmic expectation. Metrical expectation in Schumann's practice represents exoteric security to composer and audience alike. How does expectation operate in other rhythmic organizations besides divisive metricality? Analysis in this direction must coalesce investigation of aural experience with investigation of notational practice and assumptions.

Since rhythm embodies all of the time-binding constructions of a musical texture, the theoretical study of rhythm seems to be comprehensive. But unless rhythmic study treats the inter-relevance of the composer's creative style to the notation and to the recreative assumptions of the

performer, it is incomplete. Rhythmic intention must reach the intuition and understanding of the performer, both to authenticate and to vivify performance.

The concept of inflection is in need of specific investigation. The action of rhythmic grouping--inflection--is imperfectly understood; this uncertainty is reflected in the lack of precise and commonly-accepted nomenclature, not so much for constructions, which are visible in a score, but for audible effects which are the primary purpose of a score. "Meter" is in the music dictionaries; "metrical inflection" is not. "Inflection" in the sense in which it is used in this study is not. For this study "stress" and "accent" have had to be distinguished arbitrarily, as Cooper and Meyer did, since common usage does not recognize their distinct functions. Above all, there is no generally accepted term for whatever it is that makes the "strong places" of rhythmic grouping, whether in metrical or non-metrical music. And the descriptive terms historically used in referring to those strong places and their coefficients (such as good-bad, heavy-light, or strong-weak) direct attention to points in time rather than to the multi-level clusters of rhythmic experience, clusters which both bind and propel musical time.

SELECTED BIBLIOGRAPHY

Books

- Abraham, Gerald (ed.). Schumann: A Symposium. London: Oxford University Press, 1952.
- Barnett, David. The Performance of Music. New York: Universe Books, 1972.
- Basch, Victor. Schumann, A Life of Suffering, trans. Catherine Alison Phillips. New York: Tudor Publishing Co., 1936.
- Bedford, Herbert. Robert Schumann. London: Kegan Paul, Trench, Trubner & Co., Ltd., 1925; 2nd ed., intro. Cyril Scott, 1933; reprinted Westport, Conn.: Greenwood Press, 1971.
- Boetticher, Wolfgang. Robert Schumann: Einführung in Persönlichkeit und Werk. Berlin: Bernhard Hahnefeld Verlag, 1941.
- Boucourechliev, André. Schumann, trans. Arthur Boyars. New York: Grove Press, 1959.
- Brion, Marcel. Schumann and the Romantic Age, trans. Geoffrey Sainsbury. New York: The MacMillan Co., 1956.
- Brown, Thomas Alan. The Aesthetics of Robert Schumann. London: Peter Owen, 1969.
- Burk, John N. Clara Schumann, A Romantic Biography. New York: Random House, 1940.
- Chapman, Raymond. "Rhythm and Metre," Chap. 8 in Linguistics and Literature. New York: Crane, Russak & Co., 1973.
- Chissell, Joan. Schumann. The Great Composers Series, ed. Eric Blom and J. A. Westrup. London: J. M. Dent, 1948; reprinted, New York: Collier Books, 1962. Also, 2nd revised edition, now in The Master Musicians Series, ed. Stanley Sadie. London: J. M. Dent, 1977.

- _____. Schumann Piano Music. London: British Broadcasting Corporation, 1972.
- Cleugh, M. F. Time and Its Importance in Modern Thought. New York: Russell & Russell, 1937.
- Cone, Edward T. Musical Form and Musical Performance. New York: W. W. Norton, 1968.
- Cooper, Grosvenor, and Leonard B. Meyer. The Rhythmic Structure of Music. Chicago: The University of Chicago Press, 1960.
- Donington, Robert. String Playing in Baroque Music. London: Faber & Faber Ltd., 1977.
- Dorian, Frederick. The History of Music in Performance. New York: W. W. Norton, 1942.
- Fantel, Hans. The Waltz Kings. New York: William Morrow, 1972.
- Ferguson, Donald N. A History of Musical Thought. New York: Appleton-Century-Crofts, Inc., 1948.
- _____. The Why of Music. Minneapolis: University of Minnesota Press, 1969.
- Ferguson, Howard. Keyboard Interpretation from the 14th to the 19th century. London: Oxford University Press, 1975.
- Fraser, J. T. (ed.). The Voices of Time. New York: George Braziller, 1966.
- _____. Of Time: Passion, and Knowledge. New York: George Braziller, 1975.
- Friskin, James, and Irwin Freundlich. Music for the Piano. New York: Holt, Rinehart and Winston, 1954.
- Fuller-Maitland, J. A. Robert Schumann. London: Sampson Low, Marston, & Co., 1888; new ed., foreword by Francesco Berger, MDCCXCIV [sic; 1904?].
- _____. Schumann's Concerted Chamber Works. London: Oxford University Press, 1929.
- _____. Schumann's Pianoforte Works. London: Oxford University Press, 1927.

- Gartenberg, Egon. Vienna: Its Musical Heritage. University Park: Pennsylvania State University Press, 1968.
- Geiringer, Karl. Brahms, his life and work, trans. H. B. Weiner and Bernard Miall. London: Allen and Unwin, 1936; rev. and enlarged, 1948.
- Goetschius, Percy. Preface, Symphony Number One in B^b Major by Robert Schumann. Boston: Oliver Ditson, 1917.
- Gross, Harvey (ed.). The Structure of Verse: Modern Essays on Prosody. Greenwich, Conn: Fawcett Publications, 1966.
- Gurney, Edmund. The Power of Sound. London, 1880; reprinted, with an Introduction by Edward T. Cone. New York: Basic Books, 1966.
- Hadow, W. W. Robert Schumann and the Romantic Movement in Germany. Vol. I, Studies in Modern Music. London: MacMillan and Company, 1893-94; reissued, New York: Kennikat Press, 1970.
- Harding, Bertita. Concerto: The Story of Clara Schumann. London: Harrap, 1962.
- Hauptmann, Moritz. The Letters of a Leipzig Cantor, ed. Alfred Schone and Ferdinand Hiller; trans. and arr. by A. D. Coleridge. 2 vols. London: Novello, Ewer, 1892; reprinted New York: Vienna House, 1972.
- Hedley, Arthur. Chopin. London: J. M. Dent, 1947; reprinted New York: Collier Books, 1962.
- Hinson, Maurice. Guide to the Pianist's Repertoire, ed. Irwin Freundlich. Bloomington: University of Indiana Press, 1973.
- Hopkins, Gerard Manley. "Author's Preface," Poems of Gerard Manley Hopkins. Third ed., ed. W. H. Gardner. London: Oxford University Press, 1948.
- Hutchings, Arthur. Schubert. London: J. M. Dent, 1973.
- Jacob, Heinrich Eduard. Felix Mendelssohn and His Times, trans. Richard and Clara Winston. Englewood Cliffs: Prentice-Hall, 1963.
- James, Burnett. Brahms: A Critical Study. New York: Praeger, 1972.

Joachim, Joseph. Briefe von und an Joseph Joachim,
gesammelt und herausgegeben von Johannes Joachim und
Andreas Moser. 3 Bände. Berlin: Julius Bard, n.d.

_____. Letters to and from Joseph Joachim, selected and
trans. Nora Bickley. London: MacMillan, 1914.

Kubler, George. The Shape of Time: Remarks on the History
of Things. New Haven and London: Yale University Press,
1962.

Lahee, Henry C. Famous Violinists of To-day and Yesterday.
Boston: L. C. Page, 1899.

Langer, Suzanne. Feeling and Form. London: Routledge and
Paul, 1953.

_____. Philosophy in a New Key. Boston: Harvard Univer-
sity Press, 1948.

Litzmann, Berthold. Clara Schumann: An Artist's Life, trans.
Grace Hadow. 2 vols. London: MacMillan, 1913.

_____. (ed.). Letters of Clara Schumann and Johannes
Brahms. 2 vols. New York: Longmans Green, 1927;
reprinted, Vienna House, 1971.

Loesser, Arthur. Men, Women, and Pianos. New York: Simon
and Schuster, 1954.

Longyear, Rey. Nineteenth-Century Romanticism in Music.
Englewood Cliffs, N. J.: Prentice-Hall, 1969.

Mann, Alfred. The Study of Fugue. New Brunswick, N. J.:
Rutgers University Press, 1958.

Mason, Daniel Gregory. The Romantic Composers. New York:
MacMillan Company, 1906.

May, Florence. The Life of Johannes Brahms. Second ed.,
rev. 2 vols. London: William Reeves, 1905.

Meyer, Leonard B. Emotion and Meaning in Music. Chicago:
University of Chicago Press, 1956.

_____. Explaining Music. Berkeley: University of
California Press, 1973.

_____. Music, The Arts, and Ideas. Chicago: University
of Chicago Press, 1967.

- Nettl, Paul. The Story of Dance Music. New York: Philosophical Library, 1947.
- Niecks, Frederick. Robert Schumann: A Supplementary and Corrective Biography, ed. Christina Niecks. London: J. M. Dent, 1925.
- Patterson, Annie W. Schumann. London: J. M. Dent, 1903; rev. ed. 1934.
- Persichetti, Vincent. Twentieth Century Harmony. New York: W. W. Norton, 1961.
- Plantinga, Leon B. Schumann as Critic. New Haven: Yale University Press, 1967.
- Prall, D. W. Aesthetic Analysis, intro. Arthur Berger. New York: Crowell Company, 1936; Apollo Edition, 1967.
- Rosen, Charles. The Classical Style. London: Faber and Faber, 1971.
- Sachs, Curt. The Commonwealth of Art. New York: W. W. Norton, 1946.
- _____. Rhythm and Tempo. New York: W. W. Norton, 1953.
- _____. World History of the Dance, trans. Bessie Schonberg. New York: W. W. Norton, 1937.
- Schauffler, Robert Haven. Florestan: The Life and Work of Robert Schumann. New York: Henry Holt, 1945.
- _____. The Unknown Brahms. New York: Dodd, Mead and Company, 1933.
- Schonberg, Harold C. The Collector's Chopin and Schumann. Philadelphia: Lippincott, 1949.
- _____. The Great Pianists from Mozart to the Present. New York: Simon and Schuster, 1963.
- Schumann, Eugenie. The Schumanns and Johannes Brahms. New York: The Dial Press, 1927.
- Schumann, Ferdinand. Reminiscences of Clara Schumann as found in the diary of her grandson, trans. and ed. June W. Dickinson. Rochester: Schumann Memorial Foundation, 1949.

- Schumann, Robert. The Musical World of Robert Schumann: A Selection from Schumann's Own Writings, ed. Henry Pleasants. New York: St. Martin's press, 1965.
- _____. On Music and Musicians, Selections from Robert Schumann's Critical Writings, trans. Paul Rosenfeld, ed. Konrad Wolff. New York: Pantheon, 1946.
- Seashore, Carl E. In Search of Beauty in Music. New York: Ronald Publishers, 1947.
- Spohr, Louis. The Musical Journeys of Louis Spohr, trans. and ed. Henry Pleasants. Norman: University of Oklahoma Press, 1961.
- Stein, Erwin. Form and Performance. New York: Knopf, 1962.
- Walker, Alan (ed.). Robert Schumann: The Man and His Music. New York: Harper & Row, 1974.
- Wasielowski, Joseph Wilhelm von. Life of Robert Schumann, 1858. Trans. A.L. Alger, Boston: Oliver Ditson, 1871; reprinted with Introduction by Leon Plantinga, Detroit: Reprints in Music, 1975.
- Werner, Eric. Mendelssohn, A New Image, trans. Dika Newlin. New York: Free Press of Glencoe, 1963.
- Whitrow, G. J. The Nature of Time. New York: Holt, Rinehart and Winston, 1972.
- Wolff, Konrad. The Teaching of Artur Schnabel. London: Faber and Faber, 1972.
- Wolfram, Victor. The Sostenuto Pedal. Arts and Sciences Studies no. 9. Stillwater: Oklahoma State University, 1965.
- Yeston, Maury. The Stratification of Musical Rhythm. New Haven and London: Yale University Press, 1976.

Periodicals

- Brown, Thomas Alan. "Theory and Practice in Schumann's Aesthetics," Journal of the American Musicological Society, XVII (1964), 310-45.
- Ciardi, John. "Metaphor and Parlor Games," Saturday Review, (Nov. 18, 1961), .75.

- Cone, Edward T. "Analysis Today," Musical Quarterly, XLVI /2 (April 1960), 172-88.
- . "Beyond Analysis," Perspectives of New Music, VI/1 (1967), 33-51.
- Cummings, W. H. "Bar-lines," Musical Times, 45 (1904), 574.
- Davies, Fanny. "About Schumann's Pianoforte Music," Musical Times, LI (1910), 493-95.
- . "On Schumann--and Reading Between the Lines," Music and Letters, VI (1925), 214-23.
- Fox Strangways, Arthur Henry. "Phrasing," Music and Letters, IX (1928), 1-8.
- Frager, Malcolm. "The Manuscript of the Schumann Piano Concerto," Current Musicology, 14 (1973), 83-87.
- Goldstein, Walter. "The Rhythmic Tricks of Chopin and Schumann," Proceedings of the Music Teachers' National Association, (1924), 63-73.
- Jacobs, Robert L. "Schumann and Jean-Paul," Music and Letters, XXX (1949), 250-58.
- Lewin, David. "Behind the Beyond, A Response to Edward T. Cone," Perspectives of New Music, VII/2 (1969), 59-69.
- Lichtenthal, Herbert. "Musical Interpretation," The Music Review, IV (1943), 163-70.
- Parrott, Ian. "A Plea for Schumann's Opus 11," Music and Letters, XXXIII/1 (Jan. 1952), 55-58.
- Sams, Eric. "Did Schumann Use Ciphers?" Musical Times, 106 (Aug. 1965), 584-91.
- . "Politics, Literature, and People in Schumann's Opus 136," Musical Times, 109 (Jan. 1968), 25-27.
- . "Schumann and Faust," Musical Times, 113 (June 1972), 543-46.
- . "The Schumann Ciphers," Musical Times, 107 (May 1966), 392-93.

_____. "The Schumann Ciphers: A Coda," Musical Times, 107 (Dec. 1966), 1050-51.

_____. "A Schumann Primer?" Musical Times, 111 (Nov. 1970), 1096-97.

_____. "The Tonal Analogue in Schumann's Music," Proceedings of the Royal Musical Association, 96 (1969-70), 103-17.

_____. "Why Florestan and Eusebius?" Musical Times, 108 (Feb. 1967), 131-32.

Temperley, et al. Letters and comments on articles by Sams concerning Schumann and the cipher, Musical Times, 106 (Oct. 1965), 767-70.

Zukowsky, Paul. "The Psychophysics of Musical Performance," Hi-Fi/Musical America, 28/2 (Feb. 1978), MA8-10.

Dissertations

Collins, Michael Bruce. "The Performance of Coloration, Sesquialtera, and Hemiolia [sic] (1450-1750)." Unpublished doctoral dissertation, Stanford University, 1963.

Glusman, Elfriede. "The Early Nineteenth-Century Lyric Piano Piece." Unpublished doctoral dissertation, Columbia University, 1970.

Hackman, Willis H. "A Clarification and Reconstruction of the Concept of Meter for Music-Structural Rhythmic Analysis Following Philosophical-Analytical Paradigms." Unpublished doctoral dissertation, George Peabody College for Teachers, 1975.

Krueger, Richard Rankin. "Weingartner's Suggestions for the Performance of the Symphonies of Schubert and Schumann: A Translation of Ratschläge für Aufführungen Klassischen Symphonien, Band II: Schubert und Schumann." Unpublished doctoral dissertation, University of Washington, 1970.

McNab, Duncan Robert. "A Study of Classic and Romantic Elements in the Piano Works of Mozart and Schumann." Unpublished doctoral dissertation, University of Southern California, 1961.

- Perkins, Marion Louise. "Changing Concepts of Rhythm in the Romantic Era: A Study of Rhythmic Structure, Theory and Performance Practices Relating to Piano Literature." Unpublished doctoral dissertation, University of Southern California, 1961.
- Pierce, Anne Alexandra. "The Analysis of Rhythm in Tonal Music." Unpublished doctoral dissertation, Brandeis University, 1968.
- Pinson, Patricia Testerman. "The Shattered Frame: A Study of the Grotesque in Nineteenth Century Literature and Music." Unpublished doctoral dissertation, Ohio University, 1971.
- Rittenhouse, Robert John. "Rhythmic Elements in the Symphonies of Johannes Brahms." Unpublished doctoral dissertation, University of Iowa, 1967.
- Roesner, Linda Correll. "Studies in Schumann Manuscripts: With Particular Reference to Sources Transmitting Instrumental Works in the Large Forms." 2 vols. Unpublished doctoral dissertation, New York University, 1973.
- Smither, Howard Elbert. "Theories of Rhythm in the Nineteenth and Twentieth Centuries with a Contribution to the Theory of Rhythm for the Study of Twentieth Century Music." Unpublished doctoral dissertation, Cornell University, 1960.

Dictionaries and Encyclopedias

- Dictionary of Contemporary Music, ed. John Vinton. New York: Hudson and Thames, 1974.
- Smither, Howard E. "Rhythm."
- Grove's Dictionary of Music & Musicians. Fifth edition, ed. Eric Blom. In 9 vols., 1954; supplementary vol., 1961. Reprinted, London: The MacMillan Press, 1975.
- Abraham, Gerald. "Robert Schumann."
- Andrews, H. K. "Polyphony."
- Blom, Eric. "Bar," "Cross Rhythm," "Measure (2)."

- Brown, Maurice J. E. "Franz Schubert."
- Carner, Mosco. "Waltz."
- Cobbett, W.W. "Joachim Quartet."
- Colles, H. C. "Fanny Davies," "Subject," "Syncopation."
- Dart, Thurston. "Notation," "Proportions."
- David, Paul. "Joseph Joachim," "Louis Spohr."
- Donington, Robert. "Articulation," "Expression,"
"Phrasing."
- _____, Ebenezer Prout, and Frank Kidson. "Minuet."
- Fox Strangways, A. H. "Rubato," "Time."
- Grove, Sir George. "Josphe W. von Wasielewski."
- _____; with an interpolation by Franklin Taylor.
"Clara Schumann."
- Halsi, Czeslaw R. "Karol Lipiński."
- Hedley, Arthur. "Frederic Chopin."
- Legge, R. H. "Friedrich Niecks."
- Maczewsky, A. "Moritz Hauptmann."
- Middleton, Louisa, and Francis Hueffer, rev. Humphrey
Searle. "Franz Liszt."
- Ouseley, Sir Frederick A. Gore. "Arsis and Thesis."
- Prout, Ebenezer. "Courante."
- Radcliffe, Philip F. "Johannes Brahms."
- Reiss, Józef W. "Polonaise."
- Richardson, E. F. "Metronome."
- Rockstro, W.S. "Hemiola, Hemiolia."
- Rudge, Olga; E. Heron-Allen; and Eric Blom. "Niccolò
Paganini."
- Shera, F. H. "Symphony."

Taylor, Franklin. "Tie."

Vallas, Léon. "Hector Berlioz."

Williams, Ralph Vaughan; Sir Adrian Boult; and H. C. Colles; rev., Eric Blom. "Conducting."

Young, Percy. "Felix Mendelssohn."

Harvard Dictionary of Music. Second ed., ed. Willi Apel. Cambridge, Mass.: Belknap Press of Harvard University Press, 1969.

Entries on "Accent," "Agogic," "Arsis and thesis," "Bar," "Bar line," "Beat," "Courante," "Cross rhythm," "Harmonic rhythm," "Hemiola, hemiola," "Measure," "Metronome," "Notation," "Performance practice," "Phrasing and articulation," "Polonaise," "Polyrhythm," "Proportions," "Rhythm," "Rubato," "Syncopation," "Takt," "Tie," and "Waltz."

The Oxford Companion to Music. Tenth edition, ed. John Owen Ward. London: Oxford University Press, 1970.

Scholes, Percy A. "Syncopation."

Music

Lanner, Josef. Waltzer. Denkmäler der Tonkunst in Österreich, Jg. XXXIII/2, Band 65 (1926).

Schumann, Robert. Werke, hrsg. von Clara Schumann. 35 vols. Leipzig: Breitkopf und Härtel, 1881-93; reprinted, Westmead, England: Gregg International Publishers Ltd., 1967.

_____. Complete Works. Kalmus Study Scores. New York: Edwin F. Kalmus, Publisher, n. d.

_____. Complete Works for Piano Solo, "Edited according to manuscripts and from her personal recollections by Clara Schumann." 6 vols. [and a seventh which includes Opp. 54, 92, and 134 for piano and orchestra]. New York: Edwin F. Kalmus, Publisher, n.d.

- _____. Concerto in a minor, Op. 54: sketch of the 1841 Phantasie which became the first movement, with Schumann's revisions superimposed in the score, and the addition (1845) of an Andantino and Rondo. Opportunity to study a Xeroxed copy of this score courtesy of Malcolm Frager, Lenox, Mass.
- _____. Concerto in a minor, Op. 54: facsimile reproduction of the first edition (solo piano part only, with orchestral cues). Leipzig: Breitkopf und Härtel, 1846; with Preface and footnotes by Harold Bauer and reduction of the orchestral score for second piano. New York: Carl Fischer, 1948.
- _____. Sonata No. 3 in a minor, for violin and piano, ed. O.W. Neighbour. London: Schott & Co., Ltd., 1956.
- _____. Symphony/ Opus 38: facsimile of sketches and the manuscript of the full score in the Library of Congress. New York: The Robert Owen Lehman Foundation, 1967.
- Strauss, Johann Jr. Waltzer. Denkmäler der Tonkunst in Österreich, Jg. XXXV/2, Band 68 (1928).

CHARACTERISTIC METRICAL ANOMALIES
IN THE INSTRUMENTAL MUSIC OF ROBERT SCHUMANN:
A STUDY OF RHYTHMIC INTENTION

by

Mary Evans Johnson

Volume II: Appendices

Volume II: Appendices

A.	Examples for Chapter III, Empty Barbeats	1
B.	Examples for Chapter IV, Lilt Formation	28
C.	Examples for Chapter V, Consistent Metrical Displacement	64
D.	Examples for Chapter VI, Oblique Harmonic Rhythm.	113
E.	Examples for Chapter VII, Metrical Repositioning	179
F.	Examples for Chapter VIII, Hemiolic Construction	242
G.	Examples for Chapter IX, Other Anomalous Features	301
H.	Listing of Schumann's Instrumental Works	325

APPENDIX A

Examples for Chapter III, Empty Barbeats

Ex. A1 - A Single Empty Barbeat (Op. 60/I, m. 2)

Langsam.

MANUAL.

PEDAL.

m. 1

m. 4

Detailed description: This musical score is for a single empty barbeat. It features three staves: a grand staff (treble and bass clef) for the 'MANUAL' and a single bass clef staff for the 'PEDAL'. The tempo is marked 'Langsam.' (Ad libitum). The key signature has one flat (B-flat). The manual part has a whole rest in the first measure (m. 1) and a half note in the second measure (m. 2). The pedal part has a half note in the first measure (m. 1) and a half note in the second measure (m. 2). The measures are labeled 'm. 1' and 'm. 4' at the bottom.

Ex. A2 - Consecutive Empty Barbeats (Op. 5/12. 1st ed., m. 75, 76)

Vivace, 6/8

[III] [IV] [I]

m. 73

m. 77

Detailed description: This musical score shows consecutive empty barbeats. It features a grand staff (treble and bass clef) for the 'MANUAL' and a single bass clef staff for the 'PEDAL'. The tempo is marked 'Vivace, 6/8'. The key signature has one flat (B-flat). The manual part has a whole rest in the first measure (m. 73) and a half note in the second measure (m. 74). The pedal part has a half note in the first measure (m. 73) and a half note in the second measure (m. 74). The measures are labeled 'm. 73' and 'm. 77' at the bottom. Above the manual part, there are three empty barbeats labeled [III], [IV], and [I].

Ex. A3 - Consecutive Empty Barbeats (Op. 2/9, m. 38, 39)

Prestissimo, 3/8

[V]

m. 33

Detailed description: This musical score shows consecutive empty barbeats. It features a grand staff (treble and bass clef) for the 'MANUAL' and a single bass clef staff for the 'PEDAL'. The tempo is marked 'Prestissimo, 3/8'. The key signature has one flat (B-flat). The manual part has a whole rest in the first measure (m. 33) and a half note in the second measure (m. 34). The pedal part has a half note in the first measure (m. 33) and a half note in the second measure (m. 34). The measures are labeled 'm. 33' at the bottom. Above the manual part, there is one empty barbeat labeled [V].

Ex. A4 - Empty Barbeats in Alternate Bars (Op. 21/6,
m. 10, 12)

Sehr lebhaft, mit vielem Humor, 2/4

[I]



Ex. A5 - Empty Barbeat: The Grand Pause (Op. 2/10, m. 69)

Vivo, 3/4

[I]

[V]



Ex. A6 - A Single Empty Barbeat in Phrase Extension
(Op. 26/I, m. 211)

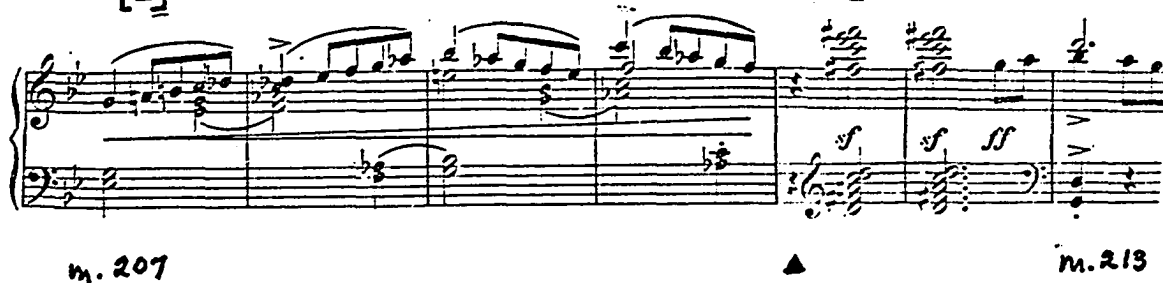
Sehr lebhaft, 3/4

[I]

[V]

[VI]

[I]



Ex. A7 - Variety of Supermetrical Import Among Empty Barbeats: Four
Empty Barbeats in the Final Seven Bars (Op. 15/13, m. 19, 21, 23, 24)

(No tempo term), C

[I]



m. 13

[VII - VIII] seq. [VII - VIII] [VII - VIII - I]



m. 18

m. 25

Ex. A8 - Empty Barbeat in a Final Cadence, in the Midst of Final
Tonic Harmony (Op. 21/7, m. 171)

Äusserst lebhaft, 2/4



Ex. A9 - Empty Barbeat Following a Polonaise Cadence
(Op. 6/9, 1st ed., m. 33)

Hierauf schloss Florestan und es zuckte ihm
schmerzlich um die Lippen. 3/4

m.29

ri - lard.

Polo

m.33

[IV]

Ex. A10 - Empty Barbeat Upon a Polonaise Cadence Bar
(Op. 2/11, m. 67)

(No tempo term), 3/4

m.66

Polo

m.70

[VII]

[VIII]

Ex. All - Empty Barbeats in Phrase Augmentation at a Final Cadence (Op. 9/21, m. 276, 278, 280, 282)

Vivo,
Più stretto, 3/4

[II - III - IV - I]

[illegible]

[II - III - IV - I]

[II - III - IV - I]

M. 272

M. 283

Ex. A12 - Empty Barbeats Punctuating Lilt Formation
(Op. 41#3/I, m. 9, 13)

Allegro molto moderato. $\text{♩} = 60$.

p sempre teneramente *len.* *len.*

p sempre teneramente *len.* *len.*

p sempre teneramente *len.* *len.*

p sempre teneramente *len.* *len.*

m. 9 m. 13

Ex. A13a - Empty Barbeat in the Waltz Caesura Pattern
(Op. 63/II, m. 25ⁱ)

Lebhaft, doch nicht zu rasch, 3/4

p sempre teneramente *len.* *len.*

p sempre teneramente *len.* *len.*

p sempre teneramente *len.* *len.*

p sempre teneramente *len.* *len.*

m. 22 m. 26

Ex. A13b - An Effect of Empty Barbeat in an Expanded Waltz
Caesura Pattern (Op. 63/II, m. 188-91)

(Lebhaft, doch nicht zu rasch, 3/4)

[I]

m. 184

(Δ) (Δ) (Δ)

m. 192

Ex. A14 -
 Empty Barbeat in the
 Waltz Caesura Rhythm,
 Melodic Alteration
 (Op. 61/I, m. 216)

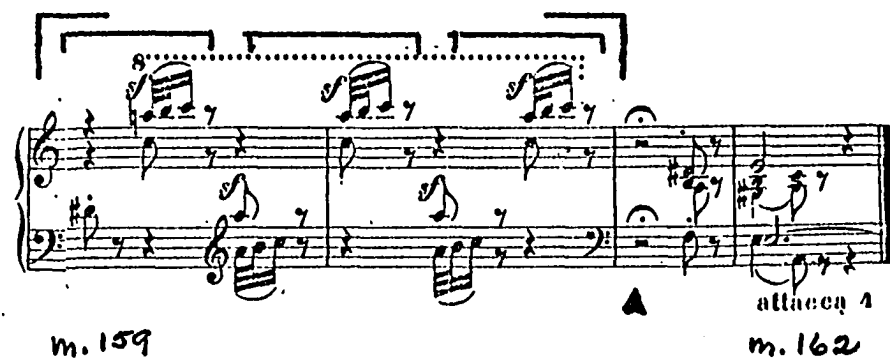
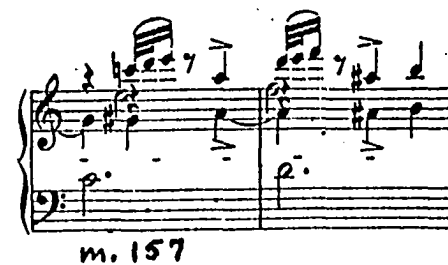
Allegro, ma
 non troppo, 3/4

Fl
 Ob
 Cl
 Bn
 H
 Tt
 Timp
 VI
 V2
 VA
 C
 DB

m. 214 m. 217

Ex. A15 - Empty Barbeat with Fermata, Following Hemiolitic Construction (Op. 4/III, m. 161)

Allegro marcato, 3/4



Ex. A16a - Full Barbeat Initiating Phrase (Op. 14/IV, 2nd ed., m. 17);
 A16b - Empty Barbeat Initiating Related Phrase (Op. 14/IV, 2nd ed.,
 m. 25); A16c - Empty Barbeat Initiating Related Phrase (Op. 14/IV,
 2nd ed., m. 29)

Presto possibile, 2/4

a

m. 17 *q.w.*

b

m. 25 **Δ**

c

m. 29 **Δ** *q.w.* m. 31

Ex. A17 - Empty Barbeat at a Mid-Phrase Metrical Flexing (Op. 12/4, m. 69)

Mit Humor,
3/4

HR
AR




m. 61

m. 67

m. 72

Ex. A18 - Initial Empty Barbeat (Op. 16/4, m. 1)

Sehr langsam (M.M. ♩ = 66.)



m. 1

Ad.

m. 5

Ex. A19 - Initial Empty
Barbeat (Op. 115, m. 1)

Rasch. $\text{♩} = 132$ Langsam. $\text{♩} = 63$.

Fl
Ob
Cl (Bb)
Bn
Valve-Horn
Nat. Horn
Tpt.
Tbn. A
Tbn. T
Tbn. B
VI
VII
VA
C
DB

Rasch. Langsam.
m. 1 m. 3

Ex. A20 - Initial Empty
Barbeat (Op. 134, m. 1)

Ziemlich langsam. $\text{♩} = 82$.
Tutti

Fl
Ob
Cl
(B)
Bn
H
(D)
Tr
(D)
Tb
Timp
P
VI
VII
VA
C
DB

Ziemlich langsam.
Tutti

Ziemlich langsam.

m. 1

Ex. A21 - Initial Empty Barbeat, Upbeat Bar
(Op. 14/I, m. 1)

Allegro brillante. ($\text{♩} = 76$.)

m. 1 m. 3

Ex. A22 - Initial Empty Barbeat, Performance
Problem (Op. 73/III, m. 1)

Rasch und mit Feuer. ($\text{♩} = 160$.)

m. 1 m. 2

Ex. A23 - Initial Empty Barbeat, Fugal Subject
(Op. 72/1, m. 1)

Nicht schnell. $\text{♩} = 60$.

m. 1 m. 6

Ex. A24 - Initial Empty Barbeat, Fugal Subject (Op. 72/3, m. 1)

Nicht schnell und sehr ausdrucksvoll. $\text{♩} = 58$.

p *f*

▲

m. 1 m. 5

Ex. A25 - Initial Empty Barbeat (Op. 68/34, m. 1)

Langsam. Mit inniger Empfindung.

p

▲

m. 1 m. 3

Ex. A26 - Initial Empty Barbeats, Three Consecutive Phrases
(Op. 32/I, m. 1, 6, 11)

Sehr markirt. M. M. $\text{♩} = 160.$

m. 1

m. 6

m. 11

m. 15

Ex. A27a - Initial Empty Barbeats, Piano Quartet
(Op. 47/I, m. 13)

Allegro ma non troppo. $\text{♩} = 100.$
sempre con molto sentimento

V
VA
C

ritard. e dim. *mf* *sf*

Allegro ma non troppo. $\text{♩} = 100.$

PF
ritard. e dim. *mf* *sf espressivo*

m. 11 *Ad.* m. 16

(Bars 1-12 = Introduction)

Ex. A27b - Initial Empty Barbeats, Piano Quartet
(Op. 47/III, m. 1)

Andante cantabile. $\text{♩} = 54.$

V
VA
C

f *p* *dim.* *p*

Andante cantabile.

PF
f *p* *mf* *p*

m. 1 *Ad.* m. 6

Ex. A27c - Initial Empty Barbeats, Piano Quartet (Op. 47/IV, m. 1)

FINALE.
Vivace. $\text{♩} = 152.$

V
VA
C
Pf

Vivace. $\text{♩} = 152.$

m. 1 Δ m. 4

Ex. A28a - Initial Empty Barbeats, String Quartet (Op. 41#1/I, m. 1)

Introduzione.
Andante espressivo. $\text{♩} = 69.$

V
VA
C
Pf

Introduzione.
Andante espressivo. $\text{♩} = 69.$

m. 1 Δ m. 6

Ex. A28b¹, b² - Initial Empty Barbeats, String Quartet
(Op. 41#1/II, into m. 1 cf. m. 52 into 53)

Presto. $\text{♩} = 138$.

m. 1 m. 4

[V]

m. 47 m. 50

m. 51 m. 56

Ex. A28c - Initial Empty Barbeats, String Quartet
(Op. 41#1/III, m. 1)

Adagio. $\text{♩} = 55$.

m. 1 m. 5

Ex. A29a - Empty Barbeat, Resuming Motion After a Fermata
(Op. 120/I, m. 144)

Lebhaft, 2/4

NB

Fl
Ob
Cl
Ba
H (F)
H (D)
T⁺ (F)
Tb
Timp
VI
VII
VA
'C
DB

m. 142 m. 146

Ex. A29b - Earlier Related Passage, No Fermata Before
Empty Barbeat (Op. 120/I, m. 131)

Lebhaft, 2/4

no n
↓

Fl
Ob
Cl
Ba
H (F)
H (D)
T (F)
Tb
Timp
VI
VII
VA
C
DB

m. 129 A E m. 134

Ex. A30 - Following a Fermata, Empty Barbeat with Fermata
(Op. 20, m. 947, 949)

Adagio, C

musical score for piano, measures 944 to 951. The score is in C major and 4/4 time. It features a series of chords and melodic lines. Measure 944 is marked "m. 944". Measure 945 has a "ritard." marking. Measure 946 has a "ritard." marking. Measure 947 has a "pp" marking. Measure 948 has a "ritard." marking. Measure 949 is marked "Allegro." and "m. 951". The score ends with a fermata over the final chord.

Ex. A31a - A Riddle of Empty Barbeats (Op. 41#3/II, m. 1-48,
theme for variations)

Assai agitato. J. = 146.

VI
VII
VA
'C

m. 1

pp
cresc.
pp
cresc.
pp
cresc.
pp
cresc.

m. 35

m. 48

Ex. A31b - Answer to the Riddle of Empty Barbeats (Op. 41#3/II, third variation, m. 145-192)

Un poco Adagio. $\text{♩} = 76$.

VI
VII
VA
C

m. 145

(a tempo)

un poco ritard.

cresc.

cresc.

cresc.

cresc.

cresc.

m. 161

m. 166 *un poco ritard.*

(a tempo)

cresc.

dim.

dim.

dim.

dim.

dim.

dim.

m. 189

m. 192

Ex. A32 - Almost Empty Barbeats: Thin Texture
(Op. 44/III, Trio II, m. 123f)

Molto vivace, 6/8

Trio II.
L'istesso tempo.

VI
VII
VA
C

mf

L'istesso tempo.

Pf

mf

(A) (A) (A) (A)

m. 123 m. 126

Ex. A33 - Almost Empty Barbeats: All-Tied Texture
(Op. 85/5, into m. 2, into m. 4, P^o and S^o)

Lebhaft.

P^o

mf

Lebhaft.

S^o

mf

m. 1 (A) (A) m. 4

Ex. A34 - Almost Empty Barbeat: Springboard for Melody
(Op. 26/IV, m. 1)

Mit grösster Energie. M. M. ♩ = 116.

m. 1 (Δ) m. 2

Ex. B1 - The Lilt in Consecutive Phrase Endings (Op. 2/9, m. 28, 32)

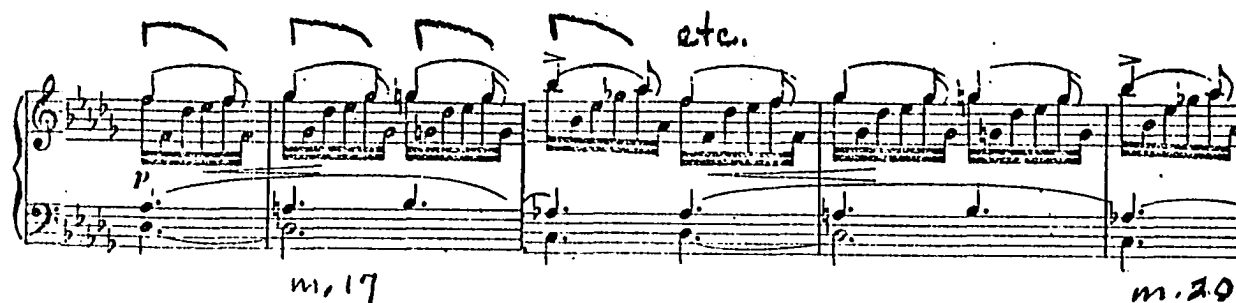
Prestissimo, 3/8

28 Ex. B2 - Melodic Lilts Followed by Rests (Op. 110/I, m. 36, 37, 39, 40)

Bewegt, doch nicht zu rasch, 6/8

Ex. B3 - Consecutive Melodic Lirts (Op. 12/2, into m. 17-20)

Sehr rasch, 6/8

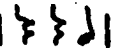


Ex. B4 - Separated and Consecutive Melodic Lirts
(Op. 13, Anhang/III, m. 11-12)

(No tempo term), 12/8

Handwritten musical score for Ex. B4. The score is in 12/8 time and marked '(No tempo term)'. It features a piano (p) dynamic. The melody consists of a series of eighth-note lirts (trills) in the right hand, with a steady eighth-note accompaniment in the left hand. The notation includes slurs over the lirts and a 'p' dynamic marking. The score is labeled 'm. 11' at the beginning and 'm. 13' at the end. A bracketed 'I' is written above the melody at the end of the excerpt.

Ex. B5 - Thematic Lirts in the "Pathetique" Style (Op. 81, m. 27, 29, 31, 33)

=B29 - Waltz Accompaniment Variant  (m. 31, 32, 33)

Leidenschaftlich bewegt. (♩ = 140.)



Fl

Ob

Cl. (B^b)

Bn

Valve-horn (E^b)

Nat. Horn

Tr. (C)

Timp.

VI

VII

VA

C

DB

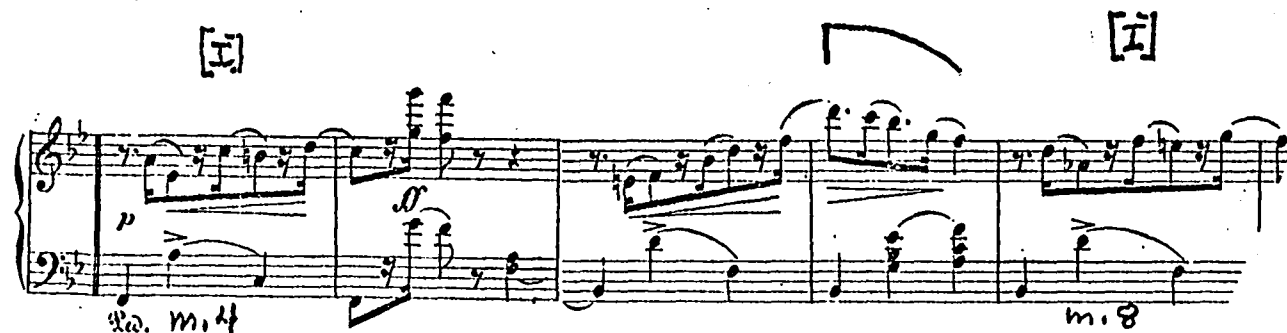
Leidenschaftlich bewegt.

m. 27

m. 33

Ex. B6 - The Lilt in a Phrase Ending (Op. 9/7, m. 7)

Vivo, 3/4



Ex. B7 - Divided Texture: The Lilt With Upbeat Construction
(Op. 26/I, m. 389-96)

Höchst lebhaft, 3/4

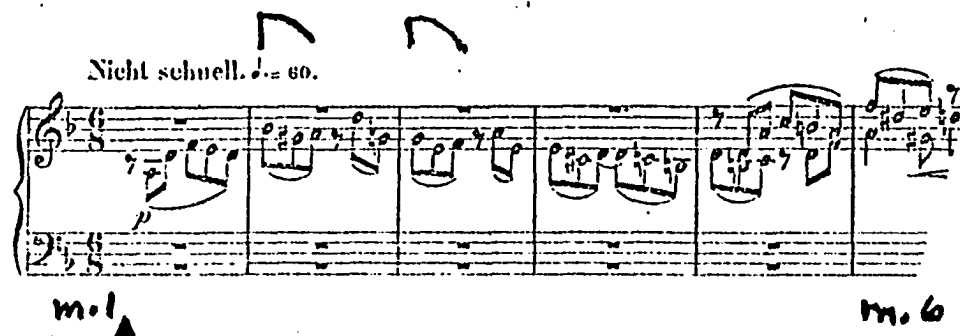


Ex. B8 - A Post-Lilt Rest Within the Bar (Op. 2/6, m. 8, 10, 12)

(No tempo term), 3/4



Ex. B9 - Lilts in a Fugue Subject (Op. 72/1, m. 2, 3, etc.)



Ex. B10 - The Lilt as a Variation Device (Op. 118a/II, m. 19-22)

Ziemlich langsam, C



Ex. B11 - A Lilt Tied to the Next Beat (Op. 41#2/I, m. 3-4)

Allegro vivace. $\text{♩} = 96.$

VI

VII

VA

c

m. 1

m. 2

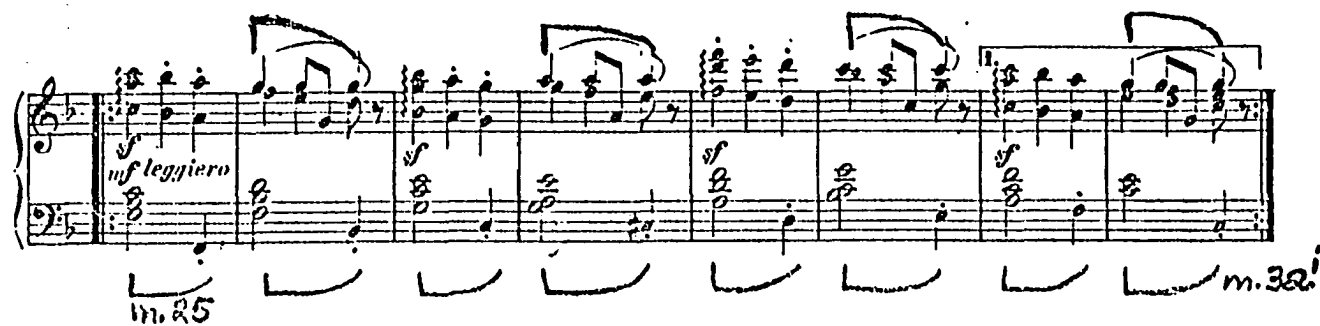
Handwritten musical score for Ex. B11, measures 1-2. The score is written for strings (VI, VII, VA, c) and consists of four staves. The tempo is 'Allegro vivace. ♩ = 96.'. The key signature is one sharp (F#). The notation shows a lilt tied to the next beat, with measures 1 and 2 marked. The music features a series of eighth notes and quarter notes, with a lilt indicated by a slur over the notes in measure 1.

Ex. B12 - Consecutive Disjunct Melodic Lilts (Op. 124/5, m. 1-3)



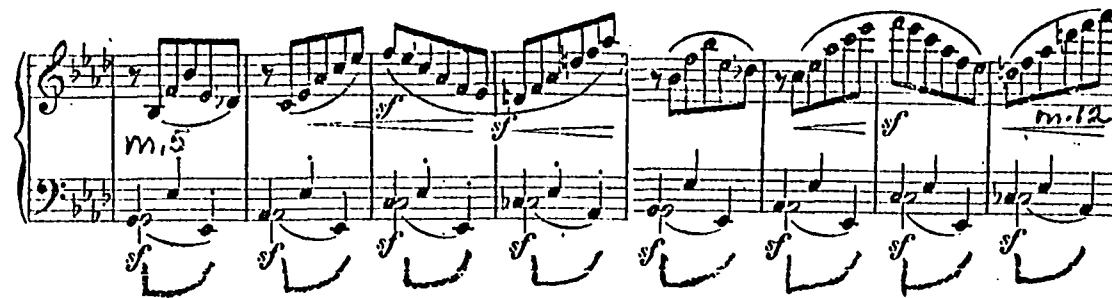
Ex. B13 - Consecutive Bass Lilts (Op. 2/6, m. 25-32¹)

(No tempo term), 3/4



Ex. B14 - Consecutive Lilts, Bass and Tenor (Op. 9/20, m. 5-12)

Vivo, precipitandosi, 3/4



Ex. B15 - Bass Lirts Throughout a Piece (Op. 6/2, m. 1-24)

Innig.

p

m. 1

1. 2.

p

Pedale

1. rit. 2. rit.

m. 13 m. 16

m. 18 m. 24

Ex. B16 - Independent Bass Lilt (Scherzo, Op. 14 Anhang, m. 19)

Vivacissimo, 6/8

Handwritten annotations: m. 18, m. 20

Ex. B17 - Influence of Phrase Structure on Bass Lilts; with Waltz Accompaniment Pattern in Middle Voices | 3 3 3 |
(Op. 2/10, m. 25-32)

Vivo; Più lento, 3/4

Handwritten annotations: m. 25, m. 32

Ex. B18 - Waltz Accompaniment Variant | 3 3 3 |
(Op. 110/II, m. 1, 2, etc.)

Handwritten annotations: m. 1, m. 2

Ex. B19 - Waltz Accompaniment Variant

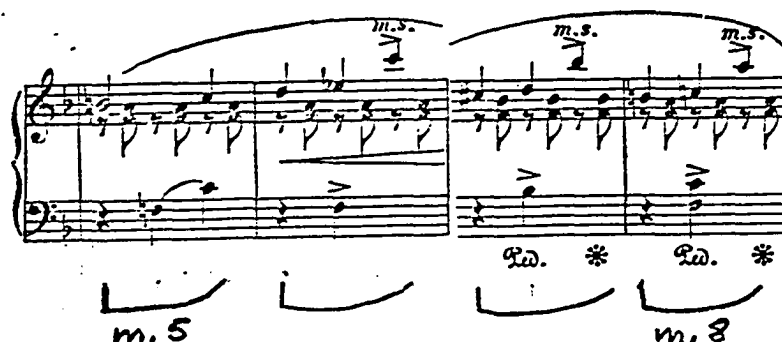


(Op. 73/III, m. 24-27)

Rasch und mit Feuer, C

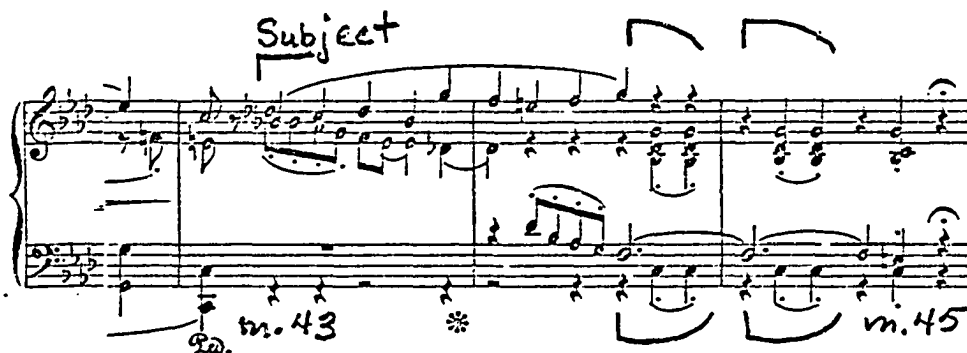
Ex. B20 - Waltz Accompaniment Variant
(Op. 4/V, m. 5-8)

Allegro moderato, 3/4



Ex. B21 - Waltz Accompaniment Variant
(Op. 72/3, m. 44, 45)

Nicht schnell und sehr ausdrucksvoll, 6/4



Ex. B22 - Waltz Accompaniment Variant , Programmatic Use
(Op. 2/12, m. 65-68, 70-84)

Finale, 3/4



m. 50

m. 59

m. 70

m. 80

m. 88

Ex. B23 - Waltz Accompaniment Pattern (Op. 97/II, m. 1-8)

Sehr mässig. $\text{♩} = 100.$



Fl
Ob
Cl
Bn
H
(F)
H
(C)
T
(F)
Timp
VI
VII
VA
C
DB

Sehr mässig.
m. 1

m. 8

Ex. B24 - Waltz Accompaniment Variant
(Op. 46, into m. 221f)

(Tema: Andante espressivo), 3/4



Pf I

p dolce

3

etc.

Pf II

p

m. 221

m. 222

Ex. B25a - Waltz Accompaniment Variant
(Op. 17/III, m. 34-35)

Langsam getrage. Durchweg leise zu halten, 12/8



Etwas bewegter.

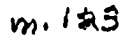
pp

m. 34

m. 36

Pedal.

1931



1151

$\frac{1}{2} = 0.5$.

Y

Ex. B27a - Evolution of a Waltz Accompaniment Variant
(Op. 54/III, m. 187-96)

Allegro vivace, 3/4



The musical score is written for a chamber ensemble. The staves are labeled as follows:

- Bn. (Bassoon): Starts with a *pp* marking and a *TUTTI.* marking. It features a melodic line with a bracketed *[I]* marking.
- Pf. (Piano): Features a melodic line with a *pp* marking.
- VI (Violin I): Features a melodic line with a *pp* marking.
- VII (Violin II): Features a melodic line with a *pp* marking.
- VA (Viola): Features a melodic line with a *pp* marking.
- C (Cello): Features a melodic line with a *pp* marking.
- DB (Double Bass): Features a melodic line with a *pp* marking.

The score includes dynamic markings such as *pp* (pianissimo) and *pp* (pianissimo). It also includes rehearsal marks *[I]* and *TUTTI.* The bottom of the page shows measures 187 and 196.

Ex. B27b - Evolution of a Waltz Accompaniment Variant
(Op. 54/III, m. 267 into m. 274 this page, cont. through m. 281 next page)

Allegro vivace, 3/4



PS

[I]

8

VI

VII

VA

C

DB

m. 267

m. 273

cont.

Ex. B27b, continuation

[I]

Pf

VI

VII

VA

C

DB

m. 275 m. 277 m. 279 m. 281

1 3 3 2 | 1 3 3 2 | 1 3 3 2 |

Ex. B28 - Waltz Accompaniment Variant in Compound Meter
(Op. 80/I, m. 149-50)

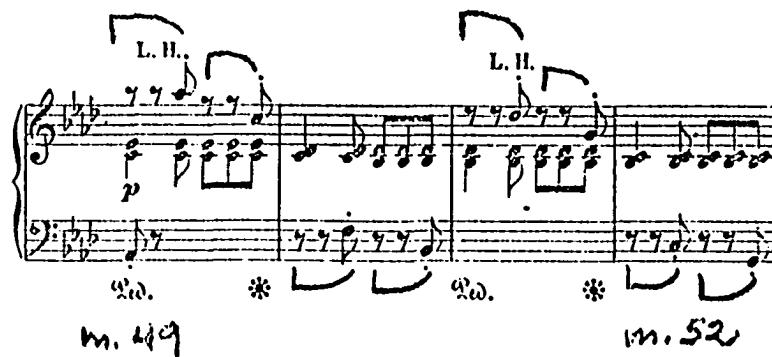
Sehr lebhaft, 6/8



Ex. B29=B5

Ex. B30 - Waltz Accompaniment Variant , LH Crossing RH
(Op. 82/8, m. 49-52)

Rasch, kräftig, 6/8



Ex. B31 - Waltz Accompaniment Variant  in Bass in Alternate Bars,
Lengthy Passage (Op. 23/3, m. 35, 37, 39 shown; pattern extends through
m. 116)

Mit grosser Lebhaftigkeit, 3/4

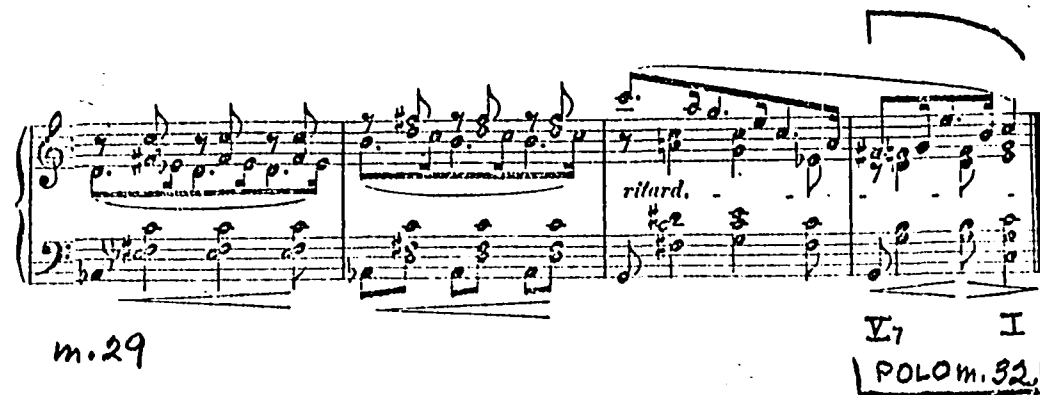


m. 35

m. 40

Ex. B32 - Cadencing Lilt: Terminal Polonaise Cadence
(Op. 6/9, 2nd Ed., m. 32)

Lebhaft, 3/4



m. 29

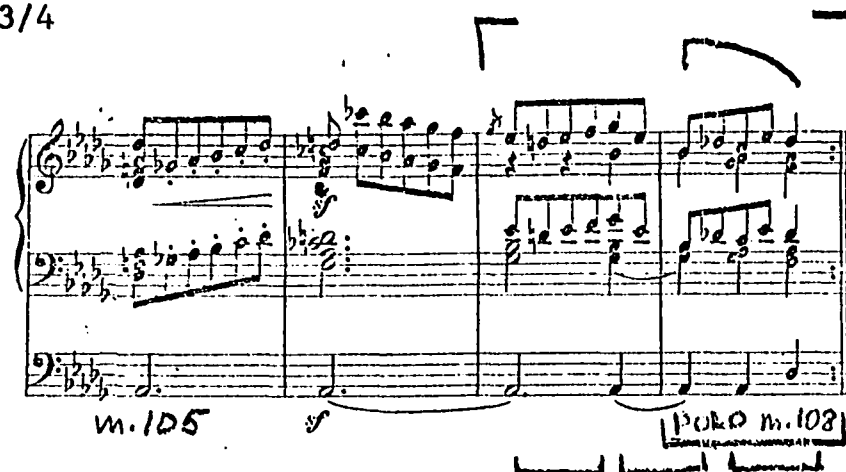
ritard.

V₇ I

POLO m. 32.

Ex. B33 - Cadencing Lilt: Polonaise Cadence Within Hemiolic Construction
(Op. 58/3, m. 107-108)

Lebhaft, 3/4



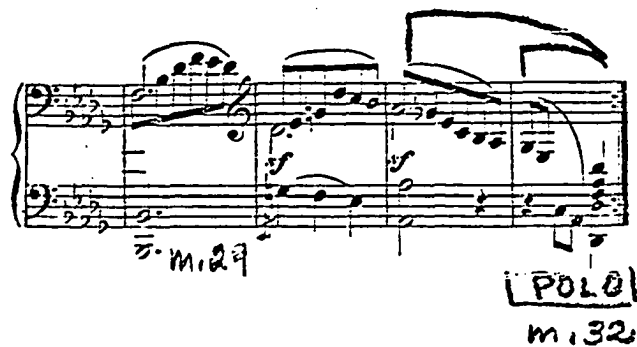
Ex. B34 - Cadencing Lilt: Polonaise Cadence Following Hemolic Construction
(Op. 2/5, m. 8)

(No tempo term), 3/4



Ex. B35 - Double Length Cadencing Lilt, Polonaise Cadence
(Op. 23/3, m. 31-32)

Mit grosser Lebhaftigkeit, 3/4



Ex. B36 - Cadential Lilt in the Waltz Caesura Pattern
(Op. 63/II, m. 24)

Lebhaft, doch nicht zu rasch, 3/4

Handwritten musical score for Ex. B36. It features a grand staff with two systems. The first system starts at measure 22 (labeled 'm. 22') and ends with a double bar line. The second system starts at measure 26 (labeled 'm. 26') and ends with a double bar line. A bracket labeled 'I' spans the second system. The music is in 3/4 time and includes various musical notations such as notes, rests, and dynamic markings.

Ex. B37 -
Cadential Lilt
(Op. 61/I, m. 215)

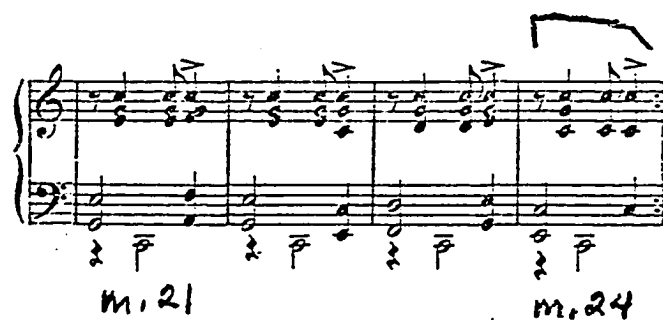
Allegro, ma
non troppo, 3/4

Fl
Ob
Cl
Bn
H
Tt
Timp
VI
VII
VA
C
DB

m. 214 A m. 217

Ex. B38 - Filled Out Lilt Cadence (Op. 15/9, m. 24)

(No tempo term), 3/4



Ex. B39 - Filled Out Lilt Cadence (Op. 9/3, m. 44)

Vivo, 3/4



Ex. B40 - Brief Imitative Passage With Lilt Motifs,
Divided Rhythmic Function (Op. 110/I, m. 13-14)

Bewegt, doch nicht zu rasch, 6/8

Handwritten musical score for Ex. B40, Op. 110/I, measures 13-14. The score is in 6/8 time and features three staves. The top two staves are for voices or instruments, and the bottom staff is for piano. The music is marked 'Bewegt, doch nicht zu rasch, 6/8'. The score includes dynamic markings 'cresc.' and 'cresc.' on the top two staves, and 'cresc.' on the piano staff. The measures are labeled 'm. 12' and 'm. 15'.

Ex. B41 - Tied-Into Lilts to Begin a Long Canonic Passage
(Op. 80/III, m. 1-8 etc.)

Handwritten musical score for Ex. B41, Op. 80/III, measures 1-8. The score is in 6/8 time and features three staves. The top two staves are for voices or instruments, and the bottom staff is for piano. The music is marked 'In mässiger Bewegung. M.M. ♩ = 50.'. The score includes dynamic markings 'p' and 'sp'. The measures are labeled 'm. 1' and 'm. 8'.

Ex. B42 - Mutable Lilts: Lilt as Ornamental Articulation (Op. 88/I, m. 1,5)

Nicht schnell, mit innigem Ausdruck.

V

lc

Nicht schnell, mit innigem Ausdruck. J. 58.

Pf

p

m. 1

m. 8

Ex. B43 - Mutable Lilts: Effect of Phrase-Length Expectation (Op. 1, Finale, m. 1-4)

Vivace. J. = 80.

p semplice e tutto crescendo

f

pp

m. 1

m. 4

Ex. B44 - Mutable Lilts: Phrase-Length Expectation with Hockets
(Op. 80/I, m. 22-29)

Sehr lebhaft, 6/8

[I]

The musical score consists of three staves: Violin (V), Viola (C), and Piano/Forte (PF). The key signature has one flat (B-flat), and the time signature is 6/8. The score is marked with a bracketed 'I' above the first staff. The first staff (V) begins with a piano (p) dynamic and features a series of hocket patterns. The second staff (C) also begins with a piano (p) dynamic and features similar hocket patterns. The third staff (PF) begins with a piano (p) dynamic and features a series of chords. All three staves have a crescendo (cresc.) marking. The score ends with a double bar line. Below the first staff, the measure number 'm. 22' is written. Below the third staff, the measure number 'm. 29' is written.

m. 22

m. 29

Ex. B45 - Mutable Lilts: Effect of Separately Slurred
Melodic Lilt, With Standard Waltz Accompaniment
(Op. 124/4, m. 1-8)

Lebhaft.

Mit Pedal.

m. 1

m. 5

m. 8

Ex. B46 - Mutable Lilts: Two Rhythmic Patterns Which Are Now Lilt,
Now Upbeat (Op. 9/4, entire pièce shown, m. 1-40)

Un poco maestoso.

m. 1 m. 6

m. 7 m. 12

m. 13 m. 19

cont.

Ex. B46, continuation

The musical score is written for piano and consists of three systems of music. The first system spans measures 20 to 26, the second system spans measures 27 to 33, and the third system spans measures 34 to 40. The key signature is one flat (B-flat major or D minor). The first system includes the instruction *molto teneramente* above the staff. Above the first system, there are circled letters: (a), (b), (a), (b), (b), and (a). Above the second system, there are circled letters: (a), (a), and (a). Above the third system, there are circled letters: (a), (a), (a), (a), (a), and (a). The score includes various musical notations such as notes, rests, and dynamic markings like *ff* (fortissimo) in measure 33.

System 1: m. 20 to m. 26. Annotations: (a), (b), (a), (b), (b), (a). Instruction: *molto teneramente*.

System 2: m. 27 to m. 33. Annotations: (a), (a), (a). Dynamic marking: *ff* in m. 33.

System 3: m. 34 to m. 40. Annotations: (a), (a), (a), (a), (a), (a).

Ex. B47 - Mutable Lilts: Double Upbeat Pattern Adding Double Afterbeats
(Op. 70, m. 64-65 cf. m. 66-69)

Rasch und feurig.

Horn
(F)

Pf

u u -

m. 62

etc.

m. 66

m. 69

Ex. B48 - Mutable Lilts: Equivocal Sicilianos (Op. 58/3, m. 1-16)

Lebhaft.

Pedal-Piano

m. 1

m. 6

m. 12

m. 16

Ex. B49 - Ambiguity of Function in a Series of Lilt
Suspensions (Op. 60/II, m. 155, 156, 157, 158)

Lebhaft, 3/4

Pedal-piano

4-3 2-1 7-6 2-1

sus

m. 154 m. 159

Ex. B50 - Melodic Lirts with Hemiolic Aspects
(Op. 97/I, m. 1f)

Lebhaft. $\text{♩} = 68$.

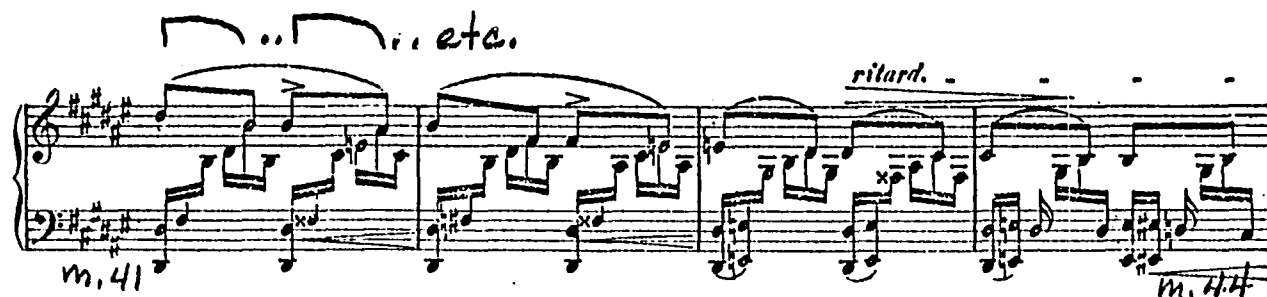
Lebhaft.

f M. 1

M. 8

Ex. B51 - A Notational Oddity: Lilt Rubato (Op. 28/I, m. 41-44)

Sehr markiert, 2/4



APPENDIX C

Examples for Chapter V, Consistent Metrical Displacement

Ex. C1 - Slant Melody: a, Original Form; b, Displaced Form
(Op. 6/16, m. 1f cf. m. 17f)

a

Mit gutem Humor.

p. 920. m. 1

b

m. 17

m. 20

Ex. C2 - Slant Melody: Sole Form (Op. 15/10, m. 1f)

"Fast zu ernst"



Ex. C3a and b - Slant Melody in Upbeats (Op. 21/4, m. 50f cf. m. 66f)

Ballmässig, sehr munter, 3/4

Handwritten musical score for Ex. C3a and b, "Ballmässig, sehr munter, 3/4". The score is in 3/4 time, key of D major (two sharps). It consists of two systems, labeled 'a' and 'b'. System 'a' is marked with a slant line and an arrow pointing right. The piece begins with a piano (p) dynamic. The score is labeled with "m. 50" at the beginning and "m. 54" at the end. System 'b' is marked with a slant line and an arrow pointing left. The score is labeled with "m. 66" at the beginning and "m. 70" at the end, with the word "ad." written above the final measure.

Ex. C4 - Slant Melody, Inner Voice, in Afterbeats
(Op. 28/III, m. 256f)

Sehr markiert, 2/4

→ 

Etwas langsamer.

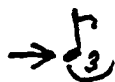
Intermezzo 2.



m. 256 m. 263

Ex. C5 - Slant Melody, Chromatic Embellishment
(Op. 92, m. 479-80)

Allegro, ♩



Fl
Ob
Cl
Bn
Pf
VI
VII
VA
C
DB

m. 479 cresc. m. 480 f

Ex. C6 - Normal Displacement of Octaves: Melodic
Afterbeats (Op. 44/I, into m. 132-133)

Allegro brillante, ♩

The musical score is arranged in five staves. The top four staves are for Violins I (VI), Violins II (VII), Viola (VA), and Cello (C). The bottom staff is for the Piano (P). The key signature is three flats (B-flat, E-flat, A-flat), and the time signature is common time (C). The Piano part begins at measure 132, marked with a double bar line and the text 'm. 132'. The Piano part features a melodic line with a 'dim.' (diminuendo) marking and a 'p non legato' (piano, non legato) marking. The Violin and Viola parts have a melodic line with a 'p' (piano) marking. The Cello part has a melodic line with a 'p' (piano) marking. The Piano part has a melodic line with a 'p' (piano) marking. The Piano part has a melodic line with a 'p' (piano) marking.

Ex. C7 - Displacement of Octaves (Op. 2/11, m. 32f)

(No tempo term), 3/4

Handwritten annotations: *Più lento.....etc.*, *p*, *sempre legato*, *etc.*, *m. 32*, *m. 35*.

Ex. C8 - Displacement of Octaves (Op. 17/I, into m. 106f)

Durchaus fantastisch und leidenschaftlich vorzutragen, C

Handwritten annotations: *p*, *Im lebhaften Tempo*, *m. 106*, *etc.*, *m. 109*.

Ex. C9 - Displacement of Octaves (Op. 92, m. 232-34 etc.)

Allegro, ♩

Musical score for Ex. C9, showing displacement of octaves. The score is for measures 231 and 234. The instruments listed are Flute (Fl), Oboe (Ob), Clarinet in B-flat (Cl (Bb)), Bassoon (Bn), Trumpet (Tr), Piano (Pf), Violin (VI), Viola (VII), Violoncello (Va), Double Bass (Cb), and Double Bass (Db). The tempo is Allegro, marked with a common time signature (C). The key signature is one sharp (F#). The score shows a displacement of octaves in measures 231 and 234, indicated by the 'TUTTI' marking and the 'ff' (fortissimo) dynamic. The piano part (Pf) features a complex rhythmic pattern with many sixteenth notes. The string parts (VI, VII, Va, Cb, Db) also show a displacement of octaves in measure 234, marked with 'ff'.

Fl
Ob
Cl (Bb)
Bn
Tr
Pf
VI
VII
Va
Cb
Db

m. 231

TUTTI

m. 234

VI *a tempo*
p espress.
 VII *p espress.*
 VA *p espress.*
 C *p espress.*
 PF *a tempo* → *OR d.*
sempre legato e p
con Qw. m. 133

m. 137 *etc.* *m. 140*

Ex. C10 - Extreme Time Lag
 in Displacement of Octaves.
 (Op. 44/II, into m. 133f)

In modo d'una Marcia, ♩

Ex. C11 - Suspension Series (Op. 22/IV, into m. 61f)

Presto, 2/4

a tempo

p

SUS

m. 61

SUS

m. 63

SUS etc.

m. 69

m. 75

Ex. C12 -- Retardation Series (Op. 80/I, m. 89-90)

Sehr lebhaft, 6/8

Handwritten musical score for Ex. C12, Retardation Series (Op. 80/I, m. 89-90). The score is in 6/8 time and features three staves: Violin (V), Viola (C), and Piano (PF). The music is marked 'cresc.' and includes dynamic markings 'm. 85' and 'm. 91'. Handwritten annotations include '→', '↓', and 'x' above the Violin staff, and 'm. 85' and 'm. 91' below the Piano staff.

Ex. C13 - Displacement as Imitation (Op. 44/I, m. 99-101)

Allegro brillante, C

→ d

a tempo con fuoco

VI

VII

VA

etc.

a tempo

PF

con fuoco

m. 99

m. 103

The musical score is for measures 99 and 103 of Op. 44/I. It features five staves: Violin I (VI), Violin II (VII), Viola (VA), Cello (C), and Piano (PF). The key signature is one flat (B-flat). The tempo is 'Allegro brillante, C'. The score shows a displacement of the piano part relative to the strings. The piano part is marked 'a tempo' and 'con fuoco'. The string parts are marked 'a tempo con fuoco' and 'con fuoco'. The piano part is marked 'PF' and 'con fuoco'. The score is for measures 99 and 103. The piano part is marked 'a tempo' and 'con fuoco'. The string parts are marked 'a tempo con fuoco' and 'con fuoco'. The piano part is marked 'PF' and 'con fuoco'.

Ex. C14 - Displacement as Imitation (Op. 63/IV, m. 411-18)

Mit Feuer, ♩ . Nach und nach Schneller

Handwritten musical score for Ex. C14, featuring Violin (V), Cello (C), and Piano (PF) parts. The score is written on three staves. The Violin and Cello parts are in treble and bass clefs respectively, with a key signature of one sharp (F#). The Piano part is in treble and bass clefs, with a key signature of one sharp (F#). The tempo is marked "Mit Feuer, ♩ . Nach und nach Schneller". The score includes measure numbers "m. 411" and "m. 419" with "x" marks indicating specific measures. The word "etc." is written above the Piano part. The score is marked with "V", "C", and "PF" for Violin, Cello, and Piano respectively. There are also handwritten arrows pointing to the beginning of the Violin and Cello parts.

Ex. C15 - Slant Bass in Upbeats (Op. 9/17, m. 1f)

INTERMEZZO.

Presto.

molto staccato

etc.

m. 1

m. 4

Ex. C16a - Slant Bass in Afterbeats (Op. 16/1, m. 1f)

Äusserst bewegt.

2nd. m. 1
→

m. 4

etc.

Ex. C16b - Confirming Passage (Op. 16/I, m. 21-24)

m. 21

m. 24

Ex. C17 - Slant Bass Pedal Point Sonority (Op. 28/II, m. 1f)

Einfach. (♩ = 100.)

Handwritten annotations: m. 1, etc., m. 4

Ex. C18 - Slant Bass Sonority (Op. 10/1, m. 1f)

Allegro molto.

Handwritten annotations: m. 1, m. 2

Ex. C19 - Slant Bass Sonority (Op. 17/I, into m. 182f)

Im Legenden Ton, 2/4

m. 182

m. 185

Ex. C20 - Slant Bass Sonority (Op. 99/6, Albumblätter/III, m. 1f)

Ziemlich langsam, sehr gesangvoll.

Mit Pedal. m. 1

m. 5

Ex. C21 - Consistent Displacement, Normal and Anomalous Procedures (Op. 85/9, m. 1-8 and 35-38)

So schnell als möglich.

p

So schnell als möglich.

p

m. 1 m. 4

m. 5 m. 8

sp

m. 35 m. 38

Ex. C22 - Duet Displacement (Op. 6/4, into m. 1f)

→ *Ungeduldig.*

m. 1 m. 4

Ex. C23 - Normal Chordal Afterbeats (Op. 6/8, m. 1f)

Frisch.

m. 1 m. 2

Ex. C24 - Anomalous Chordal Afterbeats (Op. 41#2/III, Trio, m. 89-90)

Presto, 6/8 to begin the Scherzo (III)

→ *TRIO.*
Lo stesso tempo.

m. 87 m. 94

Ex. C25 - Anomalous Chordal Afterbeats (Op. 9/15, m. 5-6 etc.)

Presto.

m. 1

m. 5 *ad.*

m. 8

Ex. C26 - Slant Bass (Op. 1, Var. II, into m. 1f)

(No tempo term)

il Basso parlando

m. 1

m. 8

cre - sci - do

Ex. C27 - Consistent Metrical Displacement: Slant Harmony
in Upbeats (Op. 13/VII, into m. 13-15)

Allegro molto, 2/4

Handwritten musical score for Ex. C27. The top staff is a piano accompaniment in 2/4 time, marked *ff*. The bottom staff is a vocal line with lyrics: "rin - for - zan - do". The score shows measures 13 and 15. A handwritten "HR" with an arrow points to the beginning of the piano part. Below the piano staff, there are handwritten notes: "m. 13" and "m. 15".

Ex. C28 - Slant Harmony (Op. 68/23, into m. 9f)

Kurz und bestimmt, 6/8

Handwritten musical score for Ex. C28. The top staff is a piano accompaniment in 6/8 time, marked *ff*. The bottom staff is a vocal line. The score shows measures 9 and 12. A handwritten "HR" with an arrow points to the beginning of the piano part. Below the piano staff, there are handwritten notes: "m. 9" and "m. 12".

Ex. C29 - Slant Harmony (Op. 109/4, m. 93-96)

Lebhaft, 2/4

Handwritten annotations: *p*, *etc.*, *m. 93*, *m. 96*, and *x* marks below measures 93-96.

Ex. C30 - Ambiguous Slant (Op. 17/II, into m. 92-95)

Mässig. Durchaus energisch, C

Handwritten annotations: *m. 89*, *m. 91*, *m. 92*, *m. 95*, and *etc.*

Ex. C31 - Slant Harmony, Accumulating (Op. 124/7, into m. 1f)

So rasch als möglich.

p

Mit Pedal. m. 1

m. 4

Ex. C32 - Slant Harmony, Accumulating (Op. 14/IV, 2nd Ed., m. 9f)

Presto possibile, 2/4

m. 9

BASS: F - G - A^b - B^b - A^b - G - C -

LINE: F - G - A^b - B^b - A^b - G - C -

m. 11

F

m. 14

m. 17

Ex. C33 - Slant Harmony in Amphibrachs (Scherzo, Anh. Op. 14, m. 1-4 etc.)

Vivacissimo.

non legato

mf m. 1

mf m. 4

← *f* ← *g* ← *f* etc.

Ex. C34 - Displaced Waltz Pattern (Op. 9/21, into m. 25f)

Non Allegro, 3/4

Molto più vivace.

mf sempre

sempre

m. 23

← *p* etc.

m. 32

Ex. C35 - Displaced Waltz Pattern (Op. 9, Anh. Var. IV, m. 1f)

p con espress.

m. 1

bass → etc.

m. 10

Ex. C36a, b - Displaced Consonant Pedal Point (Op. 124/9, into m. 1f; into 29-32)

Mit zartem Vortrag.

p

a

→ ← ← etc.

m. 1

m. 4

b

m. 29

→ ← ← m. 32

Ex. C37 - Displaced Repeated Chords (Op. 12/3, m. 1, 2, 3-4)

Langsam und zart.

m. 1 m. 5

* * * *

Ex. C38 - Slant Texture (Op. 92, m. 1f)

Langsam. $\text{♩} = 63$.

Fl *SOLO*

Ob

Cl (B $\flat$) *SOLO* *pp*

Bn

H.

Tr.

Timp

Pf *Langsam.* *pp*

VI *SOLO*

VII

VA

C *Ein Cello allein*

DB *pp*

m. 1

cont.

Ex. C38, continuation

Clar.

m. 2

m. 3
cont.

Ex. C38, continuation

The musical score consists of three systems of staves. The first system has two staves: the top staff is in treble clef with a key signature of two sharps (F# and C#), and the bottom staff is in bass clef. The top staff contains a few notes, and the bottom staff contains a continuous, flowing melodic line. A dynamic marking of *pp* (pianissimo) is present in the top staff, followed by the word *SOLDO*. The second system also has two staves, with the top staff in treble clef and the bottom staff in bass clef. The top staff contains a few notes, and the bottom staff contains a continuous, flowing melodic line. The third system has four staves: the top two are in treble clef and the bottom two are in bass clef. The top two staves are empty, and the bottom two staves contain a continuous, flowing melodic line. A dynamic marking of *pp* is present in the bottom left of the third system. The notation includes various musical symbols such as clefs, key signatures, dynamics, and melodic lines.

Ex. C39 - Slant Texture (Op. 88/IV, into m. 101f)

Im Marsch Tempo, C

The musical score consists of three staves. The top staff is in treble clef with a key signature of one sharp (F#) and a 3/4 time signature. It contains a melodic line with eighth and sixteenth notes. The middle staff is in bass clef with the same key signature and time signature, containing a complementary melodic line. The bottom staff is in bass clef with a key signature of one sharp and a 3/4 time signature, containing a bass line with eighth and sixteenth notes. The first measure of the bottom staff is labeled 'm. 101' and the last measure is labeled 'm. 108 etc.'. Above the top staff is the instruction 'Dasselbe Tempo.' and above the middle staff is 'Dasselbe Tempo. J. 132.'. A bracket on the left side of the staves indicates the tempo. A double bar line is present at the end of the first measure of the bottom staff.

Ex. C40 - Slant Texture (Op. 38/III, into m. 390f)

Molto vivace, 3/4

Quasi Presto.

Fl
Ob
Cl (B $\flat$)
Bn
(D)
H (B $\flat$)
Tr (D)
Tbn
Tmp
VI
VII
VA
VC
DB

Quasi Presto.
m. 389

etc.
m. 396

Ex. C41 - Slant Texture (Op. 115, m. 19 into 20)

Langsam, C

2 Nach und nach rascher. -

The musical score is written for a full orchestra and a conductor. The instruments are listed on the left: Fl (Flute), Ob (Oboe), Cl (Clarinet), Bn (Bassoon), Hr (Horn), Tr (Trumpet), Vt (Violin), Vll (Viola), Vn (Violoncello), Kb (Kontrabaß), and Cb (Cello). The score is divided into two measures, m. 19 and m. 20. The tempo is 'Langsam, C' and the instruction is 'Nach und nach rascher.' (Gradually faster). The score shows a complex, overlapping texture of notes across the measures, with many notes beamed together and slurs indicating phrasing. The conductor's part is written on a separate staff at the top, with a '2' indicating a second ending or a specific tempo marking.

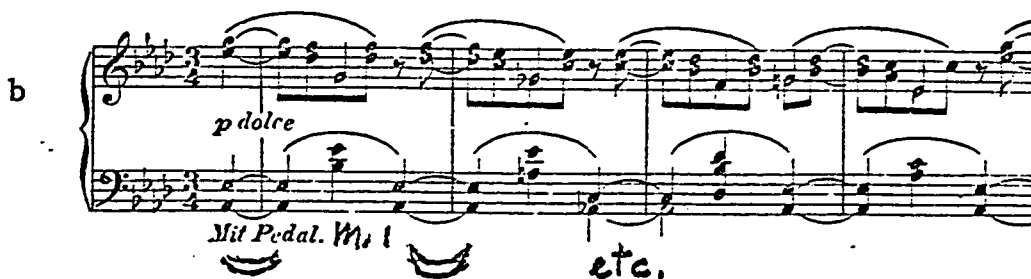
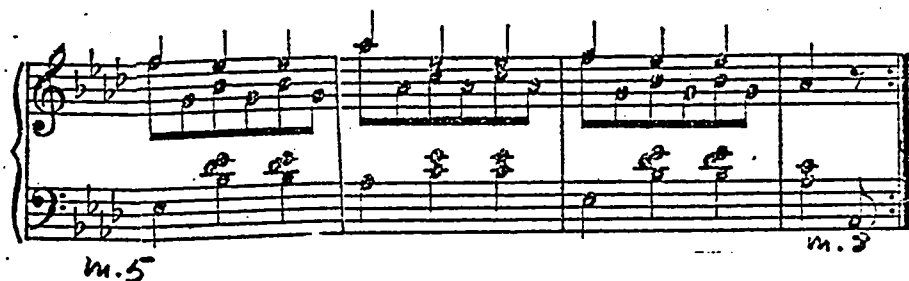
Ex. C42 - Slant Texture (Op. 128, m. 21f)

Kräftig, gemessen, C

Handwritten musical score for a symphony orchestra, showing measures 20 and 22. The score is written for the following instruments: Flute (Fl), Clarinet in B-flat (Cl Bb), Bassoon (Bn), Horn in F (H (F)), Trumpet in F (T (F)), Trombone (Tb), Tuba (Tuba), Violin I (VI), Violin II (VII), Viola (VA), Cello (C), and Double Bass (DB). The key signature is one flat (B-flat major or D minor). The tempo/mood is marked "Kräftig, gemessen, C". The score shows a complex texture with many slurs and ties, indicating a "Slant Texture". The notation includes various dynamics (p, f) and articulation marks (accents). The measures are labeled "m. 20" and "m. 22" at the bottom. The word "etc." is written in the Trumpet part.

Ex. C43 - Consistent Metrical Displacement as a Variation Device (a: Schubert, "Sehnsucht" Waltz, Op. 9/2, m. 1-8;
b: Schumann, Op. 124/15, m. 1-8)

a¹



¹Franz Schubert, Complete Works, Breitkopf & Härtel Critical Edition, 1884-1897 (New York: Dover Publications, 1965), Vol. 5, Series 12.

Ex. C44a, b - Consistent Metrical Displacement as a Variation Device
 (Op. 14/III [mvt. II in the 1st Ed.]; a, Tema, m. 1-8; b, Var. III, m. 1-8)

QUASI VARIAZIONI.
 Andantino de Clara Wieck. ♩ = 44.

a

p sempre

m. 1

m. 8

b

VAR. III
 Passionato.

legatissimo

staccatissimo

sf

riten.

in tempo

m. 1

m. 8

Ex. C45a,b - Consistent Metrical Displacement as a Variation Device
 (Op. 5, 1st Ed.: a, #1, Tema, m. 1-4; b, #2, Var. I, m. 1f)

a

Un poco Adagio.

m. 1 m. 8

b

m. 1 X X X m. 8

Ex. C46 - Patterned Consistent Displacement (Op. 26/II, into m. 1-12)

Ziemlich langsam, M. M. ♩ = 92.

Pedal.

ritard.

m. 1

m. 5

m. 9

m. 12

The musical score consists of three systems, each with a treble and bass staff. The first system begins with a tempo marking 'Ziemlich langsam, M. M. ♩ = 92.' and a 'Pedal.' instruction. Above the first staff, there are three hand-drawn musical notes with arrows pointing left, indicating a consistent displacement. The second system continues the melodic and harmonic patterns. The third system concludes with a 'ritard.' (ritardando) marking. Measure numbers m. 1, m. 5, m. 9, and m. 12 are handwritten below the staves to indicate specific points in the piece.

Ex. C47 - Patterned Consistent Displacement (Op. 22/III, m. 1-4)

→ *Sehr rasch und markirt. M.M. ♩ = 138.* →

Pedal *m. 1* *m. 4*

Ex. C48a, b, c - Patterned Consistent Displacement (Op. 7: a, into m. 52-55;
b, into m. 68-69; c, into m. 76-77)

Allegro, 2/4

a

m. 52 *m. 55* *m. 58* *m. 61*

b

m. 68 *m. 69*

c

m. 76 *m. 77*

Ex. C49 - Patterned Consistent Displacement (Op. 41#1/III, m. 4f)

Adagio, C

← ♯ ← ♯ ← ♯ etc.

Ex. C50a - Harmonic Anticipation, Patterned (Op. 54/III,
into m. 253, 257, etc.)

Allegro vivace, 3/4

a

Pf

VI

VII

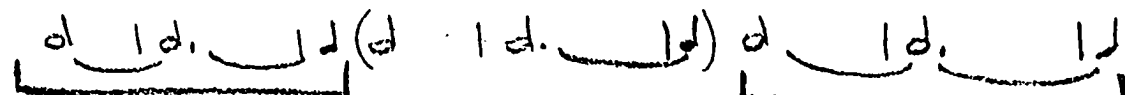
VA

'C

DB

ad.

ad. sempre

m. 251 HR  m. 258 etc.



Ex. C50b - Slant Harmony, Patterned Accumulation (Op. 54/III,
two-beat clashes, m. 324 and 326, harmonic dis-
placement rather than harmonic anticipation)

b

Fl. TITTL.

Ob.

Clar.

Fag.

Cor.

pp cresc.

in Pf, quasi HR.

divisi.

VI

VII

VIA

C

DB

HR d m. 321 d d d d d d d m. 327

Ex. C51 - Consistent Displacement: Strict Rubato
(Op. 121/I, m. 45-46, piano; m. 49-50, violin)

Lebhaft, C

V

PF

Handwritten annotations: *pf*, *p*, *Rub.*, *m. 44*, *m. 47*, and asterisks.

Handwritten annotations: *f*, *etc.*, *Rub.*, *m. 48*, *m. 51*, and asterisks.

Ex. C52 - Consistent Displacement: Strict Rubato (Op. 54/II, m. 10 cf. m. 14)

Andantino grazioso, 2/

The musical score is for a chamber ensemble and includes the following parts and markings:

- Fl I:** Flute I, staff 1. Includes a melodic line with slurs and accents.
- Bh:** Bassoon, staff 2. Includes a melodic line with slurs and accents.
- H:** Horn, staff 3. Includes a melodic line with slurs and accents.
- Pf:** Piano, staves 4 and 5. Includes a complex accompaniment with arpeggiated figures and slurs.
- VI:** Violin I, staff 6. Includes a melodic line with slurs and accents.
- VII:** Violin II, staff 7. Includes a melodic line with slurs and accents.
- VA:** Viola, staff 8. Includes a melodic line with slurs and accents.
- C:** Cello, staff 9. Includes a melodic line with slurs and accents.
- DB:** Double Bass, staff 10. Includes a melodic line with slurs and accents.

Additional markings include dynamics such as *p* (piano) and *pp* (pianissimo), and performance instructions like *pizz.* (pizzicato) for the Double Bass. The score is divided into measures by vertical bar lines, with some measures containing multiple beams for sixteenth notes.

Ex. C53a, b - Consistent Patterned Displacement: Free Rubato
(Op. 99, III of Drei Stücklein, m. 3, 4 and m. 19f)

a

Sehr rasch.

Qw. M. 1 * Qw. * m. 4

b

m. 19 Qw. * m. 22

Ex. C54 - Special Case: Common Tone Ambiguities (Op. 4/II, m. 4, 5, 6)

Presto a capriccio.

m. 1 I V I V I IV I m. 7

Ex. C55 - Special Case: Visually Uninterpreted Displacement (Op. 22/I, m. 59-62)

So rasch wie möglich, 2/4

← OR →

m. 59 m. 62

Rhythmic structure

all displacements construed as upbeats:
 all displacements construed as afterbeats:
 mixed displacements (one of several possibilities):

Ex. C56 - Special Case: Reversal of Voices in Displacement (Op. 20, m. 652f)

Innig, C

The musical score is for a piano piece in C major, Op. 20, measures 652-655. The tempo is marked *Schneller.*. The score is written for piano with a treble and bass staff. The key signature has one sharp (F#). The time signature is not explicitly shown but is 4/4. The score shows a reversal of voices in displacement, with the right hand playing a melody that is a displacement of the left hand's melody. The right hand's melody is marked *etc.* and the left hand's melody is marked *cresc.*. The score is annotated with handwritten notes: *m. 652* and *m. 655* at the beginning and end of the excerpt, and *etc.* above the right hand's melody. There are also handwritten arrows pointing to specific notes in the right hand's melody.

Ex. C57 - Special Case: Displacement of a Secret Voice (Op. 20, m. 251-262 shown; passage extends through m. 274)

→ *usually* *Hastig. J = 120.*

(innere Stimme)

etc.

etc.

m. 251

m. 262

*) Diese innere Stimme soll nicht mitgespielt werden. Der Spieler soll hier gleichsam „zwischen den Zeilen“ lesen.
 This inner part is not to be played. The player is to “read between the lines” here, as it were.
 Cette partie intermédiaire ne doit pas être jouée. Ici, l’exécutant doit savoir „lire entre les lignes”

(Footnote from Clara Schumann's Instructive Edition)

Ex. C58 - Special Case: Purposeful Inconsistent and Unpatterned Displacement (Op. 16/8: a, m. 1-4; b, m. 17-20; c, m. 49-52; d, m. 65-68; cont. next p.)

a

Schnell und spielend.

pp Die Bäume durchaus leicht und frei.

m. 1

Two staves of music in 8/8 time. The right staff has a treble clef and the left staff has a bass clef. The music is marked 'pp' and 'Schnell und spielend.' The lyrics 'Die Bäume durchaus leicht und frei.' are written below the right staff. A measure number 'm. 1' is written below the left staff.

b

pp

m. 17

Two staves of music in 8/8 time. The right staff has a treble clef and the left staff has a bass clef. The music is marked 'pp'. A measure number 'm. 17' is written below the left staff.

c

pp

m. 49

Two staves of music in 8/8 time. The right staff has a treble clef and the left staff has a bass clef. The music is marked 'pp'. A measure number 'm. 49' is written below the left staff.

d

pp

m. 65

Two staves of music in 8/8 time. The right staff has a treble clef and the left staff has a bass clef. The music is marked 'pp'. A measure number 'm. 65' is written below the left staff.

Ex. C58, continuation

(e, m. 113-16; f, m. 117-20; g, m. 133-36; LH accumulated rhythm, next page)

e

Handwritten musical notation for system 'e', measures 113-16. The system consists of two staves. The upper staff is in treble clef and contains a complex melodic line with many beamed sixteenth and thirty-second notes. The lower staff is in bass clef and contains a more rhythmic accompaniment with longer note values and some rests. A dynamic marking 'p' is visible in the first measure of the lower staff. The system is labeled 'm. 113' below the first measure.

f

Handwritten musical notation for system 'f', measures 117-20. The system consists of two staves. The upper staff is in treble clef and contains a complex melodic line with many beamed sixteenth and thirty-second notes. The lower staff is in bass clef and contains a more rhythmic accompaniment with longer note values and some rests. A dynamic marking 'f' is visible in the first measure of the upper staff. The system is labeled 'm. 117' below the first measure.

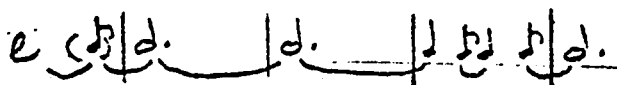
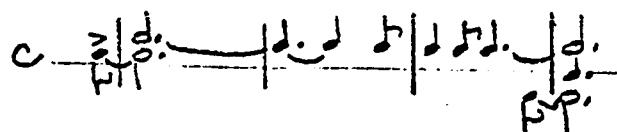
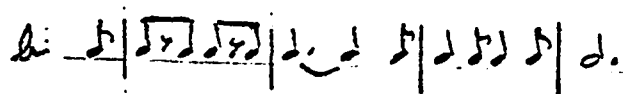
g

Handwritten musical notation for system 'g', measures 133-36. The system consists of two staves. The upper staff is in treble clef and contains a complex melodic line with many beamed sixteenth and thirty-second notes. The lower staff is in bass clef and contains a more rhythmic accompaniment with longer note values and some rests. A dynamic marking 'pp' is visible in the first measure of the lower staff. The system is labeled 'm. 133' below the first measure.

cont.

Ex. C58, continuation

LH Accumulated Rhythm



APPENDIX D

Examples for Chapter VI, Oblique Harmonic Rhythm

Ex. D1 - Harmonic Anticipation: Repetition (Op. 21/6 into m. 302)

Sehr lebhaft, mit vielem Humor, 2/4

m. 300
m. 303

HR

LAR

Ex. D2 - Harmonic Anticipation: Pitch Movement (Op. 44/IV, into m. 50)

Allegro ma non troppo, ♩

HR

LAR

Ex. D3 - Harmonic Anticipation: Arpeggiation (Op. 63/I, into m. 15, into m. 17)

Mit Energie und Leidenschaft, C

The musical score for Ex. D3 consists of three staves: Violin (V), Viola (C), and Piano (Pf). The Violin and Viola parts feature arpeggiated chords in measures 15 and 17, with handwritten annotations 'm. 15' and 'm. 18' respectively. The Piano part features a complex arpeggiated pattern in measure 15, with a handwritten annotation 'm. 18' in measure 17. The score is marked with 'Pf' and includes dynamic markings like 'f' and 'p'.

Ex. D4 - Harmonic Anticipation: Arpeggiation (Op. 41#2/III, into m. 1, into m. 2)

Presto. $\text{♩} = 76$.

The musical score for Ex. D4 consists of four staves: Violin I (VI), Violin II (VII), Viola (VA), and Cello (C). The Violin I and II parts feature arpeggiated chords in measures 1 and 2, with handwritten annotations 'm. 1' and 'm. 2' respectively. The Viola and Cello parts feature a complex arpeggiated pattern in measure 1, with a handwritten annotation 'm. 2' in measure 2. The score is marked with 'Presto' and includes a tempo marking '♩ = 76'.

Ex. D5 - Harmonic Anticipation: Scale (Op. 54/I, into m. 46)

Allegro affettuoso, C

SOLO.

Fl

Ob

Cl (A)

Bn

H

Tr

Timp.

Pf

VI

VII

VA

'C

DB

m. 45

m. 47

[HR
LAR

Ex. D6 - Harmonic Anticipation: Scale (Op. 44/III, into m. 25, 27, 29)

Molto vivace, 6/8

Handwritten musical score for a five-part setting of "The Rose Tree". The score is written on five staves, labeled VI, VII, VA, C, and PF. The key signature is one flat (B-flat), and the time signature is common time (C). The music is in a homophonic style, with each part having its own melodic line. The PF part (Piano Forte) is written in a grand staff (treble and bass clef) and features a more complex, rhythmic accompaniment. The score includes dynamic markings such as *p* (piano) and *mf* (mezzo-forte). The piece is divided into two sections, marked "m. 25" and "m. 29". Below the main score, there is a handwritten section labeled "HR" and "LAR" with a treble clef and a key signature of one flat, followed by a series of notes and rests, and two percentage symbols (%).

Ex. D7 - Harmonic Anticipation: Inversion Change (Op. 16/2,
into m. 21)

Sehr innig und nicht zu rasch, 3/4

Handwritten musical score for a piece titled "Im Tempo." The score is written on two staves, treble and bass clef, with a key signature of one flat (B-flat). The tempo marking "Im Tempo." is written above the right staff. The score includes a "ritard." (ritardando) marking above the right staff. The piece is divided into measures, with measure numbers "m. 19" and "m. 22" written below the staves. The notation includes various musical symbols such as notes, rests, and dynamic markings.

Ex. D8 - Harmonic Anticipation at a Meter Change:
Inversion Change (Op. 26/II, into m. 13)

Ziemlich langsam, 2/4

Handwritten annotations below the staff: m. 12, [HR], [AR]

Ex. D9 - Harmonic Anticipation: Position Shift
(Op. 21/3, into m. 47, 48, 49)

Leicht und mit Humor, 2/4

Handwritten annotations below the staff: m. 47, m. 49

Handwritten annotations below the staff: [HR], [AR]

Ex. D10 - Harmonic Anticipation: All-Tied (Op. 41#3/IV, into m. 1, 3, 5, 7)

Allegro molto vivace. $\text{♩} = 100$.

VI

VII

VA

C

m. 1

m. 8

HR

AR

%

%

%

Ex. D11 - Harmonic Anticipation: All-Tied Framework (Op. 92, into m. 37)

Langsam, C

in tempo
TUTTI

Fl
Ob
Cl
Bn
H
VI
VII
VA
C
DB

in tempo p m. 35

m. 38

[HR
[AR

Ex. D12 - Harmonic Anticipation: Composite (Op. 44/I,
into m. 324, 325, 326, 327)

Allegro brillante, C

VI

VII

VA

C

PF

[HR] d. % % % m. 327

[AR] uuuu

Ex. D13 - Harmonic Anticipation: Composite (Op. 16/2,
Intermezzo I, into m. 46, 47, 48)

Sehr lebhaft, 2/4

VI

VII

VA

C

PF

[HR] 4 % %

[AR] uuuu

Ex. D14 - Harmonic Anticipation to Begin (Op. 11/III,
into m. 1)

Allegroissimo.

2d. Viol.

[HR] [AR]

Ex. D15 - Harmonic Anticipation to Begin (Op. 6/18,
into m. 1)

Ganz zum Überfluss meinte Eusebius noch Folgendes;
dabei sprach aber viel Seligkeit aus seinen Augen.

pp

2d. Viol.

m. 1 m. 4

[HR] [AR]

Ex. D16 - Extreme Harmonic Anticipation: Extensive
Consecutive All-Tied Barbeats (Op. 124/15, into m. 1,
into m. 2, etc.)



Ex. D17 - Harmonic Anticipation to Begin (Op. 61/II,
into Trio I, m. 98)

Allegro vivace, 2/4

Fl
Ob
Cl
(8^{va})
B_h
H
T₊
Timp
VI
VII
VA
C
DB

m. 96 $\frac{2}{4}$
[HR
[AR

m. 101

The musical score is for a woodwind and string ensemble. It features staves for Flute (Fl), Oboe (Ob), Clarinet (Cl), Bassoon (B_h), Horn (H), Trumpet (T₊), Timpani (Timp), Violin I (VI), Violin II (VII), Viola (VA), Cello (C), and Double Bass (DB). The score is in 2/4 time and marked 'Allegro vivace'. It shows measures 96 through 101. Measures 96-97 contain woodwind entries with various articulations like staccato (stacc) and accents (acc). Measures 98-101 show the woodwinds playing sustained notes while the strings play a rhythmic pattern. Handwritten notes at the bottom left indicate 'm. 96' and 'm. 101' with some markings like '[HR and '[AR. A 'div' marking is present in measure 100 for the strings.

Ex. D18 - Harmonic Anticipation to Begin (Op. 120/I,
into m. 1)

Ziemlich langsam. (♩ = 52)

Fl

Ob

Cl (B $\flat$)

Bn

H(F)

H(D)

T(C)

Timp

VI

VII

VA

C

DB

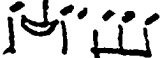
Ziemlich langsam.

Ziemlich langsam.

Ziemlich langsam.

m. 5

m. 1

[HR 
AR 

Ex. D19a, b - Harmonic Anticipation at the Recapitulation
(Op. 26/V, a: into m. 1; b, into m. 161)

Höchst lebhaft. ♩ = 138.

a

b

m. 159 m. 162

[HR AR] 4 6 6

Ex. D20 - Harmonic Anticipation at a Cadence (Op. 88/III,
into m. 53, 54)

Langsam, und mit Ausdruck, 6/8

V

C

PF

m. 50 m. 55

[HR AR] 4 6 6

Ex. D21 - Harmonic Anticipation: Consecutive All-Tying
into a Cadence (Op. 41#3/I, into m. 220, 221, 222, 223)

Allegro molto moderato, 3/4

VI

VII

VA

C

m. 214

[HR 2 1/2 % % %
AR 1 1/2

m. 226

Ex. D22 - Harmonic Anticipation: Cadence Cliché
(Op. 15/2, into m. 8)

"Curiose Geschichte" (No tempo term), 3/4

m. 7

[HR 1 1/2
AR 1 1/2

Ex. D23 - Harmonic Anticipation: Cadence Cliché
(Op. 14/II, into m. 4)

Molto comodo, 3/4



Ex. D24 - Harmonic Anticipation: Transition (Op. 4/III,
into m. 133)

Assai vivo, 3/4

Ex. D25 - Harmonic Anticipation: Mid-Phrase (Op. 22/I,
into m. 158, 159, 160)

So rasch wie möglich, 2/4

Diagram illustrating the harmonic structure of Ex. D25, showing the relationship between the Harmonic Reduction (HR) and the Anticipatory Reduction (AR) across measures 158, 159, and 160.

Ex. D26 - Harmonic Anticipation: Mid-Phrase (Op. 28/I,
into m. 2)

Sehr markirt. (M. M. ♩ = 88.)

Diagram illustrating the harmonic structure of Ex. D26, showing the relationship between the Harmonic Reduction (HR) and the Anticipatory Reduction (AR) across measures 1, 2, and 3.

Ex. D27 - Harmonic Anticipation in a Modulating Phrase Connection
(Op. 54/I, into m. 462, after the cadenza)

Allegro molto.

The musical score is divided into three systems. The first system features three staves for woodwinds: Oboe (Ob.), Clarinet (Clar.), and Bassoon (Fag.). The second system features a grand staff for piano (Pf) with treble and bass staves. The third system features five staves for strings: Violin I (VI), Violin II (VII), Viola (VA), Violoncello (C), and Double Bass (DB). The tempo is marked 'Allegro molto.' at the beginning of the first and third systems. The score includes various musical notations such as notes, rests, and dynamic markings. Handwritten annotations 'm. 458' and 'm. 465' are present at the bottom of the third system. A bracket labeled 'HR' and 'AR' with a diagram of a phrase connection is also included.

Ob.
Clar.
Fag.
Pf
VI
VII
VA
C
DB
m. 458
[HR
AR
m. 465

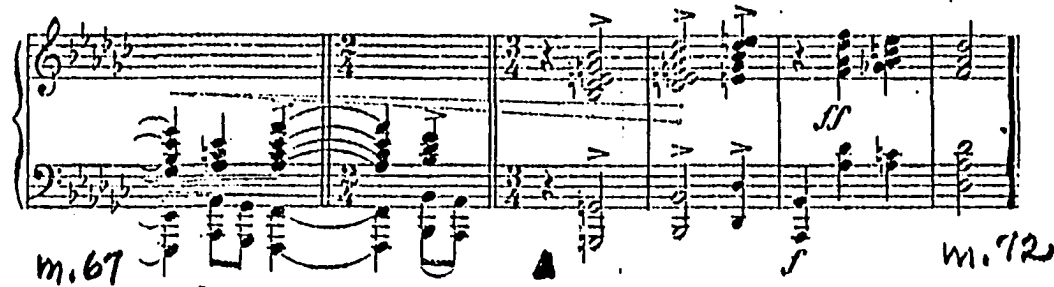
Ex. D28 -, All-Tied Harmonic Anticipation into a One-Bar Metrical Flexing
(Op. 22/III, into m. 20)

Sehr rasch und markiert, 3/4

The image shows a handwritten musical score for piano, spanning measures 17 to 21. The music is written on a grand staff (treble and bass clefs). The key signature has one flat (B-flat). The tempo/mood is indicated as 'Sehr rasch und markiert, 3/4'. The score illustrates a metrical flexing exercise. Measures 17 and 18 are in 3/4 time. Measure 19 is marked with a '2' over a '4', indicating a change to 2/4 time. Measure 20 is marked with a '3' over a '4', indicating a change to 3/4 time. Measure 21 is also in 3/4 time. The notation includes various chords, arpeggios, and melodic lines. Below the staff, there are handwritten annotations: 'm. 17' under the first measure, a bracketed section labeled 'HR' and 'AR' with musical notation below it, and 'm. 21' under the final measure.

Ex. D29 - All-Tied Harmonic Anticipation Into a One-Bar Meter Change
(Op. 12/4, into m. 68)

Mit Humor, 3/4



HR
AR

Hand-drawn smiley face with a wide, open-mouthed grin, positioned to the right of the text 'HR' and 'AR'.

Ex. D30 - All-Tied Harmonic Anticipation into an Extended Meter Change (Op. 110/III, into m. 44)

Ziemlich langsam, 12/8; middle section Etwas bewegter, 9/8; Schneller twelve bars before the example, which shows the return to Ziemlich langsam

The musical score consists of two systems of staves. The first system shows a melodic line and a harmonic line with dynamic markings 'dim.' and 'p'. The second system shows a similar structure with a 'dim' marking. Tempo markings 'Erstes Tempo.' and 'Schneller' are indicated. Handwritten annotations 'm. 43' and 'm. 45' are present. Below the score, a bracketed diagram shows harmonic reduction (HR) and arpeggiated reduction (AR) for a specific passage.

HR

AR

Ex. D31 - Harmonic Anticipation in Variations (Op. 13, Étude VII = Var. VI,
into m. 1, 4, 5; mid-bar m. 1, 2, 3, 4, 5)

Allegro molto. $\text{♩} = 96.$

ten. *ten.* *ten.* *ten. segue*

f *sempre brillante* *p* *f* *f*

ten. m. *ten.* *ten. segue*

HR AR

m. 5

Ex. D32 - Harmonic Anticipation in Variations (Op. 41#3/II; variation theme shown, 48 m.; harmonic anticipation occurs into m. 14, 15, 16; 24, 25; 32; 46, 47, 48)

Assai agitato. J. = 194.

The musical score is organized into four systems of staves, labeled VI, VII, VA, and C. The first system (measures 1-16) includes a tempo marking 'Assai agitato. J. = 194.' and a measure number 'm. 1' at the start. The second system (measures 17-34) contains dynamics like 'pp' and 'cresc.', and measure numbers 'm. 17', 'm. 34', and 'm. 35'. The third system (measures 35-48) includes 'pp' markings and measure numbers 'm. 35' and 'm. 48'. Performance instructions 'HR' and 'AR' are present in the first system. The score concludes with a double bar line and a final measure number 'm. 48'.

Ex. D33 - Harmonic Anticipation in Variations
(Op. 121/III, into m. 1)

Leise, einfach. $\text{♩} = 74$.

pizz.
p dolce

p mit Verschiebung

pf

m. 1 m. 4

[HR 
AR 

Ex. D34 - Harmonic Anticipation into Each Beat
(Op. 99, III of Drei Stücklein, into m. 9-10)

Frisch, 6/8

m. 9 m. 11

[HR 
AR 

Ex. D35 - Harmonic Anticipation into Each Beat
(Op. 2/11, m. 1-2)

$\text{♩} = 112$

accel.

m. 1 m. 3

[HR 
AR 

Ex. D36 - Harmonic Anticipation into Each Beat (Op. 11/IV, into m. 1-4)

Allegro un poco maestoso.

m. 1 m. 4

[HR
 [AR

Ex. D37 - Harmonic Anticipation, Mid-Bar (Op. 6/6, m. 40, 42, 44, 45)

Sehr rasch und in sich hinein, 6/8

m. 40 m. 45

[HR
 [AR

Ex. D38 - Harmonic Anticipation, Mid-Bar (Op. 11/I, m. 107-110)

Allegro vivace, 2/4

The image displays a handwritten musical score for a piano piece, specifically focusing on measures 106 through 110. The score is written on two staves, with the right hand (treble clef) and left hand (bass clef) parts. The key signature is B-flat major (two flats). The tempo is marked 'Allegro vivace, 2/4'. The score includes several performance instructions: 'rit. sf' (ritardando, fortissimo) at the beginning of measure 106, 'passionato' (passionately) above measure 107, and 'a tempo sf ff' (return to tempo, fortissimo, fortissimo) at the start of measure 108. The notation features various rhythmic values, including eighth and sixteenth notes, and rests. A handwritten note 'M. 106' is placed below the first staff. A handwritten note 'AUG. 6 ON' is placed below the second staff. A handwritten note 'B7 = Cb' is placed below the third staff. A handwritten note 'M. 108' is placed below the fourth staff. A handwritten note 'M. 109' is placed below the fifth staff. A handwritten note 'M. 110' is placed below the sixth staff. The score is divided into measures by vertical bar lines, with repeat signs (double dots) at the end of measures 108 and 110. The handwriting is in black ink on a white background.

M. 106

AUG. 6 ON

B7 = C^b

M. 108

M. 109

M. 110

Ex. D39 - Harmonic Anticipation, Grace Notes
(Op. 17/III, into m. 68)

Langsam getragen. Durchweg leise zu halten. C

m. 67 [HR AR] m. 69

Ex. D40 - Harmonic Anticipation, Grace Notes
(Op. 23/2, into m. 59)

Markiert und lebhaft, C

m. 58 [HR AR] m. 59

Ex. D41 - Harmonic Anticipation, Grace Notes
(Op. 9/17, into m. 37)

Presto, 2/4

m. 33 [HR AR] m. 37

Ex. D42 - Harmonic Anticipation, Polychord
(Op. 21/8, into m. 312)

Munter, nicht zu rasch, 3/4

Handwritten diagram below the staff:

```

[HR] 4/4
[AR] 1 2 3 4
  
```

Ex. D43 - Harmonic Anticipation, Polychord (Op. 99, I of
Drei Stücklein, into m. 161)

Nicht schnell, mit Innigkeit, C

Handwritten diagram below the staff:

```

[HR] 4/4
[AR] 1 2 3 4
  
```


Ex. D44 - Harmonic Anticipation, Complex (Op. 82/7,
into m. 19, 20)

Langsam, sehr zart, C

HR
AR

Ex. D45 - Harmonic Anticipation, Mid-Hemiole (Op. 124/7,
into m. 9, 11)

Sehr mässig, 3/4

HR
AR

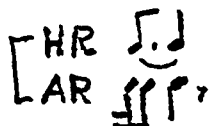
Ex. D46 - Harmonic Anticipation, Mid-Hemiole
(Op. 63/II, into m. 39, 41, 43, 45)

Lebhaft, doch nicht zu rasch, 3/4

The image displays a handwritten musical score for a piano and violin duo. The score is divided into two systems. The first system covers measures 39 to 41, and the second system covers measures 43 to 45. The piano part is written in treble and bass staves, while the violin part is in a single staff. The tempo is marked 'Lebhaft, doch nicht zu rasch, 3/4'. The key signature has one flat (B-flat). The score includes various musical notations such as notes, rests, and dynamic markings. Handwritten annotations in red ink are present: 'm. 39' and 'm. 41' are written below the piano staff, and 'm. 43' and 'm. 45' are written below the piano staff. A bracket labeled 'HR' and 'AR' is placed over the violin staff in the first system. Three percentage signs (%) are written below the piano staff in the second system. The score is marked with 'm. 39' and 'm. 41' at the beginning of the first system, and 'm. 43' and 'm. 45' at the beginning of the second system.

Ex. D47 - Harmonic Anticipation, Mid-Siciliano
(Op. 4/IV, m. 7, 8)

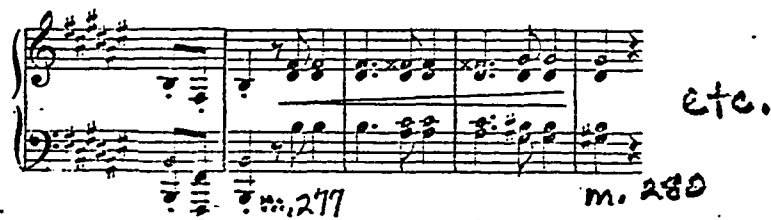
Allegretto semplice, 12/8



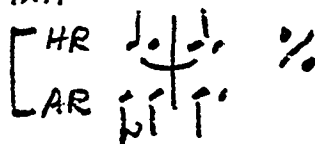
%

Ex. D48 - Harmonic Anticipation, Mid-Siciliano
(Op. 26/I, m. 278, 279)

Tempo wie zuvor (Sehr lebhaft), 3/4



etc.



%

Ex. D49 - Harmonic
Anticipation,
Mode Change
(Op. 97/II,
into m. 49)

Sehr mässig,
3/4

Fl
Ob
Cl
(B)
Bn
H
(C)
Tr
(F)
Timp
VI
VII
VA
C
DB

m. 47 HR

d
m

AR

m. 50

Ex. D50 - Harmonic Anticipation, Fanfare (Op. 99/XI, m. 55-57 etc.)

Sehr getragen, 0

Trio.

m. 55

m. 57 etc.

[HR d-♪ 1/2, 1/2, 1/2]

[AR ♯♯♯ 1/2, 1/2, 1/2]

Ex. D51 - Harmonic
Anticipation, Fan-
fare (Op. 46, ori-
ginal version in-
to m. 220, 221,
etc.)

Andante espressivo
. . . Animato, 3/4

=D81 - Implied
Plus Complete
Suspension (m.
227: cf. bass
lines)

The musical score is written for a solo instrument, likely a piano, in 3/4 time. It begins with a 'Solo' marking. The tempo is 'Andante espressivo', which changes to 'Animato' at measure 220. The score includes several measures of music, with specific annotations such as 'marcato' and 'ff marcato'. Measure numbers 220, 223, 224, and 227 are clearly marked. A section of the score is enclosed in a box and labeled 'IMP/SUS', indicating a suspension. The score concludes with a 'SUS' marking. The notation includes various musical symbols such as notes, rests, and dynamic markings.

Ex. D52 - Harmonic
Anticipation, Fan-
fare (Op. 38/I,
into m. 1, 3)

Andante un poco maestoso. (♩ = 66.)

Andante un poco maestoso. (♩ = 66.)

Fl
Ob
Cl (B $\flat$)
Bn
H (F)
H (B $\flat$)
Tr (B $\flat$)
Timp
VI
VII
VA
C
DB

ff
m. 1
ff
m. 4

[HR] 1/2
[AR] 1/2

Ex. D53 - Harmonic Anticipation, Scales (Op. 54/II into III, into m. 109, 113, 115)

Allegro vivace. *And.te*

a tempo *string.*

Fl.
Ob.
Cl.
Cb.
Bb.
Hr.
Pb.

a tempo *string.*

Allegro vivace.

VI
VII
VA
VB
DB

a tempo *string.*

[HR
AR

[HR
AR

m.
116

Ex. D54 - Harmonic Anticipation, Neapolitan Chord
(Op. 121/II, into m. 213, 215)

Sehr lebhaft, 6/8

V

PF

m. 212

m. 216

[HR J. Y. J.]

[AR ccc ccc]

%

Ex. D55 - Harmonic Anticipation, Neapolitan Chord
(Op. 44/III, Trio II, into m. 149, into m. 153)

Molto vivace, 6/8 . . . Trio II: L'istesso tempo, 2/4

The musical score for Ex. D55 consists of five staves. Staves VI, VII, VA, and C are for the Trio II section, marked 'Molto vivace, 6/8'. The piano accompaniment is marked 'Trio II: L'istesso tempo, 2/4'. The score includes dynamic markings such as *p*, *pizz.*, *sf*, and *Disson.*. Handwritten annotations include 'HR AR' (Harmonic Anticipation) and 'N' (Neapolitan Chord) with a diagram of the chord structure. The score also indicates measures m. 147, m. 149, and m. 150, with a 'Diss.' marking at m. 150.

=D61 - Harmonic Anticipation, Dynamic Markings (into m. 149, into m. 153)

=D69 - Dissonant Harmonic Anticipation (mid-bar 146, mid-bar 150)

Ex. D56a, b - Harmonic Anticipation, Common Tones (Op. 44/II,
a: into m. 1, ambiguous harmony; b: into m. 25ⁱ,
clarified harmony)

a

In Modo d'una Marcia.
Un poco largamente. $\text{♩} = \text{es.}$

VI

VII

VA

C

Pf

In Modo d'una Marcia.
Un poco largamente.

$\text{♩} = \text{m. 1}$

HR $\text{♩} \text{ ♩ } \text{♩} \text{ ♩} ?$
 $\text{E}^b \rightarrow \text{C}$

b

dim.

dim.

dim.

dim.

1.

dim.

$\text{♩} = \text{m. 25}^i$

[HR $\text{♩} \text{ ♩ } \text{♩} \text{ ♩}$
AR $\text{♩} \text{ ♩ } \text{♩} \text{ ♩}$

Ex. D57 - Harmonic Anticipation, Wide (Op. 4/III, into m. 69, 71)

Alternativo: Assai vivo, 3/4

Ex. D58 - Harmonic Anticipation, Wide (Op. 26/I, into m. 255, 256, 258)

Sehr lebhaft, 3/4

Ex. D59 - Harmonic Anticipation, Dynamic Markings (Op. 38/
III, Trio II, into m. 338, 339, 340, 341, 342, 343)

Molto vivace, 3/4

Fl
Ob
Cl (Bb)
Bn
H (D)
H (Bb)
Tb
Tb
Timp.
VI
VII
VA
C
DB

m. 337

HR
AR

m. 344

Ex. D60 - Harmonic Anticipation, Dynamic Markings
(Op. 11/IV, into m. 127)

Allegro un poco maestoso, 3/4

allegro

m. 126

[HR *sf*]
[AR]

Ex. D61=D55

Ex. D62 - Harmonic Anticipation, Dynamic Markings
(Op. 124/8, into m. 26)

Langsam, C . . . Leidenschaftlicher

m. 24

m. 27

[HR
AR]

Ex. D63 - Harmonic Anticipation, Dynamic Markings
(Op. 9/2, into m. 10)

Moderato, 2/4

pp

m. 9

m. 12

[HR
AR]

Ex. D64 - Harmonic Anticipation and Patterned Slant Structures (Op. 6/11,
into m. 1, 5, 9)

Einfach.

mf

rit. m. 1 m. 6

Sop. + Ten.
←

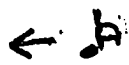
Schluss

ritard. *mf*

m. 7 m. 10

HR
AR

Ex. D65 - Harmonic Anticipation and Patterned Slant Structures (Op. 5/7, 1st Ed.,
patterned slant melody, m. 1-8ii; all-tied harmonic anticipation into m. 9-12)

←  **Presto.** etc.

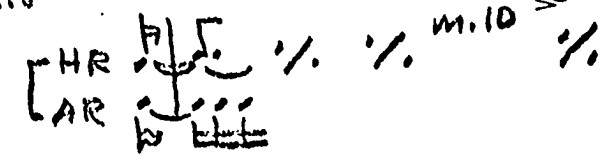
m. 1 m. 5

m. 6 m. 8ⁱ m. 8ⁱⁱ m. 10

ritard.

m. 11

HR AR



Ex. D66 - Harmonic Anticipation, Special Case (Op. 38/III, Trio I, into m. 49, 51, 53, etc.) *Molto più vivace.*

Fl
 Ob
 Cl
 (B^b)
 B_u
 H_u
 H_u
 (B^b)
 Tr
 Tb
 Timp.
 VI
 VII
 VA
 C
 DB

Molto più vivace.

11. 63

[HR 2/2 1/2 1/2 1/2 1/2 1/2 1/2
AR 1/2 1/2 1/2 1/2 1/2 1/2 1/2]

Ex. D67a, b - Harmonic Anticipation, Special Case
(Op. 20, into m. 78: a, Instructive Edition; b, Werke)

Sehr rasch und leicht, 2/4

a

b

Ex. D68 - Harmonic Anticipation, Special Case
(Op. 19, into m. 61)

Leise bewegt, 2/4

Ex. D69=D55

Ex. D70 - Harmonic Anticipation, Special Case (Op. 120/I, m. 117-into 121)

Lebhaft, 2/4

=D74 - Supermetrical Harmonic Anticipation (m. 117- into 121)

The musical score is written for a full orchestra and includes a conductor's part. The staves are arranged as follows from top to bottom:

- Flute (Fl)**: Treble clef, playing a melodic line.
- Oboe (Ob)**: Treble clef, playing a melodic line.
- Clarinet in B-flat (Cl^{Bb})**: Treble clef, playing a melodic line.
- Bassoon (Ba)**: Treble clef, playing a melodic line.
- Horn in F (H^F)**: Treble clef, playing a melodic line.
- Trumpet in F (Tr^F)**: Treble clef, playing a melodic line.
- Trombone (Tb)**: Treble clef, playing a melodic line.
- Timpani (Timp)**: Treble clef, playing a melodic line.
- Violin I (VI)**: Treble clef, playing a melodic line.
- Violin II (VII)**: Treble clef, playing a melodic line.
- Viola (Va)**: Treble clef, playing a melodic line.
- Cello (C)**: Treble clef, playing a melodic line.
- Double Bass (DB)**: Treble clef, playing a melodic line.
- Conductor's part**: Treble clef, with a large bracket on the left side.

The score is in 2/4 time and features a variety of musical notations, including notes, rests, and dynamic markings. The conductor's part includes a large bracket on the left side, indicating a specific section of the score.

Ex. D71 - Harmonic Anticipation, Special Case (Op. 68/11, mid-m. 1611)

Schalkhaft, 6/8

m. 14

Schluss. m. 17

[HR
AR]

wi

Ex. D72 - Harmonic Anticipation, Special Case (Op. 15/12, into m. 31)

"Kind im Einschlummern," (no tempo term), 2/4

m. 25

m. 32

[HR
AR]

i-i-i

Ex. D73 - Harmonic Anticipation, Special Case: Anticipatory and Suspensive Structures (Op. 12/2: a, into m. 1; b, into m. 3; c, into m. 41; d, into m. 115)

Sehr rasch.

a

a.w. m. 1

[HR d. 9-8
AR 7-7
V 4-3]

b

m. 3

c

m. 41

a.w. m. 115

Ex. D75 - Supermetrical Harmonic Anticipation (Op. 118c/IV, m. 1-2 into m. 3)

Sehr lebhaft. J. = 130.
Mit sarkem Vortrag.

m. 1 2d..

* m. 4

HR d. d. d.

AR p. p. p. p. p. p. p.

Ex. D76 - Supermetrical Harmonic Anticipation (Op. 22/I, m. 1-4 into m. 5)

So rasch wie möglich.

The musical score is written for piano. The title is "So rasch wie möglich." The tempo is marked "Allegretto". The key signature has one flat (B-flat) and the time signature is 3/4. The piano part consists of a right hand with eighth-note chords and a left hand with a rapid eighth-note pattern. A "Pedal." marking is present in the left hand. Below the piano part is a rhythmic notation with two staves: the top staff has a treble clef and a single note with a fermata, and the bottom staff has a bass clef and a series of eighth notes. The notation is labeled "m. 1" and "m. 7".

Ex. D77 - Supermetrical Harmonic Anticipation (Op. 54/I,
m. 398-401 into m. 402; m. 389-404 shown)

Allegro affettuoso, C

[I] [I]

Accelerando poco a poco.

FI
Ob
Cl
Bn
Hr
Tr
Timp

PF

Accelerando poco a poco.

VI
VII
VA
VC
DB

Accelerando poco a poco.

m. 389

I $\frac{V}{N}$ N

m. 395

I $\frac{V}{N}$ N

cont.

Ex. D77, continuation

(Tutti tacet)

Cad. gza.
(Dir. o. w. vorher die d.)

Pf



m. 402

m. 405

$\text{Aug } 6^{\text{th}}$
(German) $V^{\#}$

Ex. D78 - Confirmation of Implied Suspension (a: Thematic Source, Duple Meter, Op. 16/7, into m. 89-92; b: Thematic Transformation with Implied Suspensions, Triple Meter, Op. 26/I, into m. 87, 88, 89, 90 etc.; c: Confirmation of Suspensive Construction, Op. 26/I, bass on barbeat m. 465

a: Sehr rasch; Noch schneller; Etwas langsamer, 2/4

b,c: Sehr lebhaft, 3/4

a

Etwas langsamer.

m. 89 m. 92

b

m. 85

IMP SUS 1/2 1/2 etc.

CODA.

c

m. 463

m. 465

m. 472

SUS
9-8
7-6
4-(4)

Ex. D79 - Implied Suspension (Op. 21/8, into m. 321, 322, 323, 324, 325, 326, 327)

Munter, nicht zu rasch, 3/4

mf

ritard.

m. 320

m. 327

HR

AR

IMP/HR

320

Ex. D80 - Implied Retardations (Op. 17/III, m. 27, each beat)

Langsam getragen. Durchweg leise zu halten. 12/8

m. 27

m. 29

HR

AR

IMP/HR

RET

Ex. D81=D51

Ex. D82 - Implied Suspension in a Cadence Cliché
(Op. 46, into m. 92)

Andante espressivo . . . Un poco più animato, 3/4

PFI

PFI II

m. 91

m. 92

HR

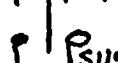
AR

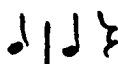
IMP/HR

P SUS

Ex. D83 - Con-
secutive All-
tied Barbeats
(Op. 26/I,
into m. 87-
126)

Sehr lebhaft,
3/4

HR 
AR 
IMP/HR 
except into m.
102, 110, &
126:

HR 
AR 
and into m.
118:

HR 
AR 



m. 87

m. 94

m. 95

m. 102

m. 103

m. 110

m. 111

m. 119

m. 120

m. 126

Ex. D84 - Consecutive All-Tied Barbeats (Op. 99/12, into m. 63-85)

Tempo di Menuetto, 3/4

The musical score is presented in three systems, each with a grand staff (treble and bass clefs). The key signature is two flats (B-flat major). The time signature is 3/4. The score begins with a piano (*pp*) marking. The first system covers measures 63 to 69. The second system covers measures 70 to 77, featuring a crescendo (*cresc.*) and a diminuendo (*dimu*) marking. The third system covers measures 78 to 86, featuring a piano (*pp*) marking. The notation includes various musical symbols such as notes, rests, ties, and bar lines. The measures are numbered at the bottom of each system: m. 63, m. 69, m. 70, m. 77, m. 78, and m. 86.

Ex. D85 - Alternate and Consecutive All-Tied Barbeats (Op. 12/4, into m. 60-96)

Mit Humor, 3/4

The musical score is written for piano in 3/4 time, featuring a key signature of three flats (B-flat, E-flat, A-flat). It consists of three systems of staves, each with a treble and bass clef. The first system (measures 60-66) begins with a piano (*p*) dynamic. The second system (measures 67-73) includes a fortissimo (*sf*) dynamic. The third system (measures 74-81) includes piano (*p*) and mezzo-forte (*mf*) dynamics. The notation is characterized by frequent ties and slurs, creating a rhythmic pattern of alternate and consecutive all-tied barbeats. Measure numbers 60, 61, 66, 67, 73, 74, and 81 are indicated below the staves.

cont.

Ex. D85, continuation

musical score for piano, measures 82 to 96. The key signature is three flats (B-flat, E-flat, A-flat). The score is written for two staves (treble and bass clef). Measure 82 is marked with a forte (*f*) dynamic. The music features complex chordal textures and melodic lines. Measures 87 and 88 are marked with a *ritard.* (ritardando) and a forte (*f*) dynamic. Measure 89 is marked with a piano (*p*) dynamic. Measures 90 to 96 are marked with a mezzo-forte (*mf*) dynamic. The score concludes with a first ending bracket over measures 95 and 96, marked with a *rit.* (ritardando) dynamic.

Ex. D86 - Consecutive All-Tied Barbeats and Beats (Op. 41#2/II, m. 16-32)

Andante, quasi Variazioni, 12/8

VI
VII
VA
C

un poco marcato
pp
un poco marcato
pp
un poco marcato
pp

m. 16 etc. m. 20

m. 21 m. 25

espress..

↑ ↑
viola on the beat

cont.

Ex. D86, continuation

↑ ↑
tutti on the beat

Ex. D87 - Consecutive All-Tied Barbeats in Duple Meter (Op. 63/I, into m. 231-34)

Mit Energie und Leidenschaft, C

Etwas langsamer. a tempo
Etwas langsamer. a tempo
m. 231 m. 235

Ex. D88 - Consecutive All-Tied Barbeats, Soloistic and Ensemble Approaches (Op. 47/II, Trio II, a: soloistic, into m. 153-60; b: ensemble, m. 184-92)

Molto vivace, 3/4

a

Trio II.

V

VA

Pf

p dol. *cresc.* *p dol.* *cresc.*

Q.W. m. 153 etc. m. 160

b

V

VA

C

Pf

arco *p dol.* *cresc.* *dim.* *p dol.* *cresc.* *dim.*

m. 184 Q.W. m. 192

ALLT except for 'cello

Ex. D89 - Harmonically Static Incipit (Op. 124/15,
into m. 1)

p dolce

Mit Pedal. m. 1

m. 4

AR

[IMP/HR] | p s u s

Ex. D90 - Harmonically Static Incipit (Op. 11/III,
into m. 1)

Allegroissimo.

f

m. 1

m. 4

HR

[AR] | d. |

Ex. D91 - Harmonically Static Incipits (Op. 26/I, a: into m. 1; b: into m. 87; c: into m. 151; d: into m. 253; e: into m. 335; f: into m. 341; g: into m. 508)

a

Sehr lebhaft. $\text{♩} = 76$.

m. 1 - m. 4

[HR $\text{♩} \text{♩} \text{♩}$
AR $\text{♩} \text{♩} \text{♩}$

b

m. 87 m. 90

[HR $\text{♩} \text{♩} \text{♩}$
AR $\text{♩} \text{♩} \text{♩}$
IMP/HR $\text{♩} \text{♩} \text{♩}$ SUS

$\text{♩} = 86$.

c

m. 151 m. 154

[HR $\text{♩} \text{♩} \text{♩}$
AR $\text{♩} \text{♩} \text{♩}$

d

Tempo wie vorher.

m. 253 m. 256.

[HR $\text{♩} \text{♩} \text{♩}$
AR $\text{♩} \text{♩} \text{♩}$

cont.

Ex. D91, continuation

e

Höchst lebhaft.

m. 335

m. 338

[HR d | d]
[AR p p p p p]

f

m. 341

m. 344

[HR ! | d]
[AR G7 | p]

g

m. 508

m. 511

[HR d | !]
[AR p p p]
[LMP/HR p | p sus]

APPENDIX E

Examples for Chapter VII, Metrical Repositioning

Ex. E1 - Metrical Repositioning, Mild (Op. 130/3,
S^o, m. 1)

Nicht schnell, etwas gravitütisch.

P^o

m.l.

S^o

m.l.

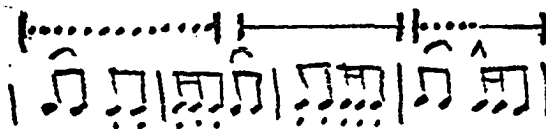
Ex. E2 - Metrical Repositioning, Ingenious
(Op. 102/I, m. 1-4)

Mit Humor. ♩ = 120.

Pf

m. 1 *p. ten.* *ten.*

Durational
and articulative
pattern -



a a' b, a a'b, a b'

Melodic
pattern -

x y z, x' y z', x' z

Ex. E3 - Metrical Repositioning, Extreme Stretto
(Op. 47/IV, into m. 268)

Vivace, 3/4

.....

The musical score consists of four staves: Violin (V), Viola (VA), Cello (C), and Piano (Pf). The key signature has two flats (B-flat and E-flat). The time signature is 3/4. The score shows a complex metrical repositioning, with notes often spanning across bar lines. The piano part includes markings for m. 267 and m. 269. The tempo is marked as Vivace.

Handwritten musical notation showing three staves of music. The notation is in 3/4 time and features complex metrical repositioning, with notes often spanning across bar lines. The tempo is marked as Vivace.

Ex. E4 - Metrical Repositioning, Harmonic Rhythm Non-Congruent
(Op. 2/11, m. 5 into 6)

HR

V I V I

Ex. E5 - Metrical Repositioning, Harmonic Progression Pattern Non-Congruent
(Op. 88/IV, 101-108f)

Im Marsch Tempo, C

Dasselbe Tempo.

Dasselbe Tempo. J. 132.

m. 101

m. 108

A: V I VI, V I VI, VI X, V I VI, V X

Ex. E6 - Metrical Repositioning, Rhythmic Stretto (Op. 12/6, into m. 5, 6, etc.)

2/4

Schnell.

pp

m. 5 m. 6

etc.

Ex. E7 - Supermetrical Repositioning (Op. 132/III, m. 3, 4)

[III] [IV]

Ruhiges Tempo, mit zartem Ausdruck.

p

Ruhiges Tempo, mit zartem Ausdruck. ♩ = 54.

m. 1 m. 5

Ex. E8 - Metrical Repositioning: Thematic Emphasis on Positional Contrast
(Op. 92, rhythmic motifs m. 43-49 cf. into m. 51-54, next page)

Orch. Abridged

Allegro. $\text{♩} = 84$.

Tutti Solo Tutti Solo

Allegro. $\text{♩} = 84$. m. 43 m. 49

cont.

Ex. E8, continuation

, continuation

Handwritten musical score for piano, continuation. The score is written on two systems of staves. The first system has a treble and bass staff with a grand staff bracket on the left. The second system has a grand staff with three staves (treble, middle, and bass). The music is in 2/4 time, indicated by a '2.' and a '4' with a vertical line. The first system contains measures 48-53, and the second system contains measures 54-59. The music features a melodic line in the treble and a bass line in the bass. The melody is composed of eighth and sixteenth notes, often beamed together. The bass line consists of a steady eighth-note accompaniment. The score is marked with 'p' for piano. The first system is marked with a 'p' and a '2.' and a '4' with a vertical line. The second system is marked with a 'p' and a '2.' and a '4' with a vertical line. The score is marked with 'm. 50' and 'm. 54' at the bottom.

Ex. E9a - Overt Repositioning, Even Fit
(Op. 82/7, into m. 1, into m. 2)

Langsam, sehr zart. ♩ = 63.

pp

p

m. 1 *

cf.

Ex. E9b - Overt Repositioning, Uneven Fit
(Op. 2/2, m. 1-2)

Prestissimo. ♩ = 116.

ff

m. 1

E^b-G-B^b:

Ex. E10a - Overt Supermetrical Repositioning, Even Fit
(Op. 18, into m. 1 cf. into m. 2)

Leicht und zart. M.M. = 152.

pp

Qw. m. 1 m. 4

Ex. E10b, x - Overt Repositioning, Uneven Fit
(Op. 47/II, Trio I, into m. 67-70)

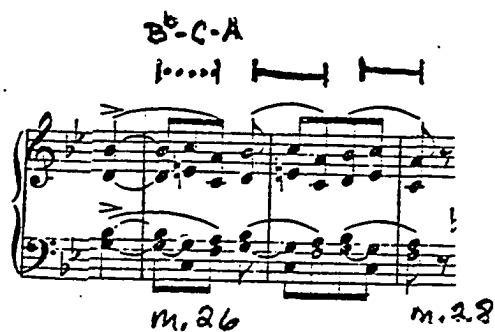
Molto vivace, 3/4

OR

Qw. m. 67 * m. 70

Ex. E10b,y - Overt Repositioning, Uneven Fit
(Op. 26/V, into m. 26-28)

Höchst lebhaft, 2/4



F: II VI, II VI, IV I

Ex. E11 - Overt Repositioning, Uneven Fit
(Op. 134, m. 52-55)

Lebhaft, C

6-beat melodic phrase

Hob.

Fag.

p dolce

p dolce

p dolce

pizz.

pizz.

p

p

m. 52 m. 56

Ex. E12a, x - Overt Repositioning: Consecutive Repetition,
Even Fit (Op. 105/II, Tema, into m. 1-2)

The image displays a musical score for Violin (V) and Piano (Pf) in 2/4 time, marked *Allegretto. 3/4 = 96*. The score illustrates a technique of consecutive repetition, where a short melodic phrase is repeated multiple times. Above the staves, a diagram shows the structure of the repetition: a melodic phrase followed by a dotted line, then a bar line, and another dotted line, indicating the phrase is repeated. The Violin part begins with a *p* (piano) dynamic and includes a *rit.* (ritardando) marking. The Piano part begins with a *p* dynamic and includes a *rit.* and *sf* (sforzando) marking. The score is divided into measures, with *m. 1* and *m. 3* labeled at the bottom.

Ex. E12a, y - Overt Repositioning: Consecutive Repetition,
Even Fit (Op. 61/II, Trio, m. 125-into 126)

Allegro vivace, 2/4

a tempo

Fl
Ob
Cl (Bb)
Bb
H (C)
T+ (C)
Timp
VI
VII
VA
C
DB

a tempo

a tempo

m. 122

m. 127

F.B.

Ex. E12b - Overt Repositioning: Consecutive Repetition,
Uneven Fit (Op. 81, m. 27f)

Leidenschaftlich bewegt. (♩=140.)

Fl
Ob
Cl
Bn
Violin I
Violin II
VI
VII
VA
'C
DB

Leidenschaftlich bewegt.

etc.

m. 27 m. 30

Ex. E13a - Overt Supermetrical Repositioning: Consecutive Repetition, Even Fit (Op. 13, Étude VII=Var. VI, into m. 2 cf. into m. 3)

Allegro molto. $\text{♩} = 98.$

ten. ten. ten. ten. segue

sempre brillante

m. 1 m. 3

Ex. E13b - Overt Repositioning: Consecutive Repetition, Uneven Fit (Op. 121/I, m. 285-86)

Lebhaft . . . Schneller, C

v

pf

m. 283

m. 285 m. 286

Ex. E14, x - Overt Repositioning: Consecutive Repetition, Uneven Fit
 (Op. 41#2/II, m. 1f, 6-beat groups: 4+2)

|.....| | | | etc.

Andante, quasi Variazioni. J. = 68.

VI *p espress.*

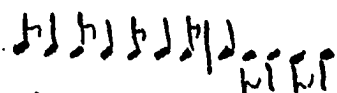
VII *p espress.*

VA *p espress.*

'C *p espress.*

m. 1 *p espress.* m. 5

6-beat pattern:



Ex. E14, y - Overt Repositioning: Consecutive Repetition, Uneven Fit
 (Op. 68/31, m. 1-8 shown, 3-beat groups)

Schr kräftig. M.M. ♩ = 84.

m. 1 m. 5

m. 6 m. 7 m. 8 m. 9

Ex. E15a, x - Overt Repositioning: Comparative Repetition, Even Fit (Op. 54/II,
into m. 1 beat 1 cf. m. 17 into beat 2)

Andantino grazioso. $\text{♩} = 120$

Fl.

Clar. in B.

Fag.

Cor. in E

PF

Andantino grazioso.

VI

VII

VIII

C

DB

m. 1

[I]

$\text{♩} = 120$

$\text{♩} = 120$

pp

pp

pp

pp

pp

pp

pp

pp

m. 17

Ex. E15a, y - Overt Repositioning: Comparative Repetition,
Even Fit (Op. 94/I, within m. 3 cf. the interval E-C)

E-C E-C E-C
|..| H |..|

Nicht schnell. M.M. ♩ = 100.

Ob

Pf

m. 1

m. 6

Ex. E15b - Overt Repositioning: Comparative Repetition,
Uneven Fit (Op. 7, m. 3f cf. m. 173f)

1...| etc.

m. 3

cf.

m. 173

cf.

Ex. E16a - Overt Repositioning: Comparative Repetition, Even Fit (Op. 54/II,
into m. 21, into m. 22 cf. m. 24)

Andantino
grazioso, 2/4

Musical score for Ex. E16a, Op. 54/II, measures 20-26. The score is for a piano (PF) and a string quartet (VI, VII, VA, VC, DB). The tempo is Andantino, 2/4, and the mood is grazioso. The score shows a comparative repetition of a melodic line in the piano part, which is then taken up by the strings in measures 25-26. The piano part features a melodic line with a trill in measure 21, and the strings enter in measure 25 with a similar melodic line. The score is marked with 'pp' (pianissimo) in measures 21, 25, and 26. The piano part is marked with 'pp' in measure 21, and the strings are marked with 'pp' in measures 25 and 26. The score is marked with 'arco' in measure 26. The piano part is marked with 'pp' in measure 21, and the strings are marked with 'pp' in measures 25 and 26. The score is marked with 'arco' in measure 26. The piano part is marked with 'pp' in measure 21, and the strings are marked with 'pp' in measures 25 and 26. The score is marked with 'arco' in measure 26.

Measures 20-26. The score is marked with 'pp' (pianissimo) in measures 21, 25, and 26. The piano part is marked with 'pp' in measure 21, and the strings are marked with 'pp' in measures 25 and 26. The score is marked with 'arco' in measure 26. The piano part is marked with 'pp' in measure 21, and the strings are marked with 'pp' in measures 25 and 26. The score is marked with 'arco' in measure 26.

Ex. E16b - Overt Repositioning: Comparative Repetition,
Uneven Fit (Op. 130/3, m. 11 cf. m. 12, S^O)

Nicht schnell, etwas gravitatisch, 3/4

The image displays a musical score for two parts: P^O (Piano) and S^O (Solo). The P^O part is written on a grand staff (treble and bass clefs) and the S^O part is written on a single staff (bass clef). The key signature is one sharp (F#) and the time signature is 3/4. The P^O part features a melodic line with eighth and sixteenth notes, while the S^O part provides a harmonic accompaniment with eighth notes. A bracket labeled [.....] indicates a comparative repetition of the melodic line between the two parts. The score is labeled 'm. 11' at the bottom, indicating it is the eleventh measure of the piece.

Ex. E17 - Overt Repositioning: Comparative Repetition,
 Uneven Fit (Op. 131, double gapped: into m. 1 cf. into
 m. 3; into m. 2 cf. into m. 4)

Im mässigen Tempo. ♩ = 58.

Fl

Ob.

Cl.

Bn.

H
(C)

Solo

Im mässigen Tempo.

VI

VII

VA

C

DB

m. 1

m. 4

Ex. E18a - Overt Repositioning: Overlapping Repetition,
Even Fit (Op. 12/6, m. 41-45, cf. entries each half-beat
in 2/4)

Schnell, 2/4

The musical score for Ex. E18a is written for piano in 2/4 time, marked 'Schnell'. It features overlapping repetition of a melodic phrase across measures 41 to 45. The notation includes a treble and bass staff. Above the staff, there are several horizontal lines with vertical tick marks, indicating the timing of the repeated entries. A large curved line with a double slash (%) spans the entire passage, signifying a continuous or overlapping structure. The measure numbers 'm. 41' and 'm. 45' are clearly marked at the beginning and end of the excerpt.

Ex. E18b - Overt Repositioning: Overlapping Repetition,
Uneven Fit (Op. 12/6, into m. 5-6, cf. entries each
half-beat in 2/4)

The musical score for Ex. E18b is written for piano in 2/4 time, marked 'Schnell.'. It illustrates overlapping repetition in measures 5 and 6. Above the staff, there are horizontal lines with vertical tick marks, showing the staggered entry of the repeated phrase. The measure numbers 'm. 5' and 'm. 6' are indicated at the start and end of the overlapping section. The notation includes a treble and bass staff with various musical symbols such as notes, rests, and dynamic markings.

Ex. E19a - Overt Repositioning: Overlapping Repetition,
Even Fit (Op. 15/12, m. 1-3 etc.)

"Kind im Einschlummern" (no tempo term)

The musical notation for Ex. E19a is in 2/4 time. It features a piano (p) dynamic. The melody consists of eighth notes, and the bass line consists of quarter notes. A bracket above the first two measures indicates a repeating pattern. Below the first measure, the text "m. 1" is written, followed by a dotted line and a vertical bar. To the right of the main notation, the word "etc." is written, followed by a simplified diagram of the repeating pattern: a treble clef with a dotted quarter note and an eighth note, and a bass clef with a quarter note.

Ex. E19b - Overt Repositioning: Overlapping Repetition,
Uneven Fit (Op. 85/7, P^o, into m. 39-into 40)

=E23 - Repositioned Pattern Model, Overlapped Repetition

Sehr kräftig, C

The musical notation for Ex. E19b is in 2/4 time. It features a piano (p) dynamic. The melody consists of eighth notes, and the bass line consists of quarter notes. A bracket above the first two measures indicates a repeating pattern. Below the first measure, the text "m. 39" is written, followed by a dotted line and a vertical bar. To the right of the main notation, a simplified diagram of the repeating pattern is shown: a treble clef with a dotted quarter note and an eighth note, and a bass clef with a quarter note. The diagram is positioned to the right of the main notation, with a vertical line separating it from the main notation.

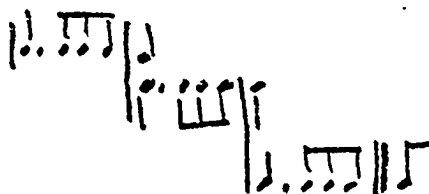
Ex. E20 - Overt Supermetrical Repositioning: Overlapping
Repetition, Uneven Fit (Op. 54/III, m. 388-91)

Allegro vivace, 3/4

[I]

[I]

Musical score for Ex. E20, measures 387-391. The score is for a 3/4 time signature, Allegro vivace. The instruments listed on the left are Flute (Fl), Oboe (Ob), Clarinet (Cl), Bassoon (Bn), Trumpet (T), Violin I (VI), Violin II (VII), Viola (VA), Cello (C), and Double Bass (DB). The score shows overlapping repetitions of a musical phrase, with the first repetition starting at measure 387 and the second starting at measure 391. The key signature is one sharp (F#).

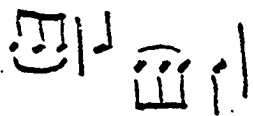


Ex. E21 - Repositioned Pattern Model
(Op. 97/II, F horn melody into m. 33)

Sehr mässig, 3/4

Fl
Ob
Cl
Bn
H (F)
H (C)
Tr
Timp
VI
VII
VA
VC
DB

m. 32



m. 34

Ex. E22 - Repositioned Pattern Model (Op. 115, excerpted lines, m. 6-26 shown;
cf. into m. 7, 9, 22; m. 13, 15, 20; m. 23, 24; into m. 25-26)

Langsam, C

VI

VII

m. 6

sfp

cresc.

f

dim.

p dol.

m. 13

Detailed description: This block contains the first system of a musical score for two staves, VI and VII. The key signature has two flats (B-flat and E-flat). Staff VI begins with a treble clef and a key signature change to one flat (B-flat). It features a series of eighth and sixteenth notes with slurs and ties. Above the staff, there are handwritten annotations: a triplet of eighth notes, a dotted line, and a bracket. Dynamic markings include *sfp*, *cresc.*, *f*, *dim.*, and *p dol.*. Staff VII begins with a treble clef and a key signature change to one flat (B-flat). It also features a series of eighth and sixteenth notes with slurs and ties. Above the staff, there are handwritten annotations: a triplet of eighth notes, a dotted line, and a bracket. Dynamic markings include *p*, *cresc.*, *f*, *dim.*, and *p dol.*. The system ends with a double bar line and the measure number 'm. 13' written below the staff.

Nach und nach rascher.

m. 14

m. 19

Detailed description: This block contains the second system of a musical score for two staves, VI and VII. The key signature has two flats (B-flat and E-flat). Staff VI begins with a treble clef and a key signature change to one flat (B-flat). It features a series of eighth and sixteenth notes with slurs and ties. Above the staff, there are handwritten annotations: a bracket and a double bar line. Dynamic markings include *f*. Staff VII begins with a treble clef and a key signature change to one flat (B-flat). It also features a series of eighth and sixteenth notes with slurs and ties. Above the staff, there are handwritten annotations: a bracket and a double bar line. Dynamic markings include *f*. The system ends with a double bar line and the measure number 'm. 19' written below the staff.

cont.

Ex. E22, continuation

Handwritten notes and markings on the score include:

- f*, *ff*, *p*, *cresc.*, *molto cresc.*
- Soli*
- In leidenschaftlichem Tempo.*
- VA*
- m. 20*
- m. 25*

In leidenschaftlichem Tempo. ♩ = 144.

Handwritten notes and markings on the score include:

- cresc.*
- m. 26*

Ex. E23=E19b

Ex. E24 - Intrinsic Metrical Repositioning (Op. 4/I,
Alternativo, m. 45f)

Allegro quasi maestoso, 3/4

Più vivo.

m. 45 pp

m. 48

Ex. E25 - Intrinsic Metrical Repositioning (Op. 9/I, m. 26, 27)

Quasi maestoso, 3/4

Più moto.

ff brillante

Normal

m. 25

m. 29

Ex. E26 - Intrinsic Metrical Repositioning (Op. 68/39, into
m. 1-3)

Langsam.

pp

m. 1

Ex. E27 - Intrinsic Metrical Repositioning (Op. 120/I, m. 10-14f)

Ziemlich langsam, 3/4

The musical score is arranged in a system with 12 staves. From top to bottom, the staves are labeled: Fl (Flute), Ob (Oboe), Cl (Clarinet), Bn (Bassoon), (F) (Horn F), (D) (Horn D), Tt (Trumpet), Timp (Timpani), VI (Viola), VA (Violoncello), and Kb (Kbass). The score spans measures 10 to 14f. Measure 10 begins with a *mf* dynamic. Measures 11 and 12 feature a *cresc.* (crescendo) marking. Measure 13 continues the *cresc.* and includes a *mf* dynamic. Measure 14f concludes the section. The notation includes various note values, rests, and articulation marks, illustrating the concept of intrinsic metrical repositioning.

Ex. E28 - Intrinsic Metrical Repositioning (Op. 68/18, m. 1-2)

Nicht sehr schnell.

m. 1 m. 2

I IV(II) V₇ I

I I

Ex. E29 - Intrinsic Metrical Repositioning (Op. 44/IV, into m. 22-25 etc.)

Allegro ma non troppo, C

VI

VII

VA

C

Pf

sempre f

m. 21 m. 25

! ! ! !

Ex. E30 - Intrinsic Metrical Repositioning
(Op. 44/III, into m. 1-4 etc.)

Molto vivace. ♩ = 132.

Molto vivace.

marcato

staccato m. 1

m. 4

Ex. E31 - Comparative Repositioning With Formal Significance (Op. 13, a: Tema;
b: Finale opening; c: displaced Tema in Finale

Andante.
legatissimo

a

p

m. 1

m. 4

Allegro brillante. (d. 66.)

b

f

p

Ad. m. 1

m. 4

c

sempre con forza

f

p

m. 143

m. 147

Ex. E32 - Comparative Repositioning With Formal Significance
(Op. 97/II, a: m. 1f; b: into m. 11f; c: into m. 113)

a Sehr mässig. ♩ = 100.

Fl
Ob
Cl
Bn
H
H
T
Timp
VI
VCL
VA
C
DB

Sehr mässig.
ten. ten.
ten. ten.
ten. ten.
Sehr mässig.
p ten. ten.
p ten. ten.
m. 8

111 etc.

b

The musical score is written for a piano and orchestra. It consists of two systems of staves. The first system includes a grand staff (treble and bass clef) and four additional staves, likely for woodwinds or strings. The second system includes a grand staff and four additional staves, likely for strings or other instruments. The notation is complex, featuring many triplets, slurs, and dynamic markings. The tempo markings "poco rit." and "Im Tempo." are repeated at the beginning of each system. The score is marked with "m. 9" at the start of the first system and "1. m. 16" at the end of the second system. The overall style is that of a classical or romantic era musical score.

poco rit. Im Tempo. 1.

poco rit. Im Tempo. 1.

m. 9

poco rit. Im Tempo. 1. m. 16

c

m. 112

m. 114

3/4

into m. 1



m. 11 into 12,
into m. 113



into m. 113



Ex. E33 - Comparative
Repositioning With
Formal Significance
(Op. 120/I, a: m.
29 cf. b: m. 122, 124

Ziemlich langsam
3/4 . . . Stringendo,
2/4 . . . Lebhaft

a **Lebhaft**

Fl
Ob
Cl
Bn
H (F)
H (D)
Tr (F)
Tb
Timp
VI
VII
VA
C
DB

m. 29 m. 31

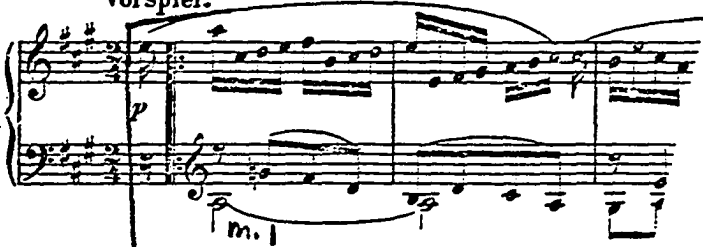
b

musical score for a piano piece, page 215, section b. The score consists of 12 staves. The first 8 staves are for the right hand, and the last 4 staves are for the left hand. The music is in a minor key and 4/4 time. It features a complex, flowing melody with many sixteenth and thirty-second notes. There are two boxed sections labeled "II" and "IV" in the 10th and 11th staves. The piece ends with a double bar line and the measure number "m. 124".

Ex. E34 - Duple/Triple Versions (Op. 68/40, a: Vorspiel,
m. 1-2 cf. b: Fuge, m. 23-24)

Vorspiel.

a



2/4

cf.

6/8

FUGE. Lebhaft, doch nicht zu schnell.

b



m. 23

m. 24

Ex. E35 - Duple/Triple Versions (a: Op. 16/8, m. 1-4 cf.
b: Op. 38/IV, into m. 43-46)

a Schnell und spielend.

pp Die Bässe durchaus leicht und frei.

m. 1 m. 4

cf.

b Allegro animato e grazioso, ♩

marcato
p

marcato
p

pizz.
p

pizz.
p

pizz.
p

arco
f

arco
f

arco
f

p

p

m. 43 m. 46

Ex. E36 - Duple/Triple Versions (a: Op. 16/7, coda theme, into m. 89-92 b: Op. 26/I, into m. 87f. The phrase shown here for comparison occurs into m. 91-94, at the same pitch level as the earlier theme. Op. 26/I into m. 87 is shown in Ex. D91b.)

Sehr rasch . . . Noch schneller, 2/4

a

Etwas langsamer.



m. 89

cf.

Sehr lebhaft, 3/4

b



m. 91

Ex. E37 - Duple/Triple Versions (a:Op. 54/II, m. 11 into 12 cf. b: Op. 54/III, m. 255 into 256)

a Andante grazioso, 2/4

Fl I
Bn
H
VI
V I
V II
VA
VC
VB
m. 9
m. 13

b

Allegro vivace, 3/4

III
m. 253
m. 256

Ex. E38 - Duple/Triple Versions (a: Op. 105/I, m. 1-4 cf. b: Op. 105/I, into m. 114-118 cf. c, next page: Op. 105/III, m. 168-71)

a

Mit leidenschaftlichem Ausdruck. $\text{♩} = 68$.

1^{te} Salte...

p cresc.

m. 1 m. 4

b

etwas zurückhaltend *2^{te} Salte...* *Im Tempo*

etwas zurückhaltend

m. 114 m. 118

Thematic Recap. into m. 114; Tempo Recap. m. 116, mid-theme
cont.

Ex. E38, continuation

c

Alc. Saitte

p

f

p

pp

m. 168

m. 171

Ex. E39 - Duple/Triple Versions (Op. 41#3/I, a: Introduction, falling fifths, m. 1, 3, 5, 6, 7 cf. b: Allegro, falling fifths, m. 8, 12)

a

VI Andante espressivo. $\text{♩} = 60$.

VA

E

m. 1

m. 7

cf.

b Allegro molto moderato. $\text{♩} = 60$.

p sempre teneramente

ten.

p sempre teneramente

ten.

p sempre teneramente

ten.

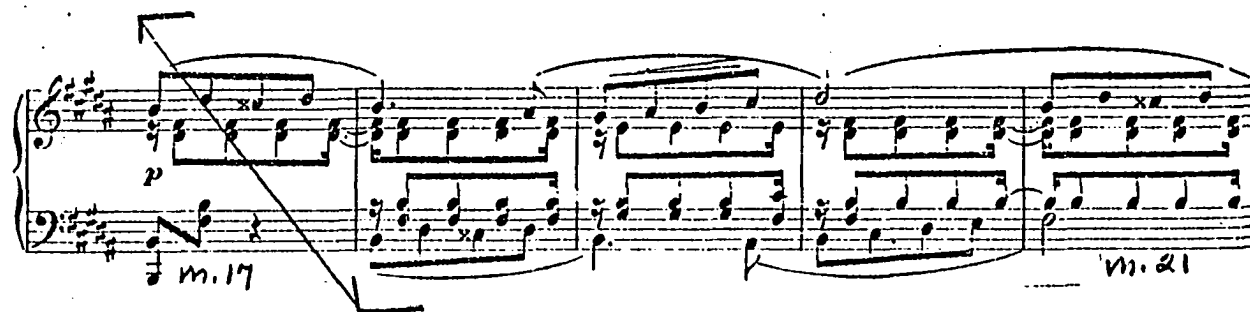
p sempre teneramente

m. 8

m. 15

Ex. E40 - Imitative Textures (Op. 9/14, m. 17-21 etc.)

Animato, 2/4



Ex. E41 - Imitative Textures (Op. 6/16, into m. 9-14)

Mit gutem Humor, 3/4

Musical score for Ex. E41, Op. 6/16, measures 9-14. The score is in 3/4 time and features imitative textures. The right hand (treble clef) and left hand (bass clef) play in parallel motion, with the right hand often leading. The music is marked with a forte (*f*) dynamic. A diagonal line with arrows at both ends is drawn across the first two measures, indicating a specific interval or relationship. The measures are labeled 'm. 9' and 'm. 15' at the bottom.

Ex. E42 - Imitative Textures (Op. 4/I, motif, m. 3 into 4 etc.;
stretto, m. 17-23)

Allegro quasi maestoso, 3/4

Handwritten musical score for measures 3 to 8. The score is in treble and bass clefs with a key signature of two sharps (F# and C#). The time signature is 3/4. The music features imitative textures with various note values and rests. Measure numbers 3, 4, 5, 6, 7, and 8 are indicated below the staff.

Handwritten musical score for measures 17 to 24. The score is in treble and bass clefs with a key signature of two sharps (F# and C#). The time signature is 3/4. The music features imitative textures with various note values and rests. Measure numbers 17, 21, and 24 are indicated below the staff. The word "sempre" is written above the staff in measure 21, and "poco" is written above the staff in measure 22. The word "or" is written above the staff in measure 24.

Ex. E43 - Imitative Textures (Op. 13, Étude IV=Var. III,
m. 1-4)

Handwritten musical score for measures 1-3. The tempo is marked $\text{♩} = 132$. The key signature has two sharps (F# and C#). The score is written for piano with a grand staff. A bracket labeled "Pedale" spans the first measure. The first measure is marked "m. 1" and the third measure is marked "m. 3". The music features imitative textures with various chords and melodic lines. Dynamics include f (forte) and sf (sforzando).

//

Handwritten musical score for measures 4 and 5. The key signature has two sharps (F# and C#). The score is written for piano with a grand staff. The fourth measure is marked "m. 4". The music continues the imitative textures. Dynamics include f (forte) and sf (sforzando). The word "etc." is written to the right of the fifth measure.

Ex. E44a - Derivation of Stretto Motif (Op. 41#1/I, m. 34-41)

Allegro. $J. = 69.$

VI

VII

VA

C

mf

m. 34

m. 41

Ex. E44b - Imitative Textures (Op. 41#1/I, m. 80-91)

p cresc.

p cresc.

m. 76

m. 80

m. 84

m. 88

m. 91

Ex. E45a - Derivation of Fugue Subject and
Stretto Motif (Op. 44/IV, m. 1-5)

Allegro ma non troppo. $\text{♩} = 120$.

VI
VII
VA
C

Pf

m. 1

m. 5

sempre marcato

Ex. E45b - Imitative Textures (Op. 44/IV,
into m. 249-66)

m. 249

m. 251

cont.

Ex. E45b, continuation

Musical score for Ex. E45b, continuation, measures 252 to 258. The score is written for a piano and features five staves. The key signature is B-flat major (two flats). The notation includes various musical symbols such as notes, rests, and dynamic markings. A box labeled 'p' is present in the first staff at measure 252. A box labeled 'cresc.' is present in the first staff at measure 257. A box labeled 'p cresc.' is present in the third staff at measure 257. A box labeled 'cresc.' is present in the fifth staff at measure 257. The measure numbers 'm. 252' and 'm. 258' are indicated at the bottom of the staves.

Musical score for Ex. E45b, continuation, measures 259 to 266. The score is written for a piano and features five staves. The key signature is B-flat major (two flats). The notation includes various musical symbols such as notes, rests, and dynamic markings. A box labeled 'p' is present in the first staff at measure 259. A box labeled 'cresc.' is present in the first staff at measure 265. A box labeled 'p cresc.' is present in the third staff at measure 265. A box labeled 'cresc.' is present in the fifth staff at measure 265. The measure numbers 'm. 259' and 'm. 266' are indicated at the bottom of the staves.

Ex. E46a - Derivation of Stretto Motif (Op. 47/IV, m. 1-4)

Vivace. $\text{♩} = 152.$

V

VA

C

Pf

Vivace. $\text{♩} = 152.$

m.1

m.4

Ex. E46b - Imitative Textures (Op. 47/IV, m. 63-68)

pizz.

m.63

m.68

Ex. E46c - Imitative Textures (Op. 47/IV, m. 73-81)

①
②
arco
③
m. 73
m. 76

This musical system covers measures 73 to 76. It features three staves for voices and a grand staff for piano. The voices are marked with circled numbers 1, 2, and 3. The piano part is marked with a circled 3. The word 'arco' is written above the piano staff. The system shows imitative textures where the voices and piano play similar melodic lines in different registers.

①
②
③
m. 77
m. 81

This musical system covers measures 77 to 81. It continues the imitative textures from the previous system. The voices and piano parts are marked with circled numbers 1, 2, and 3. The system shows the continuation of the imitative textures, with the voices and piano playing similar melodic lines in different registers. A double bar line is present at the beginning of the system.

Ex. E46d - Imitative Textures (Op. 47/IV, m. 131-35)

① marcato
cresc.
② cresc.
③ cresc.
p
cresc.
m. 131
B $\flat$ Pedal Point
m. 135

Ex. E46e - Imitative Textures (Op. 47/IV, m. 234-38)

①
② arco
④
m. 234
③
④
m. 238

Ex. E47 - Metrical Repositioning, Special Case (Op. 3/4, into m. 9-12)

Allegro, 6/8

Handwritten musical score for "The Rose Tree". The score is written on two staves, treble and bass clef, in 3/4 time. The melody is in the treble staff, and the bass staff provides a simple accompaniment. The key signature is one flat (B-flat). The score is divided into measures by vertical bar lines. Above the first measure, there is a small diagram showing a sequence of notes: a half note, a quarter note, and a half note, with a bracket underneath. The melody consists of eighth and quarter notes, often beamed together. The bass staff features a simple accompaniment of eighth and quarter notes. The score ends with a double bar line and a final note in the treble staff.

Ex. E48 - Metrical Repositioning, Special Case (Op. 11/I, m. 52)

Un poco Adagio, 3/4

Musical score for "L'Espresso" by Franz Liszt, Op. 28, No. 15. The score is in 2/4 time, key of D major, and features a piano (p) dynamic. The melody is in the right hand, and the accompaniment is in the left hand. The piece is marked "L'Espresso" and "Op. 28, No. 15". The score includes a repeat sign at the end.

Ex. E49 - Metrical Repositioning, Special Case (Op. 61/I, m. 45-46 cf.
m. 47-48; strings only, abridged score)

Sostenuto assai, 6/4

original form:



diminution:



VI
VII
VA
C
DB

sf *sf* *sf* *dim.*

più e più strin. *ten.* *do*

m. 45 *più e più strin.* *ten.* *do* m. 49

Ex. E50 - Metrical Repositioning, Special Case (Op. 82/1,
m. 1 cf. m. 16 cf. m. 17=Recap.)

I

Nicht zu schnell. M.M. ♩ = 132.

VII

m. 1

m. 15

I

m. 17

m. 19

Ex. E51 - Supermetrical Repositioning, Special Case (Op. 56/5, m. 1-8f)

Pedal-Piano

[I] [II] [III] [IV] [I]

Nicht zu schnell. (♩ = 98.)

mf p mf

m. 1 m. 5

[II] [III] [IV]

mf p

m. 6 m. 8

Ex. E52 - "Grossvater" Theme (Op. 2/12, m. 1-12)

[I] [V]

FINALE.

The musical score is for the finale of 'The Merry Widow'. It is written for piano and voice. The piano part is in 2/4 time and features a series of chords and arpeggios. The voice part is in 2/4 time and features a series of notes and rests. The score is divided into two parts, I and V, and ends with a double bar line. The tempo is marked 'Allegretto' and the key signature is one sharp (F#).

1. 2.

mi l mi 8 ii

(♩ = ♪, according to Clara's Instructive Edition)

Handwritten musical score for 'The Rose Tree'. The score is written on two staves, Treble and Bass clef, in 2/4 time. The key signature is one sharp (F#). The melody is in the Treble staff, and the accompaniment is in the Bass staff. The score is divided into two systems. The first system contains measures 1 through 8, and the second system contains measures 9 through 12. The melody is a simple, folk-like tune. The accompaniment consists of chords and single notes. The score is labeled 'm. 9' and 'm. 12' at the bottom.

Ex. E53 - Supermetrical Repositioning, Special Case (Op. 2/12, m. 21-24 etc.)

Più lento, 3/4

[I] [VII]

m. 21 m. 28

// [I] [VII]

m. 29 m. 36

// [I]

poco rit.

m. 37 m. 42

Ex. E54 - Supermetrical Repositioning, Special Case (Op. 9/21, into m. 49-64)

Non Allegro . . . Molto più vivace, 3/4

The image displays two systems of musical notation for piano, illustrating supermetrical repositioning. The first system, starting at measure 49, features a treble and bass staff. Above the treble staff, a bracket labeled [I] spans measures 49 through 52. Below the bass staff, a bracket labeled [I] spans measures 53 through 56. A handwritten note "Thème du XVII^{ème} siècle." is written below the bass staff at measure 54. The second system, starting at measure 53, also has a treble and bass staff. Above the treble staff, a bracket labeled [V] spans measures 53 through 56. Above the bass staff, a bracket labeled [VIII] spans measures 53 through 56. A bracket labeled ([V] - [VI]) spans measures 57 through 60. A bracket labeled [I] spans measures 61 through 64. A bracket labeled [V] spans measures 65 through 68. A bracket labeled [VIII] spans measures 69 through 72. A bracket labeled [I] spans measures 73 through 76. The music is written in 3/4 time and includes various musical notations such as notes, rests, and dynamic markings like *ff*.

Ex. E55 - Supermetrical Repositioning, Special Case
(Op. 6/3, m. 9-26)

Etwas hahnbüchen, 3/4

[I] Schneller.

m. 9 m. 14

m. 15 m. 20

m. 21 m. 26

Ex. E56 - Supermetrical Repositioning, Special Case
(Op. 6/3, m. 45-50)

Etwas hahnbüchen . . . Schneller, 3/4

[I]

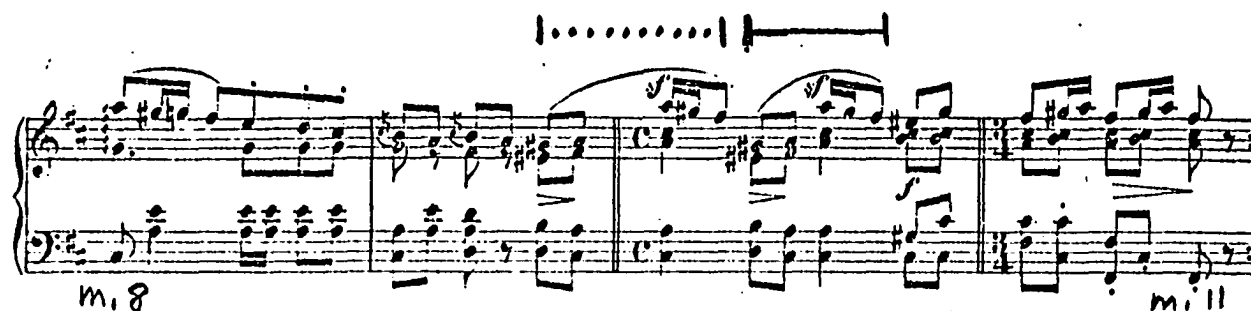
m. 44 p p spitz

[I] [III]

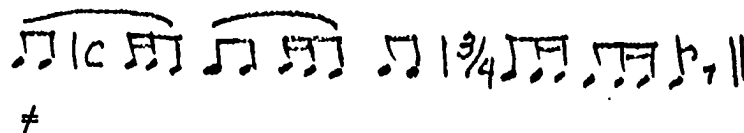
m. 50

Ex. E57 - Metrical Repositioning, Antipode (Op. 2/11, m. 10)

(No tempo term), 3/4



as written:



steady 3/4 :



Ex. E58 - Rhythmic Modulation Through Metrical Repositioning
(Op. 120/I, into m. 23-29f)

Ziemlich langsam, 3/4

NB 2/4
↓

Stringendo... Lebhaft. (J. 92)

The musical score is arranged in a standard orchestral format. The staves are labeled on the left: Fl (Flute), Ob (Oboe), Cl (Clarinet), Br (Bassoon), H (Horn), H (Horn), Tr (Trumpet), Tr (Trumpet), Tmp (Timpani), VI (Violin), VII (Violin), VA (Viola), C (Cello), and DB (Double Bass). The score is divided into three sections by vertical lines, labeled at the bottom as m. 22, m. 25, and m. 29. Above the first section (m. 22), the tempo is marked 'Ziemlich langsam, 3/4'. Above the second section (m. 25), the tempo changes to 'Stringendo...'. Above the third section (m. 29), the tempo changes to 'Lebhaft. (J. 92)'. A handwritten note 'NB 2/4' with a downward arrow points to the second section. A musical notation example at the top right shows a sequence of notes with a sharp sign, indicating a key signature change. The score includes various musical notations such as notes, rests, and dynamic markings.

m. 22 m. 25 m. 29

Ex. E59 - The Question of Hemioles (Op. 21/4, into
m. 17-25f)

Ballmässig. Sehr munter, 3/4

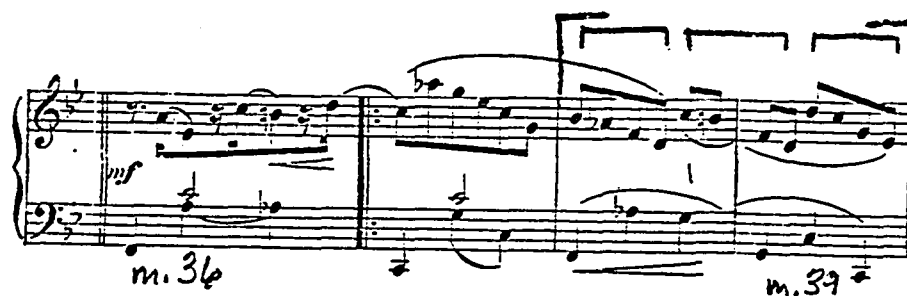
The image displays a musical score for a piano piece, specifically a section from Op. 21/4. The tempo and mood are indicated as "Ballmässig. Sehr munter, 3/4". The score is divided into two systems, separated by a double bar line. The first system covers measures 17 to 20, and the second system covers measures 21 to 25. The music is written for piano and features a complex hemiola rhythm, which is a 3/4 time signature where the music is played in a 6/8 feel. The notation includes various musical symbols such as notes, rests, and dynamic markings like *f* (forte) and *sf* (sforzando). The measures are numbered at the bottom of the staves: m. 17, m. 20, m. 21, and m. 25.

APPENDIX F

Examples for Chapter VIII, Hemiolic Construction

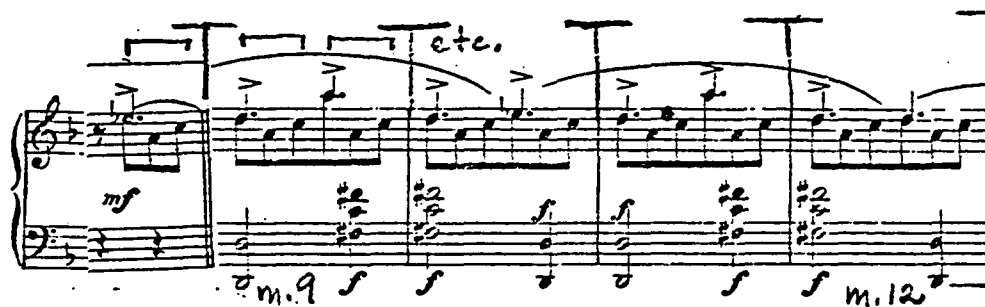
Ex. Fla - Unanimous Hemiolic Construction (Op. 9/7, m. 38-39)

Vivo, 3/4



Ex. Flb - Reverse Hemiolic Construction, Partial
(Op. 6/10, m. 9-12)

Balladenmässig. Sehr rasch, 3/4



Ex. F2 - Hemiolic Inner-group Construction
(Op. 21/4, m. 23-24)

Ballmässig. Sehr munter, 3/4



Ex. F3 - Hemiolic Inner-Group Construction (Op. 21/4,
into m. 202-203, 204-205)

Ballmässig, Sehr munter, 3/4

Handwritten musical score for Ex. F3, measures 200-206. The score is written on a grand staff (treble and bass clefs) in 3/4 time. The key signature has one sharp (F#). The music features a hemiolic inner-group construction. Measures 200-203 are grouped together with a bracket underneath, and measures 204-205 are grouped together with a bracket underneath. Measure 206 is marked separately. Below the score, there is a section labeled 'VII' with a series of rhythmic notations: I, 1/4, 1/4, 1/4, 1/4, 1/4, 1/4.

Ex. F4 - Hemiolic Inner-Group Construction (Op. 21/8,
m. 395-396)

Munter, nicht zu rasch . . .
Nach und nach lebhafter, 3/4



Ex. F5 - Hemiolic Inner-Group Construction (Op. 6/6, m. 39)

Sehr rasch und in sich hinein, 6/8



Ex. F6 - Hemiotic Inner-Group Construction (Op. 54/III, m. 335-346)

Allegro vivace, 3/4

Fl

Clar *p*

Fag *p*

TO F# etc.

TO G#

TO G#

TO A EXTENDED

B Partial Point

VI

VII

VA

C

DB

m. 335

m. 342

cont.

Ex. F6, continuation

The musical score is arranged in three systems. The first system contains staves for Flute (Fl.), Clarinet (Clar.), and Horn (Cor.). The second system features a piano solo section marked "EXTENDED" with a slanted line indicating an extension, and includes the instruction "brillanto". The third system continues the piano part and includes other instruments. Measure numbers "m. 349" and "m. 350" are written below the piano staff in the third system.

Ex. F7 - Hemiolic Inner-Group Construction (Op. 23/3, m. 173-180)

Noch lebhafter, 3/4



Ex. F8 - Hemiolic Inner-Group Construction (Op. 124/7, into m. 1; m. 4-5)



Ex. F9 - Hemiolic Inner-Group Construction (Op. 6/9, 1st Edition, a: m. 3-4; b: m. 7-8)

Hierauf schloss Florestan und es zuckte ihm schmerz-
lich um die Lippen. 3/4

a

m. 3

b

m. 7

Ex. F10 - Hemiolic Inner-Group Construction (Op. 16/5, m. 86- into m. 88)

Sehr lebhaft, 3/4

m. 86

Ex. F11 - Hemiolic Inner-Group Construction (Op. 54/III, m. 205-212; initial presentation of this theme is also shown, into m. 189-196)

Allegro vivace, 3/4

Handwritten musical score for measures 188-196. The score is for five parts: VI (Violin I), VII (Violin II), VA (Viola), C (Cello), and DB (Double Bass). The key signature is two sharps (F# and C#), and the time signature is 3/4. The tempo is Allegro vivace. The score begins with a *pp* (pianissimo) dynamic. The woodwinds (VI, VII, VA) play a melodic line with eighth and sixteenth notes, while the strings (C, DB) provide a harmonic accompaniment. A wavy line on the right side of the score indicates a continuation of the theme. The measures are labeled m. 188 and m. 196. A handwritten "etc." is placed above the woodwind staves in measure 190.

Handwritten musical score for measures 205-212. The score is for two parts: Bn (Solo Horn) and Pf (Piano). The key signature is two sharps (F# and C#), and the time signature is 3/4. The tempo is Allegro vivace. The piano part (Pf) plays a complex, rhythmic accompaniment with many beamed sixteenth and thirty-second notes. The solo horn part (Bn) is marked "SOLO." and plays a melodic line. The measures are labeled m. 205 and m. 212. A handwritten "etc." is placed above the piano staff in measure 208.

(strings tacet)

Ex. F12 - Hemiolic Inner-Group Construction (Op. 17/III, m. 47)

Langsam getragen. Durchweg leise zu halten, 12/8

↑
consonant

Ex. F13 - Hemiolic Inner-Group Construction (Op. 12/1, m. 1)

Sehr innig zu spielen. etc.
p
m. 1 Pedal m. 4
↑
dissonant

Ex. F14 - Hemiolic Construction (Op. 97/I, m. 1-6)

Lebhaft. 2 = 66. etc.

Fl

Ob

Cl

B

H (E)

Tr (E)

Tim

Lebhaft.

V1

V2

VA

VC

VB

m. 1

m. 7

Ex. F15 - Hemiolic Archetype (Op. 68/15, m. 1)

Innig zu spielen. M.M. = 56.

mf

m. 1

Ex. F16 - Cadential Hemiolic (Op. 4/III, m. 104-105, into an embellishing cadence; m. 106-107, into a section cadence)

Assai vivo, 3/4

[I]

m. 101

m. 103

[VIII]

m. 104

V₇/VI

V₇ I

m. 108

Ex. F17 - Cadential Hemiole, Partial, on Tonic Chord
(Op. 10/5, m. 14)

No tempo term, 6/8

m. 13

I

m. 15

Ex. F18 - Cadential Hemiole (Op. 130/3, m. 15-16)

Nicht schnell, etwas gravitatisch, 3/4

P°

S°

m. 15

16

4

V

I

Ex. F19 - Cadential Hemiole, Partial (Op. 6/15, m. 7-8)

Frisch, 3/4



Ex. F20 - Cadential Hemiole (Op. 58/3, m. 107-108)

Lebhaft, 3/4

HR 1d. 1d 2 II

Ex. F21 - Cadential Hemiole (Op. 63/II, m. 24-25)

Lebhaft, doch nicht zu rasch, 3/4

Violin (V) and Viola (C) staves show melodic lines with various ornaments and dynamics. The Piano (P) part features a 'Waltz caesura' marking. The score is divided into measures 22 and 26.

Waltz caesura

Ex. F22 - Expanded Hemiole (Op. 41#1/II, into m. 190)

Presto, 6/8

The score for Ex. F22 features four staves: Violin I (VI), Violin II (VII), Viola (VA), and Cello (C). The music is in 6/8 time and includes measures 187 and 191. The notation is complex, with many sixteenth and thirty-second notes.

Ex. F23 - Expanded Reverse Hemiole, Partial
(Op. 80/III, into m. 162-163)

In mässiger Bewegung, 3/8

Coda.

V

C

Pf

p

m. 161

m. 165

Ex. F24 - Expanded Hemiole (Op. 4/III, m. 7-9)

Allegro marcato, 3/4

m. 6

m. 10

Ex. F25 - Expanded Hemiole, Partial (Op. 80/III, m. 66-68)

In mässiger Bewegung, 3/8

Handwritten annotations: m. 65, m. 68

Ex. F26 - Expanded Hemiole (Op. 9/1, m. 99-101)

Quasi maestoso . . . Più moto . . . Animato, 3/4

Handwritten annotations: m. 99, m. 103

Ex. F27 - Expanded Hemiole (Op. 11/III, into m. 28-32)

Allegriissimo, 3/4

musical score for Ex. F27, Allegriissimo, 3/4. The score is in G major (one sharp) and 3/4 time. It consists of two staves, treble and bass. The music features a complex rhythmic pattern with many beamed sixteenth and thirty-second notes. A bracket labeled 'V' spans measures 28-32. The tempo marking 'marcatissimo' is present. Measure numbers m. 25 and m. 32 are indicated at the start and end of the excerpt.

Ex. F28 - Hemioles Shorter Than a Bar, Partial (Op. 4/VI, m. 5, 6)

Allegro, 3/4

musical score for Ex. F28, Allegro, 3/4. The score is in G major (one sharp) and 3/4 time. It consists of two staves, treble and bass. The music features a rhythmic pattern with beamed eighth and sixteenth notes. A dotted line is drawn above the treble staff. Measure numbers m. 5 and m. 8 are indicated at the start and end of the excerpt.

Ex. F29 - Consecutive Hemioles (Op. 16/5, m. 86-109)

Sehr lebhaft, 3/4

Handwritten musical score for "Consecutive Hemioles" (Op. 16/5, m. 86-109) by F29. The score is in 3/4 time, marked "Sehr lebhaft". It consists of three systems of piano (p) and right-hand (r) parts. The first system (m. 86-93) features a right-hand part with eighth-note patterns and a left-hand part with chords. The second system (m. 94-101) continues the eighth-note patterns. The third system (m. 102-110) includes a "ritard." marking and ends with a final chord. The score is written on five staves, with the right-hand part on the upper staves and the left-hand part on the lower staves.

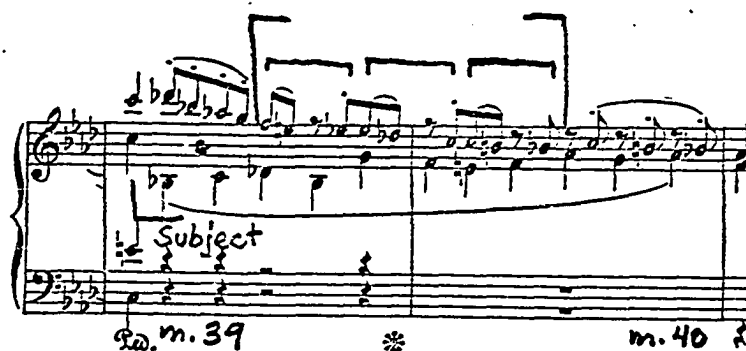
Ex. F30 - Metrically Out-Of-Phase Hemiole
(Op. 10/5, m. 35-36)

No tempo term, 6/8



Ex. F31 - Metrically Out-Of-Phase Hemiole, Partial
(Op. 72/3, m. 39-40)

Nicht schnell und sehr ausdrucksvoll, 6/4



Ex. F32 - Supermetrically Out-Of-Phase Hemiole, Partial
(Op. 9/10, m. 10-11)

Presto, 3/4

[I] [II] [III] [IV]

m. 9 m. 12

Ex. F33 - Overlapped Hemioles, Out-Of-Phase and In-Phase
(Op. 56/6, m. 6-7-8)

Adagio, 3/4

[I]

m. 5 m. 9

Ex. F34 - Overlapped Hemioles, In-Phase and Out-Of-Phase
(Op. 28/2, m. 13-14-15)

Einfach, 6/8

[I]

m.13 m.16

Ex. F35 - Initial Thematic Reverse Hemioles
(Op. 6/10, m. 1-9f)

Balladenmässig. Sehr rasch.

etc.

m.1 m.4 m.5 m.9

etc.

Ex. F36 - Initial Thematic Reverse Hemioles
(Op. 120/I, m. 1-3, 5f)

Ziemlich langsam. (♩ = 52.)

The score is written for a full orchestra and includes the following parts and markings:

- Flute (Fl):** *f*, *pp*, *cresc.*, *sf*
- Oboe (Ob):** *f*, *pp*, *cresc.*, *sf*
- Clarinet (Cl):** *f*, *p cresc.*, *p*
- Bassoon (Bn):** *f*, *pp*, *cresc.*, *p*
- Horn (F) (H (F)):** *f*, *p cresc.*, *sf*
- Horn (D) (H (D)):** *f*, *pp*, *sf*
- Trumpet (F) (T (F)):** *f*, *pp*, *sf*
- Tympani (Timp.):** *f*, *pp*, *sf*
- Violin I (VI):** *f*, *pp*, *cresc.*, *sf*
- Violin II (VII):** *f*, *pp*, *cresc.*, *sf p*
- Viola (VA):** *f*, *pp*, *cresc.*, *sf p*
- Cello (C):** *f*, *pp*, *cresc.*, *sf*
- Double Bass (DB):** *f*, *pp*, *cresc.*, *sf*

Additional markings include *alc. Saite* for Violin I and Violin II, and *mi. 1* and *mi. 5* at the bottom.

Ex. F37 - Non-Initial Thematic Hemioles, Partial (Op. 105/I, m. 2, 5, 7)

Mit leidenschaftlichem Ausdruck. $\text{♩} = 68$.

Allegro

p

crsc.

p

m. 1

m. 4

m. 7

Ex. F38 - Non-Initial Thematic Hemioles (Op. 38/II, m. 3-4, 5-6)

Larghetto. ($\text{♩} = 66$.)

Ex. F39 - Non-Initial Thematic Hemioles
(Op. 38/III, m. 5-6)

SCHERZO.
Molto vivace. (♩. = 88.)

Fl
Ob
Cl
Bn
H(D)
H(E^b)
Tr
(D)
Tb
Timp
VI
VII
VA
VC
DB

Molto vivace.
m. 1

m. 9

Ex. F40 - Non-Initial Thematic Hemioles, Partial (Op. 12/2, m. 5, 6;
see m. 2, 4 also)

Sehr rasch.

This musical score is for measures 5 and 6 of a piece in 8/8 time. The tempo is marked 'Sehr rasch.' (Very fast). The key signature has three flats. The notation is in a grand staff with treble and bass clefs. Measure 5 contains a complex rhythmic pattern with many beamed eighth and sixteenth notes. Measure 6 continues this pattern. Below the staff, there are markings: '2w.' under measure 5, 'm. 1' under measure 6, and 'm. 5' under the final measure of the system. A dotted line with an 'N' is also present under measure 6.

This musical score is for measures 6 and 8 of the same piece. It continues the rhythmic patterns from the previous system. Below the staff, there are markings: 'm. 6' under the first measure of this system and 'm. 8' under the second measure. A double slash (//) is written to the left of the first measure.

Ex. F41 - Hemiolioic Saturation (Presto, Op. 22, Anhang; m. 1-8f)

Passionato.

pp molto teneramente

m. 1 *Pa* *

m. 4

m. 5 *Pa* *

m. 8 etc.

Ex. F42a, b, c and d - Hemiolic Waltz Bass Variants
 (Op. 9/1, a: m. 28-29, partial; b: m. 47-48, partial,
 m. 49-50, unanimous; c: m. 114-119, slant; d: into
 m. 122-127, slant)

. . . Presto, 3/4

a

sempre *ff*

sf

m. 28

m. 31

b

mf

sempre *col. ad.*

m. 47

m. 50

c

Presto. *rinforzando*

ad.

m. 114

etc.

m. 121

d

stringendo

ff

m. 122

etc.

m. 129

Ex. F43a, b and c - Special Case: Heterophonic Hemioles
 (Scherzo, Op. 14, Anhang; a: m. 64-67; b: m. 80-83;
 c: m. 96-99)

Vivacissimo, 6/8

a

Trio.

sempre tenuto!

p m. 64 m. 67

b

p m. 80 m. 83

across barline

c

p m. 96 m. 99

Ex. F44 - Special Case: Nested Hemioles (Op. 4/VI,
m. 20-21, 24-25)

Allegro, 3/4

Typical hemiole

Musical notation for measures 16 to 19. The notation includes a treble and bass staff. Above the staff, there are rhythmic symbols: a vertical line, a half note, a quarter note, a half note, and a quarter note. The music features a series of eighth notes in the right hand, with a crescendo marking. The left hand has a bass line with some rests. Measure numbers m. 16 and m. 19 are indicated at the bottom.

Nested hemiole

Musical notation for measures 20 to 23. The notation includes a treble and bass staff. Above the staff, there are rhythmic symbols and the word "etc.". The music features a series of eighth notes in the right hand, with a piano marking (p) and a crescendo marking. The left hand has a bass line with some rests. Measure numbers m. 20 and m. 23 are indicated at the bottom.

Nested hemiole

Musical notation for measures 24 to 27. The notation includes a treble and bass staff. Above the staff, there are rhythmic symbols and the word "etc.". The music features a series of eighth notes in the right hand, with a piano marking (p) and a crescendo marking. The left hand has a bass line with some rests. Measure numbers m. 24 and m. 27 are indicated at the bottom.

Ex. F45 - Special Case: Brief Meter Change Following a Hemiole (Op. 41#3/I, m. 86-87, 88-89)

Allegro molto moderato, 3/4

VI a tempo
VII
VA
C
a tempo
m. 84
dim.
pp
m. 90

Ex. F46 - Special Case: Brief Meter Change Following a Hemiole (Op. 21/4, m. 184-85, 186-89)

Ballmässig, sehr munter . . . Noch schneller, 3/4

m. 178
m. 183

ad libitum
Erstes Tempo.
m. 184
m. 190

Ex. F47 - A Characteristic Pattern (Op. 21/7, m. 7-8)



Ex. F48 - A Characteristic Pattern (Op. 28/II, m. 5, 6, 7)

Einfach, 6/8

RH

This musical score is for a piano piece, measures 5-8. It is written in treble and bass staves with a key signature of three sharps (F#, C#, G#). The tempo is marked 'Einfach, 6/8'. The music features a complex, rapid pattern of eighth and sixteenth notes. Measure 5 is marked 'm. 5' and measure 8 is marked 'm. 8'. The right hand (RH) is indicated by a bracket on the left side of the score.

Ex. F49 - Static Harmonic Rhythm in a Hemiole
(Op. 9/19, m. 1-2)

The musical score is for a piano accompaniment. It features a treble staff and a bass staff. The key signature is two flats (B-flat and E-flat), and the time signature is 3/4. The tempo marking is "Con moto." with a bracket above the first two measures. The first measure is marked "mf" and the second measure is marked "mp". The score shows a static harmonic rhythm in a hemiole. Below the score, there is a handwritten "HR" followed by a diagram consisting of a horizontal line with a vertical line at the end, and a bracket underneath. To the right of the diagram is the text "m. 4".

Con moto.

mf

mp

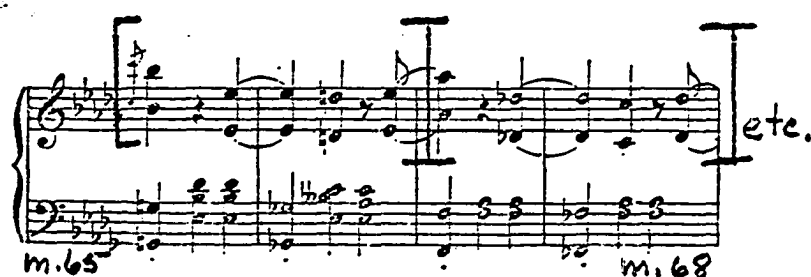
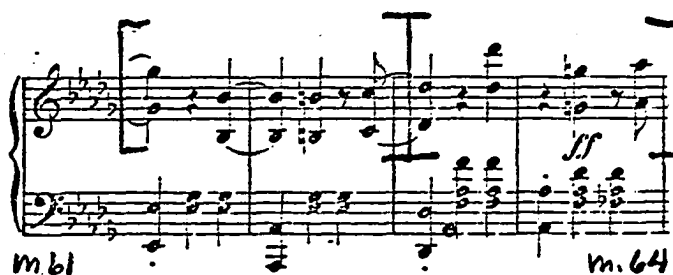
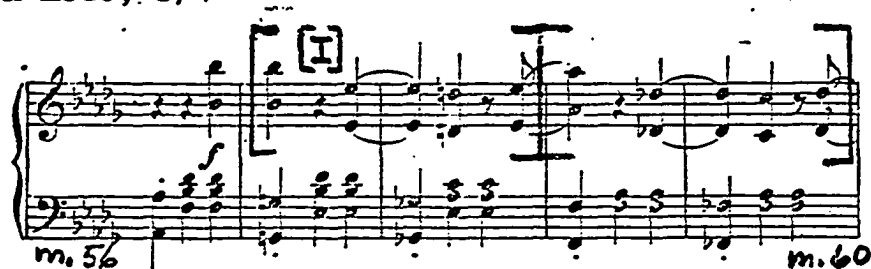
m. 1 *ad.*

HR

m. 4

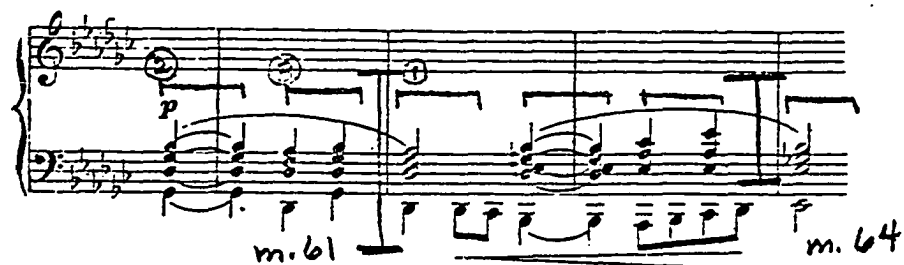
Ex. F50 - A Characteristic Pattern (Op. 9/19, m. 57-58 etc.)

Con moto, 3/4



Ex. F51 - A Characteristic Pattern (Op. 12/4, into m. 61-64)

Mit Humor, 3/4



Ex. F52 - A Characteristic Pattern (Op. 54/III,
into m. 237)

Allegro vivace, 3/4

③ ① ②

TUTTI

Fl

Ob

Cl

Bn

H
(E)

Solo
Pf

VI

VII

VA

C

DB

divisi

m. 235

m. 239

Ex. F53 - A Characteristic Pattern (Op. 124/4, m. 3-4, 5-6)

Lebhaft.

f *sf*

Mit Pedal.

m. 1 m. 8

Ex. F54 - Polonaise Cadence (Op. 120/III, Trio, m. 112¹)

Lebhaft, 3/4

1.

Fl

Ob

Cl

Bn

H (F)

H (D)

T (F)

Timp

VI

VII

VA

C

DB

m. 105¹

m. 112¹

V₇ ----- I

278

Ex. F55 - A Characteristic Pattern (Ravel, *La Valse*, rehearsal point 94f)

The musical score is for a rehearsal point in Maurice Ravel's *La Valse*. At the top, a characteristic rhythmic pattern is shown: a sequence of eighth and sixteenth notes, often beamed together. The score below is for a full orchestra and vocal soloists. The instruments listed on the left are: Flute (Fl.), Oboe (Ob.), Clarinet (Clar.), Bassoon (Bsn.), Horn (Hr.), Trumpet (Tromp.), Trombone (1st Trb., 2nd Trb.), Tuba, Timpani (Timp.), Cymbals (Cym.), Violin (Viol.), Viola, Cello (Cello), and Double Bass (C. B.). The vocal parts are for Soprano (Sopr.), Alto (Alto), and Tenor (Tenor). The score is marked with '94f' and includes dynamic markings like 'p' and 'f'.

Ex. F56 - Metrical Elements in Partial Hemioles (Op. 109/8, m. 59-60, P^o)

Lebhaft, 3/4

pattern

p^o

p

S^o

p

m. 57

etc.

etc.

m. 64

The image shows a musical score for a piano (P^o) and a solo (S^o) part. The tempo is 'Lebhaft' and the time signature is 3/4. The score is for measures 59 and 60. A 'pattern' is indicated above the piano part, showing a sequence of eighth notes. The piano part (P^o) is in the upper staff, and the solo part (S^o) is in the lower staff. The piano part starts with a piano (p) dynamic. The solo part starts with a piano (p) dynamic. The score includes various musical notations such as notes, rests, and dynamic markings. The piano part has a melodic line with some grace notes. The solo part has a more rhythmic line with some grace notes. The score is marked with 'm. 57' and 'm. 64' to indicate the measure numbers. There are also 'etc.' markings indicating that the pattern continues.

Ex. F57 - Slurs Marking Half-Hemioles (Op. 85/9,
m. 39-42, P^o part)

So schnell als möglich, 3/8

slurs

P^o

pp (Mit Verschiebung.)

m. 39

etc.

S^o

pp (Mit Verschiebung.)

m. 39

etc.

m. 42

The image shows a musical score for two parts: Piano (P^o) and Solo (S^o). The Piano part is in the upper system, and the Solo part is in the lower system. Both parts are marked 'pp (Mit Verschiebung.)'. The Piano part has slurs over groups of notes, with a handwritten 'etc.' at the end. The Solo part also has slurs and a handwritten 'etc.' at the end. Both parts are marked 'm. 39' to 'm. 42'. The tempo is 'So schnell als möglich, 3/8'.

Ex. F58 - A Characteristic Pattern (Op. 86/II, m. 39-40,
43-44; abridged score)

Ziemlich langsam, doch nicht schleppend, 3/4

[I]

Fl I *p dolce*

Ob *p dolce*

Cl *p dolce*

Ba *p dolce*

H (F) *p dolce*

VI *arco* *getheilt* *p dolce*

VII *arco* *p dolce*

VA *p dolce*

C *arco* *p dolce* *pizz.*

DB *p*

m. 38 m. 41 m. 44

B^b I VII₇ / V

cont.

Ex. F58, continuation

[I]

pp

pp

m. 42

IV VII4 I₆
3b

m. 44

Ex. F59 - Mid-Hemiole Emphasis
(Op. 38/II, m. 21-22)

Larghetto, 3/8

The musical score is for a 12-piece orchestra, including Flute (Fl), Oboe (Ob), Clarinet (Cl), Bassoon (Bn), Trumpet (Tn), Violin I (VI), Violin II (VII), Viola (VA), Cello (C), Double Bass (DB), and a Double Bassoon (DB). The tempo is marked 'Larghetto, 3/8'. The score is divided into measures 17, 21, and 23. The key signature is B-flat major. The score includes various dynamic markings such as 'cresc.', 'sf', and 'p'. A 'NB' (Nota Bene) marking is present above the Flute staff in measure 21. The score is written for a 12-piece orchestra, including Flute (Fl), Oboe (Ob), Clarinet (Cl), Bassoon (Bn), Trumpet (Tn), Violin I (VI), Violin II (VII), Viola (VA), Cello (C), Double Bass (DB), and a Double Bassoon (DB). The tempo is marked 'Larghetto, 3/8'. The score is divided into measures 17, 21, and 23. The key signature is B-flat major. The score includes various dynamic markings such as 'cresc.', 'sf', and 'p'. A 'NB' (Nota Bene) marking is present above the Flute staff in measure 21.

Ex. F60 - Use of Stress Markings (Op. 97/I, m. 159-60)

Lebhaft, 3/4

NB
↓

Fl
Ob
Cl
Bn
H
Tpt
Timp
VI
VII
VA
C
DB

m. 156 m. 162

Ex. F61a - A Characteristic Pattern (Op. 54/III,
m. 181-82, 183-84)

Allegro vivace, 3/4

The musical score is for a piano and string ensemble. The piano part (Pf) is in the upper system, featuring a complex melodic line with many beamed sixteenth and thirty-second notes, and a descending eighth-note scale. Above the piano staff, there are two large curved lines with downward-pointing arrows, indicating specific melodic patterns. The string parts (VI, VII, VA, C, DB) are in the lower system, providing harmonic support with sustained notes and some rhythmic patterns. The score is divided into two systems, with measures 181-182 in the first system and measures 183-185 in the second system. The tempo is Allegro vivace and the time signature is 3/4.

Pf

VI

VII

VA

C

DB

m. 181

m. 185

Ex. F61b - A Characteristic Pattern (Op. 54/III, m. 189-196)

VI
VII
VA
C
DB

pp
pp
pp
pp
pp

etc.

m. 188 m. 196

Ex. F61c - A Characteristic Pattern (Op. 54/III, m. 205-212)

Bn
Pf

SOLO.
etc.

m. 205 m. 212

(strings tacet)

Ex. F61d - A Characteristic Pattern (Op. 54/III, m. 213-216)

Musical score for "The Rose Tree" (No. 213) from the "Songs of the Sea" by J. S. G. The score is in 2/3 time and features a key signature of one sharp (F#). The instruments and parts are:

- Fl.** (Flute): *pp*
- Clar.** (Clarinet): *pp*
- Fag.** (Bassoon): *pp*
- Cor.** (Cornet): *pp*
- Piano**: *p* (first system), *pp* (second system)

 The score is divided into two systems. The first system contains measures 1 through 4, and the second system contains measures 5 through 8. The piano part includes a melodic line in the right hand and a harmonic line in the left hand. The woodwind parts provide harmonic support with sustained notes and moving lines. The score concludes with a double bar line and a final measure.

Ex. F61e - A Characteristic Pattern (Op. 54/III, into
m. 237)

⑤ ① ②

TUTTI

Fl

Ob

Cl

Bn

H
(E)

Solo
Pf

VI

VII

VA

C

DB

divisi

m. 235

m. 239

Ex. F62 - Hemiolic Stress Markings (Op. 60/II, m. 159-62)

Lebhaft, 3/4

Pedal-Piano

m. 155

m. 163

Ex. F63 - Metrical Elements in Partial Hemioles
(Op. 97/I, m. 153-56)

Lebhaft, 3/4

Fl
Ob
Cl
Bn
H
(E)
T+
(E)
Timp
VI
VII
VA
C
DB

m. 153
m. 157

viola pattern

Ex. F64 - Metrical Elements in Partial Hemioles (Op. 99/III of Album, m. 3-4; 7-8)

Ziemlich langsam, sehr gesangvoll.

p

Mit Pedal. m. 1

↑ NB

↑ NB m. 8

Ex. F65 - Mid-Hemiole Emphasis (Op. 9/13, m. 8)

Agitato, 6/4

m. 7 *ad.*

* *ad.*

* *ad.*

* *ad.*

* *ad.*

↑ NB

↑ NB

m. 10

Ex. F66 - Metrical Elements in Partial Hemioles
(Op. 21/7, m. 7-8)

Äusserst rasch. d. = 118.

f *ad. m. 1* *f* *m. 4*

f *m. 5* *f* *m. 8*

NB

Ex. F67 - Metrical Elements in Partial Hemioles
(Op. 58/3, m. 5-6)

Lebhaft.

Pedal-Piano

f *m. 1* *f* *m. 4*

sequential pattern

f *m. 5* *f* *m. 8*

Ex. F68 - Static Harmonic Rhythm in Hemioles (Op. 4/III, m. 23-24)

Allegro marcato, 3/4

HR 1 d. 1 d. 1

Ex. F69 - Placement of Hemiole Relative to the Bar: Ambiguous Onset of Emphasized Hemiolitic Construction (Op. 17/I, m. 245-47)

Durchaus fantastisch und leidenschaftlich vorzutragen, C

Ex. F70 - Overlapped Hemioles, Out-Of-Phase and In-Phase (Op. 21/8, m. 291-92)

Munter, nicht zu rasch, 3/4

[I]

m. 291

m. 297

Ex. F71 - Out-Of-Phase Hemioles in Imitative Texture (Op. 58/3, m. 66-67, 70-71)

Lebhaft, 3/4

Pedal-Piano

m. 65

m. 72

Ex. F72 - Slant Hemioles, Extended Passage (Op. 9/21, m. 241-267)

Vivo . . . Più stretto, 3/4

The musical score is written for piano and treble staves. It consists of three systems of music, each with a treble staff and a piano staff. The first system (m. 241-251) includes markings 'sempre ff col 2d.', 'sempre', and 'stringendo'. The second system (m. 253-262) includes 'ff possibile'. The third system (m. 263-267) continues the passage. The score is in 3/4 time and is marked 'Vivo . . . Più stretto'.

Ex. F73 - Mid-Hemiole Emphasis (Op. 21/3, m. 123-26f)

(Intermezzo) Rasch und wild, 6/8

Handwritten musical score for Ex. F73, measures 123 to 126. The score is in 6/8 time and features a piano (*p*) dynamic. A 'NB' (Nota Bene) annotation with a downward arrow points to the first measure. The notation includes various rhythmic figures and accidentals. The piece concludes with 'etc.' and a small diagram below the staff.

Ex. F74 - Mid-Hemiole Emphasis (Op. 14/II, m. 9-10)

Molto comodo, 3/4

Handwritten musical score for Ex. F74, measures 9 to 12. The score is in 3/4 time and features a piano (*p*) dynamic. A 'NB' (Nota Bene) annotation with an upward arrow points to the first measure. The notation includes various rhythmic figures and accidentals. The piece concludes with 'etc.' and a small diagram below the staff.

Ex. F75 - Mid-Hemiole Emphasis (Op. 54/III, m. 777-78)

Allegro vivace, 3/4

PF

VI

VII

VA

VB

DB

m. 775

m. 778

POLO

NB

The musical score is for piano (PF) and strings (VI, VII, VA, VB, DB). The piano part features a melodic line with a slur over measures 775-778 and a dynamic marking of *mf*. The strings play a rhythmic pattern of eighth notes. A bracket labeled 'POLO' is placed below the string parts, spanning measures 775-778. A 'NB' (Nota Bene) marking with a downward arrow points to the piano's melodic line in measure 778.

Ex. F76 - Use of Stress Markings (Op. 1/Finale, m. 63-70)

Vivace, 6/8

The musical score is written for piano in 6/8 time, marked Vivace. It consists of three systems of staves, each with a treble and bass clef. The first system covers measures 63 to 66. The second system covers measures 67 to 70, with a double bar line and repeat sign at the beginning. The third system covers measures 71 to 73, also with a double bar line and repeat sign at the beginning. The score includes various stress markings (accents) and dynamic markings: *mf* (mezzo-forte) at measure 67, *crescendo* across measures 68-70, and *ff* (fortissimo) at measure 71. The key signature has one flat (B-flat). The notation includes eighth and sixteenth notes, rests, and slurs.

Ex. F77 - Hemiolic Beaming (Op. 63/II, m. 226-27)

Lebhaft, doch nicht zu rasch, 3/4

Violin (V), Cello (C), and Piano (Pf) parts. The score includes a 'cresc.' (crescendo) marking in the Violin and Cello parts, and a 'Pw.' (Piano) marking in the Piano part. The measures are labeled m. 224, m. 229, and m. 229.

Ex. F78 - Hemiolic Beaming, Reverse Hemiole
(Op. 4/V, m. 32, 35)

Allegro moderato, 3/4

Violin (V) and Piano (Pf) parts. The score includes a 'cresc.' (crescendo) marking in the Violin part. The measures are labeled m. 29, m. 32, m. 33, and m. 36.

APPENDIX G

Examples for Chapter IX, Other Anomalous Features

Ex. G1 - Metrical Flexing (Op. 12/4, m. 68)

Mit Humor, 3/4

The image displays a musical score for a piano piece, specifically focusing on measures 61 through 72. The score is written for two staves, likely representing the left and right hands. The key signature is B-flat major (two flats), and the time signature is 3/4. The notation includes various musical symbols such as notes, rests, and dynamic markings. A piano (p) marking is present at the beginning of the first system. The score is divided into two systems by a double bar line. The first system contains measures 61 and 66, while the second system contains measures 67 and 72. A large, hand-drawn arrow points from the right margin towards the music in measure 67. The annotations 'm.61', 'm.66', 'm.67', and 'm.72' are written in a handwritten style next to their respective measures.

Ex. G2 - Metrical Flexing (Op. 56/2, m. 22)

Mit innigem Ausdruck, 12/8

(Sop. I and Sop. II in canon at the unison after 1 bar)

Pedal-Piano

m. 19

m. 22

m. 23

6/8

12/8

Ex. G3a, b and c - Metrical Flexing (Op. 14--a: III, 1st Ed., m. 15; b: IV, 2nd Ed., m. 8; c: IV, Instructive Edition, m. 8)

Presto possibile, 6/16

a

m. 8

m. 17

Presto possibile, 2/4

b

m. 5

m. 9

cont.

Ex. G3, continuation

Presto possibile, 2/4

c

m. 5

m. 7

m. 9

Ex. G4 - Metrical Flexing (Op. 9/1, m. 101)

Quasi maestoso

. . . Più moto

. . . Animato, 3/4

8.....

m. 99

m. 106

Presto. rinforzando

con forza

rilevato

Qw.

Qw.

m. 116

m. 117

stringendo

m. 127

m. 128

m. 139

Ex. G5 - Unmetered Passage (Op. 1, ABEGG theme, into m. 1-2; Finale, m. 74, unmetered)

Thema.

Animato. M.M. ♩ = 108.

mf

m. 1

A B^(b) E G G

Vivace, 6/8

ad libitum

a tempo

p

cre- - ren-

m. 72

*Q.ω. **

m. 76

Ex. G6 - Unmetered Passage (Op. 11/III, m. 167)

Intermezzo: lento, alla burla, ma pomposo, 3/4

Handwritten musical score for a piece titled "ad libitum scherzando". The score is written on two staves, with the upper staff featuring a treble clef and the lower staff a bass clef. The key signature is one sharp (F#). The tempo is marked "ad libitum scherzando". The score includes various musical notations, including notes, rests, and dynamic markings such as "f" (forte) and "p" (piano). A section of the score is marked "Presto" and includes a tempo change to "lento". The score concludes with a double bar line and a final note.

↑avoiding A-A-E

Ex. G7 - Unmetered Passage (Op. 8, m. 1)

Prestissimo.....

m.1

p senza tempo

p

ff

ad. *ad. *

Ex. G8a - Compound Motion in a Simple Meter (Op. 14/II, 1st Ed., 2/4, m. 1-4 and Var. II, m. 1-4, 2/4 notation, 6/8 motion; with Clara Schumann's note from the Instructive Edition for m. 1)

QUASI VARIAZIONI.
Andantino de Clara Wieck. ♩ = 84.

m. 1 m. 4

VAR. II. *
Moderato.

m. 1 m. 4

*) Altertümliche Schreibweise; lies!
Antiquated way of writing; play thus:
Ancienne notation; lire:

Ex. G8b - Compound Motion in a Simple Meter (Op. 14/II, 1st Ed., Var. II, m. 17-20, 2/4 notation, 2/4 + 6/8 motion)

m. 17 p m. 20 espressivo

Ex. G9 - Compound Motion in a Simple Meter (Op. 15/1, m. 1-8, 2/4 notation, 6/8 motion)

"Von fremden Ländern und Menschen," 2/4

Ex. G10 - Compound Motion in a Simple Meter (Op. 1, Var. III, into m. 1-2, 3/4 notation, 18/16 motion)

Ex. G11 - Polymeter: 2/4 + 6/8 (Op. 5/3, 1st Ed.,
m. 1-8 shown; polymeter for the entire variation,
32 bars)

Espressivo

sempre p

marcato f

m. 1

m. 4

m. 5

m. 8

Ex. G12 - Polymeter: 6/8 + 2/4 (Op. 5/5, 1st Ed.,
m. 1-8 shown; polymeter for the entire variation,
16 bars)

sempre p

m. 1

m. 4

m. 5

m. 8

Ex. G13 - Polymeter: A Staggered Encroachment of 3/2
 into C (Op. 61/IV, m. 451f)
 Allegro molto vivace, C

Handwritten annotations: $\downarrow \text{NB } 3/2$ (twice), L'istesso tempo. (multiple times), V. 444 (top right), V. 445 (bottom right).

The musical score is written for a large ensemble, including Flute (Fl), Clarinet (Cl), Bassoon (Fg), Horn (Hr), Trumpet (Tr), Trombone (Tb), Timpani (Timp), Violin I (VI), Violin II (VII), Viola (VIA), Violoncello (VCI), and Double Bass (DB). The tempo is marked 'Allegro molto vivace, C'. The score features complex rhythmic patterns with many beamed notes and rests, indicating a fast and intricate piece. The notation includes various musical symbols such as clefs, key signatures, and dynamic markings. The score is divided into measures by vertical bar lines, and the instruments are listed at the bottom of the page.

Ex. G14 - Simplistic Alternative Motion: triplet in half notes in C
(Op. 23/4, m. 43)

Einfach, C

Handwritten musical score for measures 41 to 44. The score is in C major, 23/4 time. It features a piano (p) and pianissimo (pp) dynamic range. A triplet of half notes is marked in measure 43. The tempo is marked 'Adagio.' above measure 43. The score is labeled 'm. 41' and 'm. 44' at the bottom.

Ex. G15 - Simplistic Alternative Motion: quadruplet sixteenths in 6/8
(Op. 21/3, m. 193-94)

Intermezzo: Rasch und wild, 6/8

Handwritten musical score for measures 191 to 195. The score is in D major, 6/8 time. It features a quadruplet of sixteenth notes in measure 194. The tempo is marked 'ritard.' above measure 191. The score is labeled 'm. 191' and 'm. 195' at the bottom.

Ex. G16 - Simplistic Alternative Motion: duplets, then quadruplets in 6/8; lead-in and lead-out of a 16-bar anomalous passage (Op. 80/I, anomalous bars 402-417)

Sehr lebhaft, 6/8

Handwritten musical score for measures 401 to 407. The score is written for two staves (treble and bass clef) and includes a piano (p) dynamic marking. The music features a lead-in and lead-out of a 16-bar anomalous passage. The notation includes duplets and quadruplets in 6/8 time. A large arrow above the staff indicates the direction of the passage. The measure numbers m. 401 and m. 407 are written below the staff.

Handwritten musical score for measures 408 to 413. The score is written for two staves (treble and bass clef) and includes a piano (p) dynamic marking. The music features a lead-in and lead-out of a 16-bar anomalous passage. The notation includes duplets and quadruplets in 6/8 time. A large arrow above the staff indicates the direction of the passage. The measure numbers m. 408 and m. 413 are written below the staff.

cont.

Ex. G16, continuation

Ex. G16, continuation. The score shows a continuation of a musical piece, marked with measures 414 and 420. The notation includes various musical symbols such as notes, rests, and dynamic markings.

Ex. G17 - Simplistic Alternative Motion: duplet eighths and quadruplet sixteenths in 6/8 (Op. 110/I, m. 53-54)

Bewegt, doch nicht zu rasch, 6/8

Ex. G17 - Simplistic Alternative Motion: duplet eighths and quadruplet sixteenths in 6/8 (Op. 110/I, m. 53-54). The score is marked with measures 52 and 55. The notation includes various musical symbols such as notes, rests, and dynamic markings.

Ex. G18 - Simplistic Alternative Motion: normal motion as if anomalous
 (Op. 32/III, a: m. 1f, consistent 12/16 motion; b: anomalous bar 96)

a

Sehr rasch und mit Bravour. $\text{♩} = 144$.

slucato

m. 1

m. 4

. . . Noch rascher (2/4

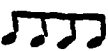
b

m. 94

m. 97

Ex. G19 - Blurring Alternative Motion: accompaniment 3x4
(Op. 44/II, into m. 30f)

In modo d'una Marcia. Un poco largamente, ♩

VII + VA - 

Piano - 

[I]



VI *arco* *espress. ma sempre p*

VII *arco* *espress. ma sempre p*

VA *arco* *espress. ma sempre p*

C *arco* *espress. ma sempre p*

Pf *sempre p e legato* 3

m. 30

[VIII]



etc.

etc.

pp

m. 33 m. 37

Ex. G20 - Blurring Alternative Motion: duplet melody with triplet accompaniment
(Op. 61/IV, m. 474-81, notated polymeter)

Allegro molto vivace, ♩ ; VI & VII into $3/2$, m. 451; Fl, Ob, Cl, Bn, VA, 'C
into $3/2$, m. 453

The musical score is presented in a standard staff format. The instruments are listed at the top: Fl, Ob, Cl, Bn, VA, V. The time signature is $4/4$ for measures 474-477 and $3/2$ for measures 478-481. The score includes a duplet melody and a triplet accompaniment. A 'Timp' (Timpani) part is also indicated. The measures are numbered 474, 475, 476, 477, 478, 479, 480, and 481. The notation includes various musical symbols such as notes, rests, and dynamic markings.

cont.

Ex. G20, continuation

Handwritten musical score for Ex. G20, continuation. The score is written on ten staves, organized into two systems of five staves each. The first system is marked with a bracket and the number $\frac{9}{2}$ above it. The notation includes various musical symbols such as notes, rests, and dynamic markings. The second system includes the markings *arco* and *sm. 478* on the first staff, and *m. 481* on the last staff. The score is oriented horizontally on the page.

Ex. G21 - Simplistic and Blurring Alternative Motion (Op. 9/5, m. 1-32)

Adagio.

sotto voce

senza tim.

m. 1

m. 6

rit.

m. 12

m. 16

cont.

Ex. G21, continuation

Più lento molto teneramente.

This musical score is for a piano piece, measures 17 to 32. It is written in a key with two flats (B-flat and E-flat) and a 3/4 time signature. The tempo and mood are indicated as "Più lento molto teneramente." The score is divided into three systems, each with a grand staff (treble and bass clefs).
- The first system (measures 17-21) begins with a *mf* dynamic. It features a complex, flowing melody in the right hand with many triplets and sixteenth notes, and a more rhythmic accompaniment in the left hand. A *rit.* marking appears at the end of the system.
- The second system (measures 22-26) starts with a *pp* dynamic. The right hand continues with intricate patterns, while the left hand provides harmonic support. A *rit.* marking is present at the beginning of this system.
- The third system (measures 27-32) concludes the piece. The right hand's melody becomes more melodic and less technically demanding, while the left hand continues with sustained chords and simple rhythmic figures. The piece ends with a final chord in the right hand.

m. 17

m. 22

m. 27

m. 32

Ex. G22 -

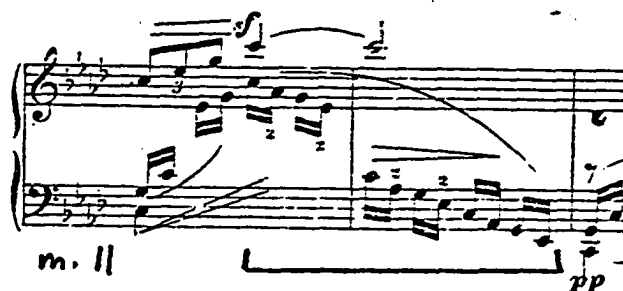
Unconventional
Ties, Rests,
A Stemless
Note (Original
2nd Scherzo
for Op. 14,
into m. 31,
35, 39, & 43)

Vivacissimo,
6/8

The musical score consists of four systems of piano music. The first system (m. 26) is in D major and includes the instruction 'più vivo' and 'riltard.' The second system (m. 31) is in D major. The third system (m. 32) is in D major. The fourth system (m. 36) is in D major. The fifth system (m. 37) is in D major. The sixth system (m. 42) is in B-flat major. The seventh system (m. 43) is in B-flat major. The eighth system (m. 47) is in B-flat major. The score includes various musical notations such as ties, rests, and stemless notes, as indicated by the text on the left.

Ex. G23 - Metrical Beaming, Options (Op. 12/5, m. 11-12)

Mit Leidenschaft, 2/4

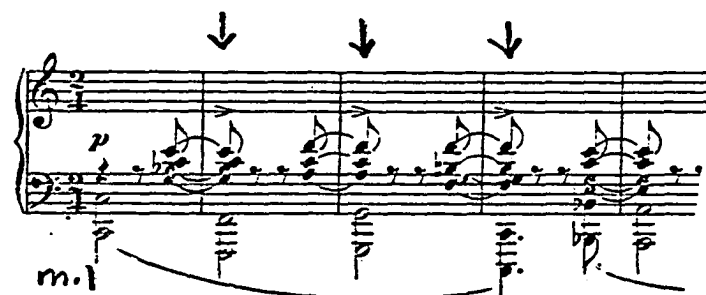


Ex. G24 - Non-Metrical Beaming (Op. 4/I, m. 1-2)



Ex. G25 - Impractical Stress Markings
(Op. 5/2, 1st Ed., m. 2f)

Un poco Adagio



Ex. G26 - Impractical Stress Markings (Op. 14/III, 1st Ed.,
m. 30-31)

Presto possibile, 6/16

m. 27

m. 32

Ex. G27 - Impractical Swell (Op. 54/III, m. 208 into 209)

Allegro vivace, 3/4

B $\flat$

PF

VI

VI

VA

C

DB

SOLO.

m. 205

m. 211

APPENDIX H

Listing of Schumann's Instrumental Works

There follows, for reference convenience, a list by opus-number sequence of the instrumental music by Schumann which is the subject of this study. The dashed line, showing a break in the continuity of opus numbers, represents vocal music.

<u>Opus</u>	<u>Date</u>	<u>Title</u>
1	'30	<u>Variations on the name ABEGG</u>
2	'29-'31	<u>Papillons</u> (12)
3	'32	<u>Studies on Caprices of Paganini</u> (6)
4	'32	<u>Intermezzi</u> (6)
5	'33	<u>Impromptus</u> on a theme by Clara Wieck (12) (with a second edition, 1850)
6	'37	<u>Davidsbündler Dances</u> (18) (with a second edition, 1851)
7	'30	<u>Toccata</u> (revised, 1833)
8	'31	<u>Allegro</u>
9	'34-'35	<u>Carnaval</u> (Variations on ASCH) (21)
10	'33	<u>Concert-Studies on Paganini Caprices</u> (6)
11	'33-'35	<u>Grand Sonata #1</u> , in F# minor (4 movements)
12	'37	<u>Fantastic Pieces</u> (8)

- 13 '34 Symphonic Études (Études in the form of variations) (12; five additional variations published posthumously)
- 14 '35 Grand Sonata #3, in F minor (Concerto without orchestra, 1st ed., 3 movements; 2nd ed., 4 movements, including one of the two Scherzos originally intended for this work)
- 15 '38 Scenes of Childhood (13)
- 16 '38 Kreisleriana (8)
- 17 '36 Fantasy (3 movements)
- 18 '39 Arabesque
- 19 '39 Flower Piece
- 20 '39 Humoresque
- 21 '38 Novelettes (8)
- 22 '33-'38 Sonata #2, in G minor (4 movements)
- 23 '39 Night Pieces (4)
-
- 26 '39 Viennese Carnival Jest (5)
-
- 28 '39 Romances (3)
-
- 32 '38-'39 Scherzo, Gigue, Romance, Fughetta (4)
-
- 38 '41 Symphony #1, in B^b ("Spring") (4 movements)
-
- 41 '42 Three String Quartets:
 #1 in a minor (4 movements)
 #2 in F (4 movements)
 #3 in A (4 movements)
-
- 44 '42 Piano Quintet in E^b (4 movements)
-
- 46 '43 Andante and Variations for Two Pianos
 (original version for two pianos, two
 'celli, and horn)
- 47 '42 Piano Quartet in E^b (4 movements)
-

- 52 '41 Overture, Scherzo, and Finale for orchestra
(3 movements)
--
- 54 Piano Concerto in A minor (3 movements)
'41, Allegro
'45, Intermezzo and Finale
--
- 56 '45 Canonic Studies for Pedal Piano (6)
--
- 58 '45 Sketches for Pedal Piano (6; based on Bach
Chaconne)
--
- 60 '45 Fugues on BACH for Pedal Piano (6)
--
- 61 '45-'46 Symphony #2, in C (4 movements)
--
- 63 '47 Piano Trio #1, in D minor (4 movements)
--
- 66 '48 Oriental Sketches, for piano four-hands (6)
--
- 68 '48 Album for the Young (43)
--
- 70 '49 Adagio and Allegro, for horn and piano
--
- 72 '45 Four Fugues, for piano
--
- 73 '49 Fantasy Pieces for clarinet and piano (3)
--
- 76 '49 Four Marches, for piano
--
- 80 '47 Piano Trio #2, in F (4 movements)
--
- 81 '47-'48 Overture to the opera Genoveva
--
- 82 '48-'49 Forest Scenes, for piano (9)
--
- 85 '49 Twelve Pieces for Children Large and Small,
for piano four-hands (12)
--
- 86 '49 Concert Piece for 4 horns and orchestra
--
- 88 '42 Fantasy Pieces for piano, violin and
cello (4 movements)
--
- 92 '49 Introduction and Allegro Appassionato,
for piano and orchestra
--
- 94 '49 Three Romances, for oboe and piano
--

- 97 '50 Symphony #3, in E^b ("Rhenish") (5 movements)
-
- 99 '32-'49 Leaves of Different Colors, for piano
- 100 '50-'51 Overture to Schiller's Bride of Messina
-
- 102 '49 Five Folk Pieces for 'cello and piano
-
- 105 '51 Violin Sonata #1, in A minor (3 movements)
-
- 109 '51 Ball Scenes, for piano four-hands (9)
- 110 '51 Piano Trio #3, in G minor (4 movements)
- 111 '51 Three Fantastic Pieces, for piano
-
- 113 '51 Legendary Tales, for viola and piano (4)
-
- 115 '48 Overture to Byron's Manfred
-
- 118a, '53 Three Sonatas for the Young: #1 in G, for
b, c Julie; #2 in D, for Elise; #3 in C, for
Marie (each, 4 movements)
-
- 120 '41 Symphony #4, in D minor (4 movements)
(revised, 1851)
- 121 '51 Violin Sonata #2, in D minor (4 movements)
-
- 124 '32-'45 Album Leaves, for piano (20)
-
- 126 '53 Seven Pieces in the Form of Fughettas, for
piano
-
- 128 '51 Overture to Shakespeare's Julius Caesar
- 129 '50 'Cello Concerto, in A minor (3 continuous
movements)
- 130 '53 Children's Ball, for piano four-hands (6)
- 131 '53 Fantasy, for violin and orchestra
- 132 '53 Legendary Tales, for clarinet, viola, and
piano (4)
- 133 '53 Morning Songs, for piano (5)

- 134 '53 Concert-Allegro with Introduction, for
piano and orchestra
-
- 136 '51 Overture to Goethe's Hermann and Dorothea

Works Without Opus Number
Included in the Study:

- '34 5 additional variations for Op. 13, for
piano
- '35-'36 Scherzo, for piano, one of two originally
intended for Op. 14; this one was never
published as part of the sonata
- '35-'36 Presto Passionato, for piano, originally
intended as the finale of Op. 22
- '53 Overture to Scenes from Faust (Goethe)
- '52-'53 FAE Sonata for violin and piano; second
and fourth movements by Schumann were
intended for the cooperative sonata,
written with Dietrich and Brahms.
Schumann's own first and third move-
ments were restored to and published
with his original movements in 1956.
"F-A-E" was Joachim's motto: "Frei
aber einsam."