

NEW MUSIC, OUTMODED MUSIC, STYLE AND IDEA

1946

The first three of these four concepts have been widely used in the last twenty-five years, while not so much ado has been made about the fourth, *idea*.

Unfortunately, methods in music teaching, instead of making students thoroughly acquainted with the music itself, furnish a conglomerate of more or less true historical facts, sugar-coated with a great number of more or less false anecdotes about the composer, his performers, his audiences, and his critics, plus a strong dose of popularized aesthetics. Thus I once read in an examination paper of a sophomore, who had studied only a little harmony and much music appreciation, but who had certainly not heard much 'live' music, that 'Schumann's orchestration is gloomy and unclear.' This wisdom was derived directly and verbally from the textbook used in class. Some experts on orchestration might agree upon the condemnation of Schumann as an orchestrator, perhaps even without an argument. However, there might be other experts who would agree that not all of Schumann's orchestration is poor—that there are gloomy spots as well as brilliant or at least good ones; they would also know that this accusation stems from the fight between the Wagnerian 'New-German' School and the Schumann-Brahmsian-Academic-Classicist School, and that the critics had in mind such brilliant parts of Wagner's music as the 'Magic Fire', the *Meister-singer* Overture, the *Venusberg* music and others. Such brilliancy can but seldom be found in Schumann's music. But some experts also know that there are very few compositions whose orchestration is perfectly flawless. More than two decades after Wagner's death, for instance, his orchestral accompaniment covered the singers' voices so as to make them inaudible. I know that Gustav Mahler had to change his orchestration very much for the sake of transparency. And Strauss himself showed me several cases where he had to make adjustment.

Thus, there is not the same degree of unanimity among experts of orchestration

as there is between the sophomore girl and her textbook. But irreparable damage has been done; this girl, and probably all her classmates, will never listen to the orchestra of Schumann naively, sensitively, and open-mindedly. At the end of the term she will have acquired a knowledge of music history, aesthetics, and criticism, plus a number of amusing anecdotes; but unfortunately she may not remember even one of those gloomily orchestrated Schumann themes. In a few years she will take her master's degree in music, or will have become a teacher, or both, and will disseminate what she has been taught: ready-made judgements, wrong and superficial ideas about music, musicians, and aesthetics.

In this manner there are educated a great number of pseudo-historians who believe themselves to be experts and, as such, entitled not only to criticize music and musicians, but even to usurp the role of leaders, to gain influence in the development of the art of music and to organize it in advance.

A few years after the first World War, such pseudo-historians acquired a dominant voice, throughout Western Europe, in predicting the future of music. In all music-producing countries, in France, Italy, Germany, Austria, Hungary, Czechoslovakia and Poland, there suddenly arose the slogan:

'NEW MUSIC'

This battle-cry had evidently been created because one of these pseudo-historians had remembered that several times in the past the same battle-cry, or others like it, had furthered a new direction in the arts. A battle-cry must, perhaps, be superficial and at least partially wrong if it is to gain popularity. Thus we may understand Schopenhauer's story of the surprise of one ancient Greek orator who, when he was suddenly interrupted by applause and cheers, cried out: 'Have I said some nonsense?' The popularity acquired by this slogan, 'New Music', immediately arouses suspicion and forces one to question its meaning.

What is New Music?

Evidently it must be music which, though it is still music, differs in all essentials from previously composed music. Evidently it must express something which has not yet been expressed in music. Evidently, in higher art, only that is worth being presented which has never before been presented. There is no great work of art which does not convey a new message to humanity; there is no great artist who fails in this respect. This is the code of honour of all the great in art, and consequently in all great works of the great we will find that newness which

never perishes, whether it be of Josquin des Prés, of Bach or Haydn, or of any other great master.

Because: Art means New Art.

The idea that this slogan 'New Music' might change the course of musical production was probably based on the belief that 'history repeats itself'. As everybody knows, while Bach still was living a new musical style came into being out of which there later grew the style of the Viennese Classicists, the style of homophonic-melodic composition, or, as I call it, the style of Developing Variation. If, then, history really repeated itself, the assumption that one need only demand the creation of new music would also suffice in our time, and at once the ready-made product would be served.

This is mistaking symptoms for causes. The real causes of changes in the style of musical composition are others. If in a period of homophonic composition musicians had acquired great skill in creating melodies—that is, main voices which reduced accompanying voices to almost meaningless inferiority in order to concentrate all possible contents in themselves—other composers may well have been annoyed by such a skill, which seemed already to degenerate into a schematic mechanism. They may then have been even more annoyed by the inferiority of the accompaniment than by what seemed to them the sweetness of the melody. While in this period only one direction of the musical space, the horizontal line, had been developed, the composers of the next period might have responded to a tendency that demanded the vitalizing of the accompanying voices also—that is, following the vertical direction of the musical space. Such tendencies might have provoked that richer elaboration of the accompaniment seen, for instance, in Beethoven as compared with Haydn, Brahms as compared with Mozart, or Wagner as compared with Schumann. Though in all these cases the richness of the melody has not suffered in the least, the role of the accompaniment has been intensified, enhancing its contribution to the common effect. No historian need tell a Beethoven, a Brahms, a Wagner to enrich his accompaniment with vitamins. At least these three men, stubborn as they were, would have shown him the door!

And vice versa:

If, in a given period, each participating voice had been elaborated, with respect to its content, its formal balance and its relation to other voices, as part of a contrapuntal combination, its share of melodic eloquence would be less than

if it were the main voice. Again, there might then arise in younger composers a longing to get rid of all these complexities. They then might refuse to deal with combinations and elaborations of subordinate voices. Thus the desire to elaborate only one voice and reduce the accompaniment to that minimum required by comprehensibility would again be the ruling fashion.

Such are the causes which produce changes in methods of composition. In a manifold sense, music uses time. It uses my time, it uses your time, it uses its own time. It would be most annoying if it did not aim to say the most important things in the most concentrated manner in every fraction of this time. This is why, when composers have acquired the technique of filling one direction with content to the utmost capacity, they must do the same in the next direction, and finally in all the directions in which music expands. Such progress can occur only step-wise. The necessity of compromising with comprehensibility forbids jumping into a style which is overcrowded with content, a style in which facts are too often juxtaposed without connectives, and which leaps to conclusions before proper maturation.

If music abandoned its former direction and turned towards new goals in this manner, I doubt that the men who produced this change needed the exhortation of pseudo-historians. We know that they—the Telemanns, the Couperins, the Rameaus, the Keisers, the Ph. E. Bachs and others—created something new which led only later to the period of the Viennese Classicists. Yes, a new style in music was created, but did this have the consequence of making the music of the preceding period outmoded?

Curiously, it happened at the beginning of this period that J. S. Bach's music was called outmoded. And, most curiously, one of those who said this was J. S. Bach's own son, Ph. Emanuel Bach, whose greatness one might question if one did not know that Mozart and Beethoven viewed him with great admiration. To them, he still seemed a leader, even after they themselves had added to the first rather negative principles of the New Music such positive principles as that of developing variation, in addition to many hitherto unknown structural devices such as those of transition liquidation, dramatic recapitulation, manifold elaboration, derivation of subordinate themes, highly differentiated dynamics—*crescendo*, *decrescendo*, *sforzato*, *piano subito*, *marcato*, etc.—and particularly the new technique of *legato* and *staccato* passages, *accelerando* and *ritardando*, and the establishment of tempo and character by specific bywords.

Beethoven's words: 'Das ist nicht ein Bach, das ist ein Meer' (This is not a brook, this is an ocean) constitute the correct order. He did not say this about Philipp Emanuel but about Johann Sebastian. Should he not have added: Who is the brook?

In any case:

While until 1750 J. S. Bach was writing countless works whose originality seems the more astonishing to us the more we study his music; while he not only developed but really created a new style of music which was without precedent; while the very nature of this newness still escapes the observation of the experts—

No, excuse me: I feel obliged to prove what I say, and hate to say it as lightly and superficially as if I were to say: New Music!

The newness of Bach's art can only be understood by comparing it with the style of the Netherlands School on the one hand and with Handel's art on the other.

The secrets of the Netherlands, strictly denied to the uninitiated, were based on a complete recognition of the possible contrapuntal relations between the seven tones of the diatonic scale. This enabled the initiated to produce combinations which admitted many types of vertical and horizontal shifts, and other similar changes. But the remaining five tones were not included in these rules, and, if they appeared at all, did so apart from the contrapuntal combination and as occasional substitutes.

In contrast, Bach, who knew more secrets than the Netherlands ever possessed, enlarged these rules to such an extent that they comprised all the twelve tones of the chromatic scale. Bach sometimes operated with the twelve tones in such a manner that one would be inclined to call him the first twelve-tone composer.

If, after observing that the contrapuntal flexibility of Bach's themes is based in all probability on his instinctive thinking in terms of multiple counterpoint which gives scope to additional voices, one compares his counterpoint with Handel's, the latter's seems bare and simple, and his subordinate voices are really inferior.

Also in other respects Bach's art is higher than Handel's. As a composer for the theatre Handel always had the power of beginning with a characteristic and often excellent theme. But, thereafter, with the exception of the repetitions of the theme, there follows a decline, bringing only what the editor of *Grove's Dictionary* would call 'trash'—empty, meaningless, étude-like broken chord figures. In

contrast, even Bach's transitional and subordinate sections are always full of character, inventiveness, imagination and expression. Though his subordinate voices never degenerate into inferiority, he is able to write fluent and well balanced melodies of more beauty, richness and expressiveness than can be found in the music of all those Keisers, Telemanns, and Philipp Emanuel Bachs who called him outmoded. They, of course, were not capable of seeing that he was also the first to introduce just that technique so necessary for the progress of their New Music: the technique of 'developing variation', which made possible the style of the great Viennese Classicists.

While Bach thus—as beforementioned—produced work after work in a new style, his contemporaries knew no better than to ignore him. It can be said that not much of their New Music remained alive, though one must not deny that it was the beginning of a new art. But there are two points in which they were wrong. First, it was not musical *ideas* which their New Music wanted to establish, but only a new style for the presentation of musical ideas, whether old or new; it was a new wave in the progress of music, one which, as described before, tried to develop the other direction of musical space, the horizontal line. Second, they were wrong when they called Bach's music outmoded. At least it was not outmoded for ever, as history shows; today their New Music is outmoded while Bach's has become eternal.

But now one should also examine the concept 'outmoded'.

One can find illustrations of this concept in our daily life rather than in the intellectual sphere. Long hair, for instance, was considered an important contribution to a woman's beauty thirty years ago. Who knows how soon the fashion of short hair will be outmoded? Pathos was one of the most admired merits of poetry about a hundred years ago; today it seems ridiculous, and it is used only for satirical purposes. Electric light has outmoded candle-light; but snobs still use the latter because they saw it in the castles of the aristocracy where artistically decorated walls would have been damaged by electric wiring.

Does this indicate why things become outmoded?

Long hair became outmoded because working women considered it a handicap. Pathos became outmoded when naturalism portrayed real life and the way in which people talked when they wanted to finish business. Candle-light became outmoded when people realized how senseless it is to make unnecessary work for one's servants—if one can get them at all.

The common factor in all these examples was a change in the forms of our life.

Can one contend the same about music?

Which form of life makes Romantic music inadequate? Is there no more romanticism in our time? Are we not more enthusiastic about being killed by our automobiles than the ancient Romans were about being killed by their chariots? Are there not still to be found young people who engage in adventure for which they may have to pay with their lives, though the glory they earn will pale with the next day's front page? Would it not be easy to find numerous youths to fly to the moon in a rocket plane if the opportunity were offered? Is not the admiration of people of all ages for our Tarzans, Supermen, Lone Rangers and indestructible detectives the result of a love for romanticism? The Indian stories of our youth were no more romantic; only the names of the subjects have been changed.

One reproach against romanticism concerns its complications. True, if one were to look at scores of Strauss, Debussy, Mahler, Ravel, Reger, or my own, it might be difficult to decide whether all this complication is necessary. But the decision of one successful young composer: 'Today's younger generation does not like music which they do not understand,' does not conform to the feelings of the heroes who engage in adventures. One might expect that this kind of youth, attracted by the difficult, the dangerous, the mysterious, would rather say: 'Am I an idiot that one dares offer me poor trash which I understand before I am half-way through?' Or even: 'This music is complicated, but I will not give up until I understand it.' Of course this kind of man will be enthused rather by profundity, profuseness of ideas, difficult problems. Intelligent people have always been offended if one bothered them with matters which any idiot could understand at once.

The reader has certainly become aware that it is not merely my intention to attack long deceased pseudo-historians and the composers who started the movement of New Music. Though I have used with pleasure the opportunity to write about some of the lesser known merits of Bach's art, and though I have enjoyed the opportunity to list some of the contributions of the Viennese Classicists to the development of compositorial technique, I do not hesitate to admit that the attack upon the propagandists of the New Music is aimed against similar movements in our own time. Except for one difference—that I am no Bach—there is a great similarity between the two epochs.

A superficial judgement might consider composition with twelve tones as an end to the period in which chromaticism evolved, and thus compare it to the climaxing end of the period of contrapuntal composition which Bach set by his unsurpassable mastery. That only lesser values could follow this climax is a kind of justification of his younger contemporaries' turn towards New Music.

But—also in this respect I am no Bach—I believe that composition with twelve tones and what many erroneously call 'atonal music' is not the end of an old period, but the beginning of a new one. Again, as two centuries ago, something is called outmoded; and again it is not one particular work, or several works of one composer; again it is not the greater or lesser ability of one composer in particular; but again it is a style which has become ostracized. Again it calls itself New Music, and this time even more nations participate in the struggle. Aside from nationalistic aims for an exportable music with which even smaller nations hope to conquer the market, there is one common trait observable in all these movements; none of them are occupied with presenting new ideas, but only with presenting a new style. And, again, the principles on which this New Music is to be based present themselves even more negatively than the strictest rules of the strictest old counterpoint. There should be avoided: chromaticism, expressive melodies, Wagnerian harmonies, romanticism, private biographical hints, subjectivity, functional harmonic progressions, illustrations, leitmotifs, concurrence with the mood or action of the scene and characteristic declamation of the text in opera, songs and choruses. In other words, all that was good in the preceding period should not occur now.

Besides these officially authorized 'Verbote', I have observed numerous negative merits, such as: pedal points (instead of elaborate bass voices and moving harmony), ostinatos, sequences (instead of developing variation), fugatos (for similar purposes), dissonances (disguising the vulgarity of the thematic material), objectivity (*Neue Sachlichkeit*), and a kind of polyphony, substituting for counterpoint, which, because of its inexact imitations, in former times would have been held in contempt as 'Kapellmeistermusik', or what I called 'Rhabarber counterpoint'. The word 'Rhabarber', spoken behind the scenes by only five or six people, sounded to the audience in a theatre like a rioting mob. Thus the counterpoint, thematically meaningless, like the word 'rhubarb', sounded as if it had a real meaning.

In my youth, living in the proximity of Brahms, it was customary that a

musician, when he heard a composition for the first time, observed its construction, was able to follow the elaboration and derivation of its themes and its modulations, and could recognize the number of voices in canons and the presence of the theme in a variation; and there were even laymen who after one hearing could take a melody home in their memory. But I am sure there was not much talk about style. And if a music historian had ventured to participate in an argument, it could only have been one who was able to observe similar qualities by ear alone. That is what music critics like Hanslick, Kalbeck, Heuberger and Speidel and amateurs like the renowned physician Billroth were able to do.

The positive and negative rules may be deduced from a finished work as constituents of its style. Every man has fingerprints of his own, and every craftsman's hand has its personality; out of such subjectivity grow the traits which comprise the style of the finished product. Every craftsman is limited by the shortcomings of his hands but is furthered by their particular abilities. On his natural conditions depends the style of everything he does, and so it would be wrong to expect a plum tree to bear plums of glass or pears or felt hats. Among all trees it is only the Christmas tree which bears fruits not natural to it, and among animals it is only the Easter rabbit which lays eggs, and even coloured ones at that.

Style is the quality of a work and is based on natural conditions, expressing him who produced it. In fact, one who knows his capacities may be able to tell in advance exactly how the finished work will look which he still sees only in his imagination. But he will never start from a preconceived image of a style; he will be ceaselessly occupied with doing justice to the idea. He is sure that, everything done which the idea demands, the external appearance will be adequate.

If I have been fortunate enough to show some views different from those of my adversaries about New Music, Outmoded Music, and Style, I would like to proceed now to my self-appointed task of discussing what seems to me most important in a work of art—the Idea.

I am conscious that entering into this sphere involves some danger. Adversaries have called me a constructor, an engineer, an architect, even a mathematician—not to flatter me—because of my method of composing with twelve tones. In spite of knowing my *Verklärte Nacht* and *Gurrelieder*, though some people like these works because of the emotionality, they called my music dry and denied me spontaneity. They pretended that I offered the products of a brain, not of a heart.

made this fact. I have been supported in my own attitude by the example of Beethoven who, having received a letter from his brother Johann signed 'land owner', signed his reply 'brain owner'. One might question why Beethoven just stressed the point of owning a brain. He had so many other merits to be proud of, for instance, being able to compose music which some people considered outstanding, being an accomplished pianist—and, as such, even recognized by the nobility—and being able to satisfy his publishers by giving them something of value for their money. Why did he call himself just 'brain owner', when the possession of a brain is considered a danger to the naiveté of an artist by many pseudo-historians?

An experience of mine might illustrate the way in which people think a brain might be dangerous. I have never found it necessary to hide that I am able to think logically, that I distinguish sharply between right and wrong terms, and that I have very exact ideas about what art should be. Thus, in a number of discussions, I may have shown a little too much brain to one of my tennis partners, a writer of lyric poetry. He did not reciprocate in kind, but maliciously told me the story about the toad who asked the centipede whether he was always conscious which of his hundred feet was just about to move, whereupon the centipede, in becoming conscious of the necessary decision, lost his instinctive ability to walk at all.

Indeed, a great danger to a composer! And even hiding his brain might not help; only having none would suffice. But I think this need not discourage anyone who has a brain; because I have observed that if one has not worked hard enough and has not done one's best, the Lord will refuse to add His blessing. He has given us a brain in order to use it. Of course an idea is not always the product of brain-work. Ideas may invade the mind as unprovoked and perhaps even as undesired as a musical sound reaches the ear or an odour the nose.

Ideas can only be honoured by one who has some of his own; but only he can do honour who deserves honour himself.

The difference between style and idea in music has perhaps been clarified by the preceding discussion. This may not be the place to discuss in detail what idea in itself means in music, because almost all musical terminology is vague and most of its terms are used in various meanings. In its most common meaning, the term idea is used as a synonym for theme, melody, phrase or motive. I myself

consider the totality of a piece as the *idea*: the idea which its creator wanted to present. But because of the lack of better terms I am forced to define the term *idea* in the following manner:

Every tone which is added to a beginning tone makes the meaning of that tone doubtful. If, for instance, G follows after C, the ear may not be sure whether this expresses C major or G major, or even F major or E minor; and the addition of other tones may or may not clarify this problem. In this manner there is produced a state of unrest, of imbalance which grows throughout most of the piece, and is enforced further by similar functions of the rhythm. The method by which balance is restored seems to me the real *idea* of the composition. Perhaps the frequent repetitions of themes, groups, and even larger sections might be considered as attempts towards an early balance of the inherent tension.

In comparison with all our developments in mechanics, a tool like a pair of pliers might seem simple. I always admired the mind which invented it. In order to understand the problem which this inventor had to overcome one must imagine the state of mechanics before its invention. The idea of fixing the cross-point of the two crooked arms so that the two smaller segments in front would move in the opposite direction to the larger segments at the back, thus multiplying the power of the man who squeezed them to such an extent that he could cut wire—this idea can only have been conceived by a genius. Certainly more complicated and better tools exist today, and there may come a time when the use of the pliers and other similar tools may become superfluous. The tool itself may fall into disuse, but the idea behind it can never become obsolete. And therein lies the difference between a mere style and a real idea.

An idea can never perish.

It is very regrettable that so many contemporary composers care so much about style and so little about idea. From this came such notions as the attempt to compose in ancient styles, using their mannerisms, limiting oneself to the little that one can thus express and to the insignificance of the musical configurations which can be produced with such equipment.

No one should give in to limitations other than those which are due to the limits of his talent. No violinist would play, even occasionally, with the wrong intonation to please lower musical tastes, no tight-rope walker would take steps in the wrong direction only for pleasure or for popular appeal, no chess master would make moves everyone could anticipate just to be agreeable (and thus allow

his opponent to win), no mathematician would invent something new in mathematics just to flatter the masses who do not possess the specific mathematical way of thinking, and in the same manner, no artist, no poet, no philosopher and no musician whose thinking occurs in the highest sphere would degenerate into vulgarity in order to comply with a slogan such as 'Art for All'. Because if it is art, it is not for all, and if it is for all, it is not art.

Most deplorable is the acting of some artists who arrogantly wish to make believe that they descend from their heights in order to give some of their riches to the masses. This is hypocrisy. But there are a few composers, like Offenbach, Johann Strauss and Gershwin, whose feelings actually coincide with those of the 'average man in the street'. To them it is no masquerade to express popular feelings in popular terms. They are natural when they talk thus and about that.

He who really uses his brain for thinking can only be possessed of one desire: to resolve his task. He cannot let external conditions exert influence upon the results of his thinking. Two times two is four—whether one likes it or not.

One thinks only for the sake of one's idea.

And thus art can only be created for its own sake. An idea is born; it must be moulded, formulated, developed, elaborated, carried through and pursued to its very end.

Because there is only 'l'art pour l'art', art for the sake of art alone.

2

CRITERIA FOR THE EVALUATION OF MUSIC

1946

In the best sellers of 150 or 200 years ago there frequently appeared a character—an old cavalier, generally no less than a marquis—whose extreme generosity perplexed and astounded both his fellow characters and the reading public of that day. Whether or not such a character ever really existed, the grandeur of his generosity was impressive. When he met with a slight accident—whether to himself, to his horse, or only to his equipage—he would reward the person who came

What I feared, happened. Although I had warned my friends and pupils to consider this as a change in compositional regards, and although I gave them the advice to consider it only as a means to fortify the logic, they started counting the tones and finding out the methods with which I used the rows. Only to explain understandably and thoroughly the idea, I had shown them a certain number of cases. But I refused to explain more of it, not the least because I had already forgotten it and had to find it myself. But principally because I thought it would not be useful to show technical matters which everybody had to find for himself and could do so. This is also the error of Mr. Hill. He also is counting tones and wants to know how I use them and whether I do it consequently.

At first I have had to recall that consequence is not an exigency of art. That is wherein art and science differ principally. While science has to demonstrate its problems perfectly and completely without any omission and from every point of view, and has therefore to proceed systematically, logically and consequently, art presents only a certain number of *interesting* cases and strives for perfection by the manner of presentation. Therefore art is more inclined to choose its cases according to variety rather than to system, according to structural qualifications rather than to consequence. To mention such commonplace wisdom should appear superficial, were it not that the theorists always fall into the error of believing their theories to be rules for composers instead of symptoms of the works, rules which a composer has to obey, instead of peculiarities which are extracted from the works. Of course, these rules ask for consequence, for logic and systematic procedure.

4

COMPOSITION WITH TWELVE TONES (1)

1941

I

To understand the very nature of creation one must acknowledge that there was no light before the Lord said: 'Let there be Light.' And since there was not yet light, the Lord's omniscience embraced a vision of it which only His omnipotence could call forth.

We poor human beings, when we refer to one of the better minds among us as a creator, should never forget what a creator is in reality.

A creator has a vision of something which has not existed before this vision.

And a creator has the power to bring his vision to life, the power to realize it.

In fact, the concept of creator and creation should be formed in harmony with the Divine Model; inspiration and perfection, wish and fulfilment, will and accomplishment coincide spontaneously and simultaneously. In Divine Creation there were no details to be carried out later; 'There was Light' at once and in its ultimate perfection.

Alas, human creators, if they be granted a vision, must travel the long path between vision and accomplishment; a hard road where, driven out of Paradise, even geniuses must reap their harvest in the sweat of their brows.

Alas, it is one thing to envision in a creative instant of inspiration and it is another thing to materialize one's vision by painstakingly connecting details until they fuse into a kind of organism.

Alas, suppose it becomes an organism, a homunculus or a robot, and possesses some of the spontaneity of a vision; it remains yet another thing to organize this form so that it becomes a comprehensible message 'to whom it may concern'.

II

Form in the arts, and especially in music, aims primarily at comprehensibility. The relaxation which a satisfied listener experiences when he can follow an idea, its development, and the reasons for such development is closely related, psychologically speaking, to a feeling of beauty. Thus, artistic value demands comprehensibility, not only for intellectual, but also for emotional satisfaction. However, the creator's *idea* has to be presented, whatever the *mood* he is impelled to evoke.

Composition with twelve tones has no other aim than comprehensibility. In view of certain events in recent musical history, this might seem astonishing, for works written in this style have failed to gain understanding in spite of the new medium of organization. Thus, should one forget that contemporaries are not final judges, but are generally overruled by history, one might consider this method doomed. But, though it seems to increase the listener's difficulties, it compensates for this deficiency by penalizing the composer. For composing thus does not become easier, but rather ten times more difficult. Only the better-prepared composer can compose for the better-prepared music lover.

III

The method of composing with twelve tones grew out of a necessity.

In the last hundred years, the concept of harmony has changed tremendously through the development of chromaticism. The idea that one basic tone, the root, dominated the construction of chords and regulated their succession—the concept of *tonality*—had to develop first into the concept of *extended tonality*. Very soon it became doubtful whether such a root still remained the centre to which every harmony and harmonic succession must be referred. Furthermore, it became doubtful whether a tonic appearing at the beginning, at the end, or at any other point really had a constructive meaning. Richard Wagner's harmony had promoted a change in the logic and constructive power of harmony. One of its consequences was the so-called *impressionistic* use of harmonies, especially practised by Debussy. His harmonies, without constructive meaning, often served the colouristic purpose of expressing moods and pictures. Moods and pictures, though extra-musical, thus became constructive elements, incorporated in the musical functions; they produced a sort of emotional comprehensibility. In this way, tonality was already dethroned in practice, if not in theory. This alone would perhaps not have caused a radical change in compositional technique. However, such a change became necessary when there occurred simultaneously a development which ended in what I call the *emancipation of the dissonance*.

The ear had gradually become acquainted with a great number of dissonances, and so had lost the fear of their 'sense-interrupting' effect. One no longer expected preparations of Wagner's dissonances or resolutions of Strauss' discords; one was not disturbed by Debussy's non-functional harmonies, or by the harsh counterpoint of later composers. This state of affairs led to a freer use of dissonances comparable to classic composers' treatment of diminished seventh chords, which could precede and follow any other harmony, consonant or dissonant, as if there were no dissonance at all.

What distinguishes dissonances from consonances is not a greater or lesser degree of beauty, but a greater or lesser degree of *comprehensibility*. In my *Harmonielehre* I presented the theory that dissonant tones appear later among the overtones, for which reason the ear is less intimately acquainted with them. This phenomenon does not justify such sharply contradictory terms as concord and discord. Closer acquaintance with the more remote consonances—the disson-

ances, that is—gradually eliminated the difficulty of comprehension and finally admitted not only the emancipation of dominant and other seventh chords, diminished sevenths and augmented triads, but also the emancipation of Wagner's, Strauss's, Moussorgsky's, Debussy's, Mahler's, Puccini's, and Reger's more remote dissonances.

The term *emancipation of the dissonance* refers to its comprehensibility, which is considered equivalent to the consonance's comprehensibility. A style based on this premise treats dissonances like consonances and renounces a tonal centre. By avoiding the establishment of a key modulation is excluded, since modulation means leaving an established tonality and establishing *another* tonality.

The first compositions in this new style were written by me around 1908 and, soon afterwards, by my pupils, Anton von Webern and Alban Berg. From the very beginning such compositions differed from all preceding music, not only harmonically but also melodically, thematically, and motivally. But the foremost characteristics of these pieces *in statu nascendi* were their extreme expressiveness and their extraordinary brevity. At that time, neither I nor my pupils were conscious of the reasons for these features. Later I discovered that our sense of form was right when it forced us to counterbalance extreme emotionality with extraordinary shortness. Thus, subconsciously, consequences were drawn from an innovation which, like every innovation, destroys while it produces. New colourful harmony was offered; but much was lost.

Formerly the harmony had served not only as a source of beauty, but, more important, as a means of distinguishing the features of the form. For instance, only a consonance was considered suitable for an ending. Establishing functions demanded different successions of harmonies than roving functions; a bridge, a transition, demanded other successions than a codetta; harmonic variation could be executed intelligently and logically only with due consideration of the fundamental meaning of the harmonies. Fulfilment of all these functions—comparable to the effect of punctuation in the construction of sentences, of subdivision into paragraphs, and of fusion into chapters—could scarcely be assured with chords whose constructive values had not as yet been explored. Hence, it seemed at first impossible to compose pieces of complicated organization or of great length.

A little later I discovered how to construct larger forms by following a text or a poem. The differences in size and shape of its parts and the change in character and mood were mirrored in the shape and size of the composition, in its dynamics

and tempo, figuration and accentuation, instrumentation and orchestration. Thus the parts were differentiated as clearly as they had formerly been by the tonal and structural functions of harmony.

IV

Formerly the use of the fundamental harmony had been theoretically regulated through recognition of the effects of root progressions. This practice had grown into a subconsciously functioning *sense of form* which gave a real composer an almost somnambulistic sense of security in creating, with utmost precision, the most delicate distinctions of formal elements.

Whether one calls oneself conservative or revolutionary, whether one composes in a conventional or progressive manner, whether one tries to imitate old styles or is destined to express new ideas—whether one is a good composer or not—one must be convinced of the infallibility of one's own fantasy and one must believe in one's own inspiration. Nevertheless, the desire for a conscious control of the new means and forms will arise in every artist's mind; and he will wish to know *consciously* the laws and rules which govern the forms which he has conceived 'as in a dream'. Strongly convincing as this dream may have been, the conviction that these new sounds obey the laws of nature and of our manner of thinking—the conviction that order, logic, comprehensibility and form cannot be present without obedience to such laws—forces the composer along the road of exploration. He must find, if not laws or rules, at least ways to justify the dissonant character of these harmonies and their successions.

V

After many unsuccessful attempts during a period of approximately twelve years, I laid the foundations for a new procedure in musical construction which seemed fitted to replace those structural differentiations provided formerly by tonal harmonies.

I called this procedure *Method of Composing with Twelve Tones Which are Related Only with One Another*.

This method consists primarily of the constant and exclusive use of a set of twelve different tones. This means, of course, that no tone is repeated within the series and that it uses all twelve tones of the chromatic scale, though in a different order. It is in no way identical with the chromatic scale.¹

Ex. 1



Example 1 shows that such a basic set (BS) consists of various intervals. It should never be called a scale, although it is invented to substitute for some of the unifying and formative advantages of scale and tonality. The scale is the source of many figurations, parts of melodies and melodies themselves, ascending and descending passages, and even broken chords. In approximately the same manner the tones of the basic set produce similar elements. Of course, cadences produced by the distinction between principal and subsidiary harmonies will scarcely be derived from the basic set. But something different and more important is derived from it with a regularity comparable to the regularity and logic of the earlier harmony; the association of tones into harmonies and their successions is regulated (as will be shown later) by the order of these tones. The basic set functions in the manner of a motive. This explains why such a basic set has to be invented anew for every piece. It has to be the first creative thought. It does not make much difference whether or not the set appears in the composition at once like a theme or a melody, whether or not it is characterized as such by features of rhythm, phrasing, construction, character, etc.

Why such a set should consist of twelve different tones, why none of these tones should be repeated too soon, why, accordingly, only one set should be used in one composition—the answers to all these questions came to me gradually.

Discussing such problems in my *Harmonielehre* (1911), I recommended the avoidance of octave doublings.² To double is to emphasize, and an emphasized tone could be interpreted as a root, or even as a tonic; the consequences of such an interpretation must be avoided. Even a slight reminiscence of the former tonal harmony would be disturbing, because it would create false expectations of consequences and continuations. The use of a tonic is deceiving if it is not based on *all* the relationships of tonality.

The use of more than one set was excluded because in every following set one or more tones would have been repeated too soon. Again there would arise the

danger of interpreting the repeated tone as a tonic. Besides, the effect of unity would be lessened.

Justified already by historical development, the method of composing with twelve tones is also not without aesthetic and theoretical support. On the contrary, it is just this support which advances it from a mere technical device to the rank and importance of a scientific theory.

Music is not merely another kind of amusement, but a musical poet's, a musical thinker's representation of musical ideas; these musical ideas must correspond to the laws of human logic; they are a part of what man can apprehend, reason and express. Proceeding from these assumptions, I arrived at the following conclusions:

THE TWO-OR-MORE-DIMENSIONAL SPACE IN WHICH MUSICAL IDEAS ARE PRESENTED IS A UNIT. Though the elements of these ideas appear separate and independent to the eye and the ear, they reveal their true meaning only through their co-operation, even as no single word alone can express a thought without relation to other words. All that happens at any point of this musical space has more than a local effect. It functions not only in its own plane, but also in all other directions and planes, and is not without influence even at remote points. For instance, the effect of progressive rhythmical subdivision, through what I call 'the tendency of the shortest notes' to multiply themselves, can be observed in every classic composition.

A musical idea, accordingly, though consisting of melody, rhythm, and harmony, is neither the one nor the other alone, but all three together. The elements of a musical idea are partly incorporated in the horizontal plane as successive sounds, and partly in the vertical plane as simultaneous sounds. The mutual relation of tones regulates the succession of intervals as well as their association into harmonies; the rhythm regulates the succession of tones as well as the succession of harmonies and organizes phrasing. And this explains why, as will be shown later, a basic set of twelve tones (BS) can be used in either dimension, as a whole or in parts.

The basic set is used in diverse mirror forms. The composers of the last century had not employed such mirror forms as much as the masters of contrapuntal times; at least, they seldom did so consciously. Nevertheless, there exist examples, of which I want to mention only one from Beethoven's last String Quartet, Op. 135, in F major:

COMPOSITION WITH TWELVE TONES (I)

Ex. 2

Beethoven, String Quartet, Op. 135, 4th movement
Introduction

Grave **Allegro**

Muss es sein? Es muss sein! Es muss sein!

Vln. 1
Vln. 2
Vla.
Vlc.

Head-motive

etc.

a)

b)

c)

d)

e)

e2)

TWELVE-TONE COMPOSITION

The original form, *a*, 'Muss es sein', appears in *b* inverted and in the major; *c* shows the retrograde form of this inversion, which, now reinverted in *d* and filled out with passing notes in *e*, results in the second phrase of the main theme.

Whether or not this device was used consciously by Beethoven does not matter at all. From my own experience I know that it can also be a subconsciously received gift from the Supreme Commander.

Ex. 3

Kammersymphonie, Op. 9, E major

The example consists of six staves labeled a) through f).
 a) Original theme in bass clef, E major (three sharps). It features a sequence of notes with triplet markings (3) over the first and last groups.
 b) The original theme inverted, also in bass clef, but in E minor (three flats).
 c) The retrograde of the inverted theme from (b), written in bass clef.
 d) The retrograde from (c) reinverted, written in treble clef. Intervallic relationships are indicated by arrows and numbers: -6, +2, +2, -3.
 e) The reinverted retrograde from (d) filled out with passing notes, written in bass clef. The same intervallic relationships (-6, +2, +2, -3) are shown.
 f) The final phrase of the main theme, written in bass clef, which is derived from the process shown in the previous staves.

The two principal themes of my *Kammersymphonie* (Chamber Symphony) can be seen in Example 3 under *a* and *b*. After I had completed the work I worried very much about the apparent absence of any relationship between the two themes. Directed only by my sense of form and the stream of ideas, I had not asked such questions while composing; but, as usual with me, doubts arose as soon as I had finished. They went so far that I had already raised the sword for

the kill, taken the red pencil of the censor to cross out the theme *b*. Fortunately, I stood by my inspiration and ignored these mental tortures. About twenty years later I saw the true relationship. It is of such a complicated nature that I doubt whether any composer would have cared deliberately to construct a theme in this way; but our subconscious does it involuntarily. In *c* the true principal tones of the theme are marked, and *d* shows that all the intervals ascend. Their correct inversion *e* produces the first phrase *f* of the theme *b*.

It should be mentioned that the last century considered such a procedure cerebral, and thus inconsistent with the dignity of genius. The very fact that there exist classical examples proves the foolishness of such an opinion. But the validity of this form of thinking is also demonstrated by the previously stated law of the unity of musical space, best formulated as follows: *the unity of musical space demands an absolute and unitary perception*. In this space, as in Swedenborg's heaven (described in Balzac's *Seraphita*) there is no absolute down, no right or left, forward or backward. Every musical configuration, every movement of tones has to be comprehended primarily as a mutual relation of sounds, of oscillatory vibrations, appearing at different places and times. To the imaginative and creative faculty, relations in the material sphere are as independent from directions or planes as material objects are, in their sphere, to our perceptive faculties. Just as our mind always recognizes, for instance, a knife, a bottle or a watch, regardless of its position, and can reproduce it in the imagination in every possible position, even so a musical creator's mind can operate subconsciously with a row of tones, regardless of their direction, regardless of the way in which a mirror might show the mutual relations, which remain a given quality.

VI

The introduction of my method of composing with twelve tones does not facilitate composing; on the contrary, it makes it more difficult. Modernistically-minded beginners often think they should try it before having acquired the necessary technical equipment. This is a great mistake. The restrictions imposed on a composer by the obligation to use only one set in a composition are so severe that they can only be overcome by an imagination which has survived a tremendous number of adventures. Nothing is given by this method; but much is taken away.

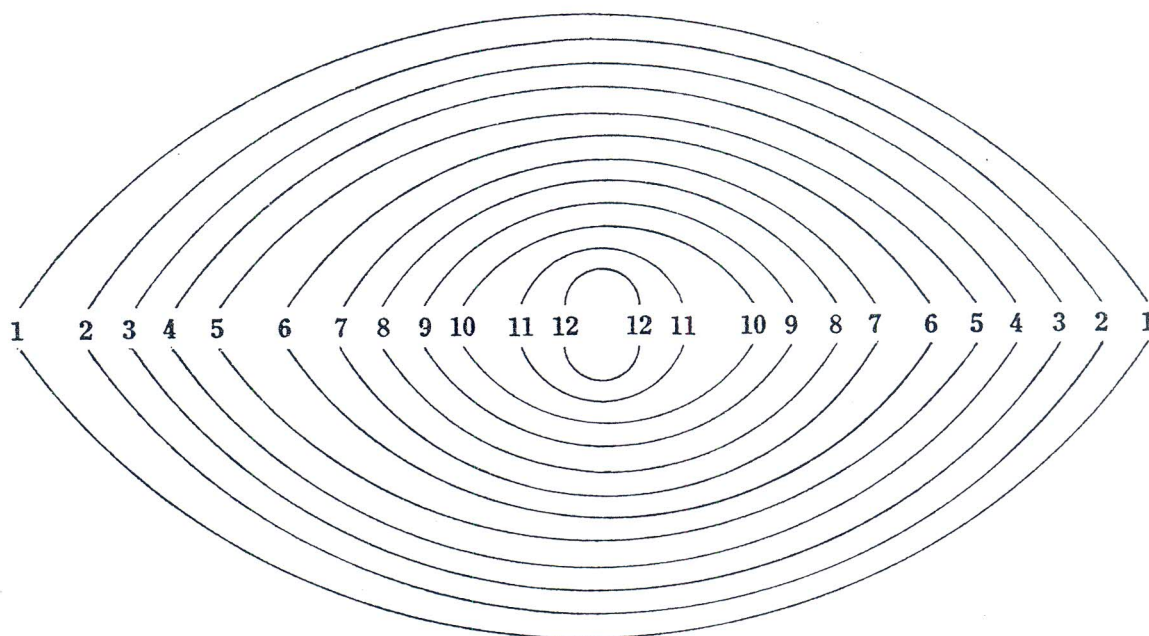
It has been mentioned that for every new composition a special set of twelve tones has to be invented. Sometimes a set will not fit every condition an experienced composer can foresee, especially in those ideal cases where the set appears at once in the form, character, and phrasing of a theme. Rectifications in the order of tones may then become necessary.

In the first works in which I employed this method, I was not yet convinced that the exclusive use of one set would not result in monotony. Would it allow the creation of a sufficient number of characteristically differentiated themes, phrases, motives, sentences, and other forms? At this time, I used complicated devices to assure variety. But soon I discovered that my fear was unfounded; I could even base a whole opera, *Moses and Aron*, solely on one set; and I found that, on the contrary, the more familiar I became with this set the more easily I could draw themes from it. Thus, the truth of my first prediction had received splendid proof. One has to follow the basic set; but, nevertheless, one composes as freely as before.

VII

It has been mentioned that the basic set is used in mirror forms.

Ex. 4



COMPOSITION WITH TWELVE TONES (I)

The musical score is presented on two staves. The top staff is labeled 'Basic Set' and the bottom staff is labeled 'Retrograde Set'. The score is divided into two measures by a double bar line. The first measure contains the Basic Set and Inversion, and the second measure contains the Retrograde Set and Retrograde Inversion. The Inversion and Retrograde Inversion are shown as arcs below the Basic Set and Retrograde Set respectively. The score is labeled 'min. 9th' and 'min. 6th'.

BS means Basic Set; INV means inversion of the Basic Set; INV 8, INV 5, INV 3, INV 6 means inversion at the 8ve, 5th, minor 3rd, or major 6th from the beginning tone.

From the basic set, three additional sets are automatically derived: (1) the inversion; (2) the retrograde; and (3) the retrograde inversion. The employment of these mirror forms corresponds to the principle of *the absolute and unitary perception of musical space*. The set of Example 4 is taken from the Wind Quintet Op. 26, one of my first compositions in this style.

Later, especially in larger works, I changed my original idea, if necessary, to fit the following conditions: (see page 236) the inversion a fifth below of the first six tones, the antecedent, should not produce a repetition of one of these six tones, but should bring forth the hitherto unused six tones of the chromatic scale. Thus, the consequent of the basic set, the tones 7 to 12, comprises the tones of this inversion, but, of course, in a different order.

In Example 5 (page 227), the inversion a fifth below does not yet fulfil this condition. Here the antecedent of the BS plus that of the INV 5 consists of only 10 different tones, because c and b appear twice, while f and f# are missing.

VIII

In every composition preceding the method of composing with twelve tones, all the thematic and harmonic material is primarily derived from three sources:

the tonality, the *basic motive* which in turn is a derivative of the tonality, and the *rhythm*, which is included in the basic motive. A composer's whole thinking was bound to remain in an intelligible manner around the central root. A composition which failed to obey these demands was considered 'amateurish'; but a composition which adhered to it rigorously was never called 'cerebral'. On the contrary, the capacity to obey the principle instinctively was considered a natural condition of a talent.³

The time will come when the ability to draw thematic material from a basic set of twelve tones will be an unconditional prerequisite for obtaining admission into the composition class of a conservatory.

IX

The possibilities of evolving the formal elements of music—melodies, themes, phrases, motives, figures, and chords—out of a basic set are unlimited. In the following pages, a number of examples from my own works will be analysed to reveal some of these possibilities. It will be observed that the succession of the tones according to their order in the set has always been strictly observed. One could perhaps tolerate a slight digression from this order (according to the same principle which allowed a remote variant in former styles)⁴ in the later part of a work, when the set had already become familiar to the ear. However, one would not thus digress at the beginning of a piece.

The set is often divided into groups; for example, into two groups of six tones, or three groups of four, or four groups of three tones. This grouping serves primarily to provide a regularity in the distribution of the tones. The tones used in the melody are thereby separated from those to be used as accompaniment, as harmonies or as chords and voices demanded by the nature of the instrumentation, by the instrument, or by the character and other circumstances of a piece. The distribution may be varied or developed according to circumstances, in a manner comparable to the changes of what I call the 'Motive of the Accompaniment'.

X

The unlimited abundance of possibilities obstructs the systematic presentation of illustrations; therefore, an arbitrary procedure must be used here.

COMPOSITION WITH TWELVE TONES (I)

In the simplest case, a part of a theme, or even the entire theme, consists simply of a rhythmization and phrasing of a basic set and its derivatives, the mirror forms: inversion, retrograde, and retrograde inversion. While a piece usually begins with the basic set itself, the mirror forms and other derivatives, such as the eleven transpositions of all the four basic forms, are applied only later; the transpositions especially, like the modulations in former styles, serve to build subordinate ideas.

Ex. 5

Wind Quintet, Op. 26

Example 5 shows the basic set (with its inversions in the octave and fifth) of my *Wind Quintet*, Op. 26.

Many themes of this work simply use the order of one of the basic forms.

Ex. 6

Wind Quintet, Op. 26

TWELVE-TONE COMPOSITION



The main theme of the first movement uses for its first phrase the first six tones, the antecedent; for its second phrase, the consequent of the BS. This example shows how an accompaniment can be built. As octave doubling should be avoided (see p. 233), the accompanying of tones 1-6 with tones 7-12, and vice versa, is one way to fulfil this requirement.

Ex. 7

Wind Quintet, Rondo (4th movement)

Example 7 proves that the same succession of tones can produce different themes, different characters.

COMPOSITION WITH TWELVE TONES (I)

Ex. 8

Wind Quintet, Rondo

a) BS

b) R 12 11 10 9 8 7 6 5 4

c) R (2nd half) 6 5 4 3 2 1 R 12 (1st half) 11 10

d) R 12 11 10 9 8 7 6 5 4

e) RI (2nd half) 6 5 4 3 2 1 RI (1st half) 12 11 10

a)

b) 3 2 1

c) 9 8 7 etc.

d) 3 2 1

e) 9 8 7 etc.

TWELVE-TONE COMPOSITION

Example 8, the principal theme of the Rondo of this Quintet, shows a new way of varying the repetitions of a theme. The production of such variants is not only necessary in larger forms, especially in Rondos, but useful also in smaller structures. While rhythm and phrasing significantly preserve the character of the theme so that it can easily be recognized, the tones and intervals are changed through a different use of BS and mirror forms. Mirror forms are used in the same way as the BS. But Example 9 shows a more complicated procedure.

Ex. 9

Wind Quintet, Rondo (measures 117–124)

The musical score for Example 9, measures 117–124, is presented in two systems. The top system shows measures 117–120, and the bottom system shows measures 121–124. The score is for a Wind Quintet, specifically focusing on the Bassoon and piano accompaniment. The tempo is marked as $\text{♩} = 60$. The Bassoon part is labeled 'Bassoon' and consists of four phrases, each using three tones. The piano accompaniment uses six tones and overlaps with the Bassoon phrases. The score includes various musical notations such as notes, rests, and fingerings.

At first a transposition of the retrograde is used three times in succession to build melody and accompaniment of this subordinate theme of the Rondo from the same Quintet. The principal voice, the bassoon, uses three tones in each of the four phrases; the accompaniment uses only six tones, so that the phrases and the sets overlap each other, producing a sufficient degree of variety. There is a definite regularity in the distribution of the tones in this and the following Example 10, the Andante from the same Quintet.

Ex. 10

Wind Quintet, Andante (3rd movement)

Horn 1 2 3 4 5 6 7 12 2 5 4

Bassoon *p dolce* 8 9 10 11 1 3 4 6 7 8 9 10 11 12 2 5 6 7 8 9 10 11 12 1 etc.

Here also the form used, the BS, appears three times; here also, some of the tones appear in the principal voice (horn) while the others build a semi-contrapuntal melody in the bassoon.

Ex. 11

Wind Quintet, Scherzo (2nd movement)

BS 1 2 3 4 5 6 7 8 9 10 11

fp

TWELVE-TONE COMPOSITION

In the Scherzo of the same work (Example 11), the main theme starts with the fourth tone after the accompaniment has employed the preceding three tones of the BS. Here the accompaniment uses the same tones as the melody, but never at the same time.

In Example 12, inversion and retrograde inversion are combined into a contrapuntal unit which is worked out in the manner of the elaboration of the Rondo.

Ex. 12

Wind Quintet, Scherzo (measures 88-94)

XI

Obviously, the requirement to use all the tones of the set is fulfilled whether they appear in the accompaniment or the melody. My first larger work in this style, the *Piano Suite*, Op. 25, already takes advantage of this possibility, as will be

COMPOSITION WITH TWELVE TONES (I)

shown in some of the following examples. But the apprehension about the doubling of octaves caused me to take a special precaution.

Exs. 13 and 13a

Suite, Op. 25
BS (transposed a diminished 5th)

Suite, Op. 25, Praeludium

The BS as well as the inversion is transposed at the interval of a diminished fifth. This simple provision made it possible to use, in the Praeludium of this Suite, BS for the theme and the transposition for the accompaniment, without octave doubling.

Exs. 14 and 14a

Suite, Op. 25, Gavotte

TWELVE-TONE COMPOSITION

Suite, Op. 25, Intermezzo

But in the Gavotte (Example 14) and the Intermezzo (Example 14a) this problem is solved by the first procedure mentioned above: the separate selection of the tones for their respective formal function, melody or accompaniment. In both cases a group of the tones appears too soon — 9–12 in the left hand comes before 5–8. This deviation from the order is an irregularity which can be justified in two ways. The first of these has been mentioned previously: as the Gavotte is the second movement, the set has already become familiar. The second justification is provided by the subdivision of the BS into three groups of four tones. No change occurs within any one of these groups; otherwise, they are treated like independent small sets. This treatment is supported by the presence of a diminished fifth, $d\flat$ – g , or g – $d\flat$, as third and fourth tones in all forms of the set, and of another diminished fifth as seventh and eighth tones. This similarity, functioning as a relationship, makes the groups interchangeable.

Exs. 15 and 15a

Suite, Op. 25, Menuet

Ex. 15a Suite, Op. 25, Trio

In the Menuet of the *Piano Suite* (Example 15) the melody begins with the fifth tone, while the accompaniment, much later, begins with the first tone.

The Trio of this Menuet (Example 15a) is a canon in which the difference between the long and short notes helps to avoid octaves.

The possibility of such canons and imitations, and even fugues and fugatos, has been overestimated by analysts of this style. Of course, for a beginner it might be as difficult to avoid octave doubling here as it is difficult for poor composers to avoid parallel octaves in the 'tonal' style. But while a 'tonal' composer still has to lead his parts into consonances or catalogued dissonances, a composer with twelve independent tones apparently possesses the kind of freedom which many would characterize by saying: 'everything is allowed'. 'Everything' has always been allowed to two kinds of artists: to masters on the one hand, and to ignoramuses on the other. However, the meaning of composing in imitative style here is not the same as it is in counterpoint. It is only one of the ways of adding a coherent accompaniment, or subordinate voices, to the main theme, whose character it thus helps to express more intensively.

XII

The set of my *Variations for Orchestra*, Op. 31, is shown in Example 16.

A work for orchestra must necessarily be composed of more voices than one for a smaller combination. Of course, many composers can manage with a small number of voices by doubling them in many instruments or in octaves, by breaking and doubling the harmony in many ways—sometimes thereby obscuring the presence of a content, sometimes making its absence clear. It must be admitted that most orchestral combinations do not promote what the artist calls unmixed, unbroken colours. The childish preference of the primitive ear for colours has kept a number of imperfect instruments in the orchestra, because of their individuality. More mature minds resist the temptation to become intoxicated by colours and prefer to be coldly convinced by the transparency of clear-cut ideas.

Avoidance of doubling in octaves automatically precludes the use of broken harmonies which contribute so much to the pleasant noise that is today called 'sonority'. Since I was educated primarily by playing and writing chamber music, my style of orchestration had long ago turned to thinness and transparency, in spite of contemporary influences. To provide for the worst seems

TWELVE-TONE COMPOSITION

better wisdom than to hope for the best. Therefore, I declined to take a chance, and, by making some slight changes, built the basic set so that its antecedent (see p. 225), starting a minor third below, inverted itself into the remaining six tones of the full chromatic scale.

Exs. 16 and 16a

Variations, Op. 31

BS3
(BS transposed a third up)

BS
(I transposed a third down)

I3
(I transposed a third down)

I-5

Variations, Op. 31, Theme

BS 1 2 3 4 5 6 7 8 9 10 11 12

Cellos

I

etc.

RI 12 11 10 9 8 7 6 5 4 3 2 1

R

12 11 10 9 8 7 6 5 4 3 2 1 1 2 3

1st Violins

I

4 5 6 7 8 9 10 11 12

pp

Besides, I used in many places a device, derived from double counterpoint of the tenth and twelfth, which allows the addition of parallel thirds to every part involved. By transposing BS a third up (BS₃) and INV a third down (INV₃), I obtained two more basic forms which allowed the addition of parallel thirds.

Ex. 17

Variation I

In the First Variation (Example 17) I used this device often, but not as often as I had expected. Very soon I recognized that my apprehension was unnecessary. Of the following examples, chosen at random to illustrate other peculiarities, none shows the addition of parallel thirds.

After an introduction successively revealing the tones of the BS and its INV₃, the 'Theme' of the Variations appears (Example 16). Built as a ternary form, it uses the tones of the BS and its three derivatives in strict order, without any omission or addition.

The motive of the Fifth Variation is based on a transposition of the INV (INV₈). Here are six independent parts built from only one set, comprising only the first two beats; the continuation carries on this system and finds ways to produce a satisfactory amount of variety (see Ex. 18).

The motive of the Sixth Variation is built from another transposition of the INV (INV₆). It is composed of a contrapuntal combination of two melodic parts, using some tones of INV₆ in the upper and others in the lower voice. This combination allows a great number of forms which furnish material for every demand

TWELVE-TONE COMPOSITION

Ex. 18

Variation V

Musical score for Variation V, Ex. 18. The score is written for six staves. The top staff is a single melodic line. The second staff is a three-part harmony. The third and fourth staves are a two-part harmony. The fifth staff is a single melodic line. The sixth staff is a single melodic line labeled "I (transposed)". The score includes various musical notations such as notes, rests, and accidentals.

Ex. 19

Variation VI

Musical score for Variation VI, Ex. 19. The score is written for two staves. The top staff is labeled "Clarinet" and the bottom staff is labeled "I 6". The score includes various musical notations such as notes, rests, and accidentals.

of variation technique. New forms result through inversion of both voices (Example 20) and other changes of their mutual positions such as, for instance, canonic imitation (Example 20a).

COMPOSITION WITH TWELVE TONES (I)

Exs. 20 and 20a

Variation VI

Variation VI

One should never forget that what one learns in school about history is the truth only insofar as it does not interfere with the political, philosophical, moral or other beliefs of those in whose interest the facts are told, coloured or arranged. The same holds true with the history of music, and he who guilelessly believes all he is told—whether he be layman or professional—is defenceless and has to ‘take it’, to take it as they give it. Of course, we know their guesses are no better than ours.

But unfortunately our historians are not satisfied with rearranging the history of the past; they also want to fit the history of the present into their preconceived scheme. This forces them to describe the facts only as accurately as they see

them, to judge them only as well as they understand them, to draw wrong conclusions from wrong premises, and to exhibit foggy visions of a future which exists only in their warped imaginations.

I am much less irritated than amused by the critical remark of one Dr. X, who says that I do not care for 'sound'.

'Sound', once a dignified quality of higher music, has deteriorated in significance since skilful workmen—orchestrators—have taken it in hand with the definite and undisguised intention of using it as a screen behind which the absence of ideas will not be noticeable. Formerly, sound had been the radiation of an intrinsic quality of ideas, powerful enough to penetrate the hull of the form. Nothing could radiate which was not light itself; and here only ideas are light.

Today, sound is seldom associated with idea. The superficially minded, not bothering with digesting the idea, notice especially the sound. 'Brevity is essential to wit'; length, to most people, seems to be essential to sound. They observe it only if it lasts for a comparatively long time.

It is true that sound in my music changes with every turn of the idea—emotional, structural, or other. It is furthermore true that such changes occur in a more rapid succession than usual, and I admit that it is more difficult to perceive them simultaneously. The Seventh Variation (Example 21) offers just such obstacles to comprehension. But it is not true that the other kind of sonority is foreign to my music.

The rapid changes of the sonority in this Seventh Variation make it difficult for the listener to enjoy. The figure in the bassoon part continues for some time, while the instrumentation of the harmonies in eighth notes changes rapidly and continuously.

COMPOSITION WITH TWELVE TONES (I)

Ex. 21

Variation VII

Strings

Bassoon

etc.

etc.

Ex. 22

Variation VIII

I

BS

TWELVE-TONE COMPOSITION

Ex. 23

Finale (measure 332)

Ex. 24

Finale (measure 396)

Examples 21–24 show that a great multitude of thematic characters can be derived from one set. Various methods are, of course, applied. It may be worth while to mention that in Example 25, as an homage to Bach, the notes B-flat, A, C, B, which spell, in German, BACH, were introduced as a contrapuntal addition to the principal thematic developments.

COMPOSITION WITH TWELVE TONES (I)

Ex. 25

Finale (measure 435)

The first system of the musical score consists of three staves. The top staff is a single melodic line. The middle and bottom staves are grouped by a brace, indicating a piano accompaniment. The middle staff has a treble clef and a 2/4 time signature. The bottom staff has a bass clef and a 2/4 time signature. The music features various rhythmic patterns, including eighth and sixteenth notes, and rests. There are two distinct sections labeled 'B' and 'A' within the piano accompaniment.

The second system of the musical score consists of three staves. The top staff is a single melodic line. The middle and bottom staves are grouped by a brace, indicating a piano accompaniment. The middle staff has a treble clef and a 2/4 time signature. The bottom staff has a bass clef and a 2/4 time signature. The music features various rhythmic patterns, including eighth and sixteenth notes, and rests. There are two distinct sections labeled 'C' and 'H' within the piano accompaniment.

The third system of the musical score consists of two staves. The top staff is a single melodic line. The bottom staff is a piano accompaniment. The music features various rhythmic patterns, including eighth and sixteenth notes, and rests.

The main advantage of this method of composing with twelve tones is its unifying effect. In a very convincing way, I experienced the satisfaction of having been right about this when I once prepared the singers of my opera *Von Heute auf Morgen* for a performance. The technique, rhythm and intonation of all these parts were tremendously difficult for them, though they all possessed absolute pitch. But suddenly one of the singers came and told me that since he had become familiar with the basic set, everything seemed easier for him. At short intervals all the other singers told me the same thing independently. I was very pleased with this, and, thinking it over, I found even greater encouragement in the following hypothesis:

Prior to Richard Wagner, operas consisted almost exclusively of independent pieces, whose mutual relation did not seem to be a musical one. Personally, I refuse to believe that in the great masterworks pieces are connected only by the superficial coherence of the dramatic proceedings. Even if these pieces were merely 'fillers' taken from earlier works of the same composer, something must have satisfied the master's sense of form and logic. We may not be able to discover it, but certainly it exists. In music there is no form without logic, there is no logic without unity.

I believe that when Richard Wagner introduced his *Leitmotiv*—for the same purpose as that for which I introduced my Basic Set—he may have said: 'Let there be unity.'

ADDENDUM (1946)

In the course of about the last ten years, some of the strictness of the rules concerning octave doubling and prominent appearances of fundamental chords of harmony have been loosened to some degree.

At first it became clear that such single events could not change the style of non-tonality into tonality. There remained still those characteristic melodies, rhythms, phrasings and other formal devices which were born simultaneously with the style of freedom of the dissonances.

Besides, even if the negation of a tonal centre's domination would have been temporarily undermined, this need not have destroyed the stylistic merits of a composition.

I have to admit that Alban Berg, who was perhaps the least orthodox of us

three—Webern, Berg and I—in his operas mixed pieces or parts of pieces of a distinct tonality with those which were distinctly non-tonal. He explained this, apologetically, by contending that as an opera composer he could not, for reasons of dramatic expression and characterization, renounce the contrast furnished by a change from major to minor.

Though he was right as a composer, he was wrong theoretically. I have proved in my operas *Von Heute auf Morgen* and *Moses und Aron* that every expression and characterization can be produced with the style of free dissonance.

5

COMPOSITION WITH TWELVE TONES (2)

c. 1948

The method of composing with twelve tones purports reinstatement of the effects formerly furnished by the structural functions of the harmony. It cannot replace all that harmony has performed in music from Bach—and his predecessors—unto our time: limitation, subdivision, connection, junction, association, unification, opposition, contrast, variation, culmination, declination, ebbing, liquidation, etc. It also cannot exert influences of similar ways on the inner organization of the smaller segments, of which the greater divisions and the whole work consists.

But in works of Strauss, Mahler and, even more, Debussy, one can already observe reasons for the advance of new formal techniques. Here it is already doubtful, as I have shown in my *Harmonielehre*, whether there is a tonic in power which has control over all these centrifugal tendencies of the harmonies. Certainly, there are still methods employed to establish a tonality, there are even cadences concluding sections which move into the most remote relations of a tonality. But the problem is not whether this number of tonalities can still admit unification, but whether they are controlled by a centre of gravitation which has the power to permit their going astray because it has also the power of recalling

them. It is quite obvious to the analyst that here compositorial methods have been in function which substitute for the missing power of the harmony.

This proves that harmony also in times preceding these masters never had the task of accomplishing all these structural techniques alone, by its own power. There were always several powers at work to produce themes, melodies, and all the larger sections of which a composition consists: the manifold forms of crystallization of intervals and rhythms in their relation to accented or unaccented beats of the measure.

This also proves that many composers working with twelve tones are mistaken when they expect too much from the mere application of a set of twelve tones, or of Hauer's 'Tropen'. This alone could not create music. Doubtless these other formative forces which produce the configurations and variations are even more important. And the history of music shows that harmony was the last contribution to music at a time when there was already great development in existence of melody and rhythm.

The construction of a basic set of twelve tones derives from the intention to postpone the repetition of every tone as long as possible. I have stated in my *Harmonielehre* that the emphasis given to a tone by a premature repetition is capable of heightening it to the rank of a tonic. But the regular application of a set of twelve tones emphasises all the other tones in the same manner, thus depriving one single tone of the privilege of supremacy. It seemed in the first stages immensely important to avoid a similarity with tonality. The feeling was correct that those free combinations of simultaneously sounding tones—those 'chords'—would fit into a tonality. Today's ear has become as tolerant to these dissonances as musicians were to Mozart's dissonances. It is in fact correct to contend that the emancipation of the dissonance is at present accomplished and that twelve-tone music in the near future will no longer be rejected because of 'discords'.

The other function is the unifying effect of the set. Through the necessity of using besides the basic set, its retrograde, its inversion, and its retrograde inversion, the repetition of tones will occur oftener than expected. But every tone appears always in the neighbourhood of two other tones in an unchanging combination which produces an intimate relationship most similar to the relationship of a third and a fifth to its root. It is, of course, a mere relation, but its recurrence can produce psychological effects of a great resemblance to those closer relations.

Such features will appear in every motif, in every theme, in every melody and, though rhythm and phrasing might make it distinctly another melody, it will still have some relationship with all the rest. The unification is here also the result of the relation to a common factor.

The third advantage of composition with a set of twelve tones is that the appearance of dissonances is regulated. Dissonances are not used here as in many other contemporary compositions as an addition to make consonances more 'spicy'. For the appearance of such dissonant tones there is no conceivable rule, no logic, and no other justification than the dictatorship of taste. If dissonances other than the catalogued ones are admitted at all in music, it seems that the way of referring them all to the order of the basic set is the most logical and controllable procedure toward this end.

In using Hauer's *Tropen*, one could not even postpone the reappearance of a tone for as long as possible. Hauer mixes *Tropen*, that is sets of six tones, according to his own taste or feeling of form (which only he himself possesses); there is certainly no such function of logic as in the method described here. Besides, Hauer calls his technique that of *atonality*. This is probably a mistake.

This seems to be the appropriate opportunity to tell about the way I arrived at my method.

Ever since 1906-8, when I had started writing compositions which led to the abandonment of tonality, I had been busy finding methods to replace the structural functions of harmony. Nevertheless, my first distinct step toward this goal occurred only in 1915. I had made plans for a great symphony of which *Die Jakobsleiter* should be the last movement. I had sketched many themes, among them one for a scherzo which consisted of all the twelve tones. An historian will probably some day find in the exchange of letters between Webern and me how enthusiastic we were about this.

My next step in this direction—in the meantime I had been in the Austrian army—occurred in 1917, when I started to compose *Die Jakobsleiter*. I had contrived the plan to provide for unity—which was always my main motive: to build all the main themes of the whole oratorio from a row of six tones—C-sharp, D, E, F, G, A-flat. These were probably the six notes with which the composition began, in the following order: C-sharp, D, F, E, A-flat, G.

When after my retirement from the University of California I wanted to finish *Die Jakobsleiter*, I discovered to my greatest pleasure that this beginning

was a real twelve-tone composition. To an ostinato (which I changed a little) the remaining six tones entered gradually, one in every measure. When I built the main themes from these six tones I did not bind myself to the order of their first appearance. I was still at this time far away from the methodical application of a set. Still I believe that also this idea offered the promise of unity to a certain degree. Of course, in order to build up a work of the length of *Moses und Aron* from one single set, a technique had to be developed, or rather the fear that this would not succeed had to be conquered. That took several years.

Before I wrote my first strict composition with twelve tones—in 1921—I had still to pass through several stages. This can be noticed in two works which I had partly written preceding the *Piano Suite*, Op. 25—partly even in 1919, the *Five Piano Pieces*, Op. 23, and the *Serenade*, Op. 24. In both these works there are parts composed in 1922 and 1923 which are strict twelve-tone compositions. But the rest represent the aforementioned stages.

In my workshop language, when I talked to myself, I called this procedure 'working with tones of the motif'. This was obviously an exercise indispensable for the acquisition of a technique to conquer the obstacles which a set of twelve tones opposes to a free production of fluent writing. Similarly, as in the case of *Die Jakobsleiter*, here also all main themes had to be transformations of the first phrase. Already here the basic motif was not only productive in furnishing new motif-forms through developing variations, but also in producing more remote formulations based on the unifying effect of one common factor: the repetition of tonal and intervallic relationship.

It is quite easy to repeat a basic set in one or more voices over and over again. There is no merit in writing canons of two or more voices, because the second, third, fourth, and further voice has only to begin two or more notes later and there will never occur parallel octaves. And who cares about parallel fifths?

I believe canonic or other imitation should serve only in order to base accompanying voices, which make the sonority fuller, on a more intimate relation to the main voice. Even the writing of whole fugues is a little too easy under these circumstances. Composing of these forms in which the highest achievement has already been reached by composers whose form of expression was that of contrapuntal combinations—composing of these forms should only be undertaken for some special reason. For instance, if a composer feels he must calm down a sort of nostalgic longing for old-time beauty; or because in the course of

a huge work—an opera, an oratorio, a cantata, etc.—one of the parts must be in old style. There are certainly few reasons which might oblige a composer to compete with those *hors-concours* achievements of such great masters, whose native language was counterpoint.

6

IS IT FAIR?

1947

It has become a habit of late to qualify aesthetic and artistic subjects in terms borrowed from the jargon of politics. Thus mildly progressive works of art, literature or even music might be classified as 'revolutionary' or 'left wing', when they only evolve artistic possibilities. On the other hand, old-fashioned products are called 'reactionary', without any clarification of what its antonym might mean in contrast.

No wonder, then, that there are people who call the method of composing with twelve tones 'bolshhevik'. They pretend that in a 'set of twelve tones', upon which such compositions are founded, since there is no tonic nor dominant, every tone is considered independent, and consequently exerts equal functions.

This is wrong in every respect; yet it is curious to note that even the exact contrary has been contended. The German composer, Paul von Klenau, during Hitler's time, composed a whole opera in twelve-tone style. After a successful performance, he published an essay in which he 'demonstrated' that this method is a true image of national-socialist principles! This, of course, also is politics—though of the opposite colour.

As a matter of fact, the structural independence of the single tone is rather limited in a set of twelve tones, because every tone is bound unchangeably to a definite place. For example, observe the following set:



But looking at this matter in yet another way, we find that there is, strictly speaking, no essential difference between the way dissonances are regarded in our day and the treatment of dissonance in old music—I mean as regards the practical effect, which is that the fact of non-consonant intervals' sounding together has no perceptible outcome in the way parts subsequently move.

It is very interesting to see that my standpoint—'the harmony is not under discussion' (which represents merely the application of the old contrapuntal principle to the new technique)—has its counterpart in the dissonance's 'lack of influence' (no obligation)!

Vienna, June 10, 1928

8

LINEAR COUNTERPOINT

1931

I was always clear about the existence of something looking and even sounding like counterpoint, which is not in fact counterpoint. Namely, *linear counterpoint*.

A line can join two points—two, perhaps that are counter-points; but a point and a counter-point can never be linear, never resemble a line. Even semantically.

Counterpoint—the word—derives, ostensibly, from the name given the first species of exercises by which this art is learned (point *counter point*: a whole-note against a whole-note).

That is perfectly possible.

But a combination of knowledge and intuition tells me that the masters of counterpoint were very fond of expressing themselves through symbolic and mystical word-play. On this I base the hypothesis that, whatever the origin of the word (see above), the deeper sense alone defines the true essence of this art. That is, that counterpoint means an 'opposing point' whose *combination with the original point* is needed if the idea is to exist. The opposing point may contain

the completion: $(a + b)(a - b) = a^2 - b^2$, so that $a^2 - b^2$ means, as it were, the idea represented by the point $(a + b)$ and opposite point $(a - b)$. Or things may be in the manner of diophantine equations, where there are many solutions, many ways to bring together point and opposing point (polymorphous canon; polymorphous texture)—here point and opposing point are placed as if right and left of the 'equals' sign, hinting at many possible solutions, or sound-combinations. Or their relationship may be something like that of subject and predicate—though in this case, whereas someone wishing to express different things without literally 'changing the subject' has, then, to change the predicate, in music it is enough to change the layout (in space and time).

Anyway, whatever one's views about the pleasure that can lie in conducting each part in polyphony independently, melodiously and meaningfully, there is a higher level, and it is at this level that one finds the question which needs answering in order to arrive at the postulate: 'Whatever happens in a piece of music is nothing but the endless reshaping of a basic shape.' Or, in other words, there is nothing in a piece of music but what comes from the theme, springs from it and can be traced back to it; to put it still more severely, nothing but the theme itself. Or, all the shapes appearing in a piece of music are *foreseen*¹ in the 'theme'. (I say a piece of music is a picture-book consisting of a series of shapes, which for all their variety still (a) always cohere with one another, (b) are presented as variations (*in keeping with the idea*) of a basic shape, the various characters and forms arising from the fact that variation is carried out in a number of different ways; the method of presentation used can either 'unfold' or 'develop'.)

It should by now be clear that from this point of view linear counterpoint is nonsense, or at least a distortion of sense. Merely for safety's sake let me add the following:

1. In a contrapuntal piece the idea is compressed in the form of a theme whose constituent elements, sounding together, form a kind of 'point of departure'.
2. This 'point of departure', this theme, contains all the possibilities for future redeployment of the elementary material.
3. In the course of the piece, the new shapes born of redeployment (varied forms of the new theme, new ways for its elements to sound) are unfolded, rather as a film is unrolled. And the way the pictures follow each other (like the 'cutting' in a film) produces the 'form'.

If, then, a contrapuntal idea is based on a combination of several parts, what can there be about it that is linear?

Now, however:

Linear: Here I must interpolate that I have not read E. Kurth's book *Der lineare Kontrapunkt*,² and hardly know more than the title and the odd things I have heard or read. Even my pupils could not tell me anything about it. So, like Jean-Paul's 'Little Schoolmaster Wuz', I am obliged to write my own book to fit the title, construct my own theory to fit this slogan. I must say at once, though, that so far as I can see any such possibility, it is from certain angles which are highly important and necessarily far from Mr. Kurth's way of thinking; they originate with me, in the structure of my theory, and I doubtless go far, far beyond anything he could have thought.

So: *linear*—one must not regard *independence* of the parts as meaning merely that, so far as their horizontal flow is concerned, they do not depend on one another—which means that parts:

- A. (a) never move (carry out) in parallel for long;
- (b) do not have to work with the same motive;
- (c) if they work with the same motive, develop it differently;
- (d) are independent rhythmically, in fact ought to contradict each other;
- (e) ought to have different dynamics, performing indications, climaxes, cadences;

but must take it to mean also that parts ought to be independent of each other even in their harmonic relationship. This means:

- B. (a) that in sounding together they need not be related to a common harmony;
- (b) that no sort of 'registerable' harmony has to result from the way they sound together;
- (c) that if possible they should produce dissonances when they sound together (to show how little they are worried);
- (d) that there need be no attempt to produce harmonic *progressions* ('registerable') ones, such as cadences or any other identifiable fundamental-progressions, and that such progressions are no criterion of the parts' function;

- (e) that so far as possible one should avoid any articulation such as can arise from the coincidence of parts in articulating 'steps'.

So by 'linear' one can imagine a number of parts, each of which has its own development, and none of which worries in any way about the others.

This poses the following questions:

1. What, then, makes these parts belong together at all? That is to say, as regards their content?
2. How is one to grasp the 'combination' of sounds which, all the same, such parts produce?
3. Why do they *sound together*, and why at the particular times the composer has indicated?

One can begin by making a concession:

For practically any truly new creation the sole criterion is the formal sense possessed by the author, who can say to himself: 'My formal sense, tested in so many cases, trained by the best masters, and the logic of my thinking, which for me is beyond all doubt, and about which I have convinced myself—these guarantee me that whatever I unconsciously write will be correct in form and ideas, even when I renounce the aids given the intellect by theory and convention.'

That is how I proceeded! That is how I argued it afterwards!

But (here I must again interpolate) that was not what the people did who built on Kurth. Rather, in order not to lose all safety, building on sand, they chose ruins as their foundations; they claimed to be turning back to 'old forms'. Claimed—for those were not forms but, at the most, manners, methods, styles, ways of acting and behaving. They wrote toccatas and the like, 'à la Handel', in a 'running' or motoric way; they assumed a 'cantata-tone', a 'concerto-grosso-tone'; favoured canons in fifteenth-century style, or inexact ones, and a new imitative style appeared, which I had to call 'imitation-imitation'. This is how it looked: their toccatas consisted of one or more rapidly-moving parts, so independent and on their own that, as well as no longer worrying about the others, each part did not even worry too much about itself and its own appearance. In fact, even on their own they really made no sense either, chattering or stuttering for no apparent reason, at best chattering like a weekly column or however else people talk; when stuttering, they were more determined, like village idiots. But they were able to make a certain effect through a certain primitive formal sense,

Now, whatever in these toccatas worked formally came from the formal sense of a jazz-arranger, and whatever in them was 'daring' came from the drolleries. But an overall sound (basically tonal, in all other respects confusing and irregular) produced by unheard and mutually irrelevant parts is in fact not particularly droll—any more than jazz, sharing the same state of mind, was entirely comprehensible. Do not forget: these toccata-boys knew how to finish—like the jazz-boys, throwing in a surprising, cheeky tonic, hardly to be justified by anything in the body of the piece.

It is much the same with the concerti grossi, where the only exception was the adagios. These stood out through their *exaggerated slowness* and lived on the advantages it offered: in music, if everything happens slowly enough, anybody can follow up to a certain point. And since I am not alleging that the authors of such pieces were entirely ungifted (I find, to the contrary, that many a musical talent was led astray by just this), it cannot be denied that these pieces could make a certain effect—the more so as certain clichés of adagio-cantabile and adagio-mood were at work, lending their support. The abrupt succession of a series of these was felt to be a virtue, to be modern.

One hardly need waste words on the canons—they bear witness to the most utter ignorance, so far as understanding the essence of contrapuntal composition is concerned.

But about this time the 'imitation-imitation' style proved an ideal way of seeming to 'consolidate'. In reality the *imitation* found here was nothing but a substitute for sequence. Just as sequence *creates cohesion through repetition* and aids *comprehensibility*, so does two- to five-fold imitation.

Let us pass over what the other parts, the accompanying parts, had to add. What could they do? Imitate—inexactly, like the stuff found in junk-shops.

But a piece that sent two 'themes', or several, rolling down one after another in this way, occasionally repeating a phrase, perhaps superimposing two such themes (what can one not superimpose, given such lack of scruple?), and even making one further concession to great art by devising some sort of 'motivic relationship' between the themes (not an innate one!)—a piece like that made a certain formal effect which the masters of this style were clever enough to enhance by allowing a key (appropriate to the purpose, or as likely not) to glimmer

through, or simply by administering a half-cadence or some arbitrarily cobbled-on tonal triad.

Far be it from me to deny that certain genuine talents, such as Hindemith or Krenek, have by an indisputable inventive talent and strong musicality produced things on a far higher level, and in their best moments even good and beautiful music. But neither can I deny that very often their unconcern strikes me as lack of conscience and bears witness to a disturbing lack of responsibility. Here I have in mind, for example, Krenek's 'basses', which he doubles (in octaves) on the bass-instruments, as if they were *fundamentals* (and in such conventional part-writing they will really sound like fundamentals, too), although the 'harmony' above them has *nothing whatever to do with them*, and the 'progressions' just as little. Or Hindemith's folk-song arrangements in the book of folk-songs where mine also appear.³

And I readily admit that this criticism is a little influenced by what I find the unsympathetic mentality of most of the young composers of the present-day—by their mania for success, their publicity, and their skill in using their elbows. I also readily admit that criticism by a contemporary, especially by someone a good deal older, is relatively inconclusive. All the more so as I feel I could bring some sense into the aesthetic and theoretical nonsense that accompanies their activity as composers—perhaps I could even draw up a complete and sufficient theory of these methods; but I do not yet find myself mature enough to assess their value.

For it is quite conceivable to apply the following procedure to the formulation of ideas, the development of ideas, and to formal construction (also bearing in mind what I know, or have noticed, about the so-called 'new tonality'. I still have to deal with this). The themes could be organized according to the following principle, as for a new tonality, or else by chromaticism, in which, however, a tonal centre would be provided.

(N.B. *New Tonality* was explained to me as follows: everything is derived from the seven tones of a series (major? minor? some other kind?), but after that one need pay no further heed to the sound as a whole, so that any note may occur together with 1, 2, 3, 4, 5 or 6 others; nor does one pay any heed to parallels (not even to octaves, apparently). But since 'the modern composer feels the need for dissonances', still other notes are introduced at certain points (??). I

immediately raised the objection that the complete lack of modulation would mean monotony, at least if one limited oneself strictly to the seven tones. This objection remained unanswered. But I think I noticed in Hindemith's oratorio⁴ that he has a way of encircling the main key with certain other keys, and in so doing he seems to organize his cadences in a way which does in fact perform a certain articulating function—hinting, in the melody or other parts, at elements that are to appear at the cadences, also by displacements in the lay-out, and by replacing the tonic and dominant with other degrees of the scale.)

Barcelona, December 2-3, 1931

9

LINEAR COUNTERPOINT: LINEAR POLYPHONY

1931

These two expressions—one stemming from Professor Kurth,¹ the other from his acolytes—form one of the bases of present-day musical theory. I know few expressions so hollow and irresponsible (and there are many—'loosened harmony', etc.). I take it that Kurth said 'linear polyphony'. This is supposed to mean a plurality (multiplicity) of parts, in which the criterion of admissibility is no longer the sum total of the sound, but exclusively the individual line—that is to say, the horizontal, and no longer the vertical.

It is a fair assumption that Mr. Kurth arrived at this expression through wrongly grasping certain personal qualities in my music. 'Wrongly', for the following reasons. My earlier works did not yet come within the scope of my remark, 'The harmony (or "the total sound"—but that was wide of the mark) is not under discussion'; it applied only to those from the time of twelve-tone composition. It can easily be shown that in the earlier works the chords are designed to have at least an accentual, articulating and colouring effect, and that their mutual conduct is full of regard for the relationships of the parts as they