

*C: Novack's correspondence with
Lowinsky regarding his Josquin
article*

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SPECIAL DELIVERY

November 18, 1972

Prof. Saul Novack
232 Beach 132nd St.
Belle Harbor, N. Y. 11694

Dear Saul,

I have been immersed in editing the Josquin Proceedings and have come to your paper. I have worked long and hard on it, as you will presently see. But let me first of all say, I consider it a vast improvement over your first essay on Josquin and I am delighted to have it in the volume.

I have been guided by two principles in editing your paper that I think you might agree with:

(1) Your essential ideas are so valuable that it is of the essence to omit anything that could damage them. This means not only obscure language but more importantly any doubtful or not quite accurate evidence. Your (and my) view on the harmonic and tonal aspects of Josquin are still sufficiently unpopular so that we must guard against exposing ourselves to easy criticism. I therefore counsel omission of anything that will not stand up to critical examination.

(2) Your ideas are so valuable that they do not need the support of an overblown rhetorical style--of which, fortunately, there is not very much. Whenever I can find a simple for a highblown word, I substitute it; whenever I can find a concrete term I prefer it to a general and vague concept. Thus I propose to do away with "independent linearity" not only because independence is part of the linear concept, but also because "linearity" is not an English word, but "(independent) voice-leading" is. I would change "beautiful technique," because a technique is not beautiful; any technique can be handled in an awkward, poor, or imaginative and appealing way; or I propose to substitute for the vague "beautiful inner form" the precise concepts at issue at this particular point: "direction and symmetry." Needless to say, all of this is offered to you for your consideration and for your approval.

But today I am confining myself to the more essential points of critique, to which I ask you to give, if you will, your immediate attention and, please, action:

1) We cannot expect the reader to be familiar with Schenker's analytical signs. Please provide a brief and concise explanation of the whole sign language, such as the "N" (Ex. 1), "P" (Ex. 2),

P (Ex. 6), dashes (ibid., mm. 145 and 147), - and + (Ex. 8, end);
N the repeated "6" (ibid.).

2) p. 3: why does the Dorian mode come closer to minor than Aeolian; does not Aeolian modify its 7th degree?

3) p. 4, line 9: "Unusual": is the superius line really unusual? I suggest: omit.

4) p. 4, fn. 6: "applied dominants." The examples really show modulation to a secondary tonal area rather than applied dominants, which do not disturb, but intensify the basic key. I suggest omitting the whole concept as not really pertinent to Josquin's music.

5) p. 6, top: I find the question an artificial and unnecessary alternative conveying the false impression that Absalon fili mi was considered "purely as a daring experiment in expression" (false factually, and false conceptually, for anything that is "daring experiment in expression" can be so only by virtue of some daring technical innovation). Factually, it was viewed from the beginning as a daring harmonic, modulatory design invented to express an extraordinary text.

6) p. 6, line 8: The bass does not move in perfect fifths, but in triads, as does, in strict imitation, every other voice.

7) p. 6, line 15: omit last sentence before § 2. It is vague and, with its use of the concept "tonality," confusing.

8) I find most of your demonstrations if accompanied by example, graph and analysis very convincing, but most of your references lacking example and graph unconvincing and better done without. I'll give the examples as they come, page by page. E.G., p. 9, top: the analysis of the De profundis is confusing. I'd favor omitting it. If you don't go along with this, then please put it so that the reader can follow and verify what you say: in particular: always give measure numbers. Mm. 34-51 do not jibe with your analysis; I'd do away also here with the concept of the applied dominant. Again, best solution: omission. (Don't spend a lot of time on these examples. You are making a fine case with your chief examples.)

9) p. 10: for the concept of variation-chain in the sequence, add footnote of Oliver Strunk, "Some Motet-Types of the 16th Century," Papers Read at the International Congress of Musicology, 1939 (New York, 1944), pp. 155-60, where, I believe, the term was originally coined.

10) p. 11, line 4: how about saying simply "feeling for tonal form" instead of "far-reaching vision of tonality"? After all, Dufay did the same thing already in his Ave regina coelorum (see Tonality and Atonality in 16th-Century Music, pp. 16-17).

11) p. 11: Planxit autem David does not contain a cantus firmus; it introduces, freely and only at particular points, the lamentation tone, slightly embellished. Also here: give measure numbers, or omit.

12) p. 12, top: The modal-tonal aspects of the Missa L'homme armé super voces musicales are too complex and subtle to be dealt with in one sentence. I suggest reducing your statement to the following unchallengeable form: "But Josquin feels free to acknowledge or ignore the modal identity of a melody; occasionally his polyphonic settings will contradict the nature of the mode and instead elicit from it a harmony of distinctly tonal color. Other times he will transpose a melody from one mode to another. The Missa L'homme armé super voces musicales is a prime example" (and let it go at that).

13) p. 12: I suggest omission of the whole discussion of Ave nobilissima creatura for many reasons, one of them being that your analysis of the mode of the cantus firmus Benedicta tu as transposed Hypophrygian is based on the erroneous assumption that it is note for note the chant melody (which you probably did not find). But the crucial B-flat at the end is added by Josquin himself. The melody is the same (otherwise) as the Plangent eum (L.U. 775). The Benedicta tu (with a few variants in the melody) can be found in Antiphonale Monasticum, p. 193.

Incidentally, I don't agree with your statement (p. 12, line 3) that the Phrygian mode "does not admit basic harmonic motion to its own central tone." It does, but with the leading tone down, instead of upward (either F-e in d-E chords or A-G-sharp in a-E chords).

14) On the whole I am pleased that so much of your evidence is based on incontestably authentic works of Josquin. But a few doubtful works have slipped in and I urge you to eliminate them all, because (a) some of them will be shown to be inauthentic in other papers of the same volume; (b) some, I trust, will be shown to be inauthentic by me in future studies; (c) all of them occur only in one or at the most two posthumous, peripheral (mostly German) sources (if two, then the second copied from the first); (d) your critics will try to throw out your thesis because it has been demonstrated-- among others--on inauthentic compositions. These are:

I. p. 13 and 13A: Mirabilia testimonia tua (sole source: Petreij's 1539)

II. fn. 5: Absolve quaesumus (sole source: a Spanish manuscript of ca. 1550)

III. p. 16 Stetit autem Salomon (sole source: Petreius 1538)

IV. fn. 20 Nesciens mater (sole source: Kriesstein 1545)

15) fn. 8: "These chords are essentially contrapuntal in function." Are not rather these counterpoints essentially harmonic in function?

15a) fn. 27: by "dissonant $\frac{6}{4}$ " do you mean $\frac{6}{4}$ on the first beat?

16) p. 18, top: "This is a fantastic example of what may be considered a freely invented quasi-chaconne." Can we omit this sentence, please?

17) p. 18, line 4: You say here "tonality" for mode, otherwise for modern major and minor. I suggest saying "mode" and confining the use of "tonality" to strictly its proper usage.

18) p. 20, line 8: Do you mean "unfolding" where it says "enfolding"?

Now to the examples:

19) Ex. 1: Is the figure at the end of the first line of the graph a II? You do not seem to distinguish between major and minor by capitals and lower case, so should it not be written "II," as is the antepenultimate chord?

20) Ex. 2: Why is the note F (m. 81⁴) omitted on the graph when the parallel G (m. 79²) is included?

We will rewrite the whole example in full score to avoid the unclear key signature in your reduced score. This is the only example with whose analysis I disagree. By analyzing it in terms of B^b minor you do violence to the score; the section begins in unambiguous B^b major; it consists of a progression of successive dominants: B^b major, E^b major, A^b major, D^b major, G^b major. Only then does it turn to a cadence in B^b minor.

21) Ex. 4: to your note on the bottom: there is no justification for your suggestion of changing the B^b in the key signature to B-natural and the following E^b to E-natural. Incidentally, may I suggest omitting the question mark in the graph (m. 109) and the flat before E in m. 114 (ascending motion, leading tone).

22) Ex. 7: the penultimate measure should be construed with B^b and E^b , except for the last chord.

23) Ex. 8: Why do you omit IV in m. 223?

24) Ex. 9: here I have a whole number of questions:

- a) the second and third notes of the second brace are in the tenor part and should be omitted;
- b) why omit the F (in tenor; = lowest note) in m. 26, the G D G in m. 135, and F(-sharp) = V in m. 177? They all seem to be structurally important notes;
- c) fifth and sixth notes from the end of the passage beginning at m. 155: why are they not combined as p?
- d) the passage labelled 55 is actually the passage beginning at m. 83, and the whole bass line from mm. 55-80 is missing from the example;
- e) mm. 139-43 of the 2.p. are missing from the example;
- f) mm. 174-79 = mm. 5-10: why are the F-sharp G left out here, but not at beginning?

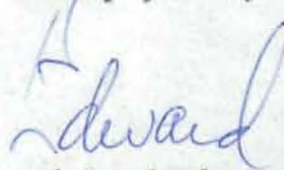
25) Ex. 10: is the graph here not almost an insult to the intelligence of the reader? The numbers alone suffice.

In conclusion, I come to a point that to an editor is a bit embarrassing, but that nevertheless cannot be ignored. I always point out to my contributors where I think they missed some pertinent literature, but in the present case it happens to concern my own writings. I have of course highlighted Josquin's use of tonal harmony and total tonal planning of a great work in my monograph on tonality; indeed, I analyzed in some detail the Benedicite omnia opera Domini to which you devote your attention, and a great many points raised so ably in your paper have been made in that monograph. In fact, most of the "additional points" that you list on pp. 20-21 as in need of consideration have been explored there, partly in connection with Josquin, partly with pre-Josquin, post-Josquin, or contemporary composers. Your point no. 2 has been explored in detail in my article on "Early Scores in Manuscript."

I renew my initial request: please give your immediate attention to my queries and let me have your response as quickly as feasible. By referring to the numbers that I used you can indicate your agreement or give your answer or revision, whatever the case may be.

Finally, let me say again how very pleased I am with your contribution to the Josquin Proceedings. You read your paper, I know, under unfavorable circumstances, but I am sparing no effort to have it published in the best possible form.

Cordially yours,



Edward Lowinsky

232 Beach 132nd Street
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January 10, 1973

Professor Edward E. Lowinsky
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Dear Ed:

Please accept my apologies for the unavoidable delay.

I am ready to accept changes or make modifications of the text for the sake of clarity. I am pleased that you find the style generally acceptable. Your examples of changes are understandable and do improve the presentation (even in such a case as "linearity", a rarely used word, which I like, and which is in Funk and Wagnall's unabridged dictionary; "voice-leading" is OK, even though for me it has certain connotations that do not suit my purpose.

Now for the body of the details:

(1) In responding, I have followed your instructions in regard to referring solely to your numbers, in order.

(2) I have accepted most of your suggestions, either outrightly or by making some modification to eliminate the basis of the criticism. When I have disagreed, I have tried to explain my point of view. In a few cases, even though I found myself in disagreement, I have yielded to your judgment which I highly respect.

(3) I have altered some details of the Absalon graph, and added a small, additional graph to clarify the main point. I have made a completely new bass graph of Levavi oculos meos in montes, inserting the missing measures you called to my attention, inserting a few others we both missed, and going through all of it very carefully. The new graph is a vast improvement. The motions are more clearly delineated, and in greater detail. I have inserted more bar references. I think you will be pleased. It is a real masterwork, and the concepts of constant dynamic motion from and to main harmonic points are quite remarkable.

The following pages to this letter are arranged in this order:

- pp. 1-6 responses to your enumerated points
- 7 the explanation of the graphic symbols
- 8 substituted Absalon graph
- 9,10 new graph for Levavi oculos meos

Finally, I must say again that I am immensely grateful for the very great care and time you have given this paper. I was quite depressed by the circumstances surrounding the reading of it at the Festival. First, the intermission was made very short because of the long, long, long paper (50 minutes!) in the first half. Secondly, I was told to begin when half the audience was still outside the hall. They kept streaming in and my notes were still being distributed some minutes after I had begun, and a number in the audience were "lost". Then the final coup, -the pressure to end being applied to me so very soon. I had timed myself exactly in advance. [Incidentally, I had prepared transparencies of the musical examples. But at the first session, after it became apparent that the hall was much too large and only the front rows would have adequate viewing, I hurriedly revised them, took them to a photo-offset firm downtown, and had them run off within 24 hours.] You therefore see the special reasons for my pleasure in having the paper appear in print, and thanks to you, in the best possible way. I am also glad that you find it a solid contribution.

Warmly yours,

June

P.S. As I told you in our telephone conversation, I will be out of the country from June 10 through August, mainly in Australia, via Israel. My daughter lives in Sydney, where her husband teaches at the University of New South Wales. If I am needed for revisions or other work, please try to schedule me before the end of May or after September 10.

The points you raised are considered in order:

1) Agreed. I have provided a brief explanations of the symbols I have used in the accompanying graphs. Please see Enclosure #1. I believe that the best place for this outline should be as a footnote to the first example.

2) I thought I had made this point clear, but I do not seem to have succeeded. Please underline the word "both". The following footnote is offered to this sentence, i.e., ending with "to the later typical character of the minor mode."

Fn. "E.g., the following example in G Dorian illustrates the presence of Eb (stipulated, and through musica ficta), E \flat , F, and F \sharp (through musica ficta). In Aeolian compositions the seventh degree is, of course, frequently raised as well; but the sixth degree, which in the minor mode appears in both forms, is rarely altered.

3) Yes, omit.

4) p.4,fn.6 : in the footnote, line 1, omit "and 37-38". Please note the reference to "I-V-I of the dominant", line 2, which constitutes the equivalent of "modulation", according to traditional usage. All the examples cited, save the omission requested above, are applied dominants. In traditional usage of the term, "applied dominant", a V-I relationship which is limited as such (not II-V-I, IV-V-I, etc.) is insufficient to constitute a "modulation". This is traditional, e.g., Sessions, Piston. The term, "secondary dominant", is the equivalent of "applied dominant" (which I like better). I believe that Josquin's flexible and frequent use of this technique (though not always with the leading tone, but the leap of the fifth down), is an important characteristic feature of his strong harmonic sense, particularly in the leap of the fifth in the lowest voice.

5) Yes; please delete the question. I should have posed it differently so as not to convey the wrong impression; but it is not necessary to my point.

6) The bass alternately moves through the triad. Thus Eb does move directly to Ab, and Db directly to Gb. The triad is incidental, the motion of the 5th outlined. For example, the G in the bass, between Bb and Eb, is the 3rd of the Eb chord, which follows immediately in the root position, the motion remaining essentially Bb to Eb, a descending 5th. I did not say "bass moves by leaps" in descending fifths". I have ~~reiterated~~ the graph analysis to make this point (as well as others) clear.

others) clear. Please change the text, p.6, line 8, to read:
"Meanwhile the bass moves in perfect 5ths, alternately via the 3rd of the triad to which it is descending (as shown in Graph A), in a fashion etc....."

7) In place of omitting the last sentence (p.6, line 15), I offer the following, less vague but essential to my viewpoint:
"The composition as a whole projects the essential tonal center of Bb. The foregoing excerpt begins in the major mode of Bb, but then moves into the minor mode of Bb, within which it terminates. The melodic line line of the uppermost voice delineates the descent through the minor triad, as shown in Graph B."

8) In accordance with your observations, the following corrections are made:

- a) p.9, line 3: eliminate this sentence, ending with "the return to E".
- b) immediately afterwards, line 7, after the words, "ascending 5ths", insert "(commencing at b.82)".
- c) p.8, line 13 (which begins "in two phases"), - the bar numbers should be inserted as follows: A(b.70) - D (b.72) - G(b.75) -C(b.76) - F(b.78); D(.79) -G(b.80) -C(b.81).
- d) Please feel free, if you think it advantageous, to eliminate the reference to Fructum est autem on p.8 (the 8th line from the bottom of the page), as well as its footnote.

9) Of course, thank you. I knew the reference, but did not use it since I had assumed that its use was generally accepted after its identification in Reese's Renaissance text.

10) I accept. (Note, I did say "far-reaching vision of tonal form .) The sentence, therefore, should be changed thus:
"Josquin's assessment of the Ionian melody reveals his feeling for tonal form,". [I knew your reference, but Dufay's concept is mosaic, whereas Josquin, through his handling of the 4th and 5th phrase, reveals an over-all view that, in my opinion, gives the setting a character not present in Dufay. How does one word this difference?]

11) In the light of your criticism, I suggest the following modification of the text, p.11, line 11:

"Planxit autem David²³, in F Ionian, offers another example of division of text, here separated by rests. The Lamentation fragment is freely reiterated, sometimes in cantus-firmus style. Each complete unit of text is prolonged within the tonic. These prolongations appear in various harmonic progressions. Intermediary points are marked frequently by strong cadential figures."

(12) I accept your suggested substitution. I would like one slight modification of your first sentence: "But Josquin ...
.....the nature of a mode, [from this point] the polyphony absorbing the melody within a different tonal center." [The remainder as you have it.]

13) Thank you for your clarification. I accept. [As to the incidental remark regarding the Phrygian, I agree with your observation regarding the "upper" leading tone, f-e. But the motion to the central tone is not harmonic, according to my sense of the meaning of "harmonic". May I therefore suggest the underlining of the word, "harmonic"? I do not agree with the a-g# motion as being in the same category (in the a-E chord succession to which you refer). The 4th degree moving to the 3rd degree is a significant half-step voice-leading direction, but it is not within our understanding of "leading-tone". Perhaps I misunderstand you.]

14) Thank you! I yield without a moment of hesitation. Therefore, please eliminate the four motets to which you refer. I really feel sad about Mirabilia testimonia tua, which is such a good piece! (And a juicy example.)

15) fn.8: we differ as to the meaning of the terms, "contrapuntal" and "harmonic". Please add the following sentence to the footnote, thereby clarifying my viewpoint, though not eliminating the disagreement:

"The VI or the IV, as harmonic functions, would operate as such only within harmonic progressions respectively, such as I-VI-V-I, or I-IV-V-I."

15a) This reference is connected with comments arising out of the discussion of Mirabilia testimonia tua, Domine. Since this example has now been eliminated because of doubtful authenticity, the example must be removed. The accompanying text must be eliminated, and the successive text revised:

Eliminate p.13

Example 6 (on p.13A)

p.14, lines 1-9.

fn. 27 (This was a reference to the cadential ⁶/₄ a dissonant chord.)

p.14, l.10: this first sentence should be eliminated.

The second sentence (on line 11) should commence: "Parallel motion, etc..."

p. 14, line 13: change "linearity" to "linear motion".

16) O.K., omit. I guess I make my point, anyway.

17) My remark is not accidental. It reflects a different view of tonality and mode. I do not consider tonality as the sole property of the major and minor modes only. Do we not regard Bartok and other 20th century composers as "tonal", even though they do not employ the major-minor system? Tonality involves the concept of a central tone as the governing force of musical continuity wherein all other tones are subservient to it, and from which and towards which all other tones flow. This condition takes place in all the modes, but with different degrees of success, and depending on other factors. Even major and minor are intertwined. (E.g., the ab in the diminished 7th chord of C Major is the flatted sixth degree characteristic of C minor.) Thus, the key of Bb in the major mode and the key of Bb in the minor mode are the same in key but different in mode. This was a great discovery of Josquin, as shown in the Absalon excerpt. Returning to the point you make in this observation, and for the sake of making my comment as effective as possible, I suggest the following modification:

(p. 18, line 4): "G (Aeolian-Dorian), as the central tone of organization, is fully realized through these motions in the bass in this remarkably forward-looking technique...
....etc."

18) Your observation is correct; "unfolding", please.

19) I agree. The II as upper case should be written, both at the end of the first line and at the beginning of the second line of the graph.

20) You are right. I have incorporated this point in the rewritten, slightly revised graph. The new graph is, I hope, clearer, if not more convincing to you.

21) I accept your various suggestions; they are convincing.




22) O.K.; please eliminate my "ficta" indications accordingly.
should


23) I have not omitted the tone, and have indicated through its stemmed form its secondary importance. The IV in this case functions as a contrapuntal chord. Since the identity of a chord offers the reader no insight into its function, I reserve the label for such cases when it functions harmonically. I-IV-I is radically different from I-IV-V-I. In this case, as a compromise, I ask you to insert the label immediately under the stem, in parenthesis, thus: (iv) . Please see on next page the corrected form.

Suggested footnote to Example #1


A brief explanation is given to the symbols used in the linear analyses of this example and the other examples which follow.


N = neighbor tone; P = passing tone; \bar{P}_N = neighbor chord (complete or incomplete), supporting a passing tone in the uppermost voice;


+ = major; - = minor; arabic numbers have the same significance as in figured bass; the slur () denotes contexts and their subdivisions; the dotted slur () and the dotted beam ()

indicate the return to or retention of a pitch whose structural significance remains the same; the curved arrow () denotes

a leading-tone chord which resolves to the chord to which the

arrow is directed; the straight arrow () shows directed

motion from and to chords of structural ^{significance.} ~~importance.~~ The beam ()

indicates the structural connection between tones of different ^()

itches; the bracket/is used to indicate the dominance of a single chord, extended through harmonic progressions and/or

contrapuntal motions shown above and within the bracket; notes do not

have durational value, ^{black} -unstemmed/notes being most immediate in their

context, stemmed, quarter notes being intermediate in context, and

subordinate to the half note, the most remote, and primary. These

symbols, derived from the graphing techniques of Heinrich Schenker,

are explained in detail in The Music Forum, Vol I, (edited by

William J. Mitchell and Felix Salzer) (New York, 1967), pp 260-268.

of this motet, see Edward E. Lowinsky, *Tonality and Atonality in Sixteenth-Century Music* (Berkeley and Los Angeles, 1962), pp. 20–25).

b) to the III chord: 'Domine, non secundum peccata nostra' (Motetten, Bundel ii, no. 13), measures 213–4, in G Dorian.

c) to the VII chord: *ibid.*, measures 190–92. This applied dominant is possible without *musica ficta* in the Dorian and Mixolydian modes.

⁹ An example of movement from V to VI instead of to I is in the concluding section of 'Descendi in ortum meum' (Supplement, no. 6), in which the final V–I is achieved tellingly with fermata.

¹⁰ In 'Paratum cor meum, Deus' (Motetten, Bundel xvii, no. 67), at measures 322–5, V moves to VI, then to IV (preceded by I⁶) as a further delay before resolving to I. These chords are essentially contrapuntal in function, serving as consonant supports of the sustained note above. The VI or the IV, as *harmonic* functions, would operate as such only within the harmonic progressions, such as I–VI–V–I or I–IV–V–I.

¹¹ Supplement, no. 5.

¹² See 'Ave nobilissima creatura' (Motetten, Bundel vii, no. 34), measures 76–80; also measures 211–15. In both cases the bass moves as follows: D–G–C–F–B \flat . The motet is in D Aeolian.

¹³ 'O admirabile commercium' (Motetten, Bundel i, no. 5), measures 47–53 (B \flat Ionian). Another example is the repetition in the bass of 'Virgo prudentissima' (Motetten, Bundel v, no. 25), measures 28–39, in which the motive moves up a fourth, the equivalent of down a fifth, in the following order: D–G–C–F, each pattern including the leading note.

¹⁴ Motetten, Bundel iv, no. 24, Part IV.

¹⁵ Motetten, Bundel x, no. 43.

¹⁶ See my study of the 'Missa Pange lingua' in 'Fusion of Design and Tonal Order in Mass and Motet: Josquin Desprez and Heinrich Isaac', *The Music Forum*, ii (1970), beginning on p. 206. Of particular interest is the *Osanna* (described on pp. 226 and 228), which involves paired repetition and succession of fifths.

¹⁷ Motetten, Bundel iii, no. 16.

¹⁸ Motetten, Bundel xxiv, no. 90.

¹⁹ Motetten, Bundel xi, no. 47. 'Virgo salutaris' (Motetten, Bundel vii, no. 35) is an example in which the shape of the melody at the opening outlines an ascending fifth, thereby resulting in the succession, G to D to A.

²⁰ Motetten, Bundel ii, no. 11.

²¹ Missen, iv. The text to which the descending fifths are applied, quite appropriately, is 'descendit de coelis'. In the motet 'Absalon, fili mi' (see Ex. 2), the descending fifths were applied to the text, 'descendam in infernum plorans'.

²² For example, the setting of the *cantus firmus* in 'O Virgo virginum' (Motetten, Bundel xxiii, no. 83), in G Dorian. The small range of the melody, as in the first phrase, G–B \flat –A–B \flat –G–A–G, leads to strong prolongations of the G tonality and consistent use of the V against the passing and neighbouring notes.

²³ Motetten, Bundel i, no. 3.

²⁴ On the variation-chain concept, see Oliver Strunk, 'Some Motet-Types of the 16th Century', *Papers Read at the International Congress of Musicology, 1939* (New York, 1944), pp. 155–60.

²⁵ Motetten, Bundel vii, no. 33.

²⁶ Motetten, Bundel iii, no. 20.

²⁷ See Novack, 'Fusion of Design and Tonal Order'; the analysis of *Et incarnatus est* is given on pp. 213 and 218–19. A much later example of the contradiction of linear mode and polyphonic tonality is J. S. Bach's treatment of Hassler's Phrygian melody, 'O Haupt voll Blut und Wunden'. In the 'Passion according to St. Matthew' the first four chorale settings of this melody are in the major, corresponding in their various transpositions to the relationship of C Ionian to E Phrygian. The fifth and final setting, appropriately, is in E Phrygian, terminating on E.

²⁸ Remarked on by Gafurius in his *Practica musicae* of 1496, Book III, Ch. 12; see Irwin Young, transl., *The Practica musicae of Franchinus Gafurius* (Madison, Milwaukee and London, 1969), p. 154.—Ed.

²⁹ Missen, iv.

³⁰ Motetten, Bundel xii, no. 51, measures 210–26.

³¹ Motetten, Bundel xviii, no. 70.

³² For other aspects, particularly with regard to cadences, the functions of dissonance, harmonic and motivic repetition, see Edward E. Lowinsky's admirable study of the earlier motet 'Benedicite omnia opera Domini', in his *Tonality and Atonality*, pp. 20–25.

Tonal Tendencies in Josquin's Use of Harmony

SAUL NOVACK

The leading-note as a means of intensifying directed tonal motion had fully emerged by the beginning of the Renaissance. The fifteenth century witnessed its enhancement and reinforcement through the fifth relationship, i.e., the dominant-tonic phenomenon. Josquin's use and expansion of this harmonic relationship constitutes an artistic achievement of the highest order. The brief exposition that follows, based on Josquin's sacred music, can only illuminate some of the highlights.

While the problem of the relationship between mode and tonality cannot be considered at this point, even though it is central to the study of harmonic usage, it is significant that Josquin's music already begins to show assimilation of the old modes to modern major and minor. He uses the Ionian mode on both C and F,¹ as well as the related Mixolydian mode, modified through *musica ficta*. There are a number of compositions in Aeolian and many in Dorian on both D and G, modified through both stipulated and unstipulated accidentals to resemble the Aeolian mode. In all of these modes the leading-note punctuates tonal continuity. It is part of the mode in Ionian and is often present through *musica ficta* in the other modes. Only the Phrygian mode remains unaffected. In this mode, which cannot have a dominant on its fifth degree because of the diminished fifth, Josquin relies upon other means to provide tonal continuity. Settings in E Phrygian frequently have extended sections in C and A; sections in C take on the features of C Ionian, and the sections in A, A Aeolian, with frequent use of the appropriate leading-tones.

While the dominant-tonic relationship was already well established during the fifteenth century, its abundant use by Josquin is neither confined to its position in strategically located cadences nor to the simple V-I progression, which frequently appears in non-cadential situations without the leading note; it still exercises the force of the relationship of the fifth, but lacks the intensity that the leading-note provides. The V-I progression can dominate the entire setting of a composition.²

Various expansions of the V-I progression occur in Josquin's music:

I-II-V-I³

I-IV-V-I⁴

I-III-V-I

The last progression assumes great importance in Baroque and Classic forms, representing the motion from the minor tonic to the so-called 'relative major', with eventual return, through the dominant, to the tonic. In Josquin's music there are frequent examples in Dorian and Aeolian settings. The Dorian mode, with its modification of both the sixth and seventh degrees, comes closest to the later typical character of the minor mode.⁵ A good example of an extended harmonic structure of I-III-V-I is found in 'Vultum tuum deprecabuntur'.⁶ At the outset of Part VI, the tonic, G minor, is clearly established. At measure 431 a long extension in B^b major begins (Ex. 1).⁷ This is the III chord of G Dorian, and, as shown in the graph,

effect as the relative major. The tonic, G, is regained at measure 449 through a II⁶-V-I cadence. The shape of the superius, with the same melodic pattern heard once in the dominant and twice in the tonic of B^b (mm. 442-7), is significant. The first statement of the motive (mm. 442-3) in the dominant of III is balanced by the succeeding statement in the tonic of III, and the reiteration of this last statement builds a climax moving towards the final cadence in the central key, G Dorian-Aeolian. The structural importance of B^b in the upper voice is revealed in the movement away from it and toward it. This note is not abandoned until the definitive downward motion to the final cadence of the passage.

A further harmonic extension is the termination of a section or composition by the use of successive fifth relationships in the progression I-VI-II-V-I, with its bass moving down a perfect fifth between VI and II, possibly only in Ionian and Mixolydian, in the latter with a leading-note in the cadence.

Harmonic progressions are also intensified by the sophisticated use of applied dominants, not only to V but also to other chords.⁸

The motion V-VI as a deceptive cadence is used as a means of extending the V and delaying the resolution to the tonic, particularly at the end of compositions.⁹ It may also serve to set off a circuitous path taken in the resolution of the V to the final I, particularly against the final sustained note in the upper voice.¹⁰ The achievement of the tonic releases the tension and enhances the finality of the tonal goal.

There are numerous examples of I moving to IV and returning to I underneath the final sustained tonic, the IV chord acting as a consonant contrapuntal chord against the sustained note. The so-called 'plagal' IV extends the I, serving a coda-like function. If the V-I progression with leading-note intensifies the motion toward the tonic, the IV-I progression at the end serves to sustain and confirm it.

The logical extension of the V-I relationship into motion through the circle of fifths is also found in Josquin's music. Although Josquin is by no means the inventor of this technique, he goes farther than any of his predecessors and with great imagination sets the stage for the opening up of the harmonic space in the sixteenth century. The first example is perhaps the boldest of all, the now famous ending of 'Absalon, fili mi':¹¹

EX. 2

The graph in Ex. 2 indicates some important aspects. The uppermost line delineates a motion from the fifth degree of the B^b tonic to 4, 3, 2, and finally 1, thereby outlining the B^b minor triad. Meanwhile, the bass moves in perfect fifths alternately via the third to the triad to which it is descending (see graph), in diatonic fashion to B^b minor, going as far as the VI chord. One cannot go further in the circle of fifths without losing the immediacy of the uppermost line's motion within the tonic triad. At this point Josquin pauses and moves directly to V, the goal of the descending motion. It took more than a century for this progression to become a regularly used harmonic device. The tonal centre of the composition as a whole is B^b. The foregoing excerpt begins in the major and moves into the minor mode, in which it terminates.

Successive fifths are freely used in various parts of compositions. They are frequent in Ionian, Aeolian, and Dorian settings, most often as descending fifths, which may also appear in the form of ascending fourths. They also are used against a *cantus firmus*.¹² Particularly important and fascinating is the fusion of thematic repetitions with root movement by fifth, resulting

tone

tone

chords

in perhaps the first genuine examples of so-called 'harmonic sequences'.¹³ There are effective settings of as many as four-fold and five-fold repetitions. An unusually extended example is found in the transposed Dorian motet, 'Vultum tuum deprecabuntur',¹⁴ measures 261-83. The first succession has the following repetitions, alternating between bass and tenor:

- D to G melodic figure
- G to C figure repeated, with new counterpoint
- C to F same passage, repeated
- F to B^b same passage, repeated

At the moment the B^b is attained, the bass enters beneath it with G. A new melodic pattern appears in the following transpositions:

- G to D melodic figure
- D to A figure repeated, with new counterpoint
- A to D original figure, modified, with new counterpoint
- D to G same passage, repeated
- G to C same passage, repeated
- C to F same passage, repeated

'Misericordias Domini',¹⁵ in A Aeolian, has several instances of successive fifths, particularly around C, including a five-fold repetition of a cadential motive. This repetition begins at measure 51 with the first statement of the cadential motive as follows:

EX. 3

The statements of this motive are:

- m. 51 beginning on E, ending on A
- m. 53 beginning on A, ending on D
- m. 55 beginning on D, ending on G
- m. 59 beginning on G, ending on G (leap of an octave instead of fourth)
- m. 61 beginning on G, ending on C

This is an artful chain of applied dominants and leading-note chords, subtly involving deceptive VI chords to delay resolutions. This technique is used to give relief to the concept 'misericordia Domini'. Almost immediately afterwards the text is repeated and, beginning in measure 70, a new succession of descending fifths with pattern repetition in two phases follows: A-D-G-C-F; D-G-C. Successive fifths are found frequently in compositions set in Phrygian, as though to compensate for the absence of the dominant function in that mode; they frequently move away from E in descending fifths and return in ascending fifths.¹⁶ In 'Factum est autem',¹⁷ in which Part I ends on E, the motion in fifths towards the final E is as follows: from G (m. 88), prolonged at first via C (m. 92), finally to D, then to A, and then to the final E. In the five-part 'De profundis clamavi',¹⁸ the setting of the concluding *Kyrie eleison* begins at measure 104 on C, moves to G (mm. 105-9), then to D (mm. 110-12), to A (mm. 113-15), and then to the concluding E. In the four-part Phrygian setting of 'De profundis clamavi',¹⁹ the shape of the melody at the beginning of the motet, moving down a fifth, results through imitation in the succession E-A-D. The succession of fifths may continue into almost a complete diatonic circle of fifths. Thus, in 'Qui velatus facie fuisti'²⁰ (*secunda pars*, mm. 82-9), ascending fifths, in a prolongation of C Ionian, move as follows: C-G-D-A-E-F-C. Significantly, B is omitted between E and F since B to F would form a diminished fifth. Finally an example from the 'Missa Fortuna desperata'²¹ reveals seven successive descending fifths (Ex. 4). II-V-I of the

EX. 4

tonic (F Ionian) in measures 109-10 is succeeded by II-V (without leading-note) -I of G minor, which is the II chord of F Ionian, and is attained at measure 111. The circle of fifths begins with the B^b, the III chord in the G prolongation, includes the augmented fourth between E^b and A—the direct leap avoided by passing notes—and is extended to the B^b chord in measure 113. The modernity of this example is obvious; it is a convincing and dynamic part of the total harmonic structure in the conclusion of this

The juxtaposition of old and new in the application of harmonic relationships to the *cantus firmus* is a fascinating subject for study. Josquin reveals in his works a whole new view of the *cantus firmus* in its relationship to tonality. The shape and form of the chant melody is exceedingly important. In some motets the Gregorian melody appears in fragments, each of which is treated with harmonic clarity.²² Josquin's ability to preserve the character of the chant melody while adapting the harmonic treatment to tonality may be shown in a number of cases, among them the two-part opening of 'Mittit ad Virginem',²³ a setting of a so-called 'variation-chain' sequence²⁴ (Ex. 5). The stanza consists of five lines whose corresponding musical units

EX. 5

suggest harmonization in tonic and dominant. Josquin's setting of the Ionian melody reveals his feeling for tonal form; he organizes the five musical units as follows:

- 1: tonic
- 2: tonic
- 3: tonic
- 4: dominant
- 5: dominant-tonic (C Ionian)

The penultimate position of the V and its ultimate resolution is most significant. The six-part 'Praeter rerum seriem',²⁵ one of the most famous motets of Josquin, is marked by considerable division of the chant melody (in G Dorian) into harmonically supported units. 'Planxit autem David',²⁶ in F Ionian, offers another example of division of text, here separated by rests. The lamentation tone is freely reiterated, sometimes in *cantus firmus* style. Each complete unit of text is prolonged within the tonic. These prolongations appear in various harmonic progressions. Intermediate points are frequently marked by strong cadential figures.

The *cantus firmus* melodies have each a specific modal character. But Josquin feels free to acknowledge or ignore the modal identity of a melody; occasionally his polyphonic settings will contradict the nature of the mode, the polyphony absorbing the melody within a different tonal centre. Other times he will transpose a melody from one mode to another. The 'Missa L'homme armé super voces musicales' is a prime example. In the case of the Phrygian mode, which has no dominant chord, and therefore no harmonic motion to its own central note or finalis, Josquin sometimes contradicts the mode of the *cantus firmus* in the polyphonic setting. In the 'Missa Pange lingua', the beginning of the Phrygian hymn melody is realized polyphonically in clear-cut C Ionian, with V-I movements in the setting of the text, 'Et incarnatus est'.²⁷

Parallel motion between the outer voices, a favourite device of Josquin,²⁸ is often used in motion directed towards a V-I cadence as a means of intensifying the drive toward the cadence. Such parallel motions are occasionally strengthened through the use of sequence. In the following example from the *Gloria* of the 'Missa Fortuna desperata',²⁹ measures 50-58, the melodic motion is in descending parallel tenths, while the drive to the cadence is achieved structurally in ascending tenths, as indicated in the graph (Ex. 6). Independent voice leading is sacrificed to intensify the

EX. 6

direction of tonal motion. In such passages the consonant parallel direction terminates on the leading-note, most frequently with a 4-3 suspension, thereby heightening the attainment of the penultimate V.

Clarity of formal design, enhanced by motivic reiterations and contrasts in vocal scoring, is further given depth through renewal of the tonal relationships. An example from 'In exitu Israel de Egypto'³⁰ is given in Ex. 7.

EX. 7.

tone
example
The V, prolonged through measures 210-18, now projects the text, 'et omnes qui confidunt in eis' (m. 218 to end), by a descending line via the dominant triad, supported by its own I-V-I. Immediately afterwards the same text is repeated to the same motive, now prolonged through the tonic triad, the top voice beginning the motion on the third of the tonic, moving down to the leading-note and supported by I-V-I of the tonic. Additional intensity is achieved through use of four voices instead of two, and through the motion of parallel tenths alternating with octaves in the outer voices, as shown in the graph. The parallelism is a striking example of the combination of tonal structure and thematic design to create direction and symmetry.

Some aspects of the direction and function of the upper voice have been considered. The significance of the lowest part in the preceding examples is manifest. No longer is the bass exclusively a line like the other voices. Its leaps are often reflections of harmonic motions; its direction, both in step and in leaps, is then conditioned by the tonal goal. As an illustration of the extent of the harmonic orientation of the bass line, the skeletal framework of the lowest voice of an entire motet, 'Levavi oculos meos in montes',³¹ is given in Ex. 8. The bass reiterates, in different ways, motions from I to V

EX. 8

and from V to I, frequently with parallel repetitions of design. G Dorian (often turning into Aeolian), as the central note of organization, is realized through the bass line in a remarkably forward-looking technique. Noteworthy is the parallelism in some repeated units, e.g. at measure 99 and at measure 103. Exact repetition occurs in the bass only, thereby highlighting the importance of the lower voice in the unfolding of the tonic-dominant relationship. Such parallelisms are striking. The beginning of the bass in Part II is quoted exactly to illustrate how thematic material and harmonic function are combined (Ex. 9).

EX. 9

The preceding examples illuminate another important aspect of Josquin's style: all voices share in the thematic material. This is what is known as 'imitative style'. However, the outer voices assume responsibilities that go far beyond those of the middle voices, especially in Josquin's late works. The highest and the lowest lines assert their functions in tonal structure, both individually and together, with a strength and purpose that unequivocally point in the direction of 'polarity of the outer voices'. In this sense Josquin is a great innovator.

The foregoing exposition has been directed to only a few aspects of Josquin's concepts of tonality.³² Only chordal forms operating within the framework of the dominant-tonic phenomenon and in the fifth relationship have been considered in this brief study. Chords with contrapuntal, voice-leading function also play vital roles in the projection of tonality and must be examined together with the harmonically functioning phenomena.

Needless to say, Josquin's use of harmony cannot be considered solely by examining chords and cadences or by sending the various simultaneities through the computer. The harmonic factors are related to a number of compositional and aesthetic aspects. It is through a study of these interrelationships that we may realize more exactly the remarkable character of Josquin's concepts of tonality, from which springs a new view not only of musical structure but also of expression of the text.

¹ Throughout the fifteenth and sixteenth centuries composers set whole Masses, but also motets and other smaller liturgical as well as secular genres, in F with a key signature of one flat in all voices. Theorists called it Lydian, but it was, as Glareanus (*Dodekachordon*, p. 115) rightly insisted, transposed Ionian. This use of Ionian transposed to F was encouraged by such examples of Gregorian chant as the *Kyrie* from the 'Missa VIII (De Angelis)' (L.U., p. 37), in which every B is flatted. And if this example be dismissed, because its origin lies in the fifteenth-sixteenth centuries, as the editors of the *Liber* indicate, then its *Sanctus*, ascribed to the '(XI) XII c.' (L.U., p. 38), or the *Sanctus* and *Agnus Dei* from the 'Missa IX (Cum iubilo)' ascribed to the fourteenth century and '(X) XIII c.', respectively, may serve instead; each of these melodies has many Bs, each one invariably flatted.—Ed.

² See, for example, 'O Virgo virginum' (Motetten, *Bundel* xxiii, no. 83), in G Dorian. Many other examples may be found in Josquin's works.

³ See 'Descendi in ortum meum' (Supplement, no. 6), where the II chord is prolonged harmonically before moving to V (mm. 61-7).

⁴ For example, measures 187-8 and 190-91 in 'Pater noster' (Motetten, *Bundel* xii, no. 50), in G Dorian. An Eb is called for in the IV chord, producing a minor IV, characteristic in the minor mode. This is a good example of the assimilation of the Dorian mode to minor.

⁵ E.g., Ex. 1, in G Dorian, illustrates the presence of Eb (stipulated, and through *musica ficta*), E \sharp , F, and F \sharp (through *musica ficta*). In Aeolian compositions the seventh degree is, of course, frequently raised; but the sixth degree, which in the minor mode appears in both forms, is rarely altered.

⁶ Motetten, *Bundel* iv, no. 24.

⁷ A brief explanation of the symbols used in the linear analyses in this paper follows: N = neighbouring note; P = passing note; N_c = neighbouring chord (complete or incomplete), supporting a passing note in the uppermost voice; + = major; - = minor. Arabic numbers have the same significance as in figured bass. The slur () denotes contexts and their subdivisions; the dotted slur () and the dotted beam () indicate the return to or retention of a pitch whose structural significance remains the same; the curved arrow () denotes a leading-note chord which resolves to the chord to which the arrow is directed; the straight arrow () shows directed motion from and to chords of structural significance. The beam () indicates the structural connection of a single chord, extended through harmonic progressions and/or contrapuntal motions shown above and within the bracket. Notes do not have durational value; unstemmed black notes are most 'immediate' in their context, stemmed quarter-notes are 'intermediate' in context and subordinate to the half-note, the most 'remote' and primary symbol. These symbols and terms, derived from the graphing techniques of Heinrich Schenker, are explained in detail in *The Music Form*, 1, ed. William J. Mitchell and Felix Salzer (New York, 1967), pp. 260-8.

⁸ Examples of applied dominants are:

a) to the V chord: 'Benedicite omnia opera Domini Domino' (Motetten, *Bundel* xiii, no. 53), in F Ionian. This motet contains a number of such examples, e.g., measures 34-5, as well as prolongations of I-V-I in the dominant (mm. 181-7). (For a harmonic analysis

of the large section beginning with page 19, line 14, through page 21, line 5. The following is substituted:

"The foregoing exposition has been directed to only a limited number of factors in Josquin's concepts of tonality.^{Fn.}"

*Fn. For other factors, particularly in regard to elements of cadence, functions of dissonance, harmonic and motivic repetition, see Edward E. Lowinsky's admirable study of the psalm motet, Benedicite omnia opera Domini, in his Tonality and Atonality in Sixteenth Century Music (Berkeley and Los Angeles, 1961), pp.20-25.

[Now, please continue from page 21, line 6, omitting the word, "Finally".

LEVAVI OCUROS MEOS IN MONTES

P 17 A (Ex 4 - 1000 2000 3000)

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(34) 35 40 43 45 51 55 60 66 73

(73) (disc. 5th) (desl. 5th) 80 83 88 92 96 98

(98)

(continued on next page. Part II)

(LEVAVI OCULOS MEOS IN MONTES, p.2)

(P. 1713)

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harmonic structure of I-III-V-I is found in 'Vultum tuum deprecabuntur.'⁶ At the outset of Part VI, the tonic, G minor, is clearly established. At measure 431 a long extension in B^b major begins (Ex. 1).⁷ This is the III chord of G Dorian, and, as

(Ex. 1)

shown in the graph, it is prolonged with its own harmonic progression of IV (m. 439) moving through II with a passing seventh (m. 441) to V (mm. 442-3), to I (mm. 444-6). E^b is consistently used within this prolongation of B^b, which acts in effect as the relative major. The tonic, G, is regained at measure 449 through a II⁶-V-I cadence. The shape of the superius, with the same melodic pattern heard once in the dominant and twice in the tonic of B^b (mm. 442-7), is significant. The first statement of the motive (mm. 442-3) in the dominant of III is balanced by the succeeding statement in the tonic of III, and the reiteration of this last statement builds a climax moving towards the final cadence in the central key, G Dorian-Aeolian. The structural importance of B^b in the upper voice is revealed in the movement away from it and toward it. This tone is not abandoned until the definitive downward motion to the final cadence of the passage.

A further harmonic extension is the termination of a section or composition by the use of successive fifth relationships in the progression I-VI-II-V-I, with its bass moving down a perfect fifth between VI and II, possible only in Ionian and Mixolydian, in the latter with a leading-tone in the cadence.

Harmonic progressions are also intensified by the sophisticated use of applied dominants, not only to V but also to other chords.⁸

The motion V-VI as a deceptive cadence is used as a means of extending the V and delaying the resolution to the tonic, particularly at the end of compositions.⁹ It may also serve to set off a circuitous path taken in the resolution of the V to the final I, particularly against the final sustained tone in the upper voice.¹⁰ The achievement of the tonic releases the tension and enhances the finality of the tonal goal.

There are numerous examples of I moving to IV and returning to I underneath the final sustained tonic, the IV chord acting as a consonant contrapuntal chord against the sustained tone. The so-called 'plagal' IV extends the I, serving a coda-like function. If the V-I progression with leading-tone intensifies the motion toward the tonic, the IV-I progression at the end serves to sustain and confirm it.

#2 The logical extension of the V-I relationship into modulation in the circle of fifths is also found in Josquin's music. Although Josquin is by no means the inventor of this technique, he goes farther than any of his predecessors and with great imagination sets the stage for the opening up of the harmonic space in the sixteenth century. The first example is perhaps the boldest of all, the by now famous ending of 'Absalon, fili mi'¹¹ (Ex. 2).

(Ex. 2)

The graph in Example 2 indicates some important aspects. The uppermost line delineates a motion from the fifth degree of the B^b tonic to 4, 3, 2, and finally 1, thereby outlining the B^b minor triad. Meanwhile, the bass moves in perfect fifths alternately via the third of the triad to which it is descending (see graph), in diatonic fashion to B^b minor, going as far as the VI chord. One cannot go further in the circle of fifths without losing the immediacy of the uppermost line's motion within the tonic triad. At this point Josquin pauses and moves directly to V, the goal of the descending motion. It took more than a century for this progression to become a regularly used harmonic device. The tonal center of the composition as a whole is B^b. The foregoing excerpt begins in the major and moves into the minor mode, in which it terminates.

Successive fifths are freely used in various parts of compositions. They ^{are} frequent in Ionian, Aeolian, and Dorian settings, most often as descending fifths, which may also appear in the form of ascending fourths. They also are used against a cantus firmus.¹² Particularly important and fascinating is the fusion of thematic repetitions with root movement by fifth, resulting in perhaps the first genuine examples of so-called 'harmonic sequences.'¹³ There are effective settings of as many as four-fold and five-fold repetitions. An unusually extended example is found in the transposed Dorian motet, 'Vultum tuum

deprecabuntur,'¹⁴ measures 261-83. The first succession has the following repetitions, alternating between bass and tenor:

D to G	melodic figure
G to C	figure repeated, with new counterpoint
C to F	same passage, repeated
F to B ^b	same passage, repeated

At the moment the B^b is attained, the bass enters beneath it with G. A new melodic pattern appears in the following transpositions:

G to D	melodic figure
D to A	figure repeated, with new counterpoint
A to D	original figure, modified, with new counterpoint
D to G	same passage, repeated
G to C	same passage, repeated
C to F	same passage, repeated

'Misericordias Domini,'¹⁵ in A Aeolian, has several instances of successive fifths, particularly around C, including a five-fold repetition of a cadential motive. This repetition begins at measure 51 with the first statement of the cadential motive as follows (Ex. 3):

(Ex. 3)

The statements of this motive are:

m. 51	beginning on E, ending on A
m. 53	" A, " D
m. 55	" D, " G
m. 59	" G, " G (leap of an octave instead of fourth
m. 61	" G, " C

This is an artful chain of applied dominants and leading-tone chords, subtly involving deceptive VI chords to delay resolutions. This technique is used to give relief to the concept 'misericordia Domini.' Almost immediately afterwards the text is repeated and, **#8** beginning in measure 68, a new succession of descending fifths

with pattern repetitions, in two phases follows: E - A - D - G - C - F; D - G - C. Successive fifths are found frequently in compositions set in Phrygian, as though to compensate for the absence of the dominant function in that mode; they frequently move away from E in descending fifths and return in ascending fifths.¹⁶ In 'Factum est autem,'¹⁷ in which Part I ends on E, the motion in fifths towards the final E is as follows: from G (m. 88), prolonged at first via C (m. 92), finally to D, then to A, and then to the final E. In the five-part 'De profundis clamavi,'¹⁸ the setting of the concluding Kyrie eleison begins at measure 104 on C, moves via a descending fourth to G (mm. 105-9), then to D (mm. 110-12), to A (mm. 113-15), and then to the concluding E. In the four-part Phrygian setting of 'De profundis clamavi,'¹⁹ the shape of the melody at the beginning of the motet, moving down a fifth, results through imitation in the succession E - A - D. The succession of fifths may continue into almost a complete diatonic circle of fifths. Thus, in 'Qui velatus facie fuisti,'²⁰ (secunda pars, mm. 82-9), ascending fifths, in a prolongation of C Ionian, move as follows: C - G - D - A - E - F - C. Significantly, B is omitted between E and F since B to F would form a diminished fifth. Finally, an example from the 'Missa Fortuna desperata,'²¹ reveals seven successive descending fifths (Ex. 4).

(Ex. 4)

II-V-I of the tonic (F Ionian) in measures 109-10 is succeeded by II-V (without leading-tone) -I of G minor, which is the II chord of F Ionian, and is attained at measure 111. The circle of fifths begins with the B^b, the III chord in the G prolongation, includes the augmented fourth between E^b and A--the direct leap avoided by passing tones--and is extended to the B^b chord in measure 113. The modernity of this example is obvious; it is a convincing and dynamic part of the total harmonic structure in the conclusion of this section of the Credo.

The juxtaposition of old and new in the application of harmonic relationships to the cantus firmus is a fascinating subject for study. Josquin reveals in his works a whole new view of the cantus firmus in its relationship to tonality. The shape and form of the chant melody is exceedingly important. In some motets the Gregorian melody appears in fragments, each of which is treated with harmonic clarity.²² Josquin's ability to preserve the character of the chant melody while adapting the harmonic treatment to tonality may be shown in a number of cases, among them the two-part opening of 'Mittit ad Virginem,'²³ a setting of a so-called 'variation-chain' sequence²⁴ (Ex. 5).

(Ex. 5)

The stanza consists of five lines whose corresponding musical units suggest harmonization in tonic and dominant. Josquin's setting of the Ionian melody reveals his feeling for tonal form; he organizes the five musical units as follows:

- 1: tonic
- 2: tonic
- 3: tonic
- 4: dominant
- 5: dominant-tonic (C Ionian)

The penultimate position of the V and its ultimate resolution is most significant. The six-part 'Praeter rerum seriem,'²⁵ one of the most famous motets of Josquin, is marked by considerable division of the chant melody (in G Dorian) into harmonically supported units. 'Planxit autem David,'²⁶ in F Ionian, offers another example of division of text, here separated by rests. The lamentation tone is freely reiterated, sometimes in cantus-firmus style. Each complete unit of text is prolonged within the tonic. These prolongations appear in various harmonic progressions. Intermediary points are frequently marked by strong cadential figures.

⑥ The cantus-firmus melodies each have a specific modal character. But Josquin feels free to acknowledge or ignore the modal identity of a melody; occasionally his polyphonic settings will contradict the nature of the mode, the polyphony absorbing the melody within a different tonal center. Other times he will transpose a melody from one mode to another. The 'Missa L'homme armé super voces musicales' is a prime example. In the case of the Phrygian mode, which has no dominant chord, and therefore no harmonic motion to its own central tone or finalis, Josquin sometimes contradicts the mode of the cantus firmus in the polyphonic setting. In the 'Missa Pange lingua,' the beginning of the Phrygian hymn melody is realized polyphonically in clear-cut C Ionian, with V-I movements in the setting of the text, 'Et incarnatus est.'²⁷

Parallel motion between the outer voices, a favorite device of Josquin's,²⁸ is often used in motion directed towards a V-I cadence as a means of intensifying the drive toward the cadence. Such parallel motions are occasionally strengthened through the use of sequence. In the following example from the Gloria of the 'Missa Fortuna desperata',²⁹ measures 50-58, the melodic motion is in descending parallel tenths, while the drive to the cadence is achieved structurally in ascending tenths, as indicated in the graph (Ex. 6).

(Ex. 6)

Independent voice leading is sacrificed to intensify the direction of tonal motion. In such passages the consonant parallel direction terminates on the leading-tone, most frequently with a 4-3 suspension, thereby heightening the attainment of the penultimate V.

Clarity of formal design, enhanced by motivic reiterations and contrasts in vocal scoring, is further given depth through renewal of the tonal relationships. An example from 'In exitu Israel de Egypto',³⁰ is given in Ex. 7.

(Ex. 7)

The V, prolonged through measures 210-18, now projects the text, 'et omnes qui confidunt in eis' (m. 218 to end), by a descending line via the dominant triad, supported by its own I-V-I. Immediately afterwards the same text is repeated to the same motive, now prolonged through the tonic triad, the top voice beginning the motion on the third of the tonic, moving down to the leading-tone and supported by I-V-I of the tonic. Additional intensity is

achieved through use of four voices instead of two, and through the motion of parallel tenths alternating with octaves in the outer voices, as shown in the graph. The parallelism is a striking example of the combination of tonal structure and thematic design to create direction and symmetry.

Some aspects of the direction and function of the upper voice have been considered. The significance of the lowest part in the preceding examples is manifest. No longer is the bass exclusively a line like the other voices. Its leaps are often reflections of harmonic motions; its direction, both in step and in leaps, is then conditioned by the tonal goal. As an illustration of the extent of the harmonic orientation of the bass line, the skeletal framework of the lowest voice of an entire motet, 'Levavi oculos meos in montes,'³¹ is given in Ex. 8.

8

(Ex. 8)

The bass reiterates, in different ways, motions from I to V and from V to I, frequently with parallel repetitions of design. G Dorian* (often turning into Aeolian), as the central tone of organization, is realized through the bass line in a remarkably forward-looking technique. Noteworthy is the parallelism in some repeated units, e.g., at measure 99 and at measure 103. Exact repetition occurs in the bass only, thereby highlighting the importance of the lower voice in the unfolding of the tonic-dominant relationship. Such parallelisms are striking. The beginning of the bass in Part II is quoted exactly to illustrate how thematic material and harmonic function are combined (Ex. 9).

(Ex. 9)

The preceding examples illuminate another important aspect of Josquin's style: all voices share in the thematic material. This is what is known as 'imitative style.' However, the outer voices assume responsibilities that go far beyond those of the middle voices, especially in Josquin's late works. The highest and the lowest lines assert their functions in tonal structure, both individually and together, with a strength and purpose that unequivocally point in the direction of 'polarity of the outer voices.' In this sense Josquin is a great innovator.

The foregoing exposition has been directed to only a few aspects of Josquin's concepts of tonality.³² Only chordal forms operating within the framework of the dominant-tonic phenomenon and in the fifth relationship have been considered in this brief study. Chords with contrapuntal, voice-leading function also play vital roles in the projection of tonality and must be examined together with the harmonically functioning phenomena.


Needless to say, Josquin's use of harmony cannot be considered solely by examining chords and cadences or by sending the various simultaneities through the computer. The harmonic factors are related to a number of compositional and aesthetic aspects. It is through a study of these inter-relationships that we may realize more exactly the remarkable character of Josquin's concepts of tonality, from which springs a new view not only of musical structure but also of expression of the text.

¹Throughout the fifteenth and sixteenth centuries composers set whole Masses, but also motets and other smaller liturgical as well as secular genres in F with a key signature of one flat in all voices. Theorists called it Lydian, but it was, as Glareanus (Dodekachordon, p. 115) rightly insisted, transposed Ionian. This use of Ionian transposed to F was encouraged by such examples of Gregorian chant as the Kyrie from the 'Missa VIII (De Angelis) (L.U., p. 37), in which every B is flatted. And if this example be dismissed, because its origin lies in the fifteenth-sixteenth centuries, as the editors of the Liber indicate, then its Sanctus, ascribed to the '(XI) XII c.' (L.U., p. 38), or the Sanctus and Agnus Dei from the 'Missa IX (Cum júbilo)' ascribed to the fourteenth century and '(X) XIII c.', respectively, may serve instead; each of these melodies has many B's, each one invariably flatted. --ED.



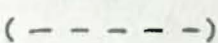




²See, for example, 'O Virgo virginum' (Motetten, Bundel xxiii, no. 83), in G Dorian. Many other examples may be found in Josquin's works.

³See 'Descendi in ortum meum' (Supplement, no. 6), where the II chord is prolonged harmonically before moving to V (mm. 61-7).

⁴For example, measures 187-8 and 190-91 in 'Pater noster' (Motetten, Bundel xii, no. 50), in G Dorian. An E^b is called for in the IV chord, producing a minor IV, characteristic in the minor mode. This is a good example of the assimilation of the Dorian mode to minor.

⁵E.g., Example 1,  in G Dorian, illustrates the presence of E^b (stipulated, and through musica ficta), E[♯], F, and F[♯] (through musica ficta). In Aeolian compositions the seventh degree is, of course, frequently raised; but the sixth degree, which appears in both forms, is rarely altered.

⁶Motetten, Bundel iv, no. 24.

⁷A brief explanation of the symbols used in the linear analyses in this paper follows: N = neighbor tone; P = passing tone; \bar{N} = neighbor chord (complete or incomplete), supporting a passing tone in the uppermost voice; + = major; - = minor. Arabic numbers have the same significance as in figured bass. The slur () denotes contexts and their subdivisions; the dotted slur () and the dotted beam () indicate the return to or retention of a pitch whose structural significance remains the same; the curved arrow () denotes a leading-tone chord which resolves to the chord to which the arrow is directed; the straight arrow () shows directed motion from and to chords of structural significance. The beam () indicates the structural connection between tones of different pitches; the bracket () is used to indicate the dominance of a single chord, extended through harmonic progressions and/or contrapuntal motions shown above and within the bracket. Notes do not have durational value; unstemmed black notes are most 'immediate' in their context, stemmed quarter notes are

'intermediate' in context and subordinate to the half note, the most 'remote' and primary symbol. These symbols and terms, derived from the graphing techniques of Heinrich Schenker, are explained in detail in The Music Forum, 1, ed. William J. Mitchell and Felix Salzer (New York, 1967), pp. 260-68.

⁸ Examples of applied dominants are:

a) to the V chord: 'Benedicite omnia opera Domini Domino' (Motetten, Bundel xiii, no. 53), in F Ionian. This motet contains a number of such examples, e.g., measures 34-5, as well as prolongations of I-V-I in the dominant (mm. 181-7). (For a harmonic analysis of this motet, see Edward E. Lowinsky, Tonality and Atonality in Sixteenth-Century Music [Berkeley and Los Angeles, 1962], pp. 20-25.)

b) to the III chord: 'Domine, non secundum peccata nostra' (Motetten, Bundel ii, no. 13), measures 213-14, in G Dorian.

c) to the VII chord: *ibid.*, measures 190-92. This applied dominant is possible without musica ficta in the Dorian and Mixolydian modes.

⁹ An example of movement from V to VI instead of to I is in the concluding section of 'Descendi in ortum meum' (Supplement, no. 6), in which the final V-I is achieved tellingly with fermata.

¹⁰ In 'Paratum cor meum, Deus' (Motetten, Bundel xvii, no. 67), at measures 322-5, V moves to VI, then to IV (preceded by I⁶) as a further delay before resolving to I. These chords are

essentially contrapuntal in ⁿfunction, serving as consonant supports of the sustained tone above. The VI or the IV, as harmonic functions, would operate as such only within the harmonic progressions, such as I-VI-V-I or I-IV-V-I.

¹¹Supplement, no. 5.

¹²See 'Ave nobilissima creatura' (Motetten, Bundel vii, no. 34), measures 76-80; also measures 211-15. In both cases the bass moves as follows: D - G - C - F - B^b. The motet is in D Aeolian.

¹³'O admirabile commercium' (Motetten, Bundel i, no. 5), measures 47-53 (B^b Ionian). Another example is the repetition in the bass of 'Virgo prudentissima' (Motetten, Bundel v, no. 25), measures 28-39, in which the motive moves up a fourth or down a fifth in the following order: D - G - C - F, each pattern including the leading-tone.

¹⁴Motetten, Bundel iv, no. 24, Part IV.

¹⁵Motetten, Bundel x, no. 43.

¹⁶See my study of the 'Missa Pange lingua' in 'Fusion of Design and Tonal Order in Mass and Motet: Josquin Desprez and Heinrich Isaac,' The Music Forum, 11 (1970), beginning on p. 206. Of particular interest is the Osanna (described on pp. 226 and 228), which involves paired repetition and succession of fifths.

¹⁷Motetten, Bundel iii, no. 16.

¹⁸Motetten, Bundel xxiv, no. 90.

¹⁹Motetten, Bundel xi, no. 47. 'Virgo salutiferi'

(Motetten, Bundel vii, no. 35) is an example in which the shape of the melody at the opening outlines an ascending fifth, thereby resulting in the succession, G to D to A.

²⁰Motetten, Bundel ii, no. 11.

²¹Missen, iv, measures 108-18 of the Credo. The text to which the descending fifths are applied, quite appropriately, is 'descendit de coelis.' In the motet 'Absalon, fili mi' (see Ex. 2), the descending fifths were applied to the text, 'descendam in infernum plorans.'

²²For example, the setting of the cantus firmus in 'O Virgo virginum' (Motetten, Bundel xxiii, no. 83), in G Dorian. The small range of the melody, as in the first phrase, G-B^b-A-B^b-G-A-G, leads to strong prolongations of the G tonality and consistent use of the V against the passing and neighbor tones.

²³Motetten, Bundel i, no. 3.

²⁴On the variation-chain concept, see Oliver Strunk, 'Some Motet-Types of the 16th Century,' Papers Read at the International Congress of Musicology, 1939 (New York, 1944), pp. 155-60.

²⁵Motetten, Bundel vii, no. 33.

²⁶Motetten, Bundel iii, no. 20.

²⁷See Novack, 'Fusion of Design and Tonal Order'; the analysis of Et incarnatus est is given on pp. 213 and 218-19. A much later example of the contradiction of linear mode and polyphonic tonality is J. S. Bach's treatment of Hassler's Phrygian melody, 'O Haupt voll Blut und Wunden.' In the 'Passion according to St. Matthew' the first four chorale settings of this melody are in major, corresponding in their various transpositions to the relationship of C Ionian to E Phrygian. The fifth and final setting, appropriately, is in E Phrygian, terminating on E.

²⁸Remarked on by Gafurius in his Practica musicae of 1496, Book III, Ch. 12; see Irwin Young, transl., The Practica musicae of Franchinus Gafurius (Madison, Milwaukee and London, 1969), p. 154. --Ed.

²⁹Missen, iv.

³⁰Motetten, Bundel xii, no. 51, measures 210-26.

³¹Motetten, Bundel xviii, no. 70.

³²For other aspects, particularly with regard to cadences, the functions of dissonance, harmonic and motivic repetition, see Edward E. Lowinsky's admirable study of the psalm motet, 'Benedicite omnia opera Domini,' in his Tonality and Atonality, pp. 20-25.