

## THE NAIVE STRUCTURALISM OF HEINRICH SCHENKER \*)

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All things considered, there are many things going on in music which one has to imagine without really hearing them. . . . Sensible listeners make up for this deficiency by using their imaginations.

C.Ph.E.Bach (1753)

### *I. Introduction.*

Heinrich Schenker, the Austrian theorist of music, died in 1935 at the age of 67. It is well known that his way of musical thinking has given rise to a school of musical analysis which during recent years has achieved a fairly wide dissemination, especially in USA. To the non Schenkerian, this school with its esoteric and seemingly speculative approach to musical understanding is at once attractive and frightening. Turning to Schenker's own work, one can easily be even more taken aback. His cocksure and arrogant style of writing, the viewpoints on arts and politics which lard his books - the worship of geniuses and 'heroes' among the composers, as well as his chauvinistic and semi-fascistic attitude to the 'nation' and to the 'masses', and, finally, his ridiculous inability to see anything worthwhile in music outside the Austrian-German tradition from Seb. Bach to Brahms, - - all this makes the acquisition of the essential in his musical thought a somewhat burdensome undertaking.

My reason for writing the present note on Schenker is the fact that - to my knowledge, at least- the literature relating to Schenker has not drawn attention to the truly structuralistic way of thinking that is developed in a most admirable way throughout his works, making his approach towards music something similar as the approach of structural linguistics towards language. Admittedly, it has been suggested that there is an inner similarity between Schenker's teachings and the transformational grammar of Noam Chomsky, but that very thought is - in my view - a short circuit resting on a quite superficial similarity<sup>1</sup>).

It is a basic view of structuralistic orientated thinking that a total doesn't consist of items but of relationships. I venture to cite a rather long passage by Louis Hjelmslev in which he develops this view, talking of *the principle of analysis*. It is my thesis that the analytical principles here described are the same as the principles

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that were developed with regard to music by Schenker during the course of his life-time.

”-Since linguistic theory starts from the text as its datum and attempts to show the way to a self-consistent and exhaustive description of it through an analysis or continued division - a deductive progression from class to segment and segment of segment, - the deepest strata of its definition system must treat this principle of analysis. They must establish the nature of the analysis and the concepts that enter into it. - -

- - Naive realism would probably suppose that analysis consisted merely in dividing a given object into parts, i.e. into other objects, then those again into parts, i.e. into still other objects, and so on. But even naive realism would be faced with the choice between several possible ways of dividing. It soon becomes apparent that the important thing is not the division of an object into parts, but the preparation of the analysis so that it conforms to the mutual dependences between these parts, and permits us to give an adequate account of them. In this way alone the division becomes adequate and, from the point of view of a metaphysical theory of knowledge, can be said to reflect the "nature" of the object and its parts.

When we draw the full consequences from this, we reach a conclusion which is most important for an understanding of the principle of analysis: both the object under examination and its part have existence only by virtue of these dependences; the whole of the object under examination can be defined only by their sum total; and each of its part can be defined only by the dependences joining it to other parts, to the whole, and to its part of the next degree, and by the sum of the dependences that these parts of the next degree contract with each other. After we have recognized this, the "objects" of naive realism are, from our point of view, nothing but intersections of bundles of such dependences. That is to say, objects can be described only with their help and can be defined and grasped scientifically only in this way. The dependences, which naive realism regards as secondary, presupposing the objects, become from this point of view primary, presupposed by their intersections.

*The recognition of this fact, that a totality does not consist of thing but of relationships, and that not substance but only its internal and external relationships have scientific existence, is not, of course, new in science, but may be new in linguistic science. -''2) (The italics are mine).*

## II. Early Schenker.

Already in 1906 a similar way of thinking manifests itself in Schenker's writing: "Concerning music the important thing - and it is very important - is to pay attention to every phenomenon, even the smallest one, and to hear every detail, even the most insignificant one, with the cause peculiar to it. You must hear in this way to do justice not only to the composers but the the very music itself. It is peculiar to music that it permits several laws to operate at the same time, some

more emphatic than others, in such a way that the strongest law – the one that intrudes most forcibly on our minds – in no way silences the laws which keep the smaller and narrower tone-circles in order.”<sup>3</sup>)

What Schenker calls causes and laws here correspond fully to the dependences and relationships of Hjelmslev’s statement.

Not seldom he speaks of biological factors in the life of the tones. ”’Das Eigenleben’ (the life-of-their-own) of the tones in the reality of the musical work.”<sup>4</sup>) This statement hints at something similar to the above-mentioned laws: constitutional forces in music which are not evident on its surface.

By means of a few examples I hope to demonstrate how this way of thinking – the shift of attention from the surface of the music to the more abstract level of causes behind that surface – appears already in this beginning phase of development of Schenker’s thought.

1°. Schenker denies the existence of the so called ninth chords as he regards the constellations commonly so named as non-chords and as products of voice-leading. Similarly many diminished and augmented intervals in vertical positions are regarded as non-existent in themselves and products of horizontal laws. Scarlatti writes:

Klaviersonate Nr. 38 in D-dur.

*Allegro tr*

The image shows two systems of musical notation for Klaviersonate Nr. 38 in D-dur. The first system is marked 'Allegro tr'. The right hand has a melodic line with a trill. The left hand has a bass line with figured bass notation: IV, V, II, —, —, —. The second system continues the piece, with figured bass notation: —, —, I, II, V, —, —, I. The text 'u. s. w.' is written to the right of the second system.

Example 1.

It would be un-musical, Schenker says, to hear bar 6 of this example in a vertical way, hearing, for instance, the B<sup>b</sup> of the melody as a diminished octave to the B of the left hand. The tones of the melody have to be understood as a melodic circumscription of the tone A, in which the C is an appoggiatura, and B<sup>b</sup> and G<sup>#</sup>

are neighbouring notes. "So to hear is first duty, and the effect of the B<sup>b</sup> over the B has only a secondary significance."

"It will be seen from these examples that it is quite necessary – from an artistic point of view – to hear every tone with its artistically immanent cause of formation, whether the ear is thereby forced to hear in a horizontal or a vertical direction. So it can happen, at one and the same time, that one or more tones will be heard only horizontally, the vertical direction being entirely without relevance, while on the other hand, in the case of other tones, the vertical effect is in the foreground."<sup>5)</sup>

2°. Schenker introduces the harmonic concept *die Stufen*, being the triads corresponding to each scale-step, but his concept is not the same as the one being used in common harmonic analysis by scale-steps.

Consider the following example from Chopin.

Chopin, Prélude Nr. 4.

*Largo*

I

IV

V

u. s. w.

Example 2.

It is to be observed that the *Stufe* is a higher abstract unit encompassing the whole of the texture of voice-leading which investigates the *Stufe* in question. "Although each one of all these appearances may in itself seem susceptible of several interpretations they are nevertheless only passing structures, not *Stufen*."<sup>6)</sup>

What is here proposed by Schenker is the idea of a *state* behind the tones, – a state in relation to which the tonal progression in question moves.

3°. Of particular significance in this early phase of Schenker's work is his concept of counterpoint. To him, counterpoint is certainly not a way of composing closely identified with this or that historical style of music. Instead, counterpoint is the skeleton within all music (remember, the major-minor music of Europe is his only concern). He attaches the greatest importance to the study of the Fuxian five species, stressing at the same time that this study is not and should not be a study of any historical style, but the acquisition of an abstract system of voice leading inherent to (western) music as an architectonic principle. Accordingly he names the actual music *Der freie Satz* (The free style).

When Brahms write:

Brahms, Händelvariationen, Var. XXIII.

Example 3 a.

Example 3 b.

Schenker regards this as an embellishment of the inner two-voice structure shown and says, "only through similar derivations can the real connexion between strict and free style be found."<sup>7)</sup>

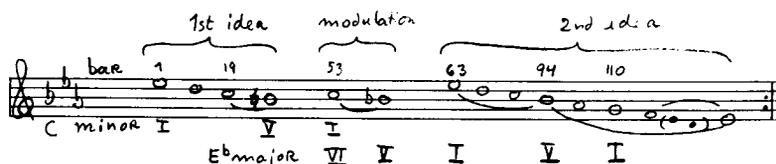
The concept of the *Stufen* was, as we saw, an idea of *states* behind the moving music. The inner *counterpoint*, now, is itself moving, only slower than the external

embellishments and diminutions. So there exists, on this inner plane, a dialectic relation between state and development. Schenker's later work was to be devoted to the development of still finer means of describing this basic dialectic, the level of abstraction increasing, the uncovered skeleton bearing still greater musical bodies, and so he approached the laying bare of the immanent and constitutional *forces* in music. It is important to note, however, that this does not mean that music was "reduced" to these general skeletons, as some critics of Schenker seem to think; it means that the body of music carried by the skeleton has been dissolved into its relationships. In the analysis the dependences in music has become primary, - presupposed by their intersections, - to quote Hjelmlev.

### III. Late Schenker.

For some years, at the beginning of the twenties, he worked with the idea that the innermost skeleton in music was the stepwise descending line (*die Urlinie*), of which the music was an extensive embellishment. The following example of his early concept of *Urlinie* is taken from his analysis of Beethoven's 5th symphony.<sup>8)</sup>

The example shows the exposition of the 1st movement:



Example 4.

Gradually it becomes clear, however, that it is not one inner voice that governs the musical progression, but two such voices, an inner top-voice and an inner bass. A sort of model for the two-voiced governing of musical progression he sees in the practice of *thorough bass*, and at about the same time he develops the idea that the essence of the fully elaborated musical work is the *improvisation* over the inner two voice setting. In his descriptions and graphs he often uses thorough bass notation, even in connection with analyses of, say, Chopin or Brahms.<sup>9)</sup>

The final stage of Schenker's theoretical construction was published after his death in 1935. Here he states: "My work advances for the first time a genuine teaching of the tone-language."<sup>10)</sup>

Here the biological metaphor - the musical work being understood and described as an organism grown in accordance with its own inner laws - is completely carried through. The concept of *modulation* has been entirely discarded, modulation simply doesn't exist. His ear insists on penetrating still more deeply into the music until he reaches the innermost, simple two-voice setting carrying the whole work. This setting he calls *die Ursatz*. The *Ursatz* is the same for all works:

Hintergrund:  
Ursatz

Example 5.

and Schenker regards it as an eternal concept, which accounts for its name. The analyst's work of hearing his way down to still deeper-seated dependences is demonstrated by Schenker in practice through an imagined stratification into "Schichten" (structural levels), of which the uppermost (nearest) *Schicht* is the music that is in fact played. An example of a rather deep seated *Schicht* is the following sketch from an analysis of Beethoven's sonata op. 27<sup>II</sup>, 1st movement. The white note-heads are tones from the *Ursatz*.<sup>11)</sup>

Beethoven, Sonate Op. 27<sup>II</sup>, 1. Satz

T 5 23 26 27 28 33 35 38 42 49 50 51  
 (Brechung)  $\overset{\wedge}{3}$   $\overset{\wedge}{2}$  (=  $\overset{\wedge}{3}$  -  $\overset{\wedge}{2}$ ) ||  $\overset{\wedge}{3}$   $\overset{\wedge}{2}$   $\overset{\wedge}{1}$

(NB: 5 - 5 - 5)

(#3-4 4- -#3)

I II V, I II V-I

(= I - IV V - I)

(A1 — B- A2)

Example 6.

In this late phase of Schenker's work the concept of harmony has been very much simplified, encompassing now only a few, simple, cadential forms. By way of compensation a very versatile and complex theory of voice-leading has come into existence consisting, first of all, of the theory of the *prolongations*. The prolongations can to some extent be regarded as an enormous expansion and generalization of contrapuntal rules. Such concepts as passing tone and neighbouring note are here, together with other similar concepts, rediscovered at a higher plane.

# Preludio II.

Allegro vivace. ♩ = 144.

The musical score for Preludio II, Op. 144, by Frédéric Chopin, is presented in seven systems. Each system consists of a piano (treble clef) and bass (bass clef) staff. The key signature is G minor (two flats) and the time signature is 3/4. The tempo is marked 'Allegro vivace' with a metronome marking of ♩ = 144. The score includes various dynamics: *f* (forte), *sf* (sforzando), *p* (piano), and *cresc.* (crescendo). It also features articulation marks such as accents (>) and slurs. Fingerings are indicated by numbers 1-5 above or below notes. The piece concludes with a final cadence marked '(1 4)'. The publisher's name, 'Edition Peters', is printed at the bottom left of the score.

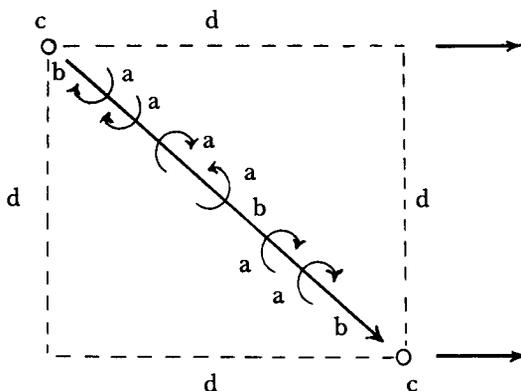
Example 7 a.

S. Bach, Wtp. Klv. I, Prl. c moll, T. 1-18

Example 7 b.<sup>12)</sup>

The principle of the stepwise passing movement, for example, on the level of the prolongations is rediscovered as *die Züge* (a difficult designation to translate. Zug: track, or the drawing of a line.) A *Zug* is an underlying stepwise motion from one point in the music to another, later, one. One such *Zug* will be demonstrated in example 7 a and 7 b.

The graph by Schenker shows how bars 1-18 of this prelude are made up of one octave-*zug*, in the top voice and in the bass. The whole progression, then, occurs, 'within' one chord, the c-minor triad. It is said to be an *auskomponierung* (a composing out) of the first *Stufe* in c minor. In a flash we can here grasp the essentials of Schenker's structuralistic way of thought: the dialectic contradiction between the *state* of the maintained *Stufe* and the *movement* comprising the octave-*zug*. Seen in this way, where are now the partial "objects" of this music? They are gone; all has been dissolved into dependences. I have made a sketch that should illustrate this:



Example 8.

The 'objects' of the surface - the figurations and diminutions (a) - are nothing but manifestations of laws governing an embellishment of the octave-*Zug* (this is

admittedly not accounted for here, but it is easy to see). The octave-*Zug* (b) itself is given with its points of beginning and end (c). These points themselves are to be heard as intersections of two moving structures: 1) the inner movement within the *Stufe*, i.e. the octave-*Zug* (b), and 2) the *Stufe* (d) itself, understood as a part of a greater movement, i.e. the *Ursatz*.

#### IV. Conclusions.

Following Schenker's biological manner of speaking, we could liken the musical composition, as rendered through the Schenkerian analysis, to a tree with its stem, its branches, and its twigs (corresponding to the *Ursatz*, the *prolongations* and the *diminutions* and *figurations* in turn.) What is emphasized through that comparison is, first of all, the fundamental organic coherence of the whole. A piece of music, then, is not a set of musical themes connected to each other by some transitional stuff, but a tree of which this or that branch, together with the twigs belonging to it, may appear as 'a theme'.

Another Schenkerian point brought out by the comparison is the fact that the laws governing the structures of the various levels are in principle the same, just as there is in principle no difference in the growth of the stem, the branch, or the twig. *The whole* is the atmosphere of the diminution, as Schenker says.

The concept of the biological growth of music, however, is on the whole to be understood as a metaphor; Schenker doesn't deny that music is man-made. For that reason one more comparison could be relevant. If we liken the composition (as seen through Schenker's analysis) to a *building*, with its fundament, its walls, its roof, its apartments and furniture, then another circumstance is stressed, which is important to us for an understanding of the structural nature of Schenker's thought: What are uncovered by Schenker are the dependences and relationships of the music as it presents itself to us, and what is shown by the Schenkerian graphs is the logic of its build-up as experienced by the listener. But nothing is thereby said of the actual chronology of its genesis: the furniture, and the roof may have been made before the walls and the fundament.

The Saussurian distinction *langue/parole*<sup>13</sup>) emphasises another important aspect of Schenker's work. In my view, the *Schichten* nearest to the listener corresponds to the concept of *parole*. In those *Schichten* are contained the rhythm, the harmonic vocabulary, and the personal and historical *styles*, - here lie the common topics of musicological studies. By hearing deeper, however, Schenker reaches dependences which are general for the whole of the corpus he investigates, i.e. the works of European major-minor music. What he is aiming at is the study of *la langue* of that music. In so doing he reveals a truly ethnological way of regarding the bulk of European upper-class music, in spite of his above-mentioned personal ethnocentricity. The very thought of the master-works as being improvisations written down seems to put further stress on the ethnological quality of his *langue*-investigations.

*The main weakness* of Schenker's theory – and it is a serious one – is that his derivational procedures are not made explicit. In fact it is not presented as a theory but as the truth itself, hence its findings are non-verifiable.

This is possibly to be understood in connection with the biological metaphor mentioned. The composers are often regarded as if they were mediums to the will of the tones. "The artist spies, so to speak, upon the soul of the tone, – the tone itself seeks as rich a purpose in life as possible . . . Then – being much more a slave of the tone than he himself suspects – he gives in to the tone as much as ever he can."<sup>14</sup>)

Accordingly, *the intuition and the instinct* of the composer are emphasized throughout his works. No wonder, then, that he, the theorist, following in the creative footsteps of the composers, has himself to rely on his intuition and instinct with regard to the tones.

So all Schenker's analytical work is based on the authority of his own intuition, making his approach what could be called a naive structuralism.

In fact the theoretical structure of his, being apparently free of self-contradiction, discloses many inconsistencies when it is considered together with the music to be analysed. The Schenkerian analysis, therefore, is an interpretation, and for one and the same piece of music several interpretations are possible. Which one is 'correct' cannot be determined with certainty without holding the hand of Schenker himself, or perhaps of one of his disciples who has preserved the intuition of the master.

An unbiased re-discovery of the structure of music cannot be based on the authority of the intuition of a single scholar. The inquiry must if possible be as 'scientific' as the sciences, and its aim should be the nature of the musical world of imagination, i.e. a cosmic musicology. I think, however, that the forces in music which were revealed through Schenker's intuitive investigations of the great corpus of 300 years of western upper-class music, – I think that those forces are an individual and social reality, and they must be rediscovered by an unbiased and cosmic musicology.

Translated by John Bergsagel.

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## Notes

1. The suggestion was made by three or more musicologists at the 11th congress of IMS in Copenhagen 1972 with reference to the fact that both Schenker and Chomsky work with several different levels in their analytical procedures. Schenker's analysis, however, displays music as an extremely complicated network of dependences in several layers (*Schichten*) of different depth, and the whole network of dependences is said to be immanent in the music; it is to be received and experienced by the listener in its entirety. Chomsky's deep structure and transformational rules are, on the other hand, not actually heard in the spoken sentence, and are in no way experienced as such.
2. Louis Hjelmslev. Prolegomena to a Theory of Language, Baltimore 1953, p. 13 (danish ed. 1943 p. 21).
3. Schenker: Neue Musikalische Theorien und Phantasien, I, Harmonielehre, Berlin 1906, p. 103.
- 4) *ibid.* p. VI and p. 106-9.
- 5) *ibid.* p. 153.
- 6) *ibid.* p. 192.
- 7) Schenker: Neue Mus. Th. u. Ph. II, Kontrapunkt. Berlin 1910 p. 268.
- 8) Der Tonwille. Flugblätter zum Zeugnis unwandelbarer Gesetze der Tonkunst einer neuen Jugend dargebracht von Heinrich Schenker. 1921-25, bd I and V.
- 9) On Thorough bass and improvisation, see, Schenker: Das Meisterwerk in der Musik, I, München 1925.
- 10) Schenker: Neue Mus. Th. u. Ph., III, Der Freie Satz, 1935 (p. 37 in rev. ed. 1956).
- 11) *ibid.* Anhang, p. 1.
- 12) *ibid.* Anhang, p. 47.
- 13) F. de Saussure: Cours de linguistique générale, 1916.
- 14) Schenker: Neue Mus. Th. u. Ph. I p. 109.

## RESUMÉ

I nyere sprogvidenskab bygges der meget på tænkemåder som vil anskue en helhed som sammensat, ikke af enkeltdelen, men af processer og forbindelser. I sin konsekvens betyder det en opløsning af "tingene": "Denne erkendelse, at en totalitet ikke består af ting, men af sammenhænge, og at ikke substansen men kun dens relationer har videnskabelig eksistens, er visse- lig ikke ny i videnskaben, men turde være det i sprogvidenskaben." (Louis Hjelmslev, 1943).

Det er min tese at "denne erkendelse" tillige karakteriserer den forklaringsmåde som Heinrich Schenker udviklede 1906-35 over for sit forskningsområde, tonebygningen i den vestlige overklassens musik fra dur-moll perioden; - at Schenker også i sin analyse med stadig større konsekvens tilstræber og gennemfører en opløsning af musikkens størrelser i forbindelser, så at musikken vises som bestående af lutter afhængighedslinjer, og "størrelserne" som blot steder hvor sådanne linjer skærer hinanden. Schenker trænger på den måde analytisk frem til uhyre enkle satsdannelser der som et indre skelet bærer forbindelsernes netværk (se fx ex. 6).

Hvad jeg mener med opløsning af musikkens størrelser kan illustreres med eksempel 7 (og mit diagram hertil, eksempel 8):

1. De enkelte toner af sekstendedels varighed i disse takter af Seb. Bachs prælude er ikke til stede som "ting", men som manifestationer af figurations- og diminutions-forestillinger der følger bestemte beskrivbare mønstre (disse er i ex. 8 symbolsk antydnet ved cirkulerende pile, -a.)
2. Det som figurationerne figurerer, de klange som de udsmykker, er imidlertid heller ikke til stede som "ting" men er blot individuelle punkter af en trinvis faldende bevægelse (den rette linje b i ex. 8. Se også Schenkers eget diagram i ex. 7b.)
3. Denne bevægelse er imidlertid heller ingen "ting" i sig selv men er givet ved selve forestillingen om en trinvis faldende bevægelse samt bevægelens endepunkter (c i ex. 8, c-moll akkorderne i ex. 7b.)
4. Disse endepunkter definerer en c-moll akkord (hvad der får Schenker til at opfatte alle disse 18 takter som en "udkomponeret" c-moll akkord.) Men den er heller ikke tilstede som en "ting" men som moment i en bevægelse: den er et led i en simpel akkordfølge som opfylder kravene til det Schenker kalder "ursatsen". (Ursatsen er et forløb af type som ex. 5.)

På den måde afdækker Schenker alle "ting" som blot krydsningspunkter af afhængigheder gennem en stadig skelnen mellem stamme, grene, kviste, og kvistes kviste i den tonale organisme.

Mens Schenker synes at have den beskrevne synsmåde fælles med strukturel sprogvidenskab, finder man ikke hos Schenker som i lingvistikken kravet om den gennemførte explicitering af metoder og procedurer, skønt det kan anses for at være en betingelse for at humanistisk videnskab kan blive en egentlig videnskab og ikke blot et trosspørgsmål. Tværtimod er hans sandhedskriterium alene begrundet i hans intuition, og dét er den alvorligste svaghed ved hans lærebog. Men det må være muligt for en mere objektiv funderet musikvidenskab at gen-opdage de kræfter og sammenhænge i musikken, som Schenker beskrev.