

# SUBJECT AS OBJECT: NIVERS, SCHENKER, AND THE NATURE OF THE FUGAL THEME.

by

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## INTRODUCTION

Construction and analysis of fugue subjects, which one would expect to be among the simpler tasks in the study of fugue, are much more complex and difficult than is generally assumed. The stylistic, tonal, and contrapuntal requirements of a good fugue subject are in fact a great challenge to composer and analyst alike.

Textbooks normally devote a great deal of space to the construction of "correct" fugal answers, but give little or no attention to the construction of fugue subjects themselves. For example, in his otherwise exhaustive and systematic *Traite de la fugue*, Andre Gedalge devotes only 3 pages to the subject, but 47 pages to the answer. Indeed, Gedalge says that the student should not even attempt to write fugue subjects, but should instead select from the collection of 231 subjects provided as an Appendix. In texts such as this, brief mention is usually made that subjects are normally of moderate length, moderate range, clearly express the tonality, and possess recognizable motivic characteristics—all the characteristics of any good theme or tune, in fact; such descriptions go no perceptible distance towards defining the special characteristics necessary for subjects in contrast to other musical themes. The discussion of answer that normally ensues usually proceeds through real, tonal, and subdominant varieties, discussing a multitude of contingencies and attempting to make general rules as to which type of answer is correct for any given subject. No doubt constructing "correct" answers is a complex task, but it is my view that devoting greater attention to the subject itself in the first place is a more useful approach to constructing answers. Indeed, insufficient regard for the essential characteristics of good fugue subjects accounts for many of the difficulties encountered, and errors committed, by students in composing the answer, countersubject, and later parts of fugue.

Guillaume Gabriel Nivers and Heinrich Schenker, however, two musicians and writers from very different eras, shed light on the question of what constitutes a good fugue subject, and between them provide a framework for the understanding of what gives fugue subjects coherence, shape, and vitality.

## NIVERS

Nivers, a French organist, composer, and theorist, described in 1667 in a short treatise entitled *Traite de la composition de musique* [Paris, 1667], the main characteristics of a good fugue subject. Please refer to Example 1, my illustration of Nivers's description, which is as follows:

To construct a fugue [subject], three things must be considered, its beginning, its continuation, and its ending.

It should commence on the degree of the final, or on the dominant, rarely on the mediant of the key in which one is writing.

It should proceed through the essential notes of the key directly or indirectly. Directly, for example, if it begins on the final, it should proceed by ascending a third or a fifth, or by descending a fourth. If it begins on the dominant, it should proceed, if ascending, by a fourth and if descending, by a third or fifth. Indirectly, for example, when it proceeds by conjunct degrees with the intention nevertheless of passing directly through the essential notes of the key.<sup>1</sup>

This description is brief yet highly perceptive in comparison to the more familiar descriptions that deal with such elements as range, length, style, meter, and rhythm, but do not touch on that which is peculiar to, and special about, fugue subjects.

In the first two lines of Example 1, the simple scalar segments described by Nivers are tabulated. Nivers of course cannot mean that just these scale segments in themselves are the only good fugue subjects, or we should have only 6 possible fugue subjects! Rather, he must mean that they are the *bases* of good fugue subjects; that is, they will form frameworks about which may occur various elaborations. This is supported by Nivers's mention of indirect means; the third line of Example 1 provides samples of indirect means that maintain the conjunct degrees or stepwise motion as Nivers describes. In actual fugue subjects then the forms of Example 1 become underlying structures.

We can therefore summarize that the proper basis for a subject is a stepwise motion filling an interval of the tonic chord, and normally beginning on 1 or 5. The fundamental features of Nivers's theory then are: (1) the subject expresses the tonic chord, partially or completely; (2) the subject utilizes linear means; and (3), by implication, the essence of the subject is elaborated by ornamentation or diminution (in the sense of elaboration, that is Nivers's "indirect" means. To reduce further, the true basis of good fugue subjects is a scale segment, connecting two notes of the tonic triad.

(At this point it is necessary to clarify that Nivers' forms, while extremely prevalent in the literature, are in fact not the only bases for fugue subjects. In particular, many modulating subjects are based on quite different forms. Nevertheless, lack of comprehensiveness cannot be a basis for invalidating Nivers' theory.)

Nivers has in fact described simple forms of what Heinrich Schenker two and a half centuries later was to name *Zuge : linear progressions*; stepwise connections between chord tones. As Nivers intimates, notes of a linear progression need not appear in immediate succession at the surface level; they may occur amidst other motions and elaborations, but they *will* constitute an unbroken series at some deeper level. The notes of such an underlying linear progression will often be prominent because of factors such as rhythm, contour, and harmonic implication.

Linear progressions, then, are the true basis of good fugue subjects; they carry the basic requirements for tonal coherence: unity, in the expression of the tonic chord, and a dynamic forward motion (that is a distance travelled, from starting to ending note, in both time and pitch). Such linear progressions provide the structural basis of virtually all non-modulating fugue subjects.

Example 2, presenting a series of three fugue subjects and accompanying analytical notations that highlight the underlying linear motions, demonstrates the application of Nivers's theory in music analysis.

In Example 2a, from the *WTC II*, it is clear that the upper stratum outlines a third progression from the fifth to the third, G-F-Eb. The 5-4-3 pattern, of which this is an example, is probably the most frequently occurring and most important of all Nivers' patterns. For example, it is found in 22 of Bach's 48 *WTC* fugue subjects. If the basis of Example 2a is 5-4-3, the notes which are not parts of the essential linear motion must be understood as ornamental, in one of two senses: (1) as harmonic ornaments (chordal skips) or (2) as melodic ornaments, including neighbor notes and passing notes. In this example, 3 of the elaborative notes are understood as chordal skips, the Eb and C of the I chord and the D of the V chord, while the remaining 2 notes, F and Eb, are passing notes. The notation of the graph is intended to illustrate these various functions.

Example 2b, also from the *WTC II*, shows a great deal of the indirect, stepwise motion to which Nivers alluded, but nevertheless it can again be understood simply as an elaborated form of the descending third, G-F-E. The most important elaboration is the upper neighbor: 5-N-(5)-4-N-(4)-3. The other ornamental notes comprise lower neighbors, arpeggiations, passing notes, and escape tones. The elegance and interest of this subject lies in the fact that measures 3 and 4 are a disguised repetition of measures 1 and 2. This observation is given support by the third line of Example 2b, which shows Bach's own simplification of the subject as it occurs thrice, in mm. 69-72, 72-75, and 76-80, in the concluding section of the work.

In a dissertation on the fugues of Bach dating from 1956, Uriel Ittenberg mentions that, most of the subjects in *WTC II* end on 3, and also notes that all three of Bach's fugue subjects for unaccompanied violin begin on 5 and end on 3.<sup>2</sup> He calls this "certainly a curious coincidence," but if coincidence has any part in Bach's creative process, it is surely not here. Rather, as Bach obviously knew, consciously or unconsciously, 5-4-3 is simply the most effective linear-tonal basis for fugue subjects, and it is particularly suited to the constrained registral and polyphonic conditions of the solo violin.

Example 2e, this time from the *WTC I*, shows probably the next most common subject pattern after 5-4-3, the descending fifth motion 5-4-3-2-1. Bach has beautifully elaborated the descending fifth by two simple means, arpeggiation and chromatic passing notes. As in the previous example, an upper neighbor to the dominant is again prominent.

Walter Schenkman noted in *Bach (The Quarterly Journal of the Riemenschneider Bach Institute, 1976)* that Bach's fugue subjects are often founded on the descending sixth, 6-5-4-3-2-1, or the descending fourth 6-5-4-3, and suggested that this melodic pattern is also prevalent in many Bach preludes.<sup>3</sup> Interestingly, he connects this pattern with the ancient tradition of solmization subjects, in which *ut re mi fa sol la* and its various permutations served as the motivic basis for compositions, a tradition still practiced in the mid-seventeenth century, as can be seen in the keyboard works of Frescobaldi, some of which were probably known by Bach.<sup>4</sup> But recently three scholars, Robert Gauldin of the Eastman School of Music,<sup>5</sup> Bo Alphonse of McGill University<sup>6</sup> and myself, have clarified that the essential progressions are not 6-5-4-3 and 6-5-4-3-2-1 but, 5-4-3 and 5-4-3-2-1, and their elaborations, 5-6-3-4-3, and 5-6-5-4-3-2-1. Reductive analysis makes clear that the 6-5-4-3-2-1 and 6-5-4-3 patterns identified by Schenkman

are incomplete tonal linear progressions, since they omit the initial dominant note, and thus the basis of such subjects is understood as essentially tonal, or triadic, rather than modal as Schenkman suggests.

It remains intriguing, however, precisely *why* the particular patterns identified by Nivers, and especially the descending motions mentioned a moment ago, are so prevalent in the literature. My explanation for the preponderance of this pattern, is, in essence, that the voice-leading requirements of an imitative opening in a tonal context lead of themselves to these constructions as the most natural and satisfactory. The scope of the paper prohibits elaboration on this point, but it is fully explored in my dissertation, the findings of which I intend to publish in the near- future.

## SCHENKER

If Nivers identified the linear basis of fugue subjects in the seventeenth century, it was Heinrich Schenker who, in a series of works spanning the first, third of our century, developed a general theory of linear progressions as a structural basis of tonal music. Three of Schenker's specific contributions are relevant to the nature of the fugue subject:

(1) I have already mentioned Schenker's identification of the *Linear Progression* as a fundament of tonal music; and we have already seen the validity of this proposition for fugue subjects in the Examples given thus far.

(2) Second is Schenker's concept of *Structural Levels* as a way of rationalizing the complexities of tonal music. Indeed, by means of structural levels, Schenker demonstrates that linear progressions play a primary role in the organization and coherence of tonal music at all levels, from the foreground, the level, at which they operate in fugue subjects, to the deepest background of entire movements.

As an application of the notion of structural levels to a fugue subject, please turn to Example 3, taken from the *WTC II*, G# minor fugue. This subject is based on Nivers' rising third motion 1-2-5. But the elaborations themselves also constitute rising third-progressions on two subordinate levels, giving a nesting of motives (Charles Burkhart's term). Also to be noted here is the phenomenon which Schenker termed *Ubergreifen* or "reaching-over"; this occurs when a rising motion is facilitated through a leap-up and step-down configuration, such that the goal of motion is approached from above rather than from below. I draw attention to this particular technique because it is commonly used in fugue subjects based on rising linear progressions, the reason for this is that it facilitates the voice-leading of the later parts of the fugue, where the subject may occur as an inner or a bass voice.

(3) And third is Schenker's view of the harmonic implications of linearity in general, which comes to bear frequently in analysis of instrumental-style fugue subjects. In particular Schenker expands Nivers' notion to include the possibility of two or more linear progressions as the basis of a single subject. It is Schenker's analyses of fugue subjects that demonstrate his view.

Schenker published complete analyses of only two fugues, the *WTC I C* minor fugue, and the fugue from Brahms' *Variations and Fugue on a Theme of Handel*, Op.<sup>7</sup> 24. In addition, analyses of fugue subjects are scattered throughout his works. They include: Bach's *WTC Book I*, C#-major, C# minor, D-minor, D# minor, and B-flat-minor, *Book II* B major; the *Invention in B minor*, the *Chromatic Fantasy and Fugue*, and *Handel's F*

major Harpsichord Suite, fourth movement, and the fugato subjects in Beethoven's 3<sup>rd</sup> and 5<sup>th</sup> symphonies.

Example 4 is Schenker's analysis of the *WTC I C* minor f u g u e subject, taken from his essay "Das Organische der Fuge" (The Organic Aspect of the Fugue). (I apologize for neglecting to provide the original music here, but I am sure that most of you are quite familiar with this one.) Without going into great detail here, it should be evident that Schenker is demonstrating the polyphonic nature of this subject; in level a) that it has a Fundamental Linear progression, 5-4-3, which has a basic harmonic implication, and which in level b) is ornamented primarily by the upper neighbor again. The underlying descending third is the "organic" basis for the motivic repetitions marked by the brackets in level c) (Ab-G-F, G-F-Eb). The remaining three levels demonstrate the voice-leading continuity of the upper stratum C and its neighbors, while the black note heads indicate an implied voice in thirds below the main linear-progression. In Schenker's conception, whether or not you agree with all the analytical details, the basic principle is that an unaccompanied fugue subject carries along with it a full complement of linear and harmonic implications. (Schenker supports his reading of this subject by comparison with the subject from Bach's invention in B minor, which is remarkably similar in its surface features as well as in its voice-leading structure, thus admitting and opening the possibility of comparative analysis as a mode of analytical validation.)

Although he nowhere formally addresses the theory of fugue subjects, Schenker succinctly places his analytical understanding of fugue subjects in a theoretical guise in the following sentence, from "The Organic Aspect of Fugue": "The fugue subjects of J. S. Bach, with only few exceptions, convey self-substantiation within themselves as they reveal a strictly compact course of action."<sup>8</sup> This "compact course of action" I take to mean the underlying linear progression which gives direction and motion to a subject, while the "selfsubstantiation" I take to mean the sense of unity that an unfolding of the tonic chord provides.

Example 5, Schenker's analysis of the *WTC II B* major fugue subject, illustrates again the strict polyphonic aspect that many subjects contain.<sup>9</sup> But I insert it here to introduce a further abstraction of the linear progression. The primary or guiding linear progression of a rising fourth from dominant to tonic, 5-6-7-8, occurs infrequently in the repertoire. Here it is accompanied by two other linear progressions, 1-2-3 and 3-4-5, which in sum project a complete polyphonic aggregate. *But*, this entire analytical construct is based on the hypothesis of an inferred note, F# (notated in parentheses), the first note of the primary linear progression. For Schenker the notion of implied structural notes developed gradually as his understanding of voice-leading principles developed. Schenker's analysis is convincing here because of the impressive coherence of the combined linear progressions, and it is confirmed by the ensuing exposition, in the successive rising entries of which the highest note of each previous entry provides for the "missing" note of the succeeding entry.

This significance of this example then is that it extends Nivers's notion of linear progressions to include implied linear progressions as potential foundations of subjects. It is the special contrapuntal role of the fugue subject in musical composition that determines this possibility, for a subject must be capable of a variety of settings, of counterpointing in a variety of combinations. And in comprehensive analytical work, the

later parts of a fugue can often serve to clarify the tonal meaning of a subject, as in this case.

## EXPANSION OF THE SYSTEM: VARIANTS

I mentioned earlier that Nivers' set of subject paradigms was incomplete, and we have just seen how the tools of Schenkerian analysis can provide a continuity of understanding even in cases where fundamental notes are not present. In the remaining part of the paper I wish to quickly introduce a further selection of Schenkerian techniques which are common in fugue subjects, and to provide a simple basis for constructing answers on the basis of a structural understanding of subjects.

If the most commonly occurring subject types are those which descend by step from the dominant, the most common elaborations of them, apart from the already mentioned upper neighbor, are harmonic expansions, more or less elaborate, of the tonic chord that the first note, the dominant, implies. (1) The first of these I call simply the initial tonic, a tonic note which occurs in close succession to the main note, the dominant. Examples 2b and 4 show this phenomenon, a tonic below and above the dominant, after and before it, respectively. Now these opening patterns of tonic and dominant, sometimes referred to as the head of the subject, have been recognized for centuries, and their implications for answer construction have traditionally been framed in the idea that tonic responds to dominant and dominant to tonic. This is true enough as an observation, but the present approach provides a deeper understanding: The opening notes, 1 and 5 of the subject are primarily a harmonic interval, expressing the tonic chord, rather than a melodic interval, and thus their proper expression in the answer will be as a harmonic expression of the chord which ends the subject and simultaneously begins the answer—usually the tonic chord. The traditional antipodal view of tonic and dominant notes here, which is so often linked incorrectly in students's minds with the idea of opposing tonic and dominant keys in subject and answer, is replaced by a view of tonic and dominant notes as components of and expressions of a tonic triad; associates rather than rivals.

Use of the initial tonic as a preparation for a linear progression renews the possibilities for beginning subjects of the mediant. (Recall that although Nivers cautioned against beginning on the mediant, he nevertheless mentioned it and recognized it as a legitimate possibility.) Put simply, the pattern 3-2-1 causes grave harmonic problems, since the answer would begin on the leading tone, but beginning with the tonic clarifies the harmonic meaning of the subject and also provides a consonant note, the dominant, for the beginning of the answer. And this pattern indeed does occur frequently in the repertoire. The WTC i C# minor subject, which will be discussed in a moment is an example.

(2) The second phenomenon might be called initial arpeggiation, a term used by Schenker in the context of broader musical segments, in which quite similarly the initial tonic chord which the dominant implies is expressed fully by inclusion of the root, and third. The beginning of Example b shows this possibility.

(3) The third phenomenon is the initial ascent, again taken from Schenkerian terminology, in which the space from the tonic up to the dominant, first note of the main linear-progression, is filled stepwise.

Example 6, taken again from *WTC II*, illustrates the initial ascent in the context, of a lengthy and polyphonic type of subject. Note the presence of a number of factors seen before, the polyphonic working out of 5-4-3 with an upper neighbor, and complete lower voice, E-D#-E. The upper neighbor itself is beautifully prolonged through a melodic expression of VII<sup>7</sup>. In this way the simple three note, three chord, basis is expanded to cover 36 or 42 notes, depending on what one considers to be the extent of the subject itself, (or depending on the parameters used to define the extent of the subject).

## EXPANDING THE SYSTEM: OTHER PATTERNS

The preceding discussion has shown that Nivers' six linear progressions are indeed basic patterns for fugue subjects, and that Schenker's techniques of reaching over, implied notes, initial tonics, initial arpeggiations, and initial ascents, fill out and refine the system in important ways.

Without going into any detail, I provide Example 7<sup>1</sup> as a summary and as a further filling out of the system. The right hand part of each column lists the common subject patterns, and the left the corresponding answer patterns. Here we see, in addition to all the patterns described thus far, a small collection of other voice-leading bases of subjects that I have encountered with some frequency in the repertoire: (1) No. 15, the octave progression, is found infrequently in baroque music, but it does occur often as a melodic basis in the fugal music of the Viennese classicists, as has been pointed out by Warren Kirkendale in his excellent book *Fugue and Fugato in Viennese Classical Chamber Music*. (2) Occasionally subjects are based not on a linear progression, but, simply on a neighbor motion based on 1 or 5, shown in Nos. 10, 11, 16, and 17. (3) Also subjects sometimes appear to be founded primarily on a root motion, 1-V-I, shown as No. 18.

Example 6, abstracted from the *WTC I* C# minor fugue, is presented both as a recapitulation of the main ideas presented here, and as a demonstration of their application. This five-part fugue is based on three subjects, shown in the first three lines of Example 8. The lower lines provide an analysis. The first subject, shown on the third line, is essentially a 3-2-1 type preceded by an initial tonic. On the uppermost line is the second subject, which first enters at m. 36. It is a simple elaboration of 5-4-3, with upper and lower neighbors and arpeggiations to the lower third—G#-E; F#-D#. On the second line is the third subject, which enters first at m. 49. It is based on the neighbor motion 8-7-8.

Whereas the *WTC II* B major fugue subject of Example 5, contains full polyphony in itself, the present example represents the opposite: here it is the combination of the three subjects that gives a complete polyphony; and this polyphony, capable of inversion in any order, as shown in Example 9, provides the contrapuntal basis for a large part of the composition.

## ANSWER PATTERNS

As a complement, and as a fresh and simplified basis for constructing fugal answers—a passage out of the maze of traditional answer construction—Example 7 on page 3 also provides a corresponding series of answer-models which can serve as bases for the

composition of tonal and real answers, along the lines of Nivers's and Schenker's conception.

While many of the answer paradigms will seem obvious in the abstract, their value appears in the formulation of answers for complex subjects, and in understanding apparent anomalies in answer construction from a structural perspective.

Answer paradigms marked "R" would represent real answers, while those marked "T" would be tonal. But this observation holds good only in so far as the background is concerned. Since this example deals only with the underlying patterns of answers, it should not be considered as an infallible guide to correct answer construction. Additional ornamental notes could either require tonal or real response dependent on their functional role in the subject, but in any case the considerations remain those of function.

And interestingly for the theory, functional notes of the subject may become ornamental (from a voice-leading: perspective) in the answer, and vice versa. For example, observe the functional role which the upper neighbor, 6 of the subject, plays in the answer paradigms Nos. 2 and 6 of Example 7: It arpeggiates the tonic chord, binding the subject and answer firmly within a single harmony, and itself becomes the starting point for a linear progression. Other factors may come into play and may result, in different, more complex answer constructions in special circumstances, yet, the basic principle of an underlying linear progression retains its validity. Even the most abstruse and convoluted subjects bear some direct relation to such basic patterns, albeit, through a greater number of structural levels.

## CONCLUSION

I believe that the hierarchical voice-leading approach to fugue subjects presented here provides a useful new focus for analytical work and for the pedagogy of imitative counterpoint as well. Although this paper focussed on only the subject, the most elementary aspect of fugue, it should be apparent that this approach has important ramifications for the study of the functional role of imitative counterpoint in the structure of entire fugues as well.

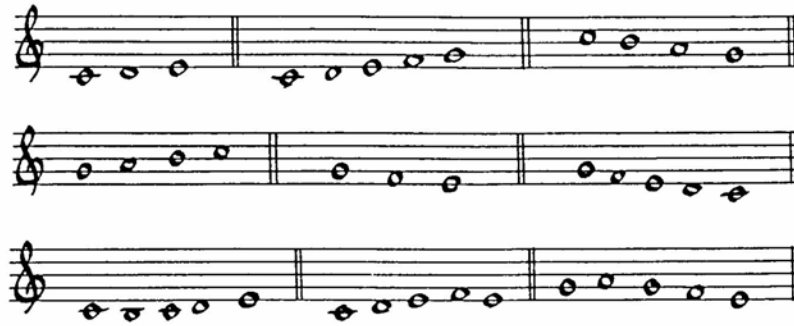
## NOTES

1. Guillaume Gabriel Nivers, *Traite de la composition de musique*, (Paris, 1667): 49-51, trans. by Charles Naldin in *Fugal Answer*: 8.
2. Uriel Ittenberg, "The Fugues of J. S. Bach: A Study of their Structure, Style and Texture" (Ph.D. diss., University of California at Los Angeles, 1956): 175-76 and 231.
3. Walter Schenckman. "The Influence of Hexachordal Thinking in the Organization of Bach's Fugue Subjects," *Bach* VII (1976): 10-11.
4. Ibid.: 12-13 and 15.
5. Robert Gauldin, A. *Practical Approach to Eighteenth Century Countepoint* (Englewood Cliffs, New Jersey: Prentice Hall, 1988): 212.
6. Paper delivered at the 1986 Canadian Music Theory Conference, University of Alberta.

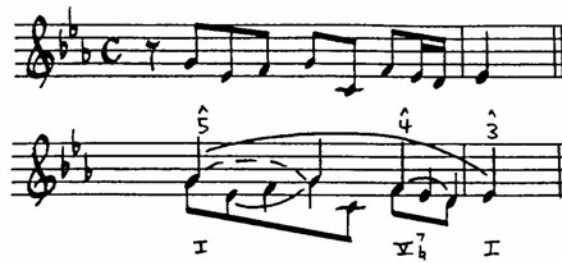


7. Schenker, *Das Meisterwerk in der Musik, Jahrbuch I* (Munchen: Drei Masken Verlag, 1925) xxx and xxx.; *Der Freie Satz*, Figures xxx. and xxx.; *Chromatic Fantasy and Fugue*, trans. and ed. Hedi Siegel, (New York: Longman, 198x), p. x.
8. Schenker, "The Organic Aspect," in *Das Meisterwerk II*, 60j trans. by Sylvan Kalin in "Thirteen Essays," II: 25.
9. Schenker, *Das Meisterwerk in der Musik, Jahrbuch I* (Munchen: Drei Masken Verlag, 1925), Figure 3, p. 97.
10. Example 7 is not to be found with this paper; but the patterns appear in William Renwick *Analyzing Fugue: A Schenkerian Approach* (Pendragon Press, 1995).

Ex. 1. Subject Patterns (after Nivers)



Ex 2a. WTC II C minor



Ex 2b. WTC II C major



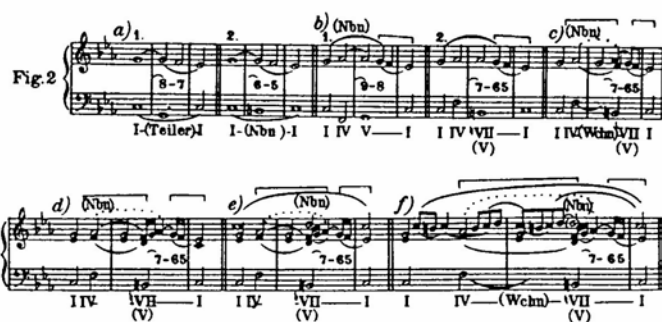
Ex 2c. WTC I F minor



Ex.3. WTC II G# minor



Ex.4. WTC I C minor (Schenker)



Ex.5. WTC II B major (Schenker)



Ex.6. WTC II E minor

