

# *current musicology*

*number 24/1977*

EDITOR-IN-CHIEF: Douglass Seaton

EDITORIAL BOARD: Thomas W. Baker, James Bergin,  
Laura DeMarco, Laurence Dreyfus,  
Paul Hawkshaw, Victoria Horn,  
Peter M. Lefferts, George Stauffer,  
Barbara Turchin

EDITORIAL STAFF: Deborah Busby, Charlotte Marie Cross,  
Timothy Gaylard, Clovis Lark,  
Ellen D. Lerner, Catherine B. Malmstrom,  
Clara Kelly Marvin, Judith J. Mender,  
Dale E. Monson, Judith E. Olson,  
Jeannie Gayle Pool, Martin H. Rutishauser,  
Lea M. Rutmanowitz, Jeanne Ryder,  
Glenn Stanley, Douglas A. Stumpf,  
Linda Williams, Deborah T. Winfield

ADJUNCT EDITORS: Asya Berger  
New York University  
Rena Mueller

EDITORIAL ADVISOR: Richard Koprowski

FACULTY ADVISOR: Leeman Perkins

Copyright © 1977, The Trustees of  
Columbia University in the City of New York  
Printed in the United States

CORRESPONDING EDITORS:

*Domestic*

John Daverio	Boston University, Boston, Mass.
Brian Taylor	Brandeis University, Waltham, Mass.
Ellen Knight	Brigham Young University, Provo, Utah
Myrl Hermann	Bryn Mawr College, Bryn Mawr, Pa.
Harrison M. Schlee	Carnegie-Mellon University, Pittsburgh, Pa.
Kenneth Gabele	Case Western Reserve University, Cleveland, Ohio
Ronald T. Olexy	Catholic University of America, Washington, D.C.
John Gordon Morris	City University of New York, New York, N.Y.
Sheila Podolak	City University of New York, Brooklyn College, Brooklyn, N.Y.
Jeffrey Giles	City University of New York, Hunter College, New York, N.Y.
Monica Grabie	City University of New York, Queens College, Flushing, N.Y.
Peter Lefferts	Columbia University, New York, N.Y.
Howard Pollack	Cornell University, Ithaca, N.Y.
Lou Reid	Florida State University, Tallahassee, Fla.
Susan Youens	Harvard University, Cambridge, Mass.
Robert A. Green	Indiana University, Bloomington, Ind.
Andrea Olmstead	Juilliard School, New York, N.Y.
William Borland	Louisiana State University, Baton Rouge, La.
Adriaan de Vries	McGill University, Montreal, Quebec, Canada
Laura Calzolari	Manhattan School of Music, New York, N.Y.
Richard Terry	Memphis State University, Memphis, Tenn.
John Nadas	New York University, New York, N.Y.
William Smialek	North Texas State University, Denton, Texas
Cecilia Van de Kamp	Northwestern University, Evanston, Ill.
Jane Duff	Pennsylvania State University, University Park, Pa.
Katherine Rohrer	Princeton University, Princeton, N.J.
Helen Baker	Rutgers University, New Brunswick, N.J.
Charles Wolterink	Stanford University, Stanford, Calif.
Roger Larsson	State University of New York at Buffalo, Buffalo, N.Y.
Debrah Smith	Tulane University, New Orleans, La.
Anne Hettinger	University of Arizona, Tucson, Ariz.
Carol Quin	University of Arkansas, Fayetteville, Ark.
Patricia Sauerbrei	University of British Columbia, Vancouver, B.C., Canada
Larry Archbold	University of California, Berkeley, Calif.
Cheryl Sprague Demmel	University of California, Los Angeles, Calif.
Kathleen Stoner	University of California, Riverside, Calif.
Margaret Crouch	University of California, Santa Barbara, Calif.
Eric Weimer	University of Chicago, Chicago, Ill.
Amzie D. Parcell	University of Cincinnati, Cincinnati, Ohio
Murl Sickburt	University of Colorado, Boulder, Colo.
Celia Fry	University of Hawaii, Honolulu, Hawaii
Alice M. Hanson	University of Illinois, Urbana, Ill.
Walter Mann	University of Iowa, Iowa City, Iowa
Martha Minor	University of Kansas, Lawrence, Kan.
Kristine Forney	University of Kentucky, Lexington, Ky.
Linda W. Claus	University of Maryland, College Park, Md.
Hugh Kerr	University of Miami, Coral Gables, Fla.
Richard James	University of Michigan, Ann Arbor, Mich.
Judith J. Warmanen	University of Minnesota, Minneapolis, Minn.
James Briscoe	University of North Carolina, Chapel Hill, N.C.
Josephine Hart	University of Oregon, Eugene, Ore.

Barbara Coeyman	University of Pennsylvania, Philadelphia, Pa.
Norman Sanger	University of Pittsburgh, Pittsburgh, Pa.
Carolyn Gresham	University of Rochester, Eastman School, Rochester, N.Y.
Harold Kjellberg	University of Southern California, Los Angeles, Calif.
Phyllis Rueb	University of Texas, Austin, Tex.
Edward Rutschman	University of Washington, Seattle, Wash.
Stephen Powell	University of Western Ontario, London, Ontario, Canada
Walter Burt	University of Wisconsin, Madison, Wis.
Edgar J. Lewis	University of Wyoming, Laramie, Wyo.
Michael Fleming	Washington University, St. Louis, Mo.
Frances Shepherd	Wesleyan University, Middletown, Conn.
David O'Dette	West Virginia University, Morgantown, W. Va.
James Keller	Yale University, New Haven, Conn.

*Foreign*

László Somfai	Bartók Archives, Budapest, Hungary
Georges Franck	Brussels, Belgium
Iain Fenlon	Cambridge University, Cambridge, England
L. Gene Strasbaugh	Free University of Berlin, Berlin, Germany
Alexander Schneider	Friedrich-Wilhelms University, Bonn, Germany
Don Harrán	Hebrew University, Jerusalem, Israel
Ludwig Finscher	Johann Wolfgang Goethe University, Frankfurt, Germany
Bernd Baselt	Martin Luther University, Halle-Wittenberg, GDR
Rudolph Angermüller	Mozarteum, Salzburg, Austria
Horst Heussner	Phillips University, Marburg, Germany
Anne-Marie Riessauw	State University of Ghent, Ghent, Belgium
A. Annegarn	State University of Utrecht, Utrecht, Holland
Paul Jeremy Hudson Booth	University College, Cardiff, Wales
Nancy M. van Deusen	University of Basel, Basel, Switzerland
John M. Jennings	University of Canterbury, Christchurch, New Zealand
Niels Martin Jensen	University of Copenhagen, Copenhagen, Denmark
Susette Clausing	University of Erlangen-Nuremberg, Erlangen, Germany
Georg Borchardt	University of Hamburg, Hamburg, Germany
Anthony Ford	University of Hull, Hull, Yorkshire, England
G. R. Rastall	University of Leeds, Leeds, England
Anne-Marie Bragard	University of Liège, Liège, Belgium
Andrej Rijavec	University of Ljubljana, Ljubljana, Yugoslavia
Davitt Moroney	University of London, London, England
Ladislav Řezníček	University of Oslo, Oslo, Norway
Bojan Bujic	University of Reading, Reading, England
Wolfgang Sieber	University of Regensburg, Regensburg, Germany
Giorgio Pestelli	University of Turin, Turin, Italy
Walter Pass	University of Vienna, Vienna, Austria
Hans Conradin	University of Zurich, Zurich, Switzerland
Tadeusz Maciejewski	Warsaw, Poland

Whenever possible, communications to the corresponding editors should be addressed care of the music department of the institution in question. Otherwise, they may be sent to the Editor of *Current Musicology* for forwarding.

PUBLISHED  
UNDER THE AEGIS OF

The Music Department  
COLUMBIA UNIVERSITY  
New York

# *contents*

		<i>REPORTS</i>
		From the Domestic Corresponding Editors:
LINDA W. CLAUS AND THOMAS A. WILSBACH	7	University of Maryland: World Music Studies
		From the Foreign Corresponding Editors:
PAUL J. H. BOOTH	11	University College, Cardiff: Research in Music and Sound
ANNE-MARIE RIESSAUW	14	State University of Ghent
		From traveling Corresponding Editors:
KRISTINE FORNEY	18	The Netherlands: Symposium on Medieval Courtly Arts
CHERYL SPRAGUE DEMMEL	20	Preparation and Procedures for Doing Research in European Libraries
	23	Announcements
		<i>ARTICLES</i>
DAVID BEVERIDGE	25	Sophisticated Primitivism: The Significance of Pentatonicism in Dvořák's American Quartet
JOEL LESTER	37	The Fux-Mattheson Correspondence: An Annotated Translation
JAY RAHN	63	Text Underlay in French Monophonic Song ca. 1500
		<i>BIBLIOGRAPHICA</i>
JOHN M. SCHECHTER	80	Non-Hispanic Instruments in Mexico and Central America: An Annotated Bibliography
	105	Contributors

## articles

### SOPHISTICATED PRIMITIVISM: THE SIGNIFICANCE OF PENTATONICISM IN DVOŘÁK'S AMERICAN QUARTET

*David Beveridge*

The works of Dvořák's American period (1893-1895) have always been popular with the music-loving public, but they have received remarkably little attention from musical scholars.<sup>1</sup> The fact that American scholars in particular have neglected these works is less ironic than it might seem, for the "American" traits which Dvořák claimed to incorporate in them are often suspiciously similar to the "Bohemian" traits which characterize his music in general. Still, these works do constitute a distinct period in Dvořák's creative output, and, American or not, they deserve our attention as examples of a unique style.

One of the most distinctive features of Dvořák's American works, and especially of the String Quartet in F, Op. 96 ("The American"), is pentatonicism. Neither the work nor any large section of it is wholly pentatonic. Yet pentatonicism plays an important role—perhaps a more important role than in any other example of Western art music before Debussy. Dvořák himself utilized pentatonic effects occasionally throughout his career (his first string quartet, written in 1862, is one example), but the American works seem to signal a quantum jump in his fondness for the device.

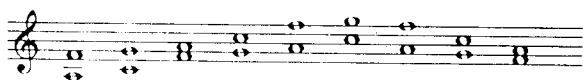
Of the many possible pentatonic scales, the only one commonly found in Western music and the only one Dvořák employed is that consisting of a stack of four perfect fifths, e.g., FCGDA (the pitches used in the American Quartet). This is termed a "tonal" pentatonic scale, because it has no half-steps (a pentatonic scale containing half-steps is referred to as "semi-tonal"). It also has the property, unique among tonal pentatonic scales, of not containing a tritone.

Within this collection, various pitches may be taken as the tonic. In Dvořák there are two possibilities: F (more frequently) and D (yielding D minor with a lowered leading tone). Note that these are the roots of the only possible triads within the scale. In the works of other composers and in folk music one may find other pitches acting as tonic—even

pitches which are not members of the pentatonic collection. Debussy, in his early “Danse Bohémienne,” constructs a melody on the notes F♯-G♯-A♯-C♯-D♯, but the harmonic context shows that the tonic is B!

It may be noticed that in the F-G-A-C-D scale the note G does not fit into either of the complete triads. In passages where pentatonicism is a harmonic as well as a melodic basis, this pitch is often omitted. For example, the note G does not appear until measure 18 of the American Quartet Finale. On the other hand the empty fifths and fourths between G and C may be exploited for their piquant effect, as in the pattern shown in Example 1—an extension of common horn fifths—which uses

EXAMPLE 1

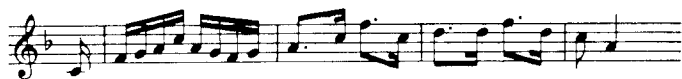


G, but omits D. Occuring in various specific shapes, this pattern is used occasionally by many composers and quite frequently by Dvořák, especially in his more pentatonic works; one example may be found at the end of the Largo in the New World Symphony, in the key of D♭, where the figure moves upward in the violins. However, the pattern is curiously absent from the American Quartet.

Most often in Western art and folk music the pentatonic scale is not treated as a closed system to be followed strictly for any great length of time. In fact, what we think of as the pentatonic “feeling” may be more dependent on certain peculiarities of melodic motion than on strict adherence to the scale. The following two melodies may illustrate the paradox: the Mendelssohn is strictly pentatonic, the Dvořák is not—yet the Dvořák has more of the pentatonic “feel.” (See Example 2.) Whereas Mendelssohn de-emphasizes the peculiarities of the pentatonic scale, Dvořák exaggerates them. For instance, in Mendelssohn’s third measure the D is so clearly a neighbor to C that there is no need for an E connecting it up to the F. But in Dvořák’s second measure the D is isolated in such a way that we are aware of it as a problem note, and aware of the gap which separates it from the tonic. Thus it is that one can speak of pentatonic effects in a work like the American Quartet, even in cases where no more than three measures are strictly pentatonic.

Dvořák sketched the American Quartet in three days during June of 1893 in the Czech community of Spillville, Iowa, where he was spending

EXAMPLE 2a: Mendelssohn, Scotch Symphony, 2nd movement, mm. 9ff.



EXAMPLE 2b: Dvořák, American Quartet, 1st movement, mm. 156ff.



the summer. It is the twelfth of Dvořák's fourteen string quartets. There has been much controversy as to whether Dvořák was really influenced by American Negro and Indian music, as he claimed, or whether his "American" style is merely an exaggeration of tendencies already present in his music from the beginning.<sup>2</sup>

None of the important themes in the American Quartet contains exactly the five notes of the pentatonic scale, but all of them come close. Most include a sixth note at one point or another, while a few are limited to only four notes (F-A-C-D). In places pentatonicism permeates not only the melody but the whole texture, placing severe restrictions on the harmony. The key scheme for the quartet, F-D minor-F-F, allows use of the pentatonic scale at the same pitch level in all the movements, but within movements one finds pentatonic melodies in A, F minor, D $\flat$ , A $\flat$ , and A minor as well.

I have chosen the Finale as the primary focus of this study. It is an especially successful and novel movement. Apart from the contribution of pentatonicism in general to the very folksy flavor of the movement, there are three particular aspects of pentatonicism that offer Dvořák fruitful material with which to work. These are the peculiarities of pentatonic harmony, the austerity of pitch usage inherent in pentatonicism as a contrast to chromatic effects, and the interesting effect created by the unexpected melodic gaps in a pentatonic scale.

The formal plan of the movement is similar to a sonata-rondo, with a contrasting middle section in place of the development. I shall refer to sections of the movement according to the diagram shown in Figure 1.

Figure 1

Thematic material	Key	Measure numbers
Introduction (anticipates A)	F-V/F	1-32
A, A'	F-a, F-C	33-68
B	A $\flat$	69-99
Transition (developing first phrase of A)	A $\flat$ -V/F	99-123
A''	F-D $\flat$	123-155
C	D $\flat$ -F	155-178
D, D'	a	179-218
Transition (developing first phrase of A)	V/a-V/F	219-234
A, A'''	F-a, D $\flat$	234-262
Transition (developing second phrase of A)	ii/b $\flat$ -V/F	263-280
B'	F	280-310
Coda (long, developing first phrase of A)	F	310-382

For ears accustomed to European art music the pentatonic limitation to two triads is a severe one, especially since the two triads do not relate to each other as tonic and dominant. Most often Dvořák ignores this limitation, and writes free accompaniments for his pentatonic melodies, but he does achieve certain effects by occasionally applying pentatonic strictures to the whole texture.

One such effect is the sheer novelty of a I-vi-I-vi-I alternation in place of the usual tonic and dominant. One finds this pattern in the introduction and again in the coda (from m. 344).

The avoidance of the dominant is also characteristic of sections where non-pentatonic harmonies prevail; in fact, the dominant plays a less central role in this movement than is customary in tonal music. Thus the "A" theme (see Example 5 below) is supported by I-IV-I. At the beginning of "A" (mm. 50-51), the abrupt shift from the key of iii back to I, with no intervening dominant chord, is quite striking. And after eight mea-



tures of tonic in the “B” theme, note the surprise of the iii chord (not V) at m. 77. The generally slow harmonic rhythm of the movement, besides allowing extreme accelerandos at strategic points, is well-suited to show off the novel progressions.

Having created an imbalance by omitting the dominant in many passages, Dvořák counteracts that imbalance in the most satisfying way. Most of the returns to “A” are through a dominant, and there is plenty of dominant in the coda. But the most fascinating passage in this regard is the introduction, where our growing anticipation of the dominant is only satisfied after m. 20. We are irritated in any case because of the failure of a real theme to materialize after the false introduction of mm. 1-4. If the vi chord of mm. 7-8 led into a standard V-I to clear the air, the situation might not yet seem completely abnormal. But Dvořák jerks us violently from vi back to the tonic with the extraordinary anticipation at the end of m. 8 (note the leap of a seventh in the first violin and the dropping out of the cello on the following downbeat). This pattern is then repeated. The tension continues to increase with the crescendo, the accelerating harmonic rhythm, and the eroding unit of repetition (from four measures down to one-half measure). With the  $I_4^6$  in m. 15 the dominant seems close enough to touch, but Dvořák is not ready for it yet. The V/V in m. 18 is the last straw, and indeed we are about to receive the dominant.

But it still comes just one bar later than we expect it. Though highly syncopated on the local level, this introduction has had a very regular scheme on the higher metrical plane. Everything up to m. 21 falls into four-bar phrases, each of which begins with tonic harmony. Periodicity operates on the next higher level as well, with a square group of 2 + 2 phrases beginning at m. 5. This scheme implies closure at m. 21, which could be accomplished very comfortably if the conclusive tonic arrival occurred at that point, preceded by our long-awaited dominant in m. 20. In comparison with this “normal” model, Dvořák’s prolongation of V/V through m. 20 is excruciating. The arrival at the dominant in m. 21, then, gratifies us all the more deliciously, while its expansion into four bars seems inevitable as a balance to what has come before. What has happened metrically is a disturbance not in the phrase structure (Dvořák will disturb the phrase structure, but not until after the introduction—see page 34 below), but in the structure of phrase groups: the 2 + 2 group which seemed to be forthcoming has been extended to 2 + 3.

In delaying the dominant and then giving it to us, Dvořák is working with something that we expect to hear. But through the restrictions of pentatonicism he can also enhance the effect of things we *don’t* necessarily expect to hear, such as chromatic modulations. This enhancement occurs

essentially through the operation of the "fresh note principle," the heightened effect caused by the first appearance of a note not included in the pentatonic cell. To speak of a single pitch for a moment, the B $\flat$  in m. 17 is significant because it is the first note in the movement outside the F-A-C-D cell. Dvořák heightens the effect by using it as a dissonance.

The start of the "B" theme (m. 69) illustrates the same idea. To ears familiar with Schubert the abrupt tonal jump down a major third is hardly striking. But it sounds especially fresh here, partly because many of the pitches in A $\flat$  have been virtually or entirely absent in the movement thus far.

Another important chromatic pitch, G $\flat$ , is delayed even longer—until m. 107, where it arrives as the root of the chord. Because of its fresh sound, the four-fold repetition of the measure hardly seems excessive. I do not mean to suggest that if a G $\flat$  occurred in m. 8, say, it would necessarily affect our appreciation of m. 107. But by adhering temporarily to the restricted language of pentatonicism, Dvořák enhances the effect of chromatic color when it arrives. Indeed, the enriched meaning of chromatic color here is quite a significant achievement for the 1890s, when the shock value of chromaticism was rapidly fading.

The opposition of pentatonic austerity to chromatic license occurs in melodic lines as well as harmonic progressions. (To some degree this is a different way of looking at the same thing.) Melodic half-steps are, of course, relatively rare in the movement, since Dvořák uses the pentatonic scale without semitones. Actual linear chromaticism is virtually nonexistent until mm. 165-170, in the "D" section, which represents a bold innovation in melodic construction within this movement. Near the end of the coda, from m. 367, Dvořák seizes upon scalar or melodic chromaticism with a vengeance, emphasizing it by the simultaneous involvement of three voices and by the use of appoggiaturas. This passage constitutes the climactic crescendo of the piece.

The remaining source of musical interest which Dvořák finds in the pentatonic scale involves the two melodic gaps. In the common major form of the scale (the form used most often in this movement) it is the fourth and seventh scale degrees (4 and 7) which are omitted. Step-wise motion through as many as three notes can occur only when one is at the right place in the scale (1-2-3)—otherwise one encounters the gaps. In musical cultures where the pentatonic scale is the only scale, the "gaps" are not heard as such. This should not be surprising; after all, the common heptatonic scale includes intervals of two different sizes—the major and minor second—yet we do not hear the larger intervals as gaps. And there is actually *less* proportional difference in size between the major seconds and minor thirds of a pentatonic scale.

Nevertheless, for Dvořák's audience the pentatonic gaps remain just that. We are conditioned to expect those missing notes, and their absence arouses interest. Dvořák frequently draws our attention to the novelty by anticipating the note on the far side of a gap. In the theme of the second movement, for example, he inserts an early D where a smooth rhythmic flow would have required no note at all (Example 3). Thus he

EXAMPLE 3: Second movement, mm. 2ff.

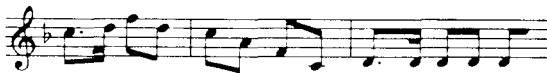


points out the special nature of the F-D skip (here the skipped note is 2 in D minor). At mm. 6-7 in the Finale the anticipation appears to be a matter of necessity rather than an artistic choice on Dvořák's part—one needs that last eighth-note in m. 6 to avoid an undesirable rhythmic stop, and of course the E is forbidden if this is to be a pentatonic passage. But Dvořák could easily have solved the problem in other ways, as shown in Example 4. The advantage of the solution he actually chose is that it isolates the D more strikingly.

EXAMPLE 4a



EXAMPLE 4b



Many examples of gap-spanning anticipations can be found in the American Quartet, mainly in the first two movements. However, one further instance in the Finale occurs in mm. 72-73, bridging the gap from 3 to 5. Two bars later comes another anticipation, which is not associated with any pentatonic gap—the interval is a half-step and the upper note is the extra-pentatonic  $D_b$ . Yet it seems to be very much in

keeping with the melodic style of the piece. Perhaps it arises as a sort of by-product of the gap-spanning anticipations.

The observations made thus far are applicable equally to the gaps between 5 and 3 and between 6 and 1. But the two have slightly different tendencies by virtue of their different positions in the scale, and Dvořák treats them accordingly. The 6-1 gap turns out to have the more far-reaching implications for the movement as a whole, but it is 5-3 which is cultivated most intensively in the main theme of the “A” section (Example 5).

EXAMPLE 5: Last movement, mm. 29ff.

The image shows two staves of musical notation in G major. The first staff begins at measure 29 with a piano (*p*) dynamic. It features a melodic line with a 5-3 interval, marked with a *fz* (fortissimo) dynamic and a *pp* (pianissimo) dynamic. The second staff continues the melody, also featuring 5-3 intervals, with dynamics including *fz*, *pp*, *sf* (sforzando), and *pp*. The notation includes slurs, accents, and dynamic markings throughout.

There is something very peculiar and, I think, engaging about the end of the first phrase of “A” (mm. 35-36). Surely the effect has something to do with the empty sound of the reiterated interval—if the last note of m. 35 were, say, a B $\flat$  instead of C, some of the effect would be lost. Perhaps the open third is all the more irritating because it was already set ringing in our ears back at m. 29, as the teasing false start of the theme.

Another factor in the cultivation of the 5-3 in the theme concerns the pursuit of a melodic goal. Undoubtedly there is a certain thwarting of our expectations when the melody jerks back to repeat 5-3 in mm. 35-36, rather than continuing down to 1 (F). That lower F, it turns out, is not to be granted at all in this section of the movement. The A is as far down as we are going to get for now—even at the end of the modulatory passage in mm. 44-46, one can hear that we are still lingering on that same uncomfortable note. It may be significant that in the D $\flat$  transposition of the theme, which constitutes its last intact appearance, we land on F instead of A (mm. 252-262); thus the melody gravitates to the tonic of the piece, though at this point it is not the local tonic. It is *certainly* significant that the beginning of the theme is modified in the coda to land us on F as tonic after only two bars. Here the local tonic, the tonic of the piece, and the melodic goal converge. The new and tonally more satisfying version is reiterated there six times by the first violin and viola (mm. 343-537).

One cannot help drawing rhythmic considerations into the discussion as well. It is interesting to note the variety of rhythms and metric placements assigned to the 5-3 interval within the “A” theme. The carry-over effect of the introduction’s regular four-bar grid is enough to establish bar-groups beginning at m. 33, m. 37, and m. 41, in spite of the tricks Dvořák begins to play here. The third of these phrases is the same as the first, but moved over one bar in the grid. This phrase in its later version seems square enough; in the first version, however, there is something wrong in the third and fourth bars (mm. 35-36). What one wants is a stress on the third bar and a release on the fourth, as in mm. 39-40, in the theme’s second phrase. Those very bars could in fact be transplanted into mm. 35 and 36, with a very stable and dull effect. What actually happens is that the second sounding of 5-3, in longer note values than the first, displaces the stress from the downbeat of m. 35 to some other arguable location.

A final factor which may contribute to the special effect of 5-3 in the “A” theme is its parallelism with the 6-1 gap already set up in mm. 5-6. Note that both melodies span an octave ( $f''-f'$  and  $c'''-c''$ ) with a pentatonic gap attached to the bottom. The interchangeability of the C octave with the F octave is demonstrated by the relocation of the “A” theme in the coda (Example 6).

EXAMPLE 6a: Original appearance, mm. 33ff.



EXAMPLE 6b: In coda, mm. 343ff.



I say that the 5-3 gap gains significance by the association with 6-1, rather than the other way around, because the 6-1 gap contains a problem which the 5-3 gap does not. The crucial pitch is 6, for it is the only pitch involved in either of the gaps which is not a member of the tonic triad. In conventional tonal music 6 is treated as a pitch in need of stepwise resolution to 5 or 7 (7 would then need to continue into 1). One does

not ordinarily leap away from 6 unless the leap is clearly intermediary to the ensuing proper resolution.

But Dvořák often leaps up from 6 to 1 boldly, and de-emphasizes or eliminates any subsequent resolution of the abandoned note. This habit contributes significantly toward a “pentatonic effect,” even when the melody is not strictly pentatonic. Dvořák also shows a tendency to skip from 6 down to 2, or more frequently 3. The opening bars of the American Quartet’s third movement display skips away from 6 in both directions (see Example 7).

EXAMPLE 7: Third movement, mm. 1ff.



In the Finale Dvořák exploits the problem of 6 on a grand scale. I have already mentioned the emphasis on the 6-1 gap in mm. 6-7, accomplished by means of the anticipation of D and its abandonment by the leap up of a seventh. Considering as well the rather bizarre eight-fold repetition of the single note, we have indeed an extreme accentuation of the note D and an exacerbation of our desire to hear it resolved down to C.

For the time being the D remains unresolved, except in so far as its energy is transferred up an octave to the reiterated Ds of mm. 19-20, and then dissipated in m. 21. This is hardly a solution to match the boldness of the problem as originally posed. But, at m. 146, when we have more or less forgotten it, the problem reappears almost in its original form (mm. 146-155). And now Dvořák displaces the D, not to the C we expect, but to D<sub>b</sub>. Then he rivets our attention on that D<sub>b</sub> by repeating it incessantly in a comical exaggeration of the effect in mm. 7-8. The “C” section of the movement follows, starting in the key of D<sub>b</sub>.

The die is certainly now cast, but Dvořák postpones the ultimate resolution for some time yet. An interesting sub-plot is hatched in the approach to the main recapitulation, m. 234, where D successfully traverses the alternative path to resolution—through E up to F (Example 8). D<sub>b</sub> reappears as a key, for the transposed statement of the “A” theme, but there is still no resolution into C—the first violin’s C at m. 263 is a dissonance.

EXAMPLE 8: Last movement, mm. 226ff.

It remains for the coda to complete the story, and this it does in as blatant and thorough a fashion as that in which the problem was originally set up. Measures 320-321 accomplish the essential move, but are not weighty enough in themselves. The resolution occurs again at m. 339, after which Dvořák repeatedly reviews our progress from D through D $\flat$  to C. The climax of the piece comes with the fortississimo D $\flat$  triad (mm. 371-372), which then becomes an augmented sixth chord leading into the dominant.

The linear descent over the course of the whole movement naturally brings to mind the theories of Schenker, and it would be quite in keeping with the Schenkerian spirit to take the whole procedure very seriously. But this is in essence a light-hearted movement, and Dvořák does not forget it. Having taken such pains to move that D down through D $\flat$  to C, he tosses out the D again five measures from the end, where it remains unresolved for all eternity.

In conclusion, it should be evident that for Dvořák pentatonicism was more than a means of adding a rustic, primitive flavor to his works. The “folksy” quality is undoubtedly endearing to many listeners, but Dvořák exploited the implications of pentatonicism for the structural organization of the work as well. For Dvořák, as for Moussorgsky, Debussy, and other composers of diverse lineage in the late 19th century, pentatonicism with its related techniques opened up important new creative possibilities. It provided an alternative, if only a temporary one, to following music’s relentless drive toward total chromaticism.<sup>3</sup>

NOTES

<sup>1</sup> Symphony No. 9, “From the New World,” Op. 95; String Quartet in F, “American,” Op. 96; String Quintet in E $\flat$ , “American,” Op. 97; Suite in A for piano (and also arranged for orchestra), Op. 98; Biblical Songs, Op. 99; Sonatina for violin and piano, Op. 100; Humoresques for piano, Op. 101; The American Flag (cantata), Op. 102; Cello

Concerto in B minor, Op. 104. The most thorough and up-to-date coverage of these works outside the Czech language is found in *Antonin Dvořák: Musician and Craftsman* (New York: St. Martin's Press, 1966) by John Clapham of Great Britain. By far the most important study done in America is Merton Robert Aborn's Ph.D. dissertation, "The Influence on American Culture of Dvorak's Sojourn in America" (Indiana University, 1965).

<sup>2</sup>The controversy stems largely from an interview with Dvořák in the *New York Herald* of 15 December 1893, in which he described the symphony "From the New World" as embodying the spirit of the American Indian and Negro races in the same sense that his "Slavonic Dances" embody the Eastern European spirit. Some writers still uphold the distinctively "American" character of Dvořák's "American" works—notably Lionel Davis in his article "Dvořák and American Music," *Student Musicologists at Minnesota* 5 (1971-72) pp. 250-313. However, John Clapham has shown that actual stylistic relationships between Dvořák's works and Indian music, at least, are almost negligible. Clapham's findings are presented in "Dvořák and the American Indian," *The Musical Times* 107 (1966) pp. 863-867, and in a paper read at the International Music Festival at Brno in 1971, entitled "Indian Influence in Dvořák's American Chamber Music."

<sup>3</sup>I thank my friend Randall Dipert of the State University of New York College at Fredonia for his helpful suggestions and encouragement in the preparation of this article.



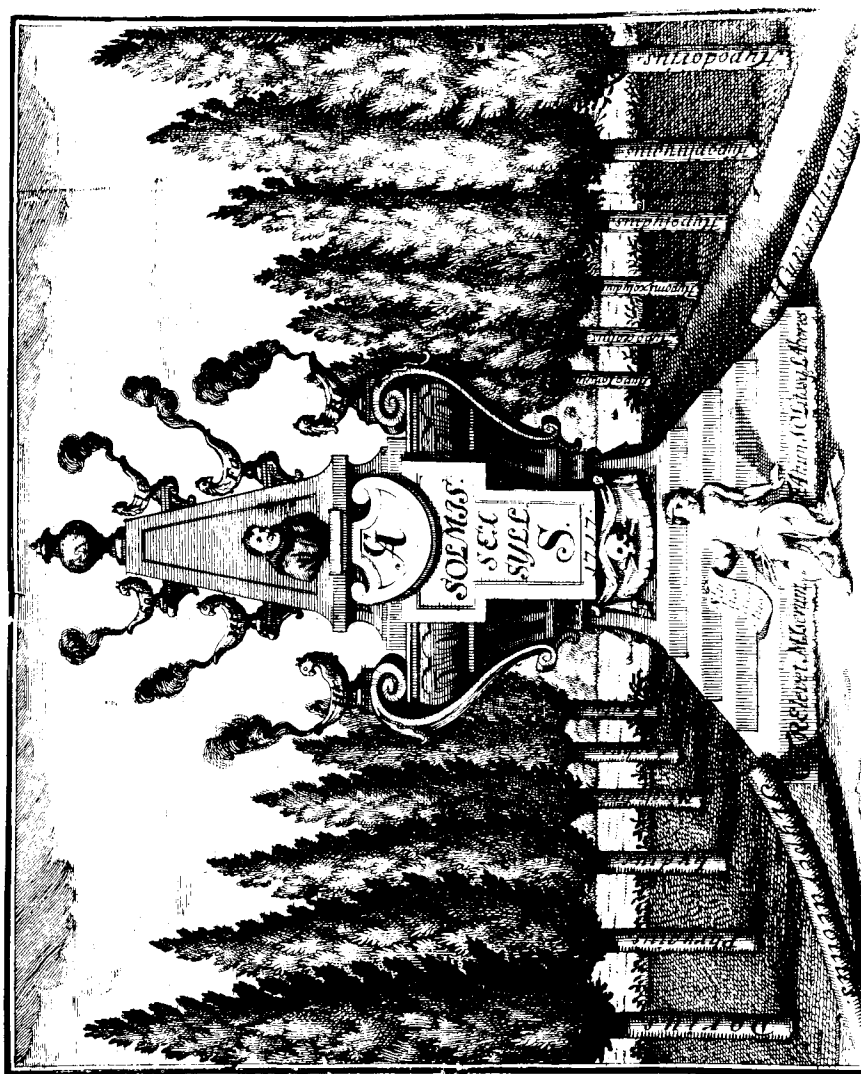
# THE FUX-MATTHESON CORRESPONDENCE: AN ANNOTATED TRANSLATION

Joel Lester

The overwhelming majority of music-theoretical writings are cast in treatises and textbooks which allow the theorist the opportunity to present his strongest case systematically and dispassionately. In these writings the theorist holds all the cards. He leads a supposedly neutral and naive reader from one argument to the next until the reader is convinced by the logic laid out before him. But totally lacking in such writings is the opportunity to question the theorist—to debate basic tenets, to see the effect of alternative lines of reasoning, and to introduce contradictory evidence. All too rarely in the history of theory do we have documentation of theorists under cross-examination, answering and being answered by their avowed antagonists rather than addressing an impartial audience. And of these instances, very few indeed tackle major issues.

One of these exceptions is the letter exchange of 1717-1718 translated here. The correspondents are two of the leading theorists of their time: Johann Joseph Fux (1660-1741), author of what is without doubt the most famous and influential counterpoint treatise of all time, the *Gradus ad Parnassum* (Vienna, 1725); and Johann Mattheson (1681-1764), one of the most influential and versatile commentators on music of his era.

The correspondence arose out of the following circumstances. In 1713 Mattheson had published his first major work, *Das Neu-Eröffnete Orchestre* (referred to below as *Orchestre I*), a general text on music intended for both professionals and amateurs. The book attacked six-syllable solmization and the church modes as inadequate bases for the understanding of contemporary music. To replace the church modes, Mattheson argued in favor of the twenty-four major and minor keys, only recently recognized in their entirety.<sup>1</sup> Johann Buttstett (1666-1727), an organist at Erfurt, took sufficient offense at Mattheson's work to publish a stinging reply: *Ut Mi Sol, Re Fa La—Tota Musica et Harmonia Aeterna*.<sup>2</sup> Mattheson responded in 1717 with a second volume: *Das Beschützte Orchestre* (The *Orchestre* Defended; *Orchestre II*), whose tone of merciless satire begins with the subtitle "Ut Mi Sol, Re Fa La—Todte (nicht Tota) Musica." This work was dedicated to thirteen prominent contemporary musicians,<sup>3</sup> to whom Mattheson appealed for an "entirely impartial, free, and candid opinion" of his views. All replies received by Mattheson were published



The frontispiece to Mattheson's *Beschützte Orchestre* (Hamburg, 1717). The memorial is erected to commemorate the passing of Guido Areentino, six-syllable solmization, and the modes. Note the modal names on the twelve standing trees and two felled trees, the facetious acronymic "derivation" of the solmization syllables, and the several representations of Guido and the six syllables on the monument itself. (Courtesy of the Music Research Division, The New York Public Library.)

with annotations and additional commentary in his *Criticae Musicae Tomus Secundus* under the subtitle “The *Orchestre-Chancellery*, or testimonies, letters, declarations, investigations, etc., by the former judges in the *Orchestre* trial.”<sup>4</sup> Most of the correspondents thanked Mattheson for the dedication, and commended his book.<sup>5</sup> Fux, however, attacked Mattheson’s views on the modes and on solmization. Mattheson answered, and the two musicians exchanged one more round of letters. The complete correspondence comprises Fux’s first letter of 4 December 1717, Mattheson’s reply of 18 December 1717, Fux’s counter-reply of 12 January 1718, and Mattheson’s final letter of 12 February 1718.

Neither theorist succeeds in converting his opponent, either here in this letter exchange, or in later writings. Fux steadfastly refused to see any value in the twenty-four keys. Thus, when he cites varying opinions on the modes in his *Gradus*, he does not even *mention* the major-minor differentiation.<sup>6</sup> Mattheson, who had never precluded using the modes for church music or for pedagogical purposes, continued to insist that the only criterion to be used in differentiating the modes is the quality of the third over the final.

In all the wrangling over details, neither theorist states explicitly the underlying conflict: whether mode should be a melodic or harmonic concept. All diatonic scales have the same number of whole and half steps, major and minor thirds, etc. Traditional modal theory was fundamentally a melodic theory, in which different melodic possibilities arose in each mode because of the different distribution of these intervals in relation to the final. The major-minor perspective views modes as harmonic—they are differentiated by the quality of particular consonances over particular scale degrees.

It is this failure to get down to the underlying principles that gives rise to the lack of resolution of the issues involved. Each theorist is “right” from his perspective, even though they articulate contradictory positions.

Fux’s defense of six-syllable solmization is consonant with his attitude toward the modes. The establishment of a scale segment as a norm allows an easy and reliable guide among the scalar differences of each mode. Indeed, this is the very reason cited by Guido in his initial presentation of the hexachord.<sup>7</sup> Mattheson, rejecting such modal differentiations as insubstantial, insists on doing away with the mutation necessary with six-syllable solmization.

Finally, for reasons entirely apart from its historical value, the letter exchange makes for lively reading. Behind a facade of conventional courtesies lies a degree of wit and sarcasm hardly known to modern scholarly disputes.<sup>8</sup>

\* \* \*

*A Monsieur Monsieur J. Mattheson, Secr. du Mini. Brit. & Vicair au Chapitre d'Hambourgue present à Hambourgue an der Elbe.*

Vienna, 4 December 1717

*Monsieur,*<sup>c</sup>

Since Your Honor chose to include me among the few to whom *Das Beschützte Orchestre* has been dedicated, I am herewith taking the opportunity to thank you: but, since neither the *Orchestre* [I] nor the Erfurt refutation<sup>10</sup> has come to my attention, I cannot disclose my *sentiment* on them; but I am greatly astonished to find that poor Guido Aretinus, never yet sufficiently praised, was ever so blasphemously smeared, though his *müsica practica* is more valuable than any authority in the world; I must confess that I was not a little bit<sup>d</sup> angry at this: for it is certain that *musique*, least of all the art of singing,<sup>e</sup> could not have been brought so far if this *methode* had never been invented. Before this time people with mature judgment were not able to get anywhere in years of work on account of the difficulty of the characters and obscure signs then in use; since that time they have been able to progress with the invented *scala* and the noble *ut, re, mi, fa, sol, la*—which small boys can learn in a few months, as daily *experienz* teaches until this very hour. It is not to be denied that mutation is made somewhat difficult by the juxtaposition of the diatonic and chromatic genera, as a result of which so many semitones occur: nevertheless solmization is just as valid even in this case, because where the semitone comes only accidentally no mutation is made, but the semitone is produced only by sharpening or flattening the voice. By adding a *si* to the six Aretinian syllables, solmization is not abolished (which Ericio Puteano<sup>11</sup> never had in mind), but rather augmented. And the above-mentioned Puteano would have never thought of his *si* if the Aretinian syllables had not evoked it; thus credit for the invention is still attributed to the first inventor. In my opinion it also happens to be quite unjust that the inventor was further criticized that he should have made his *extension* in heptachords, not in hexachords: for Pater Guido wanted to teach not only the six ascending and descending musical intervals with that method, but also to introduce the proper pronunciation of the six [sic] vowels: a, e, i, o, u (which is the *sine qua non* of everything). From this we conclude that it would be with poor cause that the letters of the alphabet *a, bee, cee, dee, ee, ef, gee*, etc. would be introduced into the

<sup>c</sup> In German letters such a *Monsieur* hardly shows respect, and is only for *inferiores*.<sup>9</sup>

<sup>d</sup> That is, according to my understanding, he was not angry at all, not even a little bit. But perhaps it should read: “not a little,” i.e., a lot; for “not a little bit” means not at all.

<sup>e</sup> A good distinction, for the art of singing is not all of music.

art of singing to replace *ut, re, mi, fa, sol, la*. He who dislikes the *numerus senarius* should take two tetrachords after one another to make a full octave, e.g., C D E F G A B C. For the reasons presented above, Aretino's invention has been retained to the present day in all places and regions where *musique* and the art of singing most flourish, and will never in the future fall into disuse, because its good effect cannot be denied. One should read what Baronius<sup>12</sup> wrote about this. Thus, in my opinion, someone who learned *musique* by *ut, re, mi, fa, sol, la* may be, all the same, a *galant-homme*. I am hardly an admirer of the idolization of antiquity, yet until something better has been found, I shall venerate in every way what the noblest masters considered right and good for so many centuries. There is no reason for the twenty-four new modes, because tone or mode is nothing other than a circular modulation within the limits of the octave; thus, it necessarily follows that there can be just as many tones, and no more, than what is ordinarily considered modulation<sup>13</sup> can change by virtue of the semitone—which can happen only six times. And because every octave from these six can be divided harmonically and arithmetically—harmonically with the fourth above, and arithmetically with the fourth below, e.g., 2, 3, 4, 4, 3, 2—two tones, authentic and plagal, are generated from each octave; the six octaves must therefore grow to twelve: the remainder are all transpositions and must be reduced to one of these twelve. Therefore, in the book sent to me, in the *tabella* on the left hand side of the page,<sup>14</sup> numbers 1, 2, 3, etc. of the modes are only a single tone, number 1; the others, numbers 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, are all transposed from the first, because the semitone (I may not say *mi-fa*) always occupies the third and seventh positions. A transposed tone is in respect to neither genus nor species different from that from which it is transposed. According to Aristotle's axiom, everything of a specific nature always keeps that nature wherever it might be placed. This I have written to Your Honor with the best intentions, and leave the matter with you for further consideration, and also want to thank you for the book sent to me and for the dedication, as I remain,

Most Highly Esteemed Sir,  
Your Most Devoted Servant  
Johann Joseph Fux.\*

---

[Mattheson comments:] The first thing we have to learn from this is the truth of that French saying: *La colere & la prevention derangent terriblement la Dialectique*, i.e., Anger (when one is angry) puts the

\*We have presented the entire letter here just as it stands in the original.<sup>15</sup>

teaching of reason into abominable disarray. The next thing is the power of prejudice, against which no one can be overly wary. For if the prejudice becomes *passé*, it is of no help. In that case only that which used to please us is considered correct. Then the prejudiced person thinks that it is shameful to listen to young people and that it is shameful to dismiss when old what he learned without a beard:

either because old men consider nothing right except their preconceptions, or because they think it is a disgraceful thing to submit to their juniors and to admit in their old age that those things which they learned as beardless youths must be discarded.<sup>f</sup>

Thus it is no wonder that we offer in vain the more graceful, *galante* music to those persons who cast away all gracefulness and refined means of expression; for they have wallowed for much too long in their vulgar and rotten type of teaching. They do not want to be taught better by those who do not agree with their concept of art; in particular, they endure nothing from their juniors. It is difficult for them to set aside in their old age those things which they learned with much pain as boys in school and to confess that they wasted their time.<sup>g</sup>

---

Meanwhile, I communicate to the kind reader, word for word, my reply to the above letter which I received on 15 December, sent on the 18th of the same month:

*A Monsieur, Monsieur Fux, premier Maitre de Chapelle de S. M. J. & Cathol. &c. à Vienne sur le Danube.*

Hamburg, 18 December 1717

Most Noble, especially most Highly Esteemed Dear Sir Ober-Capellmeister,

First of all, I must thank Your Honor, since Your Honor took the trouble to answer my dispatch in a hurry, and especially since I am more honored by your dissent than by the assent of all others. I beg your permission to answer with a little something on this matter.

Your never-sufficiently-praised Aretino, to whom *musica illa quondam practica & puerilis* obviously owed a greater debt seven hundred years ago than it owes all the present *solmisatores*—no one wanted to attack him, as Your Honor may have thought in the *Beschützte Orchestre*, and as I could ascertain with some astonishment in your otherwise honored letter of December 4.

<sup>f</sup> Don[i], de Praest[antia] vet[eris] mus[icae], p. 111 [sic].<sup>16</sup>

<sup>g</sup> Id., *ibid.*

It is certain that the art of singing, at that time a buried art (which, however, I may not honor with the general name of *musica practica*), owes to this honest *Pater* a great debt because he exhumed it, and may have made singing a little less crude;<sup>h</sup> only I want to hope that the so-called inventor's once-reasonable demand and debt was honestly paid and repaid seven hundred times in all the seven centuries, to such an extent that were one so disposed to try to demand payment on the arrears, if they should remain unpaid, they would long since have become obsolete.

As, then, it was not my intention to blasphemously smear Aretino (*nam de mortuis bene*), but rather to prove that he deserves a public monument for his art and invention, I do not see how Your Honor could have been so angry about this; Your Honor's anger must be perceived with all due pain, since I have always felt that I honored Your Honor with the representation of truth (according to my concept),<sup>i</sup> and with the testimony of my high esteem. I declare most heartily that such was and still is my true intention.

It may well be, as Your Honor writes, that if Aretino had not done it, the art of singing (your term) would hardly have come so far. But it is not to be denied that if Aretino himself had not done it, someone else would have been able to do it just as well, if not better. Yes, Dunstan<sup>19</sup> had done it long before, according to all appearances.<sup>k</sup>

<sup>h</sup> We have already cited (p. 85ff of *Criticae Musicae Tomus Secundus*) various testimonies of learned men against the overpraised Aretinian advantages; one should particularly remember here what J. Vossio wrote about it: *Multa Guidoni perperam tribuuntur*, i.e., many discoveries are unjustly ascribed to Aretino. . . .<sup>17</sup>

<sup>i</sup> *On a beau montrer la vérité; si on ne prend pas bien son tems, elle sera rejetée: il faut attendre que les hommes soient degoutez de leur erreur. Mem[oi]res Hist[oriques] et Crit[iques]*, October, 1722, p. 95.<sup>18</sup> That is, it is vain to demonstrate the truth; if it is not the time to speak the truth, it will be rejected: you must wait until people become disgusted with their error. (Then one would have to wait a long time!)

<sup>k</sup> Yet why should we stop at Dunstan and the 10th century, when testimony exists that already in the middle of the 7th century an archbishop and an abbot, learned musicians, were sent to England by Pope Vitaliano expressly to strengthen the belief of Christians, and to acquaint the churches with the organ, already introduced in Italy, along with other musical instruments, all of which is profitably discussed on page 85 of the present book. The words of my author read: "About this time, doubtless in the year A.D. 645, Pope Vitalianus, of Signian stock from a town of the Volscians, sent Archbishop Theodorus and the abbot Hadrianus, men most highly experienced in all fields of knowledge and learning, to Great Britain, in order to ensure their (the Britons') abidance by the Christian faith. He (the Pope) was the first to introduce organs and other musical instruments in the churches (of the Britons) for the divine and sacred services." Tho[mas] Carve, *Lyra*], *Sive Anacephalaesis*] *Hibernica*, p. 29, edition 2, Salzburg [1666]. That was 400 years before Aretino.

I would most gladly leave to this one, and to that one, as well as to everyone, his deserved honor, but the subject itself, the six syllables, has caused so much unrest and disorder, and it is so barely adequate in today's diatonic-chromatic-enharmonic genus, that it is a pity to see otherwise reasonable and respectable people still using it and defending it and wanting to confuse the world with it.

This has stirred me to ridicule the subject a bit, and to treat it satirically, not thinking that the tiniest child, let alone world-famous virtuosi, could have been angered: it is impossible for me to believe that what Your Honor wrote to me about this was really serious; I rather imagine that Your Honor has made a joke with your servant, under a serious guise.

Suppose, however, that it was serious: then it is indisputable that, through the addition by Putean of the syllable *si* to the six Aretinian syllables, the solmization system, if not abolished, was changed and improved in the same manner as a newly built house, in which one retains and uses a few remnants from an old, demolished building. Erycius not only had this in mind, but he has demonstrated it truly and in fact, as his writings clearly prove.<sup>1</sup>

I did not find it necessary to have any reservations against this seven-syllable solmization; my entire discourse was only directed to the agonizing six-syllable system, and the monstrous mutation arising from it: I have most wanted to bid this farewell, and have gladly wanted to accompany it to its final rest, because daily experience and everyone's healthy reason must agree with me.

If, as Your Honor writes, Aretino wanted to teach not so much the musical intervals with six syllables, as the proper pronunciation of the six vowels (we only use five), this I can accept; only these things belong to reading, not to singing, and it would be a moot point if one wanted to argue about it. I am not inclined to put the syllogism into proper form: the defect is betrayed well enough.

If, now, pronunciation should have been the main purpose of our Aretino, six syllables would not have been necessary—one A might have been spared. But I am letting this pass, and only ask, with your permission: why might there not have been seven syllables instead of six? For the seventh diatonic interval in the octave cannot be denied. The answer clearly (if I do not allude to the *senarius*) will be this: because the seventh sound was not yet fashionable at that time, and on instruments would not have had a full perfect fifth. Since, however, now not only this

<sup>1</sup> See his *Musathena*, Chapter 9, pp. 34-35 and from the *Orchestre II*, p. 325ff.



seventh diatonic note, but also each chromatic note has luckily found its pure fifth and has become entirely customary, the six syllables fall too short; it is much easier to give each sound its own name than to name twelve tones with six, or even four reusable syllables.

I am sure that I will not be thought so simple-minded that I do not know that you can make an octave from two tetrachords. However, students may make the final decision whether this must be done with the exchanged and repeated *ut, re, mi, fa* or by any other adequate means. It is a sin, shame, and nuisance that reasonable composers should waste a word on such tomfoolery. I myself would have never thought about it if one would not have forced it upon me, and with the *ut* become a fighting knight.

For the reasons presented in copious detail in the *Beschützte Orchestre*, Aretino's invention was already abolished a century ago, although not in all places and corners where pretended music was produced in such a schoolmasterly fashion; but intelligent and thoughtful people have gradually and completely abolished it, and we may think that in the future it will wane everywhere more and more, for the simple reason that we can have the thing cheaper, and the old ladder no longer reaches that high.

Otherwise Your Honor can be sure that I would immediately carry out your admonition to read Baronius,<sup>m</sup> if I had not done it long ago. Before my quill wrote a single stroke, I consulted not only this author, but hundreds of others. I continue this reading as cheerfully, as diligently, and as carefully as if I had nothing else to do, and did not yet know the ABCs of music. Actually, it may be that I didn't get much farther than that, since the more I study, the more I find that I lack.

Your Honor's opinion that one who learned music by *ut* may be a *galant homme* cannot be reasonably contradicted by any *galant homme* in the world. But GOd [sic] prevent me from ever thinking, much less writing, something so absurd. No, my Dear Highly Esteemed Sir Ober-Capellmeister, my thoughts hardly go in that direction. One may arrive at his art with a glass of wine or a pipe of tobacco; it is all the same to me. If he really knows his business, he is already a capable man in this respect. "We recognize this, and we respect this, and seek it."<sup>20</sup> But only if it be granted on the other side that someone who has learned neither his singing nor his composing (this does not concern playing) by means of solmization could nevertheless be a good chap as well as the first: only then has justice been done. This also would not be denied by a *galant homme*, even if others do or have already done so. We hold in our

<sup>m</sup> Whoever wants to read his *Annal. Ecclesiast.*, don't omit the critical pages; they will be of use.

country to that which the noblest masters have held as good and right for so many centuries, until something better comes to our attention. And when this improvement arrives, which—GOD be praised!—happens every day, so we always let the old go, even if it dates from the time of the deluge, and Noah himself, considering it good and right, introduced it. After this we do not bother with it anymore.

The case against the modes might appear a little stronger and more serious than that against solmization. Your Honor says simply: the twenty-four modes presented in the *Orchestre* have no foundation. But Your Honor does not prove it; I on the other hand can and will demonstrate the opposite before your very eyes, because all *proportiones temperatae* are known perfectly to me; and I never state anything without a foundation. I could just as easily say that St. Stephan's Tower in Vienna had no foundation; but, with your permission, let us inquire into and illuminate the arguments a little. My reasoning is mathematical and shall appear publicly in its own time;<sup>n</sup> there is not enough room here.

Mode is a circular modulation within the limits of the octave—thus reads Your Honor's definition. It should follow necessarily from this, as you said, that there can be just as many tones, and no more, than what is ordinarily considered modulation can change by virtue of the semitone: which, according to your opinion, can happen only six times.

No reason can understand this conclusion and it is entirely metaphysical; nor do I understand how the infallibility of that musical school, in which it is said that the alteration of the position of the semitone also creates change of mode, becomes accepted. I know well that it has been believed to be so by tradition since Boethius's time,<sup>o</sup> for it was heard at that time. But this belief and this fairy tale give me little satisfaction: I

<sup>n</sup> That was copiously done in the [*Exemplarische*] *Organisten-Probe* [Hamburg, 1719] and can be read in the Introduction.<sup>21</sup>

<sup>o</sup> Nevertheless, Boethius never thought about the location of the semitone: whoever can show it to me in his writings will receive a good tip. One should read Doni's *De Praestantia Mus[icae] Vet[eris]*, p. 23, on Glarean, where he calls his work "Glarean's profitless labors" and adds, "in which, I am sorry to say, he spent twenty entire years," i.e., the trouble was entirely unnecessary and to be decried, since the man spent twenty years on it. Doni also reprimands Glarean at the beginning of the *Trattato de Generi e Modi*. Salinas,<sup>22</sup> however, expressly says that Glarean had false reasoning, and lapsed with Franchino<sup>23</sup> into the same error, since they both imagined that the tones must be differentiated according to the species of the seven octaves, and formed their opinions only according to the various places of the semitone; yet all ancient authors openly said that the difference lay not there but rather only in the high and low pitches. A few words from Salinas, with which he opens Book IV, Chapter 31, p. 228, are presented on the last pages of the *Organisten-Probe* and they ought to be looked up.<sup>24</sup>

want to have reasons based on and proven by current experience, otherwise it is only hot air!

If the above premise, or definition of mode, is let pass, then nothing further can ensue but that there are as many modes as octaves. And that is not so wrong; but if only the thirds, as the intervals which are the *sine qua non* of everything, come into consideration, the number of modes is doubled.

Thus one may (with license) put the definition of mode into this form: mode is modulation with the limits of the octave according to the major or minor third. And on this the conclusion is built:

Major premise: As many major thirds as there are, so many major modes are there; moreover, as many minor thirds as there are, so many minor modes are there.

Minor premise: And yet in the chromatic genus there are twelve kinds of major third and the same number of kinds of minor third.

Conclusion: Therefore there are twenty-four kinds of modes.

This concludes correctly, and is one of the reasons on which the twenty-four modes are based, so long as the *scala* is not improved or expanded; which never will happen in this world, since it is unnecessary. For shouldn't my thirds be worth as much as the semitones of the old theoreticians—which they thought omnipotent—considering that the thirds are the *fac totum* of all modulation today? The semitones no longer have more to say than any other interval, as no experienced man will dispute. And this proves the major premise; nature and instruments prove the minor premise.

Next to this Your Honor states that because each of your six octaves can be divided arithmetically and harmonically twelve tones grow out of the six—namely six authentic and as many plagal. Oh! I also can divide my twenty-four harmonically and arithmetically, and, if it would be of any help, there would be forty-eight, only it really has nothing to do with the case. Oh my! Why should only six octaves be capable of such division? We no longer live, thank GOD!, in diatonic poverty; instead we have a chromatic, tempered scale before us, in which we can divide all twelve intervals octavewise arithmetically and harmonically so wonderfully that it becomes a sheer pleasure, which no one who has even caught a glimpse of a clavier or monochord will deny.

I write, e.g., D E F G A B C# D (I should have written *re mi fa*). Now, try to tell me, what mode is that? It is not found in Glarean, nor anywhere.

Yet there it is, a pure octave, which can be divided arithmetically and harmonically, and the dear semitones lie after the second and seventh degrees: which is an alteration which never arises among the six known old modes. Thus, certainly, that sentence which says that the semitone (I know well that it applies to the so-called natural) can be altered only six times must be discarded. For here it is for a seventh time before the eyes of the whole world, and a melody can be composed in it quite naturally. The wrongly-described natural semitone is not any better than any other, since no single semitone is unnatural.

I would change it more than twenty times, if there were room, and place it three- to four-fold in an orderly octave, and set it up such that the desired division would for the most part remain. When I have Your Honor's letter printed (which for my justification I must do with all these letters from those to whom I have dedicated the *Beschützte Orchestre*; thus the world may conclude from the pro and contra who is right and who is wrong), at that time I will write down, with GOD's help, these manifold alterations with the semitone in my answer,<sup>p</sup> and show that unless the art of combinations<sup>26</sup> is invoked, such changes of the semitones can contribute little or nothing to the properties of today's modes.

As for the so-called transposed tones, such are hopefully given to your satisfaction in the *Beschützte Orchestre*;<sup>q</sup> if only one wishes to see correctly, then it will shine forth that there is not one, but there are really and truly twenty-four different tones, which are specified in the *Tabella Modorum* itself on the left-hand side; and that tempered keys give a completely different aspect to the matter, according to which no single species of octave can correlate exactly with the others; rather, truly, they are formally, apparently, tangibly, and audibly differentiated, although it has not been and will not be disputed that, speaking freely, the twenty-four species can be reduced to two genera at first sight. I will have nothing

<sup>p</sup> Here I must stick to my word and declare that, in addition to the six places of the semitone in the old fictitious modes, where they take these degrees: 3, 7; 2, 6; 1, 5; 4, 7; 3, 6; 2, 5; at least twenty-four changes can be found; of which, however, as few as the others make a new mode. The following may serve as a demonstration. (See Example 1.)<sup>25</sup>

Now I gladly confess that some very peculiar scales are present among these, especially three, which may be divided not by fifth or fourth, but by sixth and third. Yet none is so strange that I could not compose a true melody in it: and many are quite well suited for this. It is only for the sake of an exercise that this table is inserted here; among other things, one may learn from it that all these changes of the semitone do not make a new mode; on the other hand, the mere thirds make a new mode, by which the twelve tonic modes are doubled and give a two-fold species.

<sup>q</sup> Also, above all, in the *Organisten-Probe*.

to do with transposed tones, and would not even recognize the term in this case at all; rather my thoughts go toward independent, essential, and *authentique* tones, of which each has its own figure, number, effect, properties, and powers separately, so differentiated from all others in kind that even a child can see it. Here one must have more confidence in one's ear than in fragile *raisonnement*; although even this point stands on my

EXAMPLE I

1) 1/4 D min. H.      2) 1/6 D min. H,A.      3) 1/7 D min. H,A.      \*

4) 2/4/7 C min. H.      5) 2/7 D min. H,A.      6) 3/4 D maj. A.      \*

7) 3/5 D maj. H.      8) 4/5 D maj. H.      9) 4/6 D maj. H.

10) 5/6 F maj. 6 & 3.      11) 5/7 F maj. 6 & 3.      12) 6/7 F maj. 6 & 3.      \*

13) 1/3/5 D maj. H,A.      14) 1/3/6 E maj. H,A.      15) 1/4/5 D min.H.      \*

16) 1/4/6 D min. H.      17) 1/4/7 D min. H.      18) 2/3/6 F maj. H,A.      \*

19) 2/4/6 D min. H.      20) 2/4/7 F maj. H.      21) 3/6/7 F maj. H,A.      \*

22) 4/5/7 C maj. H.      23) 1/4/5/7 D min. H.      24) 2/4/5/7 D min. H.

r It is of no great consequence what the theoretical basis of the harmony is, if the senses do not appreciate it. And the senses do not appreciate it for the very reason that they do not clearly comprehend it. Erasmus, *Proverbs*.

side, which will be clearly and uncontradictably demonstrated in its place<sup>s</sup> with mathematical reasons. For, *pace* Aristotle, something of a specific nature can be different from the same thing to a greater or lesser extent.

I wanted to and did answer Your Honor with this letter with the best of intentions, and with all submission to Your Honor's great *virtù*, and without the slightest impulse for contradiction; rather from the very great desire to hear Your Honor's further thoughts and commentaries about this, and to best profit from such thoughts: I, who truly seek nothing else than to get to the truth, and once to have the fortune that such a highly esteemed man as Your Honor may convince me of the truth through pure reason and incontestable experience. If this happens, and I am wrong, I will gladly renounce publicly all my statements, and will not even be ashamed to return to school again.

Meanwhile, Your Honor should do me the favor, do himself the justice, and do music the honor and send me a few *particularia* from your experience which may adorn the most outstanding place in the *Ehren-Pforte* which I intend to put out.<sup>27</sup> If Your Honor should chance upon something concerning this, please most humbly communicate it to me, and help me in this praisable work that will do honor to the whole musical world, with the assurance that I will assess without any partiality the merits of everyone according to their qualities; I will also willingly take advice where I should happen to have erred: wherewith, finally offering an apology for this long epistle, in all devotion I recommend myself to Your Honor's friendliness and good will, and always remain,

Most Noble, Especially Most Highly  
Esteemed Dear Sir Ober-Capellmeister  
Your obliging servant,  
Mattheson.

P.S. I am taking the liberty of sending you an example of my *Clavierarbeit* along with this, etc., etc.

---

A few weeks after sending this answer, the author received a second reply from the Ober-Capellmeister with the following contents:

Vienna, 12 January 1718

*Monsieur*, Most Highly Esteemed Sir:<sup>t</sup>

<sup>s</sup> Such has already been done in the Introduction to the *Organisten-Probe*, since this letter exchange.<sup>21</sup>

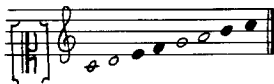
<sup>t</sup> Only an Italian *mio signore* is lacking.

Your communication of 18 December of the past year, together with the clavier pieces,<sup>u</sup> came safely into my hands; I looked through the latter, and as much as I have been able to understand them in the shortness of time, I found them quite fine, artful and of good invention, for which I send congratulations. No one knows better than Your Honor that in the *Beschützte Orchestre* Aretino and his glory were spoken of too harshly at various points—in Menippus's Eulogy of the Author<sup>28</sup> Aretino is even labeled an atheist; thus you cannot overly reproach me that I was disturbed at this, since in these countries no one complains about the difficulty of the Aretinian syllables; to the contrary their good effects are heard daily; for all the boys here from the ages of nine and ten can sing the most difficult pieces *all'improviso*, which could not be if the Aretinian invention were full of distress and misery; it is also retained in Italy, where indisputably the most excellent singers come forth with this *methode*. Since Hamburg is not the entire musical world, and since only there is it so bothersome to learn the art of singing in this manner, I do not mind if *ut, re, mi, fa, sol, la* is buried there. It seemed strange to me when Your Honor wrote that great virtuosi should never think about such *baggatellien*; I consider Your Honor such a great virtuoso, and yet you have humbled yourself to write books on this. For my part, I have never had any reason to doubt the usefulness of this invention, and have never thought to write about it. Your Honor has done me the honor to hear my opinion of the *Beschützte Orchestre*: this I wrote quite sincerely, in all seriousness and without joking; if one is not happy with this, he can stick to his opinion; I am perfectly satisfied with it. The resemblance between my opinion on the modes and St. Stephan's Tower is rather *piquant*. I am generally able to prove more in my writings than I advance; and it would cost me no trouble at all to demonstrate clearly in front of your eyes that the twenty-four modes have no reason, if I were only dealing with someone who was not a slave, and was not so much taken in by his own opinion. If a singer in a Cantata asks for the accompaniment with a *clavicembalo*, he might, for his convenience, transpose the Cantata, e.g., from C [Example 2] to a tone higher, e.g., [Example 3]. Does that make a new mode?<sup>29</sup> From this it necessarily follows that the twelve pretended modes in the *Beschützte Orchestre* are only a single mode, as is seen in the accompanying table;<sup>x</sup> it is perfectly evident from

<sup>u</sup> Namely, *Das Harmonische Denckmal*, of which a few copies may still be obtained from the author; they are to be had nowhere else in Germany.

<sup>x</sup> In the accompanying table the twelve scales were presented in notes; the first was C D E F G A B C, with the inscription *ut, re, mi, fa, ut, re, mi, fa*; each time, the valuable *mi-fa* were presented in black noteheads, in the manner in which they are presented in the passage cited from the *Organisten-Probe*. [See Translator's Note 29.]

EXAMPLE 2



EXAMPLE 3



this demonstration that in all twelve systems of this octave, the tones and semitones enter in the same positions. It is clear that the modes must be taken only from the diatonic genus. To prove this is to know it beforehand, since the semitone can be made in two ways: essentially and accidentally. Essentially, when the sharps or flats are placed at the beginning of the staff and coincide with one of the six natural diatonic modes, in which case they are transposed modes and are not capable of making a new mode; accidentally, when the sharps or flats are placed in the middle more or less to alter the modulation, as the sharp before C or the flat before B, which accidentals are not capable of changing a tone; for accidents do not change things of substance. And it would be quite absurd, e.g., if I composed a piece in D minor and placed a sharp accidentally before C in order to form a new mode; under such circumstances one could never say: the piece is composed in this mode. However, if one sets the sharp to C essentially, and thereby would make a new mode, it is well to ponder whether this new mode is of such importance that one should institute something new in opposition to the old authority. Modulation would show how poor this new mode (D minor with the prefixed C#) would be. If I wanted to modulate [*moduliren*] to F, as its third, C# is out of place. If I wanted to modulate to A, as its fifth, and perhaps compose a cadence from E to A the C# would make an ugly effect.<sup>7</sup>

---

The remaining eleven scales of the major mode had the same inscription, but had the degree of transposition up or down, e.g., *l'istesso modo d'un mezo tuono piu alto*, etc., and this looks altogether quite comforting.

<sup>7</sup> If this argument is followed through, four of the six old modes are in the same situation; yes, even in more damning perdition: as, e.g. D minor with the B; E minor without F#; F major without Bb; G major without F#. For whoever wants to modulate in the first, as Dorian, to F, as its third, cannot use B; whoever in the next as so-called Phrygian, wants to modulate to B, as its fifth, will find the F out of place;



Suppose, however, granted but not conceded, I allow this system, D E F G A B C# D, to be considered as a mode; then this would be the first and the substitution of C of the other mode. Where are the remaining twenty-two modes?<sup>z</sup> It is clearly seen from this inconvenience that the tone or mode is not formed in any way from the major or minor third, as Your Honor advances. I wanted to write something more extended about this, in order to make Your Honor come to better ideas, worrying that Your Honor could otherwise come away with a bad reputation among those who are properly competent in *musique*, which I would regret very much, since Your Honor otherwise merits special esteem on account of Your Honor's special erudition and zeal for beloved *musique*. Please spare me the printing of my two unpolished letters . . .<sup>a</sup> however, my opinion of solmization and on the modes may be made known to the whole world.<sup>b</sup> Enough has been said concerning my opinion; for I have neither the time, the humor, nor the inclination for this kind of argumentative writing. If I can otherwise do a pleasant service for Your Honor, I can be freely ordered; then I am and remain,

my Most Esteemed Sir, Your Servant  
Johann Joseph Fux

P.S. I could write many things to my credit about my career and my accomplishments if it were not contrary to *modestie* for me to put in evidence my own *elogia*; meanwhile be it enough for me that I am considered worthy to be first Capellmeister to CHARLES VI.<sup>c</sup>

---

[Mattheson comments:] We can see from this that those who do not have the confidence to get on the straight path must seek out all kinds of crooked ways. We must become acquainted with these deviations, so that they do not bother us. The first loophole in the above letter concerns the good Menippus; as if the author of the *Orchestre* were bound

---

the third, called Lydian, can hardly undertake a modulation to its final chord, much less to its sixth or fourth, without B $\flat$ ; and it does not have it. How will even the fourth, Mixolydian, come into its own with F? Is there room, if I want to modulate only to D, as its fifth, to B as its third, or to E as its sixth? For in each case it must be nothing other than F#.

<sup>z</sup> They are presented life size above, [in example I].

<sup>a</sup> What is missing here was omitted on purpose.

<sup>b</sup> How could this be done better than in Fux's very words but without such expressions as do not have to do with the subject?

<sup>c</sup> The address on this letter is the same as that on the preceding, except that it reads Haumbourgue on the Elbe.

to defend a pseudonym. Second, he [Fux] does not want to understand that it is entirely different to write about solmization and to write against it. Third, entirely different words are put in my mouth, and the *expressiones* are twisted. Fourth, Hamburg music is ridiculed. Fifth, even invective is used. Sixth, the location of the tone is unfairly confused with the semitone. Seventh, an unphilosophical circle<sup>30</sup> is produced, and eighth, entirely untimely prophecies appear. The world may judge whether these are good reasons for one to return to solmization and to the old modes. We will see how they are answered in the reply, and especially how the above postscript was so contrived that from now on he has reason to hide his false modesty.

---

Hamburg, 12 February 1718

Most Noble, etc., Highest and Most Esteemed Sir Ober-Capellmeister,

Menippus, whom you mention in your letter of 12 January, wrote anything but a eulogy of the author of the *Orchestre*: he has only exclaimed a hurried curse against Aretinian solmization and its defenders, in the manner in which he felt in his heart as an *experto Ruperto*. That he also made the devout Guido into an atheist<sup>d</sup>—this proceeds from a mistake of scholarship which concerns only the names: because not Guido, but Pietro Aretino,<sup>32</sup> is considered one. Even great people can err, and if the contents of the *carmen* could have been reconsidered before printing, it would doubtless have been changed. In any case, one may hardly attribute other people's oversights to me, since I had no part in them.

I beg your pardon, my Sir Ober-Capellmeister, I wrote no books on solmization, but only wanted to insert a single little chapter against solmization<sup>e</sup> into the *Beschützte Orchestre* because I was forced to; I know best how reluctantly I did it, and attest it in more than one place.

<sup>d</sup> It was sufficiently proven on pages 787 and 788 in *Orchestre* III that Aretino was treated not too severely, but too leniently.<sup>31</sup>

<sup>e</sup> An upright German has all the more cause to correct this distortion, especially when provoked, because in reading old church history, not without astonishment, it must be noted what happened to so many honest men on account of these scholastic tomfooleries. E.g., in 1588 there was a rector in Lübeck by the name of Pancratius Crugerius, former Cantor of St. Martin's in Braunschweig, whom the Lübeck *ministerium* mistreated by, among other things, having him removed from the pulpit, banned from the sacraments, and finally removed from service—all because he changed *ut, re, mi*, etc., to A, B, C. Thus writes the reviewer of the *Athenar[um] Lubec[ensium]* in *Acta Erudit[orum]* lat., October, 1722, p. 499ff.<sup>33</sup> "Fourth: [The priests] brought him [Crugerius] to justice because of a musical novelty. He had done away with the old *ut, re, mi*, and had ordered A, B, C to be sung in their place." And thus it is seen how the solmizing inquisitors have made ABC-martyrs for a hundred and thirty-odd years already; but they have been able to destroy this type of teaching as little as the Jesuits could destroy the Gospel.

Furthermore, I use expressions in no way as Your Honor reproaches me, namely: "that great virtuosi should have never thought about such *bagatellien*"; rather, my thoughts were formulated in these words: "it is a sin, shame, and nuisance that reasonable composers should waste a word on such tomfoolery", *c'est a dire*: the question is, whether the tones must be named or pronounced with the reusable *ut, re, mi, fa*, or with another, more adequate means? There I stand, and don't even demand the endorsement of a great virtuoso to declare it; "for an arrogant man loves to be praised";<sup>34</sup> but rest gladly on the straight road: especially since Hamburg is certainly not the entire musical world, as Your Honor rather scornfully writes. Yet I have otherwise been told that the good Italy, although it is considered the foremost *seminarium musicum*, cannot by far usurp the title of the entire musical world: because people also live behind the mountains. Here and there in Germany as well as in England (not to mention France) a small but rich and solid musical culture emerges far and wide, which "the wicked crowd of the Tuscan Street"<sup>35</sup> has never been able to find on the map of Castrato-Land. I remember here the words of Monzambano, alias Puffendorff, in his book *De Imp. Rom.*, on us Italianized Germans. This agreeable though stinging text reads: "He [the German who has seen Italy] acquires a certain reputation for foresight among the peoples north of the Alps, because of having beheld Italy from the mountain peaks."<sup>36</sup> If I now leave this aside, it is very widely rumored in our barbarism here at home, that the Italians are mostly good Puteanists, and add the reliable seventh syllable *si* for the completion of the octave in every case, just like the French. However, I would make further inquiries before I confirm it more elaborately.

Your Honor has dealt in this correspondence with one who is anything but a slave, either to his own, or to any other unfounded opinion; who is born free, lives free, and serves a nation that is so free, that for him slavery and Bohemian villages are equally unknown, foreign things. He has also recently read a book entitled *La Liberté de penser*;<sup>37</sup> and although he is not in agreement with this author on all points, he nevertheless loves the title of freedom, and disparages, however, with all his might the detestable name that Your Honor called him, which, although it is nothing less than *piquant*, sounds, to say it in German, rather rude.

You gave me the honor, my worthy Sir Ober-Capellmeister, to write your opinion about the *Beschützte Orchestre*; I am quite contented with this since you assured me again in your second letter that it was all meant seriously, and was not joking. I do not want to discuss the facts any more here, but spare my thoughts until a more comfortable opportunity, when if not the whole, then at least half of the musical world (namely, the German half) shall judge which one of us is a real slave

to his old opinion; who would obstinately retain the obsolete. Then and there,<sup>f</sup> the question will also be fully solved: whether or not a new mode originates if a piece is transposed from C to D, etc. Otherwise, I am pleased that Your Honor wrote out for us a small table, showing so fine and prettily the location of the semitone in all twelve major systems; and thereby also wanted to teach us the difference between the essential and the accidental; nothing of this sort has been seen in these environs, and because it is a *pièce curieuse*, I shall ask permission to have it printed with the rest,<sup>g</sup> although according to Your Honor's order, I will carefully see to it that the objectionable passages in the two letters labeled as unpolished by Your Honor himself are deleted. I have only the intention of publishing Your Honor's opinion on solmization and modes in appropriate terms (which, according to your express commission, may be made known to the whole world). However, if after all I have received only a pair of unpolished letters from Your Honor, I have the ardent desire to receive one single polished letter. It remains to be seen if Your Honor will deem me worthy of it.

As for where the semitone lies, I finally have understood from Your Honor's gracious table that it appears the same in all twelve octaves of my major system; however, that Your Honor chose to notate the major tones equally: that will probably be a small error covered up by an otherwise great *virtù*. One may easily differentiate the major tones from the minor tones; thus it is seen how C and D play with it so easily. Very seldom does this die deceive: this art is established.

If, however, modulation, be it rich or poor, should be that which distinguishes the modes, why have the semitones received an unnecessary function? This circular reasoning is unworthy of a true musician.

If Your Honor would consider that particular system where the semitones lie after the second and seventh degrees (which I made only for a joke), to be a new mode, and would then seriously ask: not granted, but conceded, where are the remaining twenty-two? So I would answer.<sup>h</sup> I have already sketched them and planned to further complete them (i.e., to illustrate with examples), but Horace counseled me with the verse in Chapter III [sic] of the *Satires*:

Never is your reputation likely to be in equal accord with your effort.<sup>38</sup>

If, after all, I hold a poor reputation because of my unauthoritative

<sup>f</sup> See the Introduction to the *Organisten-Probe*, p. 65ff.

<sup>g</sup> A description was already presented above, which, for want of notes, will suffice.

<sup>h</sup> It was shown in sufficient detail above, and everything was proven mathematically; more to show the impotence of the semitones than anything else.

thoughts among those experts or inexperts in music, about which Your Honor appears to be somewhat grieved with arrogated concern, I feel indifferent about it: for I am not one of those (to quote Nazianzus<sup>39</sup>) “who are motivated more by the desire for fame than the love of goodness.” It is enough, if a special respect belongs and is owed to me, on account of my hearty zeal for beloved music; it is profoundly unimportant to me whether or not I receive it. My motto is this:

*Un generoso cor s'appaga e gode  
Di meritar, non d'ascoltar, la lode.*<sup>40</sup>

And with this the matter comes to rest in GOD's name, with our little exchange of letters on the above subjects; meanwhile I want to lay nothing in the way of Your Honor's time, *humeur*, and inclination; rather I always thought that the greatest honor is to die in all esteem as,

My Highest and Most Esteemed Sir  
Ober-Capellmeister,  
Your Servant  
Mattheson.

\* \* \*

#### TRANSLATOR'S NOTES

1. Two articles of mine survey the change from modal to major-minor recognition from the perspective of German theory, but with some references to developments in other countries: “Major-Minor Concepts and Modal Theory in Germany: 1592-1680,” *Journal of the American Musicological Society* 30 (1977) pp. 208-253, and “The Recognition of Major and Minor Keys in German Theory: 1680-1730,” *Journal of Music Theory* (spring 1978, not yet published). See footnote 85 in the *JAMS* article for references to the first presentations of twenty-four keys. For the most comprehensive history of solmization see G. Lange, “Zur Geschichte der Solmisation,” *Sammelbände der Internationalen Musikgesellschaft* 1 (1899-1900) pp. 535-622.

2. Erfurt, n.d. See footnote 59 in my *Journal of Music Theory* article for the reasons I have dated it in 1715 or 1716.

3. Georg Bertouch (1668-1738), Johann Joseph Fux (1660-1741), Johann David Hein[*i*]chen (1683-1729), Georg Friderich Hendel [sic] (1685-1759), Reinhard Keiser (1674-1739), Johann Philip Krieger (1649-1725), Johann Krieger (1651-1735), Johann Kuhnau (1660-1722), Christian Ritter (1645?-1725?), Johann Christoph Schmidt (1664-1728), Augustin

Stricker (1675?-1720?), Georg Philip Telemann (1681-1767), and Johann Theile (1648-1724).

4. *Criticae Musicae Tomus Secundus* (Hamburg, 1725) pp. 179-288.

5. See my above-cited article in the *Journal of Music Theory* for a survey of the contents of those letters which refer to the modes or major-minor keys.

6. See my *Journal of Music Theory* article cited above for a discussion of the influence of this letter exchange on whether the *Gradus* should be viewed as a counterpoint manual or a composition text.

7. See Oliver Strunk, *Source Readings in Music History* (New York: W. W. Norton, 1950) pp. 121-125.

8. The Fux-Mattheson correspondence is found on pp. 185-205 of the *Criticae Musicae Tomus Secundus* (facsimile ed. [Amsterdam, 1964]). Footnotes indicated by letters or an asterisk (\*) are Mattheson's, numbered footnotes are by the translator. Addresses and dates have been moved to the head of the letters to which they apply. I wish to thank Professor Jan Meyerowitz for his invaluable assistance in unscrambling some of the more archaic and colloquial passages.

9. Heinichen also wrote to Mattheson in German and used *Monsieur*, but received no such reproach.

10. I.e., Buttstett's work.

11. Erycius Puteanus (1574-1646), a Dutch scholar and author of a treatise on music: *Modulata Pallas sive Septem Discrimina Vocum* (Milan, 1599), in which a seventh syllable was added to the Aretinian six. This work was reprinted as *Musica Plejas* (Venice, 1600) and *Musathena sive Notarum Heptas* (Hanover, 1602). In *Das Beschützte Orchester*, Mattheson had discussed Puteanus's complaints against Aretinian solmization, and quoted passages from the *Musathena* (p. 325). Puteanus's seventh syllable is *bi*, not *si* as stated by Mattheson: see *Modulata Pallas*, p. 96, *passim*.

12. Caesar Baronius (1538-1607) wrote *Annales Ecclesiastici* (1588-1607), a history of church matters commissioned by and highly partial to the Catholic Church. He was an important source of information on church music, especially for Forkel.

13. The meanings of the term "modulation" as used by Fux and Mattheson have given rise to some disagreements among modern scholars. Beekman Cannon (in *Johann Mattheson, Spectator in Music* [New Haven: Archon Books, 1947] pp. 139-140) interpreted the term in its modern sense in his summary of this letter exchange. Alfred Mann, in answer, argued that Fux's use of the term should not be construed in the modern sense, but rather as "'melody,' a true derivative of *modus*—in the sense of melodic patterns determined by a modal scale. This explains

why Fux maintained that all possibilities of modulation were contained in the six modes and why he saw no reason to establish a system of 'twenty-four new modes' " (*The Study of Fugue* [New Brunswick: Rutgers University Press, 1958] p. 54). The term modulation was certainly used in the meaning described by Mann through the early 18th century. At this time, however, it began to take on the meaning of change of key, replacing *Ausweichung*. See William J. Mitchell, "Modulation in C. P. E. Bach's *Versuch*," in *Studies in 18th-Century Music, A Tribute to Karl Geiringer on his Seventieth Birthday*, ed. H. C. Robbins Landon in collaboration with Roger E. Chapman (New York: Oxford University Press, 1970) pp. 333-342. Walther's *Lexicon* presents a definition taken from Mattheson's *Critica Musica* I, p. 261, footnote: "the way and manner with which a singer or instrumentalist brings out the melody (*die Art und Weise, oder die Manier, womit ein Sanger oder Instrumentist die Melodiam herausbringt*)." Yet Mattheson himself does not use the term in his own meaning: the term is used in three passages in this letter exchange, p. 46, line 17; p. 46, line 20; and p. 47, line 9. The first is a paraphrase of Fux's passage; the second two usages clearly refer to "types of melody," i.e., Mann's meaning.

Fux uses the term in four passages: p. 41, line 13; p. 41, line 15; p. 52, line 9; and p. 52, line 17. The first three can be interpreted solely in Mann's sense; the last makes sense only in the modern meaning.

The older meanings of the term were still in use at least as late as the 1790s, when the article "Modulation" in Sulzer's *Allgemeine Theorie* notes both this and the modern meaning. But the reader is still referred to the article "Ausweichung" for a full study of the modern meaning.

14. I.e., Plate XXII at the front of the *Orchestre* II: "Systema novum viginti quatuor modorum musicorum in duas classes divisorum." The major scales are presented in musical notation on the left side in chromatic order, C up to B. On the right side are the ascending and descending melodic minor scales.

15. Mattheson apparently intends to direct attention to Fux's rather archaic orthography.

16. Giovanni Battista Doni (1594-1647, Italian theorist of the *stile rappresentativo*), *De Praestantia Musicae Veteris Libri Tres* (Florence, 1647; repr. Bologna, 1970) p. 142, not p. 111. The original source of the quote is Horace, *Epistulae*, II.1.83-85.

17. Isaac Voss (1618-1689), a writer on Affektenlehre, among other subjects. His major work is *De Poematum Cantu et Viribus Rhythmi* (Oxford, 1673). This quote, p. 90.

18. A journal published in Amsterdam from January to December 1722.

19. Dunstan, an English saint and Archbishop of Canterbury (909-988). In the index to the *Orchestre II* Mattheson identifies him as an “English *musicus* (940 A.D.) . . . Aretino may have had much to thank him for” (p. 516). On p. 271 of *Orchestre II*, it is said that Dunstan invented writing in four parts. John Hawkins clarifies the situation: “By a mistake in a passage of Johannes Nucius [see his *Musices Poeticae* 2 (1613) p. 298], and of his [Dunstan’s] name for that of John of Dunstable, he is by Printz, Mattheson, Francis Lustig of Gronningen, and Marpurg of Berlin, said to have invented music in parts.” (*A General History of the Science and Practice of Music* [London, 1776] Index, entry “Dunstan”.)

20. The source of the quote is Horace, *Ars Poetica*, 11.

21. Mattheson discusses the various tunings of intervals in the *Exemplarische Organisten-Probe* (Hamburg, 1719) pp. 52-112. He recommends a tuning of the chromatic octave in which the I, IV, and V chords in C, E, and G major are tuned to pure thirds and fifths. The sole remaining pitch in the chromatic octave is B $\flat$ , tuned to a major third below D. This system gives rise to four sizes of semitones and four sizes of whole tones. Only two pairs of keys (C and E, and F and A major) share identical tunings. Mattheson notes that the chromatic tones in these keys will differ in tuning. See pp. 57-59 and p. 60 for the tables which best illustrate these tunings.

22. Francisco Salinas (1513-1590), author of *De Musica Libri Septem* (Salamanca, 1577).

23. Franchinus Gaffurius (1451-1522).

24. There is a discrepancy here. The last pages of the *Organisten-Probe* do not contain this reference. Passages on intonation from Book III appear.

25. Example 1 shows in notes the pitches written out in letter names in Mattheson’s table. The ordering is added by the translator for ease in identifying the modes. The numbers following each scale identify the placement of the semitones. The following errors have been emended: the sixth step in #2 is printed as B $\flat$ ; #4 is printed 2, 4; #23 is printed 1, 4, 5, 6; #24 is printed 2, 4, 5, 6. All E $\flat$ s and D $\sharp$ s are printed “dis.” Those which have been changed to E $\flat$  are marked by an asterisk. Each mode is followed by Harmonic (H), Arithmetic (A), or both, indicating the possible divisions (Harmonic = having a perfect fifth above the final, Arithmetic = having a perfect fifth below the final). Once again, several errors have been emended: #1 is printed as “Harmonic and Arithmetic,” #7 is printed as “Harmonic.” Modes 10, 11, and 12 have neither a perfect fourth nor a perfect fifth above the final and are divided by third and sixth.



26. Studies of permutations and combinations (*ars combinatoria*) appear in many contemporary and earlier theorists, notably Brossard, Kircher, Mersenne, and Printz. For a study concentrating on later manifestations of this tradition, see Leonard G. Ratner, "Ars combinatoria, Chance and Choice in Eighteenth-Century Music," in *Studies in Eighteenth-Century Music*, pp. 343-363. Mattheson's point seems to be that unless one wishes to indulge in such manipulations, the role of the semitone in modal differentiation is nonexistent.

27. A collection of articles on contemporary musicians finally published by Mattheson in 1740.

28. Perhaps the best description of the purpose of these dedicatory passages found in so many works of the period occurs (in English) in Mattheson's *Grosse General-Bass Schule*: "It is usual, upon the publishing of our Works, to print before them such Copies of Verses, as have been made in our Praise: Not that you must imagine, we are pleased with our Commendations; but because the elegant Compositions of our Friends should not be lost" (fol. a3v). Mattheson identifies this passage as coming from the *Spectator*, No. 553.

29. Mattheson does not reproduce these last two sentences of Fux's letter here, since he had already printed them in the *Organisten-Probe*, p. 65f. The reader is merely referred by means of a footnote (w) to that passage, in which Mattheson answers the question thus:

I will answer this with one word, a clear and distinct "YES," and I mean it as sincerely as if I had said it on the witness stand; this can even be confirmed with a strong "certainly." Why so? Because the C mode, if I base it only on the diatonic genus, has a major tone after the first, fourth, and sixth degrees; minor after the second and fifth. On the other hand D has a major tone after the second and fifth; but a minor tone after the first, fourth, and sixth degrees, which is exactly reversed. . . . as all of the above scales and calculations show with all clarity.

Cf. Translator's Note 21.

30. I.e., circular reasoning.

31. In the third edition of the *Orchestre* (Hamburg, 1719), the passage points out that atheism and superstition are equally sinful. Since solmi-zation is superstition for Mattheson, Aretino (i.e., Guido) was guilty of a sin equivalent to atheism.

32. Pietro Aretino (1492-1556), an Italian author known for his libelous writings.

33. *Acta Eruditorum*, a journal of book reviews on all subjects pub-

lished in Leipzig in the 17th and 18th centuries. The full title of the book referred to is *Athenarum Lubecensium Pars IV sive Historia Athenaei Lubecensis* (Lübeck, 1722) by Jean. Henr. von Seelen.

34. Horace, *Satires* (*Sermones*), II.5.96.

35. Horace, *Satires*, II.3.228. A reference to a street in Rome known for prostitutes.

36. Severino de Monzambano is a pseudonym for Baron Samuel von Pufendorf (1632-1694), a scholar, historian, and writer on legal matters, who wrote many works on contemporary political institutions. The work referred to here may be the *Disquisitio de Forma Imperii Romano-Germanici ad Severium de Monzambano* (1668), published under the pseudonym C. A. Teuteberg.

37. Apparently an anonymous, undated, political pamphlet. See Theophilus Georgi, *Allgemeines Europäisches Bücher-Lexicon*, Vol. V (Leipzig, 1753) p. 234.

38. Horace, *Satires*, II.3.66.

39. St. Gregory of Nazianus (ca. 329-388), a church father.

40. A generous heart is satisfied and is pleased with itself to merit praise, but not to listen to it.

# TEXT UNDERLAY IN FRENCH MONOPHONIC SONG

ca. 1500

*Jay Rahn*

The problem of text underlay is a most vexing one for the editor of late 15th- and early 16th-century music. Except in the case of syllabic settings, many doubts arise for the transcriber who tries to adjust the syllables of a text to the notes of its accompanying music. This is largely because ligatures, which then constituted the only means of grouping notes to be sung to a given syllable, were applied quite casually, and in any case could not control the distribution of durations shorter than a semibreve.

Since Edward Lowinsky's pioneering writings on the subject,<sup>1</sup> editors of Renaissance pieces have relied most heavily on the remarks of certain 16th-century music theorists in their attempts to settle problems of text placement. However, as will be shown, the theorists' comments are of restricted value when one confronts French monophonic song ca. 1500. The approach adopted in this article is to examine passages in those songs where text placement is least ambiguous, namely, those which are syllabic. From this examination recurrent patterns emerge which can be summarized in a few "rules." We shall then test the applicability of these observations to melismatic sections of the same repertoire, as well as to the songs' immediate precursors and followers in the tradition of French monophonic song. Finally, some implications for editing polyphonic music are discussed. To establish a framework for describing the patterns, a general discussion of the theoretical treatises, the sources for the music, and the style of the songs is necessary.

## RENAISSANCE WRITINGS ON TEXT UNDERLAY

The most famous treatment of text placement in the 16th century occurs in the thirty-third chapter of the fourth part of Zarlino's *Istituzioni armoniche* (1558).<sup>2</sup> Zarlino provides ten rules for correctly adjusting a text to its music. These rules appear to be hardly applicable to French monophonic songs ca. 1500, however, because his account was written half a century after the songs were notated, and because his discussion is based on Latin rather than French examples.

Although it was written after Zarlino's work, a small treatise on text

underlay by Gaspar Stoquerus, *De Musica Verballi Libri Duo* (ca. 1570),<sup>3</sup> deals more directly with the period under consideration. Stoquerus not only outlines—like Zarlino—ten rules for dealing with the music of his own time, that is, the Willaert generation, but he also provides an additional ten rules for performing music of the Josquin generation. Unfortunately, Stoquerus does not appear to be concerned with French texts either, for throughout his discussion he refers to accented and unaccented syllables. Although accentuation is an important feature of Latin, Italian, or German prosody, it is not relevant to French versification. In French poetry, only the last syllable of a masculine line or the penultimate of a feminine line regularly receives an accent. Systematic application of rules of stress or length to French songs results in the clumsy—and often impossible—procedure of adjusting the underlay in each stanza.

Recently, Don Harrán has brought to light a section of an earlier treatise by Lanfranco, *Scintille di Musica* (ca. 1530).<sup>4</sup> The rules which Lanfranco provides accord well with those given by Stoquerus for the Josquin generation and thus corroborate the latter writer's comments. In Lanfranco's work, the problem of applying the rules to French song is met head on. The theorist unequivocally states:<sup>5</sup>

Exceptions occur at times in works imitating French chansons [with regard to his sixth rule].

And this is the case with regard to Masses and motets, for I speak neither of French chansons nor of madrigals [with regard to his eighth rule].

For some reason, French texts cannot be underlaid in the same manner as those in other languages, especially Latin. Few of the theorists' rules can be applied to chansons, and those that can are insufficient to provide a determinate solution to problems of underlay. Different rules were at work in French songs.

#### SOURCES OF FRENCH MONOPHONIC SONG CA. 1500

The two principal sources of monophonic songs from the turn of the century are manuscripts which were compiled ca. 1500-1510, Paris, Bib. nat., f. fr. 12744 and 9346 (referred to as "A" and "B", respectively).<sup>6</sup> Unlike many contemporary polyphonic chansonniers, both A and B provide complete texts with the music. Their compilers seem to have taken great care in adjusting the texts to the melodies. Lines of poetry are aligned quite carefully beneath their corresponding melodic phrases. The final words of a line are frequently written beneath preceding parts of

the text so that the beginnings and ends of lines coincide visually with the beginnings and ends of phrases. Spaces separate portions of poetry which fit different sections of a tune. On moving from one musical staff to another, the scribes frequently hyphenate a word so that the first note on the following staff is aligned with its proper syllable. Repetitions of lines or parts of lines are often written out in full.<sup>7</sup>

In these ways, the general aspects of underlay are meticulously indicated in the sources. However, details remain perplexing. In order to solve these remaining problems, let us consider some of the songs' overall stylistic features.

## THE STYLE OF THE SONGS

Since text placement amounts to matching musical durations with syllables of a text, it is not surprising that the rhythmic and prosodic regularities of the songs provide highly instructive clues concerning their underlay.

The overwhelming majority of the songs are duple at the lowest levels of the metrical hierarchy. Two fusas constitute a semiminim, two semiminims a minim, and two minims a semibreve. In *B*, where almost every song bears the signature for *tempus imperfectum diminutum* (♠), the semibreves are nearly always paired to form a duple breve. The same is true of the songs in *A*, although they generally lack time signatures. In both *A* and *B* the majority of textual phrases are composed of groups of paired semibreves, phrases of odd numbers of semibreves appearing much more rarely. In short, the lowest levels of metrical organization are consistently duple, and the upper levels strongly tend to be duple.

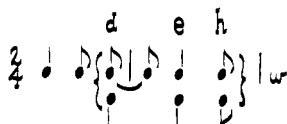
Nevertheless, there are occasions when three minims are grouped into a semibreve giving rise to triple meter at that level. This is usually indicated by the signs  $\frac{3}{2}$  or 3. When minims are grouped in threes, generally either the first two or last two are paired to form an "imperfect" semibreve. "Imperfections" such as these can be termed "integral" bisections of a perfect semibreve (3) into an imperfect semibreve and a minim (2 + 1), or *vice versa* (1 + 2). In a "rational" bisection, a duration (e.g., of two or three minims: ♪ or ♪.) is divided into equal halves (e.g., minims or dotted minims: ♪ ♪ or ♪. ♪.). In an integral bisection, the "halves" are unequal since fractions of units are not presented (e.g., 3 is divided into 2 + 1 or 1 + 2, not  $1\frac{1}{2} + 1\frac{1}{2}$ ). In this sense, perfect semibreves are usually bisected integrally.<sup>8</sup>

Within these metrical frameworks, the tunes are usually "commetric" rather than syncopated.<sup>9</sup> The few cases of syncopation are without exception of the type illustrated in Examples 1-3.<sup>10</sup> In each case, the syncopated

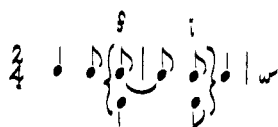
EXAMPLE 1



EXAMPLE 2



EXAMPLE 3



EXAMPLE 4



tones (a, b, c; d, e, f) establish a succession of evenly-spaced tones (indicated in brackets) with the following commetric tone (g, h, or i, respectively). Such syncopations represent a shift of the metrical hierarchy whereby the second of a pair of halves becomes the first.<sup>11</sup> These patterns can also be divided into shorter values without disrupting the basic scheme, as Example 4, a variant of Example 1.

With regard to prosody, several distinctions are basic to the songs. First, one must distinguish between lines with masculine and feminine endings.<sup>12</sup> In the former, the vowel of the last syllable is accented; in the latter, it consists of an unaccented, "mute" *e*, as in the following words:

blanche, puis-je, (ils) mangeoyent. By convention, the last syllable of a feminine line is not counted when assessing the line's quantity. Accordingly, the following line is considered to have seven syllables, not eight:<sup>13</sup>

Elle est gente et go-di-net-te  
1 2 3 4 5 6 7 (8)

Following this convention, a second distinction is to be observed, namely, between lines with even and odd numbers of syllables. In the songs, lines of six or eight syllables are much more frequent than lines of five or seven. Consistent with this is the fact that nine- and eleven-syllable lines almost never appear, whereas ten-syllable lines are frequent.<sup>14</sup>

A final distinction to be considered involves the mute *e* again. This vowel is usually elided in French speech, but in court poetry it is invariably pronounced as follows:<sup>15</sup>

speech: Qui *chant'* par amours  
court poetry: Qui *chante* par amours

In monophonic song, the situation is more complex; sometimes such *e*'s are pronounced and at other times they are elided. This results in a certain ambiguity with regard to the number of syllables, since the above example could be read as a five- or a six-syllable line. Generally, the strong tendency toward isometer in the poetry, or the syllabic nature of the setting suggests the appropriate solution, but not every case can be accounted for in these ways.

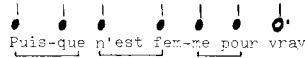
In summary, the following dichotomies mark the style of the songs: a) duple *versus* triple divisions of the semibreve, b) commetric *versus* syncoated rhythms, c) masculine *versus* feminine lines, d) even *versus* odd numbers of syllables in a line, and e) pronunciation *versus* elision of the "mute" *e*. As will be seen, each of these oppositions is reflected in the system of underlay.

## THE SYSTEM OF TEXT UNDERLAY

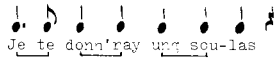
Since the songs in duple meter greatly outnumber those in triple, the former will be discussed first. The simplest case involves phrases which set masculine lines with an odd number of syllables (usually five or seven). The last syllable (when sung) can be of any length, though it is usually as long as or longer than the preceding syllable. Excluding this last syllable, such lines consist of an even number of syllables, which are grouped in pairs. In each pair, the note value which sets the first syllable is as long as, or longer than, that for the second. In syllabic lines, the latter possibility invariably involves a dotted value: ♩, ♪, ♫, ♩, etc. The

aggregate length of a pair corresponds to a binary durational unit. This unit can be a minim, a semibreve, a breve, or a long. Pairs totaling a semibreve or breve are most frequent. (See Examples 5-8.)

EXAMPLE 5



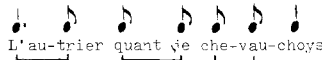
EXAMPLE 6



EXAMPLE 7



EXAMPLE 8



Settings of feminine lines with an odd number of syllables differ little from those of masculine lines of the same type except that both the penultimate and last syllables of the former can be of any duration. This is consistent with the observation that the final syllable of a masculine line and the penultimate of a feminine line are accented. (See Example 9.)

EXAMPLE 9



The relationship between syllable position and pitch duration is much the same in lines with an even number of syllables. Here the second and third, fourth and fifth, etc. syllables are paired. The first syllable forms a sort of anacrusis which is one-quarter, one-half, or as long as the aggre-



gate duration of the following pair, as in Examples 10-12. When the anacrusis is the full length of the following pair, the characteristic “long-

EXAMPLE 10

Et dy moy sy tu m'ay-me-ras

EXAMPLE 11

Vray Dieu d'A-mors, con-for-tés moy

EXAMPLE 12

Ce mois de may par des-con-fort

short-short” opening of the narrative chanson of the 1530s results.<sup>16</sup> (See Examples 13, 14.)

EXAMPLE 13

En m'en ve-nant de Pa-ris la Ro-chel-le

EXAMPLE 14

En-tre nous, æen-tils com-pai-çnons

In some cases the first syllable is repeated in “stuttering” fashion. In such instances (see Example 15), the first utterance of the opening syllable

EXAMPLE 15

Par, par u-ne sent', je luy vins au de-avant

is twice the length of the second, yielding a doubly prolonged anacrusis. These beginnings are quite often explicitly indicated in the sources, and in some cases formal repetitions of phrases require repetitions of the “stuttering” openings. For the rest, the characteristic opening rhythm  $\square \diamond \diamond$  or  $\diamond \diamond \diamond$ , and the number of syllables in the line provide the clue that a “stuttering” beginning is called for. Evidently in the latter cases the practice was so common that it could be assumed without notating the first syllable twice.

An extended anacrusis often has further metrical significance. Depending on the length of the first pair of syllables, it can help to outline either the *modus* and *tempus*, or the *tempus* and *prolatio*. (See Example 16.)

#### EXAMPLE 16

beginning	$\square \diamond \diamond$	beginning	$\diamond \diamond \diamond$
modus	$\square \square$	tempus	$\diamond \diamond$
tempus	$\diamond \diamond$	prolatio	$\diamond \diamond$

A “stuttering” beginning can even outline all three, *modus*, *tempus* and *prolatio*, as in Example 17.

#### EXAMPLE 17

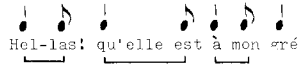
“stuttering” beginning	$\square \diamond \diamond \diamond$
modus	$\square \square$
tempus	$\diamond \diamond$
prolatio	$\diamond \diamond$

### TRIPLE METER

In duple songs, the first syllable of a pair is as long as or longer than the second. If this scheme is translated into a triple context, the following pairings are possible:  $\downarrow \downarrow$  and  $\downarrow \uparrow$ . Another possibility in triple contexts is the succession:  $\uparrow \downarrow$  which like  $\downarrow \uparrow$  represents integral bisection of the semibreve. The majority of syllabic triple-meter songs uses these

groups exclusively as may be seen in Examples 18-21. Occasionally, however, one encounters successions of three syllables each a minim in length.

EXAMPLE 18



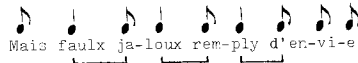
EXAMPLE 19



EXAMPLE 20

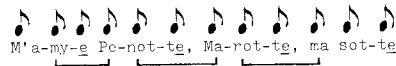


EXAMPLE 21



These result from the pronunciation of the mute *e* where it might have been suppressed. When sounded, as in Example 22, it forms rhymes which break lines into shorter units.

EXAMPLE 22



Thus, the underlay of triple-meter songs is more restricted than underlay in a duple context in that at most two durational units (minim and semibreve) are employed, and it is freer in that the division of a durational unit into thirds is found.

Of the approximately four hundred syllabic lines in our two sources, more than ninety per cent conform to this system of underlay (91.5% in

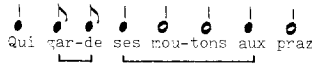
*A* and 93.7% in *B*). If one applies the system to the remaining lines, more than eighty per cent are found to be regular (Table 1). Most of the

Table 1. Frequencies and percentages of phrases with regular underlay in *A* and *B*.

TYPE OF UNDERLAY:	SOURCE:		
	A	B	A & B
regular	622 (80.7%)	589 (85.9%)	1205 (83.1%)
irregular	149 (19.3%)	96 (14.1%)	245 (16.9%)
total	771 (100%)	685 (100%)	1450 (100%)

exceptions can be accounted for in terms of syncopation and what might be called "reversal" of the system. Cases of syncopation conform to the patterns discussed above: a unit in the duple metrical hierarchy is displaced by "half a beat," and a return is made to the original, commetric scheme. (See Examples 23, 24.) In some cases, such syncopations result

EXAMPLE 23



EXAMPLE 24



in a temporary metrical ambiguity at the level of the breve. Groups of three semibreves are formed by the syllables in such a way that these passages can be interpreted either in duple, with alternations between commetric and syncopated rhythm, or in triple, with no syncopation. (See Example 25.) However, despite the consistency with which triple rhythms are presented, the underlying duple organization continues to manifest itself; the ends of phrases always coincide with the binary breve tactus, and usually the triple organization gives way to duple.

In instances of reversal, lines with an odd number of syllables are treated as though they had an even number, or *vice versa*. In such cases, there seems to be one syllable too many or too few. Although such reversals seem anomalous, they are quite consistent with both the prosodic style of the songs and the manner in which they seem to have been

EXAMPLE 25

BON VIN JE NE TE PUIS LAIS-SER,  
 JE T'AY M'A-MOUR DON-NÉ- E,

transcribed in *A* and *B*. In contrast with court poetry of the period, monophonic songs often contain metrical licenses. For example, super-numerary words or exclamations such as “et,” “hé,” and “hélas” are added to the beginnings and ends of text lines which are otherwise isometric. As mentioned before, *e*'s are sometimes pronounced and sometimes suppressed, and the number of syllables in a line might vary from stanza to stanza. Finally, syllabic lines sometimes contain fewer notes than syllables. This suggests—as one would otherwise assume—that the melodies were notated first and the words adjusted as well as possible to the tunes. Since the latter constituted a notational *fait accompli*, an ideal solution would not always be possible. Perhaps the compiler relied on performers to split a duration into two parts or find some other method of adapting the tune to the text. In such cases of reversal, one can often only speculate.

TEXT UNDERLAY IN OTHER SOURCES

More fruitful than such speculations is an examination of the patterns of text underlay found in other French monophonic songs of the Renaissance. The sources to be considered here range over a period of about seventy years. With regard to general features of text placement they are notated as scrupulously as *A* and *B*—if not more so. The songs resemble those of *A* and *B* stylistically; melodic and textual forms and modal tendencies are similar to those found in the Paris manuscripts. The tunes are generally simpler than those of *A* and *B* with respect to phrase lengths; thus, it is not surprising that pairs of syllables tend to cover a relatively short duration: a minim, semibreve, or breve, rather than a long as is often the case in *A* and *B*.

In the Dijon chansonnier<sup>17</sup> (ca. 1475) there are twenty songs which appear to have been originally monophonic.<sup>18</sup> Their tunes usually appear in the tenor parts of combinative chansons. Indeed two of the twenty correspond in text and tune to songs found in *A* and *B*.<sup>19</sup>

In matters of rhythm, prosody, and text underlay, there are further parallels between the two groups of songs. With one exception the songs are duple and bear the proportional sign  $\text{♩}$ . The exceptional case bears a triple signature but can be read just as satisfactorily in duple.<sup>20</sup> The tunes are commetric throughout, with a few instances of the special form of syncopation described earlier. Lines with even and odd numbers of syllables are approximately equal in frequency, largely because of the high frequency of five-syllable lines. The latter represent a peculiarity of the monophonic repertoire that is almost never found in courtly poems of the time or songs based on them. Masculine and feminine lines are treated differently and the mute *e* is treated in an ambiguous manner. All in all, the general style and especially the rhythmic and prosodic features—not to mention the concordances—suggest a strong affinity between the songs of the Dijon source and those found in *A* and *B*. This affinity is further reflected in the underlay of the songs.

Of the syllabic lines, more than ninety per cent (92.2%) adhere to the system of text underlay described above. The exceptions involve super-numerary syllables and the ambiguous *e*; in each there are more syllables than notes, as is sometimes the case in *A* and *B*.

If the system of underlay is applied to melismatic phrases, one again finds that more than eighty per cent (84.7%) can be fitted to the system. The largest number of exceptions involves the special type of syncopation; others involve the ambiguous *e*, extra syllables, and, in only three cases, reversal of the system (Table 2).

Table 2. Frequencies and percentages with which syllabic and melismatic lines are (or can be) set regularly in the monophonic songs preserved in the Dijon MS.

	syllabic	melismatic
regular	35 (92.2%)	65 (84.7%)
irregular	3 ( 7.8%)	15 (15.3%)
total	38 (100%)	80 (100%)

Shortly after the period when *A* and *B* were compiled, there appeared a printed collection of five monophonic songs entitled *Chansons nouvelles en lengaige provençal*.<sup>21</sup> Although no proportional signs appear in the

music, the songs are clearly duple throughout, and thoroughly commetric. All of the songs have lines with odd numbers of syllables, and almost all of the lines are syllabic. With only one exception, the syllabic lines adhere to the system described. The exceptional case involves the syncopated pattern discussed above. Of the melismatic phrases, only one cannot be underlaid in this way, and a comparison of it with two other renderings of the same phrase in the same song suggests that a notational error is involved<sup>22</sup> (Table 3).

Table 3. Frequencies and percentages with which syllabic and melismatic lines are (or can be) set regularly in the monophonic songs preserved in *Chansons nouvelles*.

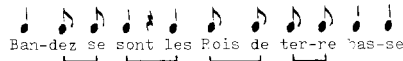
	syllabic	melismatic
regular	45 (97.8%)	7 (87.5%)
irregular	1 ( 2.2%)	1 (12.5%)
total	46 (100%)	8 (100%)

Toward the middle of the 16th century (1542), Jean Calvin, the Protestant reformer, published *La Forme des prières et chants ecclésiastiques* (Geneva).<sup>23</sup> It contains thirty-five monophonic settings of psalms translated into French by Clément Marot and Calvin himself. The style of these melodies is similar to that of the collections discussed previously, and indeed, with regard to rhythm, it is, if anything, more constrained. No dotted values appear; the only durational symbols found are the breve, semibreve, and minim. All the tunes are headed by the sign for *tempus imperfectum diminutum*. The settings are almost exclusively commetric; the few exceptions adhere to the syncopated patterns described above. Generally one can determine whether the mute *e* is to be sounded or not by the appearance or absence of a slash through the letter or its replacement by an apostrophe to mark the elision: *une, supply'*. Lines with an even number of syllables (six, eight, or ten) are considerably more frequent than those with an odd number.

Despite its overall consistency with the earlier monophonic songs discussed, there is one feature which is particularly characteristic of the psalter. Ten-syllable lines are often divided into two halves which are each treated as though they were separate lines, as in Example 26. As can be seen, duple groupings are abandoned at the caesura (marked by a brace).

Taking this special feature into consideration, one finds considerable regularity in the text underlay. The settings are almost entirely syllabic

EXAMPLE 26



and regular. Of the six exceptional cases (Table 4), three involve synco-  
pation of the type discussed earlier, and two employ reversal. The remain-  
ing exception involves an apparent adaptation of the “stuttering” open-

Table 4. Frequencies and percentages with which syllabic and  
melismatic lines are (or can be) set regularly in the  
monophonic songs preserved in *La Forme des prières*.

	syllabic	melismatic
regular	238 (97.5%)	4 (80.0%)
irregular	6 ( 2.5%)	1 (20.0%)
total	244 (100%)	5 (100%)

ing to a non-repetitive textual style. In contrast to the songs of *A* and *B*,  
syllables or entire words are never repeated immediately in the psalm  
settings. Thus, when the rhythmic pattern for a “stuttering” opening is  
presented, as in Example 27, an extra syllable appears in the line. Of the

EXAMPLE 27



few melismatic lines, only one is irregular.

\* \* \*

In summary, a system of text underlay can be inferred from the syl-  
labic lines of *A* and *B* which a) is consistent with the rhythmic and pros-  
odic style of the songs, b) accounts for more than ninety per cent of the  
syllabic phrases, c) appears to operate in the syllabic lines of other sources  
of French monophony from ca. 1475 to 1542, and d) can be applied to  
eighty per cent or more of the melismatic lines found in these sources.<sup>24</sup>

The songs of *A* and *B* reveal the greatest diversity in text underlay.  
This is mirrored by their diversity of overall style: melismatic lines are  
more frequent, as are triple meters and ambiguities involving *e*. There is  
also a greater variety of durations. By contrast, Calvin’s psalter is the



most uniform source with regard to both style and underlay. Few melismatic lines appear, few durational values, no cases of triple meter, and no ambiguities involving *e*. Between these extremes lie the monophonic songs of the Dijon chansonnier and the *Chansons nouvelles*.

Generally, syllabic lines are found to adhere to the system more often than are melismatic lines, about ninety per cent compared with about eighty per cent. This suggests that as the number of tones is increased the probability of irregularities in underlay also increases. It would be interesting to find out whether this correlation between regularity and number of notes holds in other repertoires.

It is difficult to say how far the system described here can be applied to contemporary polyphonic French song. Where monophonic songs are used as the bases for polyphonic settings, it seems appropriate to apply the system to those voices which use the pre-existent material. However, in courtly rondeaux of this and the preceding period, one must contend with a profusion of melismas and syncopations as well as few indications of word repetitions. By the time of the Parisian chanson (ca. 1530-50), these difficulties disappear for the most part. Syllabic settings become the norm—as is reflected in the Provençal songs and Calvin's psalter—and scribes tend to be more conscientious about presenting the entire text. Whether a similar system is inherent in these songs is an interesting question, for its answer might shed light on the genesis of chanson style during the early 16th century. But whatever that answer might be, one will probably find again that the norms of text underlay are intimately related to the rhythmic and prosodic style of the songs.

#### NOTES

<sup>1</sup> Especially his "A Treatise on Text Underlay by a German Disciple of Francisco de Salinas," *Festschrift Heinrich Besseler* (Leipzig: VEB Deutscher Verlag für Musik, 1961) pp. 231-251; and his comments on text underlay in the "Introduction and Commentary" volume of his edition of *The Medici Codex of 1518*, Volumes 3-5 in the series *Monuments of Renaissance Music* (Chicago: University of Chicago Press, 1968) pp. 90-107.

<sup>2</sup> Gioseffo Zarlino, *Istituzioni armoniche* (1558), Book IV, translated in Chapter 32 of Oliver Strunk ed., *Source Readings in Music History* (New York: W. W. Norton, 1950) pp. 255-261.

<sup>3</sup> Lowinsky, "A Treatise."

<sup>4</sup> Don Harrán, "New Light on the Question of Text Underlay Prior to Zarlino," *Acta musicologica* 45 (1973) pp. 24-56.

<sup>5</sup> *Ibid.*, p. 41: "Eccettuando alcuna volta la imitatione delle Canzoni Franzese"; p. 44: "Et cio sia detto in quanto alle Messe: & Motetti: Perche ne delle Canzoni Franzese: ne delle Madrigale io non ne parlo."

<sup>6</sup> *A* is edited in Gaston Paris and Auguste Gevaert eds., *Chansons du XV<sup>e</sup> siècle* (Paris: Firmin-Didot et cie, 1875; repr. Paris: Société des anciens textes français, 1935);

B in Théodore Gérold ed., *Le Manuscrit de Bayeux* (Strasbourg: Commission de la Faculté des Lettres, 1921; repr. Geneva: Minkoff Reprints, 1971). Both are re-transcribed in the author's *Melodic and Textual Types in French Monophonic Song, ca. 1500* (Ph.D. diss., Columbia University, in progress), Appendix B.

<sup>7</sup> Facsimiles of isolated pages and openings appear in Paris and Gevaert eds., Gérold ed., and Helen Hewitt ed., *Canti B*, volume 2 in the series *Monuments of Renaissance Music* (Chicago: University of Chicago Press, 1967) plates XIII and XVI, pp. 70 and 84-85 respectively.

<sup>8</sup> On integral bisection, see the author's "Some Recurrent Features of Scales," *In Theory Only* 2, nos. 11 and 12 (February and March 1977) pp. 43-52 (especially p. 45), and his "Text Underlay in Gagnon's Collection of French-Canadian Folk Songs," *Canadian Folk Music Journal* 4 (1976) pp. 3-14 (especially p. 11, footnote 9).

<sup>9</sup> For the term "commetric," see Mieczyslaw Kolinski, "A Cross-Cultural Approach to Metro-Rhythmic Patterns," *Ethnomusicology* 17 (1973) pp. 494-506. Kolinski uses the term as an antonym for "contrametric" (i.e. syncopated).

<sup>10</sup> For examples in modern notation the present article follows the edition of B, reducing the notes to one quarter of their original values, e.g., a semibreve in the original becomes a quarter note.

<sup>11</sup> Not surprisingly, it is this type of syncopation which theorists ca. 1500 feature in their examples of "syncopa." See, for example, Franchinus Gaffurius, *Practica Musicae*, trans. and ed. Clement A. Miller, no. 20 in the series *Musicological Studies and Documents* (Rome: American Institute of Musicology, 1968) pp. 113-114; and Pietro Aaron, *Toscanello in Music*, trans. and ed. Peter Bergquist (Colorado Springs: Colorado College Music Press, 1970) pp. 49-51.

<sup>12</sup> On masculine and feminine endings in French prosodic theory ca. 1500, see Henry de Croy's treatise (sometimes attributed to Jean Molinet), "L'Art de Rhétorique," chapters 2 and 3, in Ernest Langlois ed., *Recueil d'arts de seconde rhétorique*, volume 182 in the series *Collection de documents inédits sur l'histoire de France* (Paris: Imprimerie nationale, 1902) pp. 216-217.

<sup>13</sup> This convention is followed, for example, in Patrice Coirault, *Formation de nos chansons folkloriques* (Paris: Editions du Scarabée, 1953). Note, however, that the last syllable of a feminine line is counted in French prosodic theory ca. 1500 (cf. de Croy).

<sup>14</sup> When nine-syllable lines appear, they really amount to eight-syllable lines expanded or ten-syllable lines contracted, rather than true nine-syllable lines. On the problems of counting syllables in French monophony, see below. Note also that nine- and eleven-syllable lines are never discussed in prosodic theory of the time (cf. Langlois).

<sup>15</sup> The rules for counting syllables (including *e's*) in court poetry ca. 1500 are given in de Croy, chapters 1 to 4, pp. 216-217. The same rules were employed for court poetry through the 18th century.

<sup>16</sup> Cf. Gustave Reese, *Music in the Renaissance*, 2nd ed., (New York: W. W. Norton, 1959) p. 292. Openings of this type are also found in rondeaux of the Ockeghem generation, i.e., just prior to the period considered here.

<sup>17</sup> Dijon, Bibliothèque Municipale, MS. 517.

<sup>18</sup> On the Dijon MS, see Maria Rika Maniates, "Combinative Chansons in the Dijon Chansonner," *Journal of the American Musicological Society* 23 (1970) pp. 228-281. A facsimile edition is available in Dragan Plamenac ed., *Dijon Bibliothèque publique manuscrit 517*, (Brooklyn: Institute of Mediaeval Music, 1971).

<sup>19</sup> "Adieu par meshouen adieu" appears in both Dijon (no. 142, f. 172') and *A* (no. 82, f. 56); "Hoé sur la mer" appears in both Dijon (no. 122, f. 146') and *B* (no. 85, f. 87). See Maniates, pp. 256-257.

<sup>20</sup> The "triple" tune is the quodlibet which appears as number 1 in Maniates's list (cf. Maniates, p. 256).

<sup>21</sup> Edited by Emile Picot (Paris, 1909). A re-edition with critical commentary appears in Huguette Albernhe-Ruel and Philippe Gardy, *Les Chansons du Carrateyron* (Paris, 1972).

<sup>22</sup> Compare the first phrase of "Maudit sia tant de ratun," the first song in *Chansons nouvelles*, with the third and sixth phrases.

<sup>23</sup> Published in facsimile in Pierre Pidoux ed., *La Forme des prières et chants ecclésiastiques* (Kassel: Bärenreiter, 1959).

<sup>24</sup> Much the same rules appear to operate in French Canadian folk song collected in the 19th and 20th centuries (cf. Rahn, "Text Underlay in Gagnon's Collection," pp. 5-13).