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The Rival Claims of Structure and Semantics
in Music

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For the degree of Master of Arts.
The Rival Claims of Structure and Semantic in Music

PRELUDE

An air of hushed expectancy falls over the concert-hall; the conductor’s baton is poised, the symphony begins. While the music is playing, let us take to ourselves for a while the privilege of passing among those assembled in the audience to see, if we can, what is involved in the business of listening to music. Our attention is soon caught by the movements of a man who appears to have a nervous twitch, an inability to keep his head still. Others in the audience are also moving their hands or tapping their feet. Is this mere restlessness or boredom? On closer observation we see that these people are in fact all moving in time with the music - they seem to be responding to the movement of the music in their own bodies. By contrast, the young woman next to the man who first engaged our attention is motionless - head slightly bowed, eyes closed, - one wonders if this is an attitude of prayer. Others too, seem to be wrapt in - what? in the music? Are they absorbing every note, every quiver, every nuance of the music being played? Such concentration may well commend these listeners, and yet, was it not that same young woman who, as she entered the hall, had remarked that she was delighted that this particular symphony was to be played, as it caused her to see such lovely pictures. Are they pictures that pass through her mind now, as she sits so absorbed? Does the slow movement speak to her of a monastery garden, or of moonlight over a lake,
and the scherzo of a carnival? Does that brilliantly orchestrated second theme in the finale remind her of the rainbow in a cloudy sky; and will she describe her reaction in these terms to her friend during the interval? If she does, she may well be disappointed by her friend's lack of sympathy with such a response, for on the face of the latter there is a frown, a look of bewilderment, of indignation. Were we privileged to see into her thoughts, we might see her searching for the "form" of the piece. Has she a 'plan' of sonata form in her head, and is she puzzled because this opening movement does not fit into that plan? Is she searching among the "second subject themes" for the "transition section", or indignantly condemning this movement for having no second subject at all? Will she respond later to her friend's imaginative interpretation by a testy remark to the effect that the form of the work was poor, that it did not conform to the plan of a good symphony?

Across the room another listener appears to be deeply involved in the music. Yet look at his face, as he listens to the slow movement. Did he really want to come to this concert, we wonder, for his sadness seems excessive; surely some grief must weigh heavily upon his soul; and yet, another glance in his direction as the scherzo begins shows an almost miraculous transfiguration. Still using our privilege of looking into the minds of the audience, we can hear him saying, "That slow movement expressed such profound sadness, I was overcome, but now this movement expresses joy, and I too am joyful".

Perhaps this tour round the audience will prove very thought-provoking.
All these people are listening to the same piece of music; and yet already we have noted considerable variations of response. Perhaps we shall extend our privilege tonight and eavesdrop on conversations during the interval. The work reaches its final cadence, the conductor turns to acknowledge the applause ... but a gentleman just in front of us, with barely-concealed impatience turns to his neighbour, and complains, "Thank goodness that's over, I was bored stiff, I wonder what you can find to applaud". His neighbour, still enthusiastically applauding, gives him a pitying look, and between shouts for the conductor to return, testifies to the nobility, significance and truth of the message revealed by the composer in the work just played; his exaltation knows no bounds for he has shared awhile in the inspiration of the master, has felt that same uplift of soul into the realms of truth and beauty which he believes the composer must have known and expressed in his music, for all who can respond to share.

The applause dies away. What is this? Did these two men not hear the composer's message? Were they shown no pictures of fancy's delight, did they experience no uplift of the soul? They bend intently over a score, pencils in hand, and we hear their murmured discussion. "Well, there certainly seems to be a real thematic affinity between the movements." "What about that episode in the slow movement, though? Don't you think it must upset the work's integrity? After all, it has no affinity with the other themes, for although motifs one and four are suggested, they are in the wrong order, and the other two are
missing altogether." ... "Yes, I see what you mean, and of course
we can't say that the work is coherent and unified unless we can fit
in that theme. Perhaps it will show its relationship if we invert it —
or is it a retrograde form of the basic shape .....?" It seems we have
reached the students' corner, for fragments of another discussion reach
us ... "Did you see that fellow's face during the slow movement? How
could he have thought it was meant to be sad. It was in a major key
for one thing, and the basic terms of the main melody clearly express
serenity, and acceptance, surely not grief" ..... "Yes, you must be right.
He obviously misinterpreted the music. Isn't that melody similar to the
‘contentment' motif. in ..... " the voice fades away.

Next we are to hear a tone poem, by a 19th century composer, and
the members of the audience begin to study the programme of the work.
It seems from the comments of the lady who "heard" the symphony as
pictures, that the "programme" consists of a poem, dealing with scenes
from nature, and we hear her exclaiming, "What a lovely description. How
I shall see it all in the music". Her enthusiasm cannot be dampened
when her companion retorts, "How he'll fit that programme into any
satisfactory form I just don't know. The work will probably be absolutely
shapeless, but of course, form always suffers when the composer writes
programme music." Scraps of conversation float across from the other
corner ..... "of course, he'll only be able to express the clouds and
things by indirect imitation. The main interest will be to see how he
expresses the emotions of the poem using the basic terms of expression".
The two studious ones have the score of the work in front of them "... Have you read the poem yet?".... "Oh no, after all, it's the music that counts isn't it. That poem was probably added afterwards anyway, and I'd rather follow the structure to see how this composer thinks musically. To call it programme music is misleading too, of course, because music can't express any programme, except itself".

The man who had found the symphony boring and incomprehensible has read his programme, however, and over the murmurs from across the room we can hear him remarking that at least this time he will understand what the music is trying to say.

The buzz of conversation dies away, the conductor again raises his baton, and again they listen. We will eavesdrop no more. But in the morning, as they scan the press reports, what will be the reactions of these listeners to the music critic's appraisal of the works? We have noted very different responses and approaches to the music; how can the critic hope to make a fair, plausible assessment of the music which will not offend many of those who listen with him? Can he rely upon a sound basis for discussion and criticism, with agreed and accepted terms of reference, and standards for comparison? Or will those members of the public whose experience was not akin to his be free to dismiss his article as yet another statement of opinion, no more and perhaps less authoritative than their own? And can all these opinions be defended by those who express them?
We can hardly dismiss these diverging responses to a single piece of music when we see that what moves a man to ecstatic joy, after plunging him into an abyss of grief, and speaks to a woman of beautiful scenery, leaves a third listener bored and uncomprehending. Nor can we ignore the different approaches to the music, for we must wonder why some were happiest to respond to the composer's spiritual message, or the music's "content", while others preferred to puzzle over the Form, or took delight in minute analysis of the structure. Are there indeed so many ways of responding to and appreciating the same piece of music; and are all ways equally valuable, or does one approach lead closer to a true understanding of the music than the others?
The nature of music: the realm of theory.

The listeners described in the foregoing section can be broadly divided into two classes. There are those whose main pleasure in music lies in its power to suggest images, to express emotions or moods, or to convey some other message which can be described in verbal, "extra-musical" terms. The word "Referentialist" has been applied by Meyer (1) to these people who consider that music conveys an extra-musical meaning, or refers to something beyond itself. There is also an equally common type of listener who, while (usually) admitting that music is a form of communication between composer and listener, denies its referential power, and considers that what the composer wished to say can be heard in the music but not interpreted or translated into verbal terms. These listeners Meyer describes as "Absolutists". The absolutist discusses music in terms of technical and structural procedures, such as formal outline, orchestral texture, thematic schemes, and harmonic idiom. He discusses the means whereby the composer conveys that content which the referentialist seeks to interpret.

It is not my purpose here to survey in detail the development of abstract philosophical theories about the nature of music. This study is concerned primarily with the theories as they manifest themselves in concrete examples of music criticism and analysis. Abstract theories often present as many problems as they solve, partly because they do
not sufficiently regard concrete experiences; and in any case, two very thorough surveys of aesthetics have recently been offered by writers well qualified by their understanding of philosophy to deal with the general philosophy of art. (2 and 3). However, as we have already seen, the approaches to music can be (and frequently are) divided into two broad classes, and this division represents one of the main features of all discussions on the nature of music, namely the apparent dichotomy between "form" and "content". Since this division is also implicit in the terms of reference of the present essay, we may profitably survey some of the theoretical views as a background to our later studies.

According to Osborne, (2) an "emotional" theory of art arose in reaction against the moralistic influences of the Counter-Reformation on the one hand, and against a too formalistic classicism on the other. In vigorous opposition to both moralistic and rationalistic aesthetics, it began to be asserted in the 17th century that the judgement of artistic excellence is based on feeling and emotion, the appreciation of beauty is a matter of sentiment and not of reason. Related to the "Emotion theory" of art is that which sees art chiefly as a form of self-expression, and this is apparently one of the more conspicuous features in which contemporary art theory differs from mediaeval aesthetics. The usual mediaeval view has been summed up thus by Eckhart, (as quoted by Osborne) : "The painter who has painted a
good portrait therein shows his art; it is not himself that he reveals to us".

The conception of art as a mode of expression, as "the language of feeling and emotion", emerging with the new individualism of the Renaissance, was given a stronger impetus by Goethe, Schiller, Schopenhauer, and the poets and philosophers of the German Romantic Movement in general, and has been prominent in aesthetic theory ever since. The influence of the Romantics caused a shift of attention away from the work of art as an aesthetic object, and from its effect upon the observer, while focussing interest on the creative process in the mind of the artist. The art product was valued as the expression of the artist's uniqueness, as the means by which he communicated his inspired insight into reality. This Romantic attitude to art was formulated into a coherent aesthetic doctrine by Eugène Véron, one of the writers who influenced Tolstoy's aesthetic views. "Art is essentially a language...... Scientific language is the communication of thought; art-language is the expression of mood". (Véron : L'Esthétique, 1882 : quoted by Osborne).

The most definite form that the Expression theory takes is that the artist lives through a certain experience, and makes a work which embodies that experience. Through appreciative contemplation of this work other men are enabled to duplicate in their own minds the experience of the artist. What is conveyed to them is not mere knowledge that the artist had an experience, but a similar experience of their own, with a
similar affective and emotional content. When philosophers consider this version of the Expression theory they are faced with the realisation that it cannot be proved or disproved. It postulates a correspondence between experiences (that of the artist and that of the observer or listener) which cannot be compared, and precisely because they cannot be compared, no-one is in a position to say that this correspondence does not occur. The inability of critics to verify the emotional state of the creative artist has provided the basis of some of the strongest repudiations of the Expression theory, as also has the fact, at first observed subjectively, then demonstrated by psychological investigation, that the subjective response to a single work of art differs widely from one observer to another.

We have already mentioned the predominance of the Expressive view of art in the 19th century Romantic era. Applied to music, this view resulted in the increased importance of the explanatory programme note, for interpretation of music was largely based upon programmatical and allegorical concepts. The idea of music as a sort of psycho-drama arose, and terms such as "desperate struggle", "knocking of fate", "threatening fortissimos" and "gloomy minor" were used to interpret it. Composers became more self-conscious, publishing descriptions of their thoughts and feelings, and of the circumstances which acted as their inspiration for particular works, which were seized upon by listeners who then interpreted the music in terms of the composer's experiences, or described the composer's message in terms of their own "emotional wallowings".
Further reference will be made to the preoccupation of Romantic composers with expression, and to a related matter, their consciousness of formal difficulties, later. Their increasingly self-conscious consideration of form and expression led to the idea of a division between form and content in music, a division reflected in much of Tchaikovsky's discussions of his compositional methods, for example.

The division is also reflected in the teaching of the late 19th and early 20th centuries, as we can see from the writing of Parry and William Wallace, each of whom attempted to describe the pattern that music had followed in the preceding 250 years. Parry writes (4) that "to some, beauty of form in melody or structure seems the chief excuse for the art's existence ... many cannot understand what music means, nor what it is intended to express ..."; but the history of the art is "that of development of mastery of design and of the technique of expression". He considers the "ultimate origin of all music as direct expression of feeling and an appeal to sympathetic feeling in others". From this origin the art of music developed thus: "While the actual resources were being developed, and principles of design were being organised, the art passed more and more away from the direct expression of human feeling. But after a very important crisis in modern art, when abstract beauty was specially emphasised and cultivated to the highest degree of perfection, the balance swung over in the direction of expression again; and in recent times, music has aimed at characteristic illustration of things which are interesting and attractive on other grounds than mere beauty of design or of texture". Parry considered that the perfection of abstract beauty was
the work of Haydn and Mozart, whose achievement lay in "the organisation and expansion of form, based on harmonic design", "without any great force of expression". "If the world could be satisfied with the ideal of perfectly organised simplicity, without any great force of expression, instrumental art might well have stopped at the point to which they brought it. But at this point, the moment in the history of music appears to have been reached when its great resources were ready to be used for expressive ends - and Beethoven led the van. In his hands alone, the forces of design and expression were completely controlled". The essence of musical progress from Beethoven onwards lies in the development of infinite varieties of expression during the time when men "having many resources at their disposal, sought to use them more decisively for the purpose of expression."

The view of Haydn and Mozart as preparation for Beethoven, and the idea that "form" was developed first and then infused with "expression" are expressed still more strongly by Wallace,(5) who considered that the works of Haydn and Mozart were written to order, laid out for a purely superficial end. They "suggest nothing of the more serious enquiries of the mind .... if Mozart and Haydn were capable of profound expression in their work, they certainly gave scanty indication of it." Wallace echoes Parry in the assertion that it was, in fact, the function of Haydn and Mozart "to build the house in order that others might shelter in it" - "to enlarge the outline of music till Beethoven came to enrich it with the glories of his thought". Wallace concludes that an entirely new
aspect of art came into existence after 1830, for by this time "the reign of the mathematician was over".

Wallace reached this conclusion in 1908, and one wonders what he must have thought by 1940, the year of his death. By that time, the word "mathematician" was again in use as a term of abuse in a situation which reflected the rival claims of structure and expression as clearly as ever. For reaction to the emotional excesses of romantic art had crystallised into the modern view of musical autonomy, whose founder - Hanslick - had expounded the theory summed up in his definition that "Music is form moving in sounds". While admitting the use of designations such as "powerful", and "graceful", Hanslick confined their application to illustrating the specifically musical character of the passage so described, instead of suggesting a definite feeling on the part of the listener. Hanslick's views were propagated in England by Gurney, who referred to the difference in subjective responses to music to support his repudiation of the Expressive theory of music. He found, for example, that the "great subject" of the first movement of Schubert's Bb trio "represents to me, and to many, the ne plus ultra of energy and passion; yet this very movement was described by Schumann as 'tender, girlish, confiding'." ("The Power of Sound", 1880).

Still further in this direction went A. Halm, whose quotation from the Talmud at the beginning of his "Von Zwei Kulturen der Musik", (1913) represents an adequate expression of the central thought of musical autonomy: "If you want to understand the invisible look closely at the visible".
Halm* and his successors advocated the complete separation of a musical work from the emotional world of the composer and listener, and the emancipation of musical thought from "sensuous intoxication and hallucination". A somewhat similar separation was advocated by Roger Fry and Clive Bell, exponents of the approach to art (especially painting) known as "Significant Form". Fry became firmly convinced of the absolute value of abstract form separated from sentiment, feeling and representation, while Bell, ("Art", 1914) considered that the investigation of Significant Form was the central problem of aesthetics.

That this emphasis is a comparatively recent development in aesthetics is suggested by Osborne. "Within the last half-century a new conviction and confidence in the autonomy and high dignity of artistic production has taken hold of the minds of that small minority of men who are still moved by loveliness and beauty. They have seen that a work of art is, in its essence, not a means of the communication of experience from man to man, but a newly created thing which exists primarily to be experienced for what it is in itself. Every work of art is an invention, autotelic, not made to be a duplicate of anything else. Art is not an expression of life but an addition to life ...." (2) Osborne develops the view that the property which is the essence of artistic excellence is form, or "configuration". "Beauty is a co-efficient of formal structure". He recognises, as others had before him, that the main drawback of this theory was the inability to define the qualities of formal structure by virtue of which some configurations are good and some are bad, but he considers that this problem can be solved by a development of the idea
anticipated by Coleridge that "the kind of configuration which constitutes artistic excellence is the configuration known as "organic unity", that is a configuration such that the configuration itself is prior in awareness to its component parts and their relations according to discursive and additive principles". (Coleridge had expressed this in his definition of "The Beautiful" as "that in which the many, still seen as many, became one").

The idea of organic unity is at least as old as Aristotle, who said of the plot in drama that "the fable, being an imitation of action, should be an imitation of an action that is one and entire, the parts of it being so connected that if any one of them be either transformed or taken away, the whole will be destroyed or changed ...." In ancient criticism the idea of organic unity became current under the name "congruity" or "concinnity", and it has remained a subsidiary principle of criticism, until now its elevation to a fundamental principle of art has been widely accepted. A very recent review, for example, of two of those critical theses which we shall consider later, stated that what we most want the professional critic to tell us about a composition is whether it "is consistently vital, or whether it is joined, botched or lame in some places, though organically healthy in others". (6) Osborne explains why we do right to value organic unity so highly ..... "Any construction which enters into awareness as an organic unity is apprehended 'synoptically ' as a single complex whole of multifarious and intricately related parts ..... Such synoptic vision demands a heightening and taughtening of awareness far beyond the natural needs of practical life."
Only works of art can demand and provide the material for such intense awareness, and their apprehension and appreciation cause that heightening of consciousness, that enhancement of mental vitality, which critics have often noticed and attributed to other inadequate causes. This is why the experience of beauty is valued. It is valued because it makes us more vividly alive than we otherwise know how to be". "These contentions ... set the configuration theory of beauty firmly on its feet, and enable it to be a sound basis for criticism". (2)

The degree to which this theory has permeated musical analysis will become evident. But first we must consider Osborne's reference to "a sound basis for criticism". Both Osborne and Beardsley (3) lament that there is no scientific basis for aesthetic discussion, a lament anticipated by Ernest Newman and Calvocoressi, each of whom, concerned by the confusion which was evident in the sphere of music criticism, sought a firm objective basis upon which to build a scientific music criticism. It is however, only abstract theorists, concerned with finding an absolute definition of beauty or value, who seek a rigid standard by which musical works may be measured and must be justified or found wanting regardless of the instinctive experience of those who have actually come into contact with the works of art. What should really be sought for in music criticism is an objective means of explaining a response already experienced. Musical works come to us
like people - we do not analyse them first to decide whether we like them or not, we make our decision spontaneously and intuitively and then seek a rational defence for our opinion by analysis. The reason why subjective interpretation of music has been denounced is that it is not considered to provide that rational defence. However, such writing does testify to a response, which is all that detailed technical analyses can ultimately do. The "rival claims" become apparent in the assertions that the latter approach represents the only valid and meaningful way of writing about music and of justifying our opinions - a view suggested, for example, by Gerald Abraham (7) after his detailed description of the technical aspects of Sibelius' seventh symphony: "So much talk about structure and thematic derivations may disappoint the reader who has been overwhelmed by the emotional force of the 7th. But ... he will not profit by matching his emotional impressions with a critic's; on the other hand he may profit by hearing not only how Sibelius feels musically, but how he thinks musically". However, recently, investigations into the semantic meaning of music have presented the claim that it is now possible to write equally objectively about music's expressive content, how the composer "feels musically", thus producing a situation in which are presented "the rival claims of structure and semantic in music".

I propose to deal with these two approaches to music by considering how they appear in the literature surrounding one particular composer, namely Sibelius; and how they have been developed, expressed and applied
in music analysis in recent years by representative music critics and by at least one composer; noting also some problems which arise from a one-sided approach, and suggesting points which the apparent contradictions have in common and at which they might profitably combine.
Thinking in Music I: Sibelius and Organic Structure.

It is interesting to see that the seven symphonies of Sibelius can be loved and admired not only by those who have supported their opinions by detailed technical analyses, but by at least one critic, who, in his anxiety to defend Sibelius' position as a symphonist at a time when defence, particularly against German criticism, seemed necessary, not only dismissed Brahms, Mahler, and most other 19th century symphonists from the field, but suggested a set of requirements which would make even Beethoven's place in the symphonic tradition seem questionable. By the simple process of listing all the opposites of 19th century German, French and Russian symphonic methods, Cecil Gray (8) evolved his own principles for the ideal symphony, and upon them based his claim for Sibelius as the greatest symphonist since Beethoven.

German critics tended to dismiss Sibelius as a primitive and uncivilised composer, unable to handle great forms. As Weissmann put it, "he was caught in the toils of local colour and found it difficult to attain to symphonic form". (9) Weissmann further implied that the German race was the only one possessing the secret of musical construction on a large scale. Niemann, also seemingly anxious to condemn, claiming that Sibelius had based his thematic material on Finnish folk song, criticised on the ground that folk-song material is unsuited to symphonic treatment, (a criticism that Gray would wholeheartedly accept, were he not convinced from his studies that Sibelius
did not use folk melodies in his symphonies). We shall refer to these criticisms that Sibelius' symphonies are shapeless again later, but at present they are relevant in showing the background of opinion against which Gray wrote.

Comparison of Gray's work with that of Abraham, D. Cherniavsky, Hill, R. Wood and others reveals some interesting facts about musical appreciation and criticism; for while these musicians agree with Gray that Sibelius was a symphonist of considerable worth, they arrive at their estimate via a directly opposite approach, which demonstrates that Gray's basic requirements for a good symphony cannot be inferred from nor applied to, the very music he sought to vindicate by them.

From the premise that the fundamental symphonic principle is thematic diversity, (as opposed to the thematic unity of fugue), Gray argued thus: "Anything which tends to compromise the integrity of this fundamental symphonic principle is antagonistic to symphonic style. Thus the device of linking together the several movements of a symphony, under the autocracy of a constantly recurring motif, (or motto theme), constitutes a betrayal of the innermost spirit of symphonic style.... The faults of modern symphonic writing can in large part be traced to this tendency to break down the frontiers between the separate movements." However, "the movements of Sibelius' symphonies are always formally independent, self-sufficient entities, capable of standing alone ... largely in consequence of the composer's consistent avoidance of thematic inter-connection between the movements". (8)

However, in Abraham's series of linked analyses of the symphonies,
and in Cherniavsky's essay which is complementary to it (7), the emphasis is upon Sibelius' achievement of organic unity by the very processes which Gray denounces, namely, the breaking down of the barriers between movements and sections, and the linking of movements by thematic relationships of various kinds. Indeed, far from demonstrating Sibelius' "thematic diversity", most writers seek to "prove" the greatness of his works by concentrating upon their structural thematic unity.

Evidence of the methods of integration which were to become so very characteristic of Sibelius' mature symphonic technique, is found even in his first symphony, for example in the telescoping of recapitulation with development in the first movement. Towards the end of the development, the first three notes of the opening theme of the allegro, (Ex. 1) are treated imitatively and combined with a chromatic scale figure (Ex. 2):

Ex. 1. Violin I

The texture becomes more chromatic, until another of the first subject themes is heard. (Ex. 3 shows this theme as it appeared in
Though at first this sounds more plaintive than assertive, it finally blossoms out into a triumphant apotheosis of itself, which proves to be not only the climax of the development, but also the beginning of the recapitulation, the two thus being fused together.

Referring to the repeat, in the last movement, of the clarinet solo which had opened the work, Abraham contradicts Gray's assertion that this introductory melody plays no part in the first movement and that therefore the link is a very tenuous one, by demonstrating the similarity between the second subject (flute), (Ex. 4), and bars 17 - 19 of the clarinet melody (Ex. 5) (which themselves derive, via bars 6 - 7, from bars 2 - 3).

Ex. 3.

Ex. 4.

Ex. 5.
The flute figure is used considerably in the development, especially on pages 22-23 of the miniature score (Breitkopf and Hartel edition) where the horns can be heard playing figure x. Furthermore, bars 5 - 7 of the introduction are related to the second part of the second subject. (Exs. 6 and 7).

Ex. 6.

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\text{Clarinet in A (from introduction)}
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Ex. 7.

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\text{flutes and clars. in 8ves.}
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Thus even in this comparatively early work, organic unity can be demonstrated in the existence of thematic relationships.

The telescoping of recapitulation with development seen in the first symphony remained part of Sibelius' usual procedure in his later sonata-form movements. For example, in the third symphony's First movement, in which Abraham finds that the "inner connection between all the motifs is indeed remarkable", the fusion of recapitulation and development subtly reveals the relationship between the first four notes of the first subject, (Ex. 8), and the opening of the second subject. (Ex. 9).
Already in the first symphony, we found Sibelius tentatively connecting two movements, a process which appears in a considerably more developed form in the second symphony, in the fusion of Scherzo and Finale. The repeat of the Scherzo appears to be proceeding in an orthodox manner, but it is interrupted momentarily by a figure on the horns, (Ex. 10), which later proves to have been an adumbration of the opening theme of the last movement, (quoted at Ex. 11).
The trio also returns, but new elements are gradually woven into the tissue and become more clearly defined. The horn phrase on pages 95 and 96 of the miniature score, (Boosey & Hawkes Edition), is a derivation from Ex. 10 above; this becomes increasingly important in the "largamente" passage, and finally leads into the finale, becoming the opening theme of the movement.

A similar process accounts for the structure of the last movement of the third symphony, where a scherzo without trio merges almost imperceptibly into a march-like Finale. Analysis of the first part is extraordinarily difficult, indeed almost impossible, for it consists of "scraps of motives and figures" which are tossed about yet Abraham finds that "careful study does reveal an underlying formal design". The scraps of melody in the first fifty bars, though apparently unrelated, are shown "in Sibelius' familiar way" to be related not only to each other, but also to the chief theme of the second movement, (which recurs fleetingly, page 45 of miniature score, Eulenberg edition). "All these thematic beads are strung together by a viola figure". As in the second symphony, the fusion of the two movements is brought about largely by the adumbration of the finale theme beneath the flying fragments of the Scherzo. The first hint of the finale, a falling 3rd. on the oboe, answered by a rising diminished 5th. on the clarinet, occurs on page 50 of the score; then the embryo theme assumes a new shape on the horns, against the swinging arpeggio string figure (page 53) and finally, after further play on the scherzo's fragments, it asserts itself, (page 60), on divisi violas,
and triumphs over the last flying fragments of the scherzo. A striking feature of the finale proper is the unobtrusive introduction and increasing importance of a motif: (Ex. 12) from the first subject of the first movement.

Ex. 12.

This is transformed, as in Ex. 13, for its first appearance in the last movement, and finally appears as in Ex. 14:

Ex. 13.

Ex. 14.

Abraham comments on this symphony, "as always when Sibelius makes thematic references it is done so unobtrusively that one is half in doubt whether the reference is intentional or only a subconscious recollection .... but deliberate or not, these subtle links strengthen the organic unity of the symphony enormously ...." (7)

The texture of the third symphony's scherzo is built up largely by a synthesis of minute fragments; and in the idea of synthesis lies the clue to understanding many of Sibelius' formal innovations. This applies, for example, to the much-discussed first movement of the second symphony,
with its synthetic approach to symphonic structure, which was regarded as a puzzling innovation when the symphony first appeared. Gray described it as "a veritable revolution .... the introduction of an entirely new principle into symphonic form", where instead of presenting definite, clear-cut melodies in the exposition, taking them to pieces and discussing and analysing them in a development section, and putting them together in a recapitulation, Sibelius inverts the process, introducing thematic fragments in the exposition, building them up into an organic whole in the development section and then dissolving and dispersing the material back into its primary constituents in a brief recapitulation. (8) Julian Herbage (10) objects to this description, on the grounds that "to disperse and dissolve the process of symphonic growth would be a defeatist conclusion to any piece of symphonic thought".

Herbage regards the long passage based on the transformed second subject, (page 19, Poco Largamente, to page 25, Breitkopf and Hartel miniature score), as a part of the development, the climax of which comes with the majestic statement on the brass of a theme from the first subject which leads to the tonic key for the recapitulation. (letter N) (Ex. 15 shows this theme as it appears in the exposition):

Ex. 15.

However, Herbage ignores, in this analysis, the fact that the most clear-cut flowing melodies really do appear in the development, providing
a contrast with the fragmentary nature of the exposition and the recapitulation. Abraham's explanation is perhaps the most satisfactory, for he agrees with Gray that the movement is built by a synthetic method, and notes that Sibelius' second symphony does not represent its first use in a symphony, Borodin having used a similar method thirty years before in his symphony in Eb; (and Sibelius himself had shown a similar approach to construction in his early tone-poem "Lemminkainen's Homecoming".)

The "exposition" section (pages 1-11 of miniature score) consists of a number of apparently insignificant and unrelated fragments, divided into the two conventional subject groups. The main themes are quoted at Exs. 16, 17 and 18.

Ex. 16. 1st. subject:

(a) Violins
(b) Flutes
(c) Horns in F
(d) Flutes
(e) Bassoons
(f) Violins
(g) Violins
Ex. 17: Transition themes.

(a) Oboe

(b) Violins

(c) Flutes

Ex. 18: 2nd subject.

(a) Woodwind

(b) Violin

A short codetta makes a half-hearted attempt to relate these fragments.

"From the very beginning, the development section is marked by the synthetic principle and the themes are gradually woven into a complex". It begins with Ex. 18a, accompanied by 18b. Thus the two parts of the second subject are combined, and synthesised further with Ex. 16c, then with Ex. 17b. The falling 5th of Ex. 17b, becomes dominant, together with the scale figure that had completed the transition to the second subject. At page 15 of the miniature score, Ex. 16a is used as the accompaniment to 18a, with reminiscences of 16e and b. Further development of the transition scale figure leads into the final apotheosis and synthesis of the material, "Largamente". Ex. 18a, synthesised with 16c in Eb, then with 18b, becomes a broad and noble melody; 16c, transformed, is synthesised with 18b, 16a; and finally, (page 25), 16c, as a triumphant
climax, with \(16f\) and \(17b\) on the brass, leads through the return of the tonic key, and shows itself to be a triumphant fusion of recapitulation and development.

In the recapitulation, the constituent elements are repeated, but this does not represent a "breaking down" for they appear in a new order and in new combinations with one another.

The fourth symphony proved hard for its early audiences to accept. They found its structure difficult to grasp, while the austere orchestration and absence of attractive melodies, together with the predominance of the harsh augmented 4th. in the material of all four movements, gave the music less immediate appeal to the ear than that of the three preceding symphonies. However, E. Newman\(^{50}\) maintained that, structurally at least, Sibelius had included nothing in the fourth symphony which could not be grasped by anyone familiar with his symphonic procedure before 1912. He suggested that the difficulty lay in the fact that the fourth symphony was so closely integrated and concise, with the absolute elimination of all inessentials, that it proved a stumbling block only to those whose ears were not able to grasp musical procedure without the help of signposts in the form of extended transitions and clear cadences and codas. Newman likened Sibelius' methods in the fourth symphony to the way in which our ancestors must have built, placing stone upon stone with no mortar to connect them; So Sibelius placed theme upon theme, "omitting unnecessary connecting material".

Abraham, too, recognised that "many who feel the greatness of the music are apparently puzzled by its form and unable to grasp the inner
logic which they are conscious is present". He explained that this is because here Sibelius' symphonic methods (as outlined in his earlier works) are most uncompromisingly employed; he has carried compression so far that the work puzzles its hearers, but "the formal outline of the work is remarkably clear to those who have studied Sibelius' structural methods in his earlier symphonies; and study of the score soon reveals the inner logic". Abraham finds that the first movement, though Adagio, is architecturally a model of text-book sonata-form, - with one modification. We have already seen how, in his first three symphonies, Sibelius fused the recapitulation into the development, and modified the recapitulation. In the fourth symphony, he takes a small step further, and eliminates the recapitulation of the first subject altogether. "One feels that the development, being in the same grey brooding mood, has taken the place of a reprise of the first subject".

The six opening bars introduce motif x, which contains the augmented 4th. so prevalent in the symphony's material. (Ex. 19):

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Ex. 19.
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The grey melancholy theme on muted strings which constitutes the first subject, moves over an alternating pedal F# - E, until the F# in the bass triumphs, the E changes to C#, and after a mere four-bar transition the second subject bursts out in F# major, the tritone which begins it being given added emphasis by its octave transposition. A remarkable point is that this second subject is only nine bars long. There is one transition al
bar, then a thirteen-bar codetta based on the first subject in the strings with $x$ in woodwind to bring the exposition to a close. The development falls into two main parts; after four introductory bars evolved from the first subject, a solo 'cello propounds a curious syncopated melody combining elements from the first and second subjects. After fourteen bars, during which the upper strings join the 'cello, the second part of the development consists of sixteen bars of murmuring muted string background derived from $x$, against which the wind gives out a three-note motive, also closely related to $x$. A new figure, on solo wind, is introduced against the background, and the climax culminates in the second subject, now in A major. The rest of the reprise is note-for-note the same as the exposition.

Nothing, Abraham concludes, could be more concise than this movement; in place of the subject groups of the earlier symphonies, we have single short themes; transition passages are reduced to the absolute minimum and the recapitulation is drastically shortened.

The second movement is a scherzo, though after the trio the repeat of the first section trails off rather inconsequentially. The scherzo itself is a kind of rondo structure, the themes are somewhat fragmentary, and the same basic interval of a tritone is strongly in evidence, for example in the themes of the first section quoted at Ex. 20.

Ex. 20.

(a) oboe

(b) Violin I
A curious 44-bar episode for strings (Ex. 21) proves to be a rhythmic distortion of a figure from the trio (quoted at Ex. 24). Ex. 22 shows a sequential section from the end of this episode, illustrating the prevailing influence of the augmented fourth.

In the trio, we see the interplay and constant repetition of two versions of a basic rhythm, each ending in the germ interval (Exs. 23 and 24).

The most loosely constructed movement of the symphony is the third, which consists solely of alternations of two elements - a flute motif containing $x$, and a motif rising in two perfect 5ths. Each is stated first in a rudimentary form, and develops with every repetition until the 5ths generate a flowing melody under which the augmented 4th. can be heard as cadence.
Fourteen bars from the end there occurs a phrase which coincides with the opening of the finale.

Nothing could be in stronger contrast to this short rhapsodic movement than the finale, which is long and comparatively symmetrical though diffuse in structure. A strange feature is the "development" section, which consists of nineteen bars of rushing C major scales for strings, unison, against which the triangle plays one of the first subject motifs, the bells another. The recapitulation follows with the second subject preceding the original first group of themes. Abraham describes the movement in sonata form, but suggests it may as easily be described as being in Bogenform - the apex of the arch being the C major string scales.

Although the fourth symphony is in four separate movements, we have noted the presence throughout, "almost in the manner of a leitmotif", of the augmented 4th; the link between the scherzo and trio; the evolution of a theme from two fragments in the third movement; and the quotation of the finale's theme at the end of the third movement; all of which remind us that Sibelius was by no means so concerned to maintain the barriers between movements and sections as Gray asserted so positively that he was.

The opening movement of the fifth symphony is structurally the most puzzling of all Sibelius' first movements. However, Abraham finds a basis for explaining this movement in his analyses of the earlier symphonies, for the movement is "a perfectly logical synthesis of various methods previously employed", including the telescoping of a curtailed
recapitulation with the development, the increasingly subtle fusion of scherzo with finale, and the connection of sections by thematic cross-reference. All these combine to make "a piece of musical architecture completely unlike that of any other symphonic movement ever written".

The "tempo molto moderato" section opens with a normal exposition, with the first subject group in Eb, the second in G. The horn theme with which the work opens begets a woodwind pendant of considerable importance, which in turn engenders a figure for woodwind in thirds. After the second subject group, which consists of three themes, there comes a section which may be regarded as the equivalent of the late 18th century repeat of the exposition, though the repeat here is very free, and both groups are centred on the tonic key. The object of this repeat is to establish both the themes and the tonic with the unusual emphasis necessary if the equilibrium of this big work is not to be upset.

The development begins with a fugal treatment of an "insignificant scrap of theme" linking the two subject groups in the exposition, but omitted from the repeat. The theme quickens by diminution into a chromatic murmuring on the strings, against which the original figure sounds from clarinet and bassoon. After a "largamente" development of the second subject's first theme, the key changes to B major, the horn theme and its pendant ring out on trumpets, and as the time signature changes from $\frac{12}{8}$ to $\frac{3}{4}$, the rest of the development assumes a definitely scherzo-like character. The scherzo is almost entirely evolved from the opening horn call (ex. 25) much of it being woven round an ostinato figure which
uses the first four notes of this theme. The opening phrase of the

Ex. 25. horns (written notation)

scherzo section (Ex. 26) is derived in part from this opening horn call, while the theme of what

Ex. 26.

serves as the trio (Ex. 27) is also related to it.

Ex. 27. Trumpet

Presently, flying fragments of the second subject's first theme, then of the opening horn-call appear, and the trio theme "gradually dies, throwing out a new sprout which survives and becomes important, and imperceptibly we enter on a final section which is neither a repeat of the scherzo nor a sonata-form recapitulation, but does duty for both, being based on transformations of the material of the exposition. The close relationships between all the themes used in this movement contribute much to its integration".

The above description of the fifth symphony's opening movement is an abbreviation of Abraham's detailed analysis; and it is interesting to note that while Abraham considered such detail necessary to explain a very puzzling movement, Gray comments that "the form of all the movements of the fifth is comparatively straightforward". (8)
Both Abraham and Herbage consider the sixth symphony one of the most interesting examples of Sibelius' symphonic methods, and even Gray finds that "the chief interest of the work is formal". Abraham considers the first movement to be one of Sibelius' most highly-organised compositions and finds in the symphony as a whole a pronounced strengthening of the tendency for the essence of the music to be embodied less in definite themes than in the harmonic, contrapuntal, instrumental texture as a whole. "The themes seem to be thrown up ... out of the complex musical stream, instead of the stream of thought being evolved from the themes ... This sort of musical thinking really defies analysis". The opening of the first movement is characteristic of this non-thematic style, with thirty bars of vague, almost amorphous polyphonic texture, before the first real theme appears on oboes and flutes. The second subject lacks definiteness, too, for it "begins with a striking instance of that method of reshaping a theme motif by motif which Sibelius seems to have learned from Borodin", and which reminds Abraham of the child's game of altering a word letter by letter so that "cat" becomes "dog" via "cot" and "tog". The development is pervaded from beginning to end by an incessant spizzicato figure derived from a motif of the first subject, against which background other thematic fragments are projected, in a manner which recalls the similar process in the developments of the fourth and fifth symphonies' first movements; and the beginning of the recapitulation is most skilfully dovetailed into the end of the development. "Whereas the exposition was hesitant, indeterminate, a collection of seemingly rather heterogeneous elements, the recapitulation is a
confident, clear-cut, perfectly-welded whole", due partly to the different scoring and treatment of the material; and partly to the replacement of the tentative opening to the second subject by a brilliantly-scored passage, which might possibly be considered a further development of it. Abraham's comments on the different character of the exposition and the recapitulation are echoed by Herbage. "Though it often takes some time at the beginning of a movement for the main thematic material to appear, with clarity, the conclusions have an epigrammatic clarity and conciseness". Of the sixth symphony's finale, Herbage writes that "the conventional musical analysis, consisting of an indication of the general structure, interspersed with a few thematic quotations, becomes increasingly unsatisfactory. The musical thought has become so subtilised that only copious quotations showing the interrelation of thematic material can give any idea of the constructional processes in the composer's mind." Herbage considers that the broad chorale introduction to the finale contains the germ of practically all the thematic material of the movement and suggests that the movement is "the quintessence of Sibelius' musical thought". Here the development of one theme is made so much the basis of the formal structure that it would be nearer the truth to speak not so much of separate subjects as of successive stages within the gradual evolution of the first theme. Ex. 28 shows these successive stages:
Abraham, describing the formal outline of this movement as a 'Bar' (two 'stollen' and an 'Abgesang') with introduction and coda, also notes the thematic derivation, and both writers comment upon the coda's relationship to the opening chorale, by the quotation of one of its phrases (Ex. 29) in the 'cello, with a free mirror inversion of it in the violins (Ex. 30).
We have abundant evidence already to demonstrate how thoroughly Gray's assertions that Sibelius' symphonies always fall into separate, complete and unrelated movements are contradicted by later examinations of the scores. Yet of course, Gray could not be blind, (or deaf) to the fact that Sibelius' symphonies are not all in the usual four movements. Mozart himself occasionally departed from this customary division, (for example, in the 'Prague', 'Paris' and 'Linz' symphonies, all without minuets), and Gray regards the third and fifth symphonies as straightforward three-movement works which do not call for special comment, while he considers it quite acceptable that Sibelius should have written his last symphony as one movement. In fact, when we read Gray's comments on the separate symphonies we find that he is by no means so unaware of Sibelius' formal procedures as his sweeping criticisms and generalisations (already quoted) suggest. True, he refrains from mentioning even the most obvious thematic links between movements, (one exception is the anticipation in the fourth symphony of the finale's opening theme), but he notes that the last movement of the second symphony follows the scherzo "without a break", a procedure made acceptable to him by Beethoven's fifth symphony. He notices too that the seventh symphony "is in one gigantic movement, based ....... upon the same structural principles as the first movement of the sixth, that is to say, it has one chief dominating subject .... and in addition a host of small pregnant fragmentary motifs, of which at least a dozen play a prominent part in the unfolding of the action".
This is the most that Gray says about those "fragmentary motifs" which the detailed analyses of the seventh symphony by other writers have shown to be intricately related by the same processes of thematic-motivic relation discussed in connection with the earlier symphonies. Abraham has analysed these thematic connections in detail, to demonstrate his view that whereas early composers had experimented with the idea of one-movement symphonies and sonatas (for example, Schubert, Schumann and Liszt), no-one had contrived to produce a genuinely organic whole, while the most remarkable aspect of Sibelius' seventh is that it is an organic symphony in one movement - a "single indivisible organism", superior to other one-movement works of the same type in that the "sections" merge "gradually, imperceptibly and without any break in the logical tissue of the music". His suggestion that the whole symphony is in a sense one vast development, thereby defying any attempt to label sections, finds support in Julian Herbage's explanation that analysis of the symphony is impossible, since "the themes are here in a continual state of growth, and any quotation of them cannot possibly show the process whereby they grow. Their relation to each other, too, can be indicated only at a particular point in their development". Herbage, like Abraham, apparently considers that this is the only really coherent one-movement symphony ever written. Abraham's analysis shows the "plan" of the work and reveals the inner relationships responsible for the remarkable organic unity.

At the outset, three basic germs are presented; the first consists of deliberate rising scales on the strings, the other two (Exs. 31 and 32)
are mere snippets of cadential figures, but these three motifs serve to bind the work together. Ex. 32a. can be seen in the themes which follow it, (Ex. 32 b and c.)

Ex. 31.

Ex. 32. (a) Violins (b) Flutes

The first section ends with a piece of pure diatonic polyphony for strings, in which the first cadential figure (Ex. 31) is noticed. (Ex. 33). At the height of this passage, the trombone intones a most impressive melody which begins with the second, descending cadence figure and recurs at important points throughout the work. (Ex. 34.)

Ex. 33. Violin

Ex. 34. Trombone

As the transition section quickens in tempo, a combination of the scale germ and the rhythmic figure, (Ex. 32c) leads into the second section (B) which consists of development of previous material with some new features. A tune for woodwind, derived from Ex. 34, is treated in canon; the oboes, in 3rds, have an important figure (Ex. 35), which will recur later (page 16 of the miniature score, Wilhelm Hansen edition).

Ex. 35. Oboes.
After a loose repeat of this development section, Ex. 35 is heard again, as the pace quickens, and (page 20) sprouts into two new ideas (Exs. 36 and 37) which will be seen to be the basic ideas of the next section, which is a scherzo in character. Ex. 37 is transformed, by the simple process of repeating crotchets instead of holding a dotted minim and the scherzo (Section C) begins. A phrase at the beginning of C is a note-for-note repetition, in new rhythm, of one of the phrases introduced in Section B (Exs. 38 and 39).

A further figure on violins, (Ex. 40) in the bridge passage to the next section, quickens by diminution into one of Sibelius' familiar ostinato figures, and serves to impart greater unity to the two sections, C and D. (Ex. 40). D consists of a restatement of the trombone tune over this ostinato figure. At the "poco a poco meno lento" a "new" figure is heard on the horns. In fact, it is closely related to the figure on violins, page 13, bars 1 - 2 (Ex. 41) which in turn is derived
from, or contains the second germ motif (Ex. 31).

Ex. 41.

Since this horn figure (Ex. 42) is to be transformed to play an important part later, we see how even apparently insignificant fragments are all being made to play an integral part in the whole of this symphony.

Ex. 42.

The music again quickens, to section E. This is more clear-cut than the other sections, and the themes appear to be new, though the main theme (Ex. 43) is related to the trombone tune, and the undulating phrase which occurs later (ex. 44) is related to the trombone tune's first two bars, as can be seen by comparing Ex. 44 with Ex. 34.

Ex. 43.

In the course of this section, a clucking rhythmic figure is heard on the woodwind, ex. 45: this proves to be

Ex. 45.
a transformation of Ex. 42, and at the change to "Vivace" is seen as one of the main themes of section F, a second scherzo. At the end of this scherzo, the transition slows down, while the horns play the first germ motif, (ascending scale) leading almost imperceptibly into the final section, G, which consists of the third statement of the trombone tune as a brief "recapitulation". The high divisi strings remind us of the opening polyphonic passage, while the coda recalls the rhythmic figure, Ex. 32c. At the very end, the second two germs, (the cadence figures) are used in such a way as to suggest that Sibelius used them consciously as germ motifs.

We have so far concentrated almost entirely upon two integrating devices prominent in Sibelius' symphonies - the linking and fusion of movements or sections, and the use of thematic relationships. In Abraham's discussion the degree of integration achieved is continually stressed, and the most detailed consideration is afforded to just those movements most representative of Sibelius' power of achieving organic structure by these means.

David Cherniavsky complements Abraham's analytical essay, and supports his high estimate of Sibelius' structural achievements in his study of "the means whereby Sibelius gradually attained to an ever-greater sense of unity within each whole work, arriving in his later masterpieces at that unique coherence, at that oneness of conception, which is revealed in Tapiola, and the sixth and seventh symphonies". (7) Cherniavsky notices in addition to the two technical devices emphasised by Abraham, a feature
which he considers to be the most important of all, "both for its intrinsic value and as an example for the future" - namely, Sibelius' tendency towards spontaneously evolving his themes throughout an entire work from one or two "thematic germs", a process which, together with the linking of movements and relation of themes, enables him to attain a high degree of unity within diversity.

For example, Cherniavsky considers that the all-pervasive germ of the second symphony's material consists of a falling 5th, invariably distinguished by the accented beat falling on the higher note. He cites themes in all four movements which are especially characterised by this interval, to demonstrate "to what great extent this vitally pregnant phrase has been used by Sibelius in his second symphony", and explains the absence of the interval from some of the material (especially that at the beginning of the last movement) thus: "Naturally it would be wrong to expect every theme to have been evolved from this figure, for although such close unity might possibly be confined to one movement (for example, the first movement of Beethoven's fifth symphony, ) it would only become monotonous if extended throughout an entire work. In fact diversity of thought and mood is quite as important as unity within such large-scale compositions"

The coherence which Gray and Scott Goddard, (7), as well as Cherniavsky, have noticed in the string quartet, "Voces Intimae", "comes about in three distinct ways" - by the extensive use throughout the work of purely conjunct motion; the repetition in more than one movement of more or less identical passages; and "the use in all five movements of a single thematic germ",
which Cherniavsky again considers to be the interval of a falling 5th. (Scott Goddard attached more importance to the falling 4th. However, he does not concern himself with the interval's function as a germ-motif; his observation is mainly confined to the descending 4th. in the opening melody of the first movement, which reappears with the intervening steps filled in, at the opening of the last movement). Cherniavsky again cites examples of the appearance of the germ interval, and concludes that "this quartet leaves us with a feeling of unity equalled only in the quartets of Beethoven's last period".

The use of the germ interval of the augmented 4th in the fourth symphony "together with its attendant freedom of tonality, and the extraordinary concentration of thought and intensity of mood ...... succeed in establishing a sense of unity such as has hardly ever been equalled in any other symphonic work", while "in the 6th. symphony, as also in the seventh, and "Tapiola", Sibelius reaches the final stage in his quest for, or in his spontaneous achievement of complete unity." Again, Cherniavsky attributes the attainment of this unity in the sixth symphony to "the vital presence of a thematic germ", accompanied also by further interrelation of all four movements by the recurrence and transformation of an integral theme, consisting of a minor scale of five notes rising from the tonic. This germ theme may be heard in the first three movements, and "returns, exceedingly frequently, quite often in developed forms", in the finale, appearing in practically its original form again in the
"doppio piu lento" coda. The thematic germ, which adds further to the complete unity of the whole, now consists of a rising 3rd., invariably distinguished by the accent falling on the lower note. Cherniavsky traces this germ interval through the movements, noticing especially that it assumes real importance in the coda to the finale. Here, (beginning four bars before P in Hansen miniature score) strings and wind answer each other in antiphonal phrases, and in each of the phrases, the characteristic interval appears. "And it is mainly due to the thematic germ recurring ...... in this way, as also to the final repetition of our germ theme, that we feel this last section to be so organically part of the movement". This explanation of the coda's relation to the rest of the movement adds to that of Abraham.

It is interesting to see that Cherniavsky has also discovered "germ-relationships" integrating the material of single movements. For example, he suggests that in the second symphony's first movement, practically every theme evolves from a single melodic germ of three descending consecutive notes.

It is strange that, emphasising the thematic unity of the symphonies as they do, Abraham, Herbage and Cherniavsky do not refer to the difference in approach between themselves and Gray, although both Abraham and Cherniavsky refer to his study in other contexts. However, it is the prime concern of W.G. Hill (11) to "correct" the misconceptions perpetuated by Gray's commentary on Sibelius. Though he refers to Abraham's symposium, Hill appears not to have noticed Cherniavsky's essay,
for he claims that his own "discovery" of Sibelius' use of germ motifs adds "another and perhaps significant viewpoint" to Abraham's study, and he demonstrates his discovery by a very detailed examination of the fourth symphony. Whereas earlier commentators had noted the use throughout of material related to the opening phrase with its characteristic interval, Hill considers that the work has two more basic motifs. Of these, y, (Ex. 46) is first heard in the brass figure which closes the first movement's second subject, and is most often represented by its initial falling 5th, though it occasionally appears complete (as in bars 49-50 of the third movement, on the oboe).

Ex. 46.

Motif z first appears at bar 66 of the first movement, in the first section of the development, and reappears in all subsequent movements. (Ex. 47).

Ex. 47.

It is treated much more importantly in the harmonic than in the melodic aspect, being particularly well-suited to this treatment, as its range is the striking interval of a major 7th; it appears in both rising and falling aspects. Hill traces the occurrence of each of these motifs, and of the augmented 4th, adequately demonstrating "the tight structure and thematic economy" which he sees illustrated in marvellous fashion in the fourth
symphony. These characteristics, again dependent upon Sibelius' use of germ motifs, can also be found, he believes, in others of the symphonies, and in them lies much of Sibelius' "great significance as a composer". His whole study is very similar in approach to that of Cherniavsky, and the conclusion echoes Cherniavsky's claim that it is largely in his achievement of complete unity in diversity, by the technical means illustrated, that Sibelius "has risen to such greatness and overwhelming mastery of expression in his later works".

Acclamation of Sibelius' masterly handling of form and achievement of organic unity is not confined to the writers quoted. Constant Lambert, whose admiration for Sibelius is well known, also hails him enthusiastically for his "astonishing powers of sustained musical thinking", and anticipates Abraham's analyses, tracing the increasingly tighter integration of the symphonies up to the seventh, in which Sibelius reaches "perfection of structure".

Lambert refers to Sibelius' "power of sustained musical thinking", and it is demonstration of this power which is the prime concern of the analyses by Abraham, Cherniavsky and Hill. The logic of his musical thought appears to lie in the thematic integration and organic development of his symphonies, for which bold claims have been made. We may quote yet again from Cherniavsky, who considers that Sibelius "has approached nearest to the complete freedom and organic growth of Nature, and to a higher degree of integration than had hitherto ever been achieved".

Ralph Wood, too, enlarging upon his description of Sibelius as a composer who "thinks in music" writes that the most important form "thinking
in music" takes is the achieving of continuity of growth, which can be felt to exist in a composition when every successive section, line, phrase and bar of it, is only what it is because of what the immediately preceding section, line, phrase, bar and all their predecessors were. "This is the most important kind of thinking in music, some would say it is the only real kind", and Wood considers Sibelius its most thorough-going exponent. "Many more or less cultivated listeners .... find his best music obscure, but only in one aspect, that of form; and there the trouble is not that the music fails to hang together ...... but on the contrary, that it hangs together with such remarkable cohesion, its continuity so unbroken, and so without separation, that the ears, and behind them the minds, of musicians over-used to the far lesser continuity of most other contemporary composers find the absence of signposts and boundary marks bewildering, and the consequent call for long-breathed attention too exacting".

Devotees of Mozart, and of the classical symphonists in general, may well question the exalted position given to Sibelius the symphonist in the foregoing references. However, those who acclaim Sibelius as a master of organic form are careful to explain that "form in the case of the later symphonists means something essentially different from Mozartean form, something almost as different as the form of a tree or a human anatomy from the form of a cathedral". This comparison by Abraham is echoed in Julian Herbage's words; "There is none of the symmetry of architecture in this music, but rather the asymmetrical growth of nature. Yet, beneath this superficial waywardness, can be discerned the most closely-knit musical organisation". Ernest Newman, who considers the seven symphonies to be a
progressive series, showing the composer reaching an ever-higher degree of conciseness and integration culminating in "the inevitable organic unity of the seventh symphony", also relates the ideas of "form" in Sibelius and Mozart, and says that, whereas, for most people, form is what one finds at its highest perfection in Haydn, Mozart and Beethoven, especially Mozart, in any broad view of the art, form of the type in a Mozart first movement is really a rather rudimentary affair, with its "cut-to-length limbs, and its symmetrical balance of parts". In later stages of the art, balance is obtained by less obvious symmetries in the arrangement, as is demonstrated by Sibelius' seventh. This symphony puzzles the "ordinary academic listener" by the absence of simple, and obvious mathematical symmetries to which he has grown accustomed in the classics and which he has come to regard as form per se, so that the symphony seems formless". (Compare the criticism of Weissmann, quoted on page 19). However, Newman insists that the "seventh symphony is not formless in comparison with a Mozart first movement; on the contrary, it represents a much more highly-organised form" (52). An article of Newman's on Brahms' piano music (53) makes this suggestion clearer. He quotes Coleridge's description of Shakespeare's method of working; "He goes on creating and evolving B out of A, and C out of B, and so on, just as a serpent moves, which makes a fulcrum of its own body, and seems for ever twisting and untwisting its own strength". Newman suggests that a similar idea will influence the instrumental music of the future, especially as already "the way to it seems to be opening out before modern composers in proportion as they discard the last tiresome vestiges of sonata form". 
The Romantic Symphony

Comparison of Sibelius with other symphonists, especially Romantic symphonists, is inevitable if the claims that he has attained a "greater" unity, and a "much more highly organised form" are to be substantiated. Gray is not the only writer to compare Romantic symphonists unfavourably with Sibelius. Cherniavsky, for example, attempts to explain the historic significance of Sibelius' achievement - "In order to understand the full significance of this approach, it may be as well to view it in perspective as the natural culmination of all progress up to this time". The attainment of unity in diversity has been a problem facing composers ever since the sonata became an established form. Even as early as the sonatas of Vitali, Corelli and Tartini, we find the basic principle of cyclic form which was later to be used more consistently as a means of unifying a work, already in existence, with occasional transfer of themes between movements, changing of position of themes within a movement, or building of single movements on transformation of one theme. Later, for example in sonatas and symphonies by C.P.E. Bach, and in Haydn's sonata in A major (26), and Mozart's symphony in D, (k. 181), the individual movements have already begun to be linked together to form one complete whole; and Haydn and Mozart may also relate the minuet theme to the trio, or the first movement theme to the finale. However, the real problem of establishing coherence in the complete work only became acute when Beethoven began to infuse each of the movements with a strongly-marked character of its own, thus increasing the diversity and contrast. Previously, pattern, or
perfection of form, rather than mood or expression, had been the most vital element in music, (says Cherniavsky), and variety within pattern naturally implies a far less fundamental type of diversity than does variety of mood and expression. Composers since Beethoven have increased the contrast between the character of each movement, even between each theme, and between the tonal centres, and have consequently been faced with a more intense and more deliberate struggle to retain an equal correspondence between them.

Cherniavsky discusses, in his survey, methods of achieving unity which became prominent in the 19th century. Beethoven, in his fifth symphony and first Rasamovsky quartet, extended his scherzo, and in the violin concerto and several piano sonatas, (including the "Appassionata", and "Waldstein") extended his slow movements so that these led naturally into their respective finales. In his C# minor quartet, he linked together all seven movements, so as to create one continuous tonal conception; and in several piano sonatas, (including op. 13, op. 31 No. 3, op. 106, op. 109 and op. 110,) as well as his Bb quartet, op. 130, we find "thematic germs" stealing their way imperceptibly into more than one movement; while in the fifth and ninth symphonies, and again in several piano sonatas, themes are deliberately recalled in later movements. Relating movements by definite interchange or transformation of themes became a favourite method of later composers, Schumann, Brahms, Chopin, Tchaikowsky, Dvořák, Franck, Bruckner and Elgar each contributing towards its advance in many of their most representative works, (for example, with the cyclic method of Franck, d'Indy and Saint-Saens,
the representative themes of Liszt, the motto themes of Tchaikowsky and Dvořák, and the idée fixe of Berlioz). At the same time, composers were trying to impart still greater coherence to the whole by grafting together their separate movements. Examples include Schubert's "Wanderer" fantasia, Mendelssohn's "Scottish" symphony and his violin concerto, Schumann's D minor symphony, and Liszt's piano sonata and concertos.

Cherniavsky considers that "although these methods were not always entirely successful in their aims - (sometimes interfering with the formal perfection of the individual movements and often being too evidently intentional rather than latent in the original conceptions), they certainly marked an important stage within the gradual comprehension of entire works as a whole, and undoubtedly were indispensable to recent developments, "and also to the especially organic achievements of Sibelius. For Sibelius has furthered and has brought to a higher state of integration all three of these special lines of advance."

Consideration of what Lambert refers to as "the symphonic problem" forms the background not only to Cherniavsky's study but to most other assessments of Sibelius' formal achievements, in which he is presented as the composer who above all solved the problems facing symphonic composers after Beethoven, problems which were inherent in the attempts of Romantic composers to construct extended symphonies and sonatas in the Beethoven tradition with material which no longer demanded the classical forms for its expression. For it is suggested that in works where this problem is evident, not only is the overall structure itself disrupted by excessive contrasts, but there is also a fundamental incongruity between the character
of the musical material used and the demands of the symphonic structure into which this material is expected to grow.

One of the main deficiencies of the 19th century was the inability to invent themes which would bear symphonic development. The most suitable themes for symphonic construction are often quite brief and apparently insignificant. Their potentiality lies in the fact that they are not complete in themselves, they pose a problem the consequences of which will only be resolved later, and they "depend upon continuations, explanations, clarifications, conclusions and consequences". (Schönberg) Most 19th century composers, however, tended more to a lyrical than to a dramatic type of invention, so that their themes often were too significant and complete to need symphonic expansion; while the use of folk song as thematic material presented the same problem. The suggestion that when you have played a folk song once the only thing you can do with it is to play it again, only louder, emphasises the fact that symphonic treatment of folk song or lyrical material is an attempt to expand something that is not prepared to grow, so that the inevitable result is the short-windedness and lack of inevitability attributed to most post-Beethoven symphonists.

For example, D. Hussey (10) writes of Mendelssohn that in spite of his undeniably skilled craftsmanship, "he had not the ability to create the kind of germinal theme that grows and develops a new form under the composer's hands"; while S. Williams (10), though he enjoys listening to
Schumann's symphonies, admits that Schumann, too, is essentially a lyric rather than an epic composer, and quotes Tovey's explanation of Schumann's weakness as a symphonist: "Schumann was a master of epigram", but "large forms imply the expansion of initial ideas by development; and development is the very thing that an epigram will not bear". Cooper, discussing Tchaikowsky, (10), begins by stating that "Tchaikowsky was not a symphonist by nature", and continues, "His melodies have scent, colour and glamour and sometimes violent emotional expressiveness, but they are not seeds from which the composer can make a whole forest grow. They are not seeds for the very good reason that they are flowers; they appear in full bloom, one by one, and there is very little that Tchaikowsky can do with them except arrange them artistically into a bouquet." Recalling that Abraham's demonstration of how Sibelius "thinks musically" consisted largely of describing the thematic and structural process of growth, it is significant that Cooper, after this description of Tchaikowsky's symphonic method, should add, "Tchaikowsky does not think; he feels emotionally, and he experiences with his senses, and the result is often beautiful and pleasing to the ear; but it lacks the specifically symphonic character."

The emphasis on emotional expressiveness is suggested, for example, by the directions for performance of the second subject of the first movement of the sixth symphony: "Con sordini, teneramente, molto cantabile, con espansione."

Criticism of lack of symphonic invention is by no means confined to the three composers mentioned in the foregoing paragraph. Hardly any
composer who attempted large-scale construction in the 19th century is spared. For example, G. Abraham (13) notes that Bruckner, Borodin, Dvořák and Franck, as well as Mendelssohn, Schumann and Tchaikowsky, all lacked Beethoven's and Wagner's power of conceiving pregnant germ themes and developing them symphonically. Brahms "is not remarkable for striking thematic invention", although he was "clever at covering his tracks", for his mastery of variation helped him to overlap joins and present a seemingly connected whole. In view of the principles evolved by Gray for his ideal symphony, (considered earlier - see page 20), it is not surprising that he should go much further than Abraham and firmly reject all 19th century symphonists between Beethoven and Sibelius. Franck's D minor symphony is described as "the unapproachable model of everything that should be avoided in symphonic writing", while the symphonies of Bruckner, Mahler, Tchaikowsky, Elgar and indeed "of every important practicioner of the form in modern times, sin in one or more crucial respects against the symphonic spirit". Though Schubert was "potentially a great symphonist", Mendelssohn and Schumann were "essentially Romantic lyrical miniaturists, with no real sense of form on a large scale, incapable of conceiving thematic material of a genuinely symphonic order, or of developing it symphonically even if they had been able to do so"; and "the same criticisms apply to a very great extent to the symphonies of Brahms also", especially since he once said "in an unguarded moment, that whenever he wished to compose, he thought of some German folk-song, and then his theme presented
itself to him. The consequence was a complete lack of that variety of mood and breadth of style which are the principle requirements of symphonic writing. (8)

Cooper's comment that Tchaikowsky "experiences with his senses" in his symphonies reminds us that it was not only unsuitable thematic material which caused disruption in Romantic symphonies. Most 19th century composers, especially those earlier in the century, (Schumann, Mendelssohn, Chopin), showed themselves most at ease in the composition of miniatures, (especially for the piano or solo voice), where they could express one mood in a small, self-contained piece, lingering over individual effects of colour and expressiveness without thereby destroying the structural progress of a large work. This tendency to dwell on harmonic or orchestral colour for its own sake, perhaps repeating a particular phrase or passage out of sheer delight in its sensuous effect, though appropriate in a small work, proved a further disintegrating force when it passed into the symphonies of the 19th century. In a large symphonic structure, individual, momentary effects must remain subsidiary to the overall plan and progression of the work, and any repetitions or digressions must justify themselves with regard to this overall plan. The integration of a work might, for example, be destroyed by modulation to a distant key for the sake of colour, if provision has not been made for a logical and inevitable return to the tonic key; while the repetition of a striking melody for the enjoyment of its individual effect, may inhibit organic growth. Abraham refers to this when he writes
(of Liszt) that "the dazzling idea as such was sufficient unto itself, and called not for elaboration but for enthusiastic repetition". (13).

We have seen that Gray considered the device of linking movements by thematic relationships was one of the contributory causes of the corruption of symphonic style; however, most other writers take Cherniavsky's view, that the device was used, deliberately or not, in an attempt to integrate a structure which was already in danger of falling apart. For example, Einstein, (14), who considered that the Romantic symphonists' constant problems were due to their idea that Beethoven "had burst form asunder", and thus left them free to adopt a relaxed attitude to symphonic form, emphasises that, recognising the danger of their freedom, they had recourse to "motivic safeguards", which were not found necessary by classical composers. For example, Schubert used such a safeguard in the thematic connection of the "Andante" with the "Allegro con moto" in his ninth symphony, while Berlioz and Liszt are also cited by Einstein as composers who consciously and deliberately adopted principles of motivic unity. In Schumann's D minor symphony, however, Einstein feels the unity is not merely an external feature, for all the movements are developed from melodic seeds given in the introduction, (a fact which caused Abraham and Cherniavsky to hail the symphony as an important predecessor of Sibelius' works); while proclaiming that "we here stand before a new form of the symphony," Einstein yet adds significantly, "one possessed of a thematic homogeneity of which Beethoven had felt no need". (Einstein does not explain what he means by this. He appears to ignore
similar examples of "thematic homogeneity" in Beethoven's own music.) Bayliss's reference to Franck's cyclic principle as a means of giving a sense of "added unity" also suggests the need for deliberate external measures to help overcome inner disintegration. (10)

Comparing the use of thematic devices by 19th century composers with the subtle thematic links he has discovered in Sibelius' symphonies, Abraham concludes that "theme-transformation on deliberate Lisztian-Franckish lines is a rather mechanical way of binding several pieces of music into a unified whole", while 'Sibelius' subtle links strengthen the organic unity of the symphonies enormously, and far more satisfactorily than the crude use of motto themes (à la Tchaikowsky) or cyclic themes (à la Franck)." (7)

It is interesting to compare the claims made for Sibelius with the references to Brahms by H.C. Colles (15) in his discussion of 19th century composers. He makes no mention of Sibelius, whose main work was produced outside the period Colles deals with, but claims that the composer who above all achieved unity in a truly organic way is Brahms. Colles recognises that the possibilities of thematic interrelation of the more obvious kind as a means of gaining closer unity of design are limited, and thus he perceives in Brahms' F minor piano sonata a unity not found in the other two piano sonatas, which both employ thematic transformation, a device hardly used in the F minor sonata. "The unity in the latter work is found essentially in an emotional sequence, and in
the distribution of keys, for four of the five movements gravitate towards the key of D minor. Like Sibelius after his first symphony, Brahms, after his first two piano sonatas, must have discovered that thematic transformation by itself would not carry him very far, though he did use the device later, in, for example, the third symphony. It is the fourth symphony which most engages Colles' attention, for he says of it: "the more one studies it, .... the more is the Finale felt to be the natural consequence of the preceding movements. This, however, is something which cannot be established by argument, for there is no thematic link between the several movements". It is significant, in view of the usual comparison of 19th century symphonies with those of Sibelius, that it is the very absence of any demonstrable unifying procedure which leads Colles to conclude that "one is tempted to think of this work as the highest example during the period under discussion of that principle of organic growth which is the essential factor in the symphony". The claims are almost the same; but Colles bases his conclusion on the fact that Brahms' fourth symphony is "felt" to be unified, while Abraham and others are concerned with demonstrating the subtle unity of Sibelius' symphonies, thus "proving" his superiority over other symphonists.

The strong tendency of the 19th century to ally music with literary or other non-musical ideas increased the difficulties caused by the apparent dichotomy between "content" and "form", or between "programme music" and "pure music". For the increasingly frequent association of a musical composition with a literary idea, denoted by the work's title, or
made much more explicit by a programme presented with the music, raised the question of what, if anything, music was capable of expressing, together with thorny questions concerning the extent to which the structure of a musical work was influenced by its literary association or its "content". The rapid expansion of the orchestra, and the vast widening of harmonic possibilities opened up a whole new world of sound and expression, which led intoxicated musicians to believe that music's possibilities of expression could not be limited; and where an elaborate literary programme was not presented by the composer, it was usually supplied for him, so that listeners were encouraged to "interpret" music's language in terms of its reference to a literary or pictorial idea, or in terms of a psycho-drama. Strauss' claim that the day would come when he would be able to describe a fork in music, and his actual imitation of sheep in "Don Quixote", and of a crying baby in "Sinfonia Domestica" represent a very different conception of programme music from that which Beethoven had in mind when he offered his "Pastoral" symphony as "more an expression of sentiment than a painting"; and one would say that Strauss went as far in attempting to express the concrete in music as it is possible to go, had "Pacific 231" and "Rugby" not followed his late symphonic poems.

Consideration of this preoccupation with "pictorial music" again frequently leads to an expression of the criticism that 19th century music suffers from structural disintegration. For example, Lang (16) expressed the oft-repeated criticism of Strauss when he said that Strauss' music really requires a detailed knowledge of the programme if sense and
coherence are not to suffer, thus suggesting that Strauss, too, found the construction of large forms along "absolute" lines a problem that he was unable to overcome without the programmes, "the episodes of which he marked with characteristic motifs fathered by the Wagnerian system."

"This was not an eminently musical solution, but the significant fact is that the problem itself was a musical one". Strauss realised the futility of attempting to write "absolute" sonatas and symphonies, and for him the programme became as significant a unifying device as the thematic devices of Tchaikowsky and Franck. Like them, too, it remained external, while the inner organic cohesion of the music proved just as elusive for Strauss to obtain.

Another composer for whom literary association is considered to have failed to provide a vitalising intra-musical integrating element was Berlioz. Whereas Liszt and Strauss wrote their symphonic poems in freer forms than that represented by the symphonic first movement, Berlioz, in his programme symphonies, "tried the impossible - to retain a sonata construction with its formal sections, and then to subject it to an extra-musical programme which determines the course of procedure". Thus his symphonies "represent a tragic conflict of mind and instinct - for as the poetic, dramatic ideas, the programme, were applied to any well-articulated formal construction, the result was necessarily a failure"; and yet in the movements where he let his imagination have free reign, with merely a literary idea to set the mood, "he composed music of the greatest originality and compelling genius". (Lang) (16)

Liszt is also frequently described as allowing pictorial and narrative
ideas to influence the structure of his musical works, (the usual implication being that he thus failed to achieve greatness as a musician). Lang, however, claims that Liszt, in fact, was the only composer of the 19th century truly to understand Beethoven's definition of programme music as "more the expression of sentiment than a painting", and that Liszt's great achievement "consisted in proving that it was possible to create a well-rounded and logically organised piece of music without forcing the ideas into the established frames of traditional forms". This he achieved by following a programme - but the "programme" as he understands it, is apparently much less defined and rigid than we are often led to believe. For in "Gesammelte Schriften" II : 130, (quoted in Lang) we find Liszt writing, "Since his (the musician's) language is more arbitrary and more uncertain than any other ... and lends itself to the most varied interpretation, it is not without value (and therefore not ridiculous), for the composer to give in a few lines the spiritual sketch of his work, and without falling into petty and detailed explanations, convey the idea which served him as a basis for his composition". In Beethoven, and, Lang implies, in Liszt too, the literary or pictorial subject is completely dissolved in music.

Abraham (13) too, argues that it is a fallacy to regard the literary content as dictating Liszt's musical form, especially as seven of his symphonic poems are in Bogen form; (Abraham demonstrates the use of Bogen form from "Les Préludes"). We are therefore encouraged to examine
Liszt's music as "absolute music". However, such an examination does, in fact, lead us back to the usual conclusion that Liszt's music lacks the power of organic development to a sad degree. Indeed Lang himself, after attempting to defend Liszt the musician, and despite his claim that the compact themes of the B minor piano sonata, and of the E b major piano concerto "recapture the pregnancy of the classic thought", has to admit that Liszt had an "innate bombastic strain" in his nature, encouraged by his fame as a virtuoso, and evident in his music in the "rhetoric of the virtuoso - repetitions, interjections, and exclamations", which cause unevenness in his works. Abraham, whose comment on Liszt's fondness for "the dazzling idea for its own sake" we have already quoted, aptly likens the effect of the repetitiveness in Liszt's music to that of a wallpaper pattern; while Tovey, in his description of the tone poem "Ce qu'on entend sur la montague" (quoted on page 193), clearly suggests the way Liszt compensates for lack of true musical development by a feverish rhetoric which constantly appears to be building up to a climax only to disappoint the listener by losing its power just as it should reach its peak.

Einstein, too, considers Liszt's music and finds it not surprising that the young Brahms made fun of the B minor sonata, for this work "despite its integration of thematic material, is a great rhetorical rhapsody on a few motifs" which "lacks the mysterious unity ..... that in the classics sprang from deep inspiration". (14)
Sibelius: his narrative and descriptive music.

The foregoing section illustrates that the allegations of structural disruption in 19th century music expressed by Abraham, Gray, Wood and those others who compare Romantic symphonists unfavourably with Sibelius represent a widespread, almost the classic view of this music, and against such a background the attempts of Sibelius' admirers to "prove" his greatness by demonstration of those subtle thematic processes which provide true organic unity are convincing. As one of the reasons for this alleged disruption is considered to be the Romantics' concern for pictorial and literary illustration in music, it is interesting to turn to the descriptive and narrative works of Sibelius and to see that, in his most characteristic works of this type, those same structural procedures which have been demonstrated in his symphonies can be discerned, and his programme music can thus be shown to possess a similarly high degree of purely musical significance as his symphonies.

Passing reference has already been made to the last tone-poem, "Tapiola", which, as Newman was the first to note, is constructed almost entirely from one phrase, and which Newman may well have quoted as an example of the musical form which he likened to Coleridge's serpent, uncoiling upon its own fulcrum. The work is prefaced by a quatrain which suggests a definite mood conveyed by the music, but is not a literary programme which will dominate and overwhelm the music's natural development:

"Widespread they stand, the Northland's dusky forests,
Ancient, mysterious, brooding savage dreams;
Within them dwells the Forest's mighty God,
And woodsprites in the gloom weave magic secrets".
Were this work performed without its title or any mention of the quatrain, it is doubtful if the hearer would guess its intended extra-musical association, while the work can be entirely enjoyable without knowledge of the programme, from a purely musical standpoint. I quote some of the phrases from the work to show how closely the material is related to the opening phrase. Example 48 is the opening figure, on violins, which can be seen to revolve round the four notes G#, A#, B, C# :

Ex. 48. Violins

The oboes immediately echo this figure in its basic form - (Ex. 49) :

Ex. 49.

These two versions of the same basic figure form the material out of which the whole movement evolves in a truly characteristic Sibelian manner. For example, on page ten of the Miniature Score (Breitkopf & Härtel Edition), the flutes have a "new" rhythmic phrase which is clearly related to the oboes' phrase (cf. Ex. 49 with Ex. 50) :

Ex. 50.
The oboes, (on page twelve), follow example 50 with an extension of example 49; then on page thirteen, the clarinets introduce a more sombre figure (Ex. 51) which, however, transposed and put into a different rhythm (Ex. 52) also reveals its relation to the opening theme:

Ex. 51. Clarinet

```
\begin{music}
 & = & \text{Clarinet} \\
\end{music}
```

Ex. 52.

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\begin{music}
\text{Ex. 52.}
\end{music}
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This sort of relationship can be traced through all the various thematic fragments; (they can hardly be called "themes"). Much of the melodic progression consists of sequential repetition of these small fragments. As a final example of the all-pervading use of the opening fragment, we may note that one of the climax figures, first announced on the 'cellos (page 32 of miniature score) (Ex. 53) if transposed and put beside the oboe's phrase (Ex. 49) proves to be yet another variant of this germinal figure: (See Ex. 54):

Ex. 53.

```
\begin{music}
\text{Ex. 53.}
\end{music}
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Ex. 54.

- a) oboes from Ex. 49.
- b) Cello transposed
"Tapiola", composed in 1925, was Sibelius' last piece of programme-
music. The "tone poem for large orchestra", op. 73 (The Oceanides''), was
written eleven years earlier, but it again reveals Sibelius' characteristic
approach to organic construction, for it is built up almost entirely on two
fragmentary themes (Exs. 55 and 56) announced in the opening bars after
four bars of murmured string introduction.

Ex. 55. Flutes

Ex. 56. Oboe

In the eighth bar is a further passage which is used throughout the piece,
especially among other things, in connection with Ex. 56. A seemingly
new phrase, half-way though, on glockenspiel, clarinet and harmonica,
with string accompaniment, (Ex. 57), comes in fact from a rustling string
accompaniment heard earlier, which in turn may be held to be a development
of the opening bars, (quoted at Ex. 58):

Ex. 57. Harp and
Glockenspiel

Clarinet

Strings
Ex. 58.

"The Bard", again described as a "tone poem for orchestra", written a year earlier than the "Oceanides", is a piece of musical atmospherics which contains nothing of drama or action but is rather a "brooding over a handful of minute motivic fragments that develop very little if at all". (Wood - (7) ). The structure, both progressional and textural, is typical of the mature Sibelius of the symphonies. Although there is no obvious thematic integration or development, practically every phrase is characterised by a rise and fall motion, suggested first by the viola figure in bar three, which can be heard underlying much of the rest of the movement. (See Ex. 59).

Ex. 59. Violas divisi.

For example, the violins' first phrase begins with the three rising semiquavers and rises from Eb through to Db, while the answering harp and violas drop back chromatically to Eb; and in a similar way, almost every rising phrase in the work is immediately balanced by a corresponding fall in pitch. This is evident again, for example, in the violin figure (Ex. 60) which appears on page eight of the Miniature Score (Breitkopf & Hartel Edition); and in the wood-wind figure which succeeds it and becomes the work's "theme" played tutti at the climax. (Ex. 62).
"The Bard" is close to the fourth symphony in opus number, and there are some similarities between the works. For example, in the symphony, Sibelius' predilection for stretches of thin, close counterpoints in small length notes, often with one voice in syncopation, becomes evident, and this is found too in "The Bard" (especially, for example, on pages 11 - 12 of the miniature score). Much of the thematic material of "The Bard", though heard as single lines, is split between various instruments, an orchestral technique which also shows itself in the fourth symphony, and foreshadows Sibelius' later work.

I have been unable to examine a score of "Rakastava", the three-movement suite of 1911, for strings, triangle and timpani, which Wood
describes as "really like nothing else in all music". The first movement is, however, apparently a "typical specimen of Sibelian movement-building". For example, a \( \frac{3}{4} \) figure, after its first quiet incursion at the eighteenth bar, repeated thirteen bars later, forms the basis of two strange and lovely "outbursts" that come a little before the end. "These outbursts, which are strayings into remote keys, are themselves dovetailed between eloquent ejaculations by divided violins of a thematic fragment that first appeared some time earlier, and is indeed derived from a passage in the phrase that answered the opening one".

It is interesting to note how, in one of his most well-loved early compositions - "The Swan of Tuonela" - Sibelius writes what might almost be a preparatory essay for those later works in which he builds up whole movements from the continual evolution of a tiny fragment. In "The Swan", he writes one long, winding, dream-like melody for cor anglais, which is a masterpiece of organic construction, persisting for some sixty bars almost without a break, and with hardly any repetition, save of one haunting, perpetually-recurring phrase. "The Swan of Tuonela" was originally written, (1893) as the prelude to an opera, but the opera was never finished and we now have the prelude as the third movement in a suite of four "legends" for orchestra, op. 22. They are based on episodes from the Kalevala which tell of the journey of Lemminkainen to Tuonela, (the Hell of Finnish mythology), and of other of his adventures. The first piece, "Lemminkainen and the Maidens" remains in manuscript; and by far the most remarkable from the point of view of Sibelius' compositional methods is the last one, "Lemminkainen's Homecoming". The related passage
in the Kalevala describes the journey home, from an unsuccessful expedition against Pohjola, the Northland, of the hero, Lemminkainen, and the following verse from the Kalevala is the "programme" to the work:

Then the lively Lemminkainen,
He the handsome Kaukomieli,
From his care constructed horses,
Coursers black composed from trouble,
Reins from evil days he fashioned,
Saddles from his secret sorrows,
Then his horse's back he mounted,
And he rode upon his journey,
At his side his faithful Tiera,
And along the shores he journeyed,
On the sandy shores proceeded,
Till he reached his tender mother,
Reached the very aged woman.

(Kalevala, Runo XXX)

We gather from the excitement and energy of the music that the journey was an exciting and eventful one. But the programme does not prevent Sibelius from writing a piece which is fully integrated and effective musically. Indeed it is hardly an exaggeration to say with Wood that this is "a tremendous leap into the composer's future", considering the way in which Sibelius achieves in this early work, (1895), that type of musical thinking which has been so acclaimed in his later music. The initial fragment on the bassoon, echoed by the clarinet (see Ex. 63) though a mere three notes, is the germ-motif from which the whole movement grows, and is the basic idea behind all the other thematic fragments within this perpetuum mobile framework.

Ex. 63.
"Lemminkainen in Tuonela" is closely related to "Lemminkainen's Homecoming", for the main thematic fragment of the former, (Ex. 64), is clearly related to the germ of the latter, quoted at Ex. 63. b.

Ex. 64. Flute.

A further connection between the movements of this suite appears at the very end of "Lemminkainen in Tuonela", where a phrase on solo 'cello, (Ex. 65), anticipates the phrase first heard on solo 'cello in bar six of "The Swan", (which follows in order of opus numbers). The interval of a descending 4th, the characteristic interval in the fragments quoted at Ex. 63 and Ex. 64, is also prominent in the melodic material of "The Swan".

Thus we can see that Sibelius' processes of musical thought, so minutely analysed and so highly praised in his symphonies, are evident also in his narrative tone-poems, which thus reveal themselves, in comparison with the symphonies, to be pieces of a purely musical value, even while they suggest actions or depict moods. The value which Wood, for example, accords to the best of these pieces is evident in his final comment on "Lemminkainen's Homecoming": "To study the way in which its chief motif, short enough in its full form, grows by minute bit after minute bit, from the bassoon's mere three notes at the very start, is an education in what was later to be revealed as one of Sibelius' most
distinctive methods of musical thought". (7)
Thinking in Music II: Some Recent studies in Structural Integration

The way in which Sibelius "thinks in music" has been amply demonstrated, and much has been made of the superb integration of his music. Discussion in such terms inevitably suggests that it is by his extremely skilful handling of thematic transformation and development, in a much more subtle and logical manner than other 19th century musicians, that Sibelius has proved himself to be a great composer. Indeed, so much importance has been attributed to the attainment of organic unity by thematic means, and to Sibelius' superiority in the employment of such means that Gray's claim that Sibelius is the greatest symphonist since Beethoven seems to be the only valid conclusion.

A heavy responsibility is here being laid upon the quality of organic structure, functioning through thematic relationships, as the test by which we assess the value of a composition. We noted, (page 66), that Einstein referred to "the mysterious unity ... that in the classics sprang from deep inspiration". But Einstein made no attempt to demonstrate or explain this unity, which for him remained one of the mysteries of inspiration. However, as we have seen from discussions of Sibelius' music, not everyone shares Einstein's hesitation to investigate these mysteries.

An even deeper probe into the nature of organic unity led to the recent formulations of a method of structural analysis which we shall now examine, and which claims that the presence of organic unity can be demonstrated by a study of some aspect of music's structure. Different writers have concentrated upon individual aspects of music's structure, no-one has yet
fully combined rhythmic, harmonic and thematic analysis.

Reference was made, at the beginning of the discussion upon Sibelius, to the view held by certain German critics, that his symphonies were formless and incoherent; and if the explanations of Sibelius' formal procedures which Newman offered to the English public were really required, German critics were not alone in their inability to grasp the design of works which did not conform to the orthodox patterns so beloved by writers of academic text-books on form. Exponents of the new method of musical analysis have been at pains to point out that the older, academic analyses treated each work to a process of dissection; and that their concern to label each section so that it would fit into a preconceived notion of an abstract Form too often led them to forget that any musical work worthy of observation is a living organism, functioning as a whole. Understanding of Sibelius' music would no doubt have come more easily to his early audiences had they really believed and applied the dictum that "no two valid works of music can have the same form, though they may, however, be conceived according to a common general design, that is followed in deference to demand, but may be modified, or even abandoned as soon as the first ideas suggest or manifest their generation". The writer of these words, A.J.B. Hutchings (6) aptly compares the methods used in most treatises upon the processes of music written until the present century, with the initial stages in the teaching of anatomy. "Themes, figurations, transitions, climaxes and modulations .... amounted to the equivalents of those coloured models from which, by removing a white wooden femur,
a grey rubber stomach, a purple celluloid spleen and red sponge kidneys, the student may observe the crudest physical relations between the members of a man's body. Such methods have their value, in revealing to us the 'crude relations' of size, location and connection. But the music of Wagner and later composers increasingly thwarted these methods of dissection; for "In Wagner's teeming textures, one growth in its autumn touches another at its spring, as in the fecundity of an orderly jungle, defying demarcations of 'statement', 'development', and 'recapitulation'." Of course the early audiences of Sibelius would be baffled if they imagined "development" to be a process limited to a certain part of a work. The same difficulty applies to the music of Bartók and other contemporaries, for "whereas the labeler may almost with impugnity display his limited recognitions in front of Mozart's neat outlay or Beethoven's controlled and essentially formal rhetoric, he is not merely held to ridicule by Bartók's restless, inveterately expanding variation; he is baffled even in the attempt to docket the musical processes by sections. His range of labels is inadequate. Those he is not accustomed to use until "statements" are finished, are wanted before an isolable theme has been announced". (6) It is much the same with Sibelius as with Bartók, and this would account for those criticisms concerning his inability to handle extended forms which roused Cecil Gray.

The disadvantages of an anatomical system of analysis is that "what cannot be observed by model or diagram is the supreme connector or integrator"; and so a new approach to musical analysis, seen in essence
in the accounts of Sibelius' music by Abraham, W.G. Hill, Cherniavsky and others, and made much more explicit in the writings of Schenker, Reti, Walker and others, has come to the fore, as musicians have sought more diligently after that "supreme connector and integrator".
Harmonics unity: Schenker

One of the earliest enquiries into the source of organic unity was conducted by Schenker (1867-1935) who disregarded the invention of motifs, themes and subjects as separate ideas in a musical work, and asserted that organic unity was produced by conscious or unconscious symmetry in the work's harmonic scheme. He sought, by analysis, to discover an underlying skeleton structure based on harmony, and to show that the skeleton structures of all compositions written by great masters, (at least between Bach and Brahms), follow certain fundamental principles and patterns of structure. By a process of stepwise reduction, Schenker's analysis leads from the actual composition, the "foreground", to the structural tone-pattern in the background, for which he coined the term "Ursatz". For example, in considering the last movement of Beethoven's ninth symphony, he regarded the melody of the 'Ode to Joy' as the foreground; Ex. 65 shows the "middle-ground" which is the first phase of Schenker's reduction of the actual music to its basic structure.

Ex. 65.

The reduction leads on from this stage to the background (Ex. 66), which is the Ursatz:
For Schenker's analysis, important elements of this, as of every structural pattern, are the motions of the upper part or parts; (in our example, it is a "motion of a 3rd", the numbers 3, 2, 1 signify scale-degrees); and the "breaking-up" of an otherwise continuous tonic by a 1 5 1 movement of the Bass.

According to the Harvard Dictionary of Music, Schenker's analysis seeks to demonstrate how a few basic patterns miraculously unfold into the infinite variety, the broad and rich life, of the actual compositions. Accordingly, its main interest lies, not in the background itself, (which he finds to be similar for different works), but in the point where it shows how background and foreground are connected, that is, in the "middle-ground". For example, Schenker's analysis of the second song of Schumann's "Dichterliebe" leads to the same Ursatz as that of Beethoven's melody; the difference between the two works lies in the middle-ground, which appears more complex in the Schumann analysis, so complex in fact that two reductions are necessary, resulting in two levels of middleground. It is the middleground where hidden relations are revealed, and the secret meaning of many a detail finds its explanation. It is the middleground where the work of a genius can be distinguished from the work of a lesser-talent. An Ursatz can be found in any music, great or poor, without such
a skeleton, music would not move at all. In poor music, however, the relation between foreground and background will appear primitive, without interest. Only the creation of the genius has the density of organic structure which in turn produces such interesting middlegrounds as Ex. 67. from Bach's "Twelve little preludes" No. 3:

Ex. 67.

The Harvard Dictionary assures us that it is not the purpose of Schenker's analysis to show that all compositions can be reduced to a few types of fundamental structures, but rather to demonstrate how these basic patterns do unfold into "the infinite variety .... of the actual compositions". However, a method of analysis which does demonstrate that two or more works may share the same basic structure is limited when the concern of the analyst is to show the unique internal integration of individual works. Schenker probably had most influence on later researches, (especially those of Walker and Keller), through his recognition of the need for "a depth approach to musical structure", a recognition suggested by his distinction between foreground and background, and his belief that the relation between them is a subconscious part of the creative process.
Thematic Unity: Reti

Considering the emphasis upon organic growth, and spontaneous evolution of thematic material from basic thematic germs in Sibelius' music, it is surprising that no reference to his works is made in Rudolph Reti's account of The Thematic Process in Music (17). In his attempt to answer the question "what is unity?" (not only 'what?' but 'how?') Reti studied in minute detail the "innermost thematic mechanism" of numerous works, and presented his conclusion that the different movements of a composition are connected in thematic unity - a unity that is brought about not merely by a vague affinity of mood but by the forming of the themes from one identical musical substance; furthermore, in contrast to the general view that the different themes of a single movement in sonata form are utterly contrasted, he demonstrates that these themes are also but variations of one identical thought. Reti begins his study with a very detailed examination of Beethoven's 9th symphony, a work which has often been hailed as a masterpiece of unified structure, and demonstrates how this unity is obtained. It is not possible to follow this analysis in full here, but some of Reti's examples are quoted to illustrate his method.

He divides the first theme of the ninth symphony into its four motivic elements (Ex. 68) and compares it with the first theme of the scherzo, the shape of which
he finds to be an almost exact replica of the Allegro theme's design. This he demonstrates by extracting the four motivic parts of the Scherzo's theme. (Ex. 69):

The four motivic elements of the Allegro not only reappear, but even succeed each other in exactly the same order, so that not only the motivic fragments but the image of the Allegro's full theme are repeated in the Scherzo. Motifs I and II are almost unchanged. Motif III is the most changed, it now reads E F G, instead of A G E A, thus assuming simultaneously the shape of a transposed II. However, its appearance exactly between the two occurrences (inverted and proper) of II make it certain that this E F G is meant as a corresponding substitute for Motif III, for the kernel of these bars reads:

Ex. 70:

a) Allegro

b) Scherzo
and "the identity is obvious", (to Reti, although I find the interpretation of Motif III here and later somewhat strained). Reti explains the changes by the fact that in the speed and concentration of the scherzo the leap to A would have torn the design. The analogy of IV, apart from its transposition, is complete.

Reti pauses at this point in his analysis, to consider the implication of the features described, that the different movements of a classical symphony are built from one identical thought. The themes are not, of course, literally repeated in the next movement; the composer's endeavour is just the opposite, as he strives towards homogeneity in the inner essence, but at the same time towards variety in the outer appearance. Thus the Allegro theme is transformed in the Scherzo, in tempo, rhythm and melodic detail; its whole character and mood are altered and readjusted to the new movement, but it is one common musical idea, one basic pattern, from which both themes have been formed.

When he considers the main theme of the Adagio, Reti finds that "incredible as it may seem, considering the entirely different picture which this movement presents at first glance, here again the similarity of the basic substance is not to be questioned", for we see the kernel of motif I (D A F D) in the adagio theme too, though the tempo, rhythm and whole character are again changed, and although the melodic course has been expanded by the Bb and Eb, thus adjusting the motifs to the desired mood of the Adagio. (Ex. 71).

Ex. 71. Adagio

\[
\begin{align*}
E & B\ \ P & D \ & J \ & D
\end{align*}
\]
Reti finds it interesting that motif I in D minor can still appear in its original form in a Bb major movement, and he later demonstrates further, (from other works) that this method of transforming a shape from one theme to another in a new key, with the shape still sounding at its original pitch, is one of the most effective means of thematic transformation. Reti traces the other three motifs in the Adagio theme before considering the main theme of the finale. He expresses his surprise that the use in the last movement's introduction of fragments of the former movements' opening themes did not evoke an enquiry among analysts as to whether the different movements of a Beethoven symphony are not indeed thematically unified. He also expresses a view which other analysts of similar outlook have contradicted, namely, that the thematic process is, or at least was, a conscious part of a composer's technical procedure. He asks how could a mind of a structural, a "symphonic" intensity such as Beethoven's ever have thought to include in his work an effect tending to "pot pourri" rather than to serious music, unless he were convinced that these themes represented three different expressions of one identical idea. However, the tendency has been rather to regard this thematic means of achieving unity as essentially a subconscious process.

Reti demonstrates the presence in the finale's main theme of the four motifs, in a manner which, if we accept his other illustrations, proves convincing. He thus presents in his analysis of Beethoven's ninth symphony evidence to support his claim that all the movements of a musical work are thematically related by their derivation from a single
thematic shape. He also seeks, by this analysis, to demonstrate his second theory that the apparently deliberately contrasting subsidiary themes within a movement can be seen to possess affinity with the first theme. For example, the first movement's "second subject" (Ex. 72) at first glance appears to be a new, contrasted theme:

Ex. 72.

Yet Reti points out that its kernel is an ascending triad on D minor, identical with the inversion of motif I from the first subject (cf. Ex. 68). This is immediately repeated in a varied version (Ex. 73), which makes the resemblance clearer.

Ex. 73.

This is not a "variant" of the first theme, nor a transformation of it such as the scherzo theme is. It is a new musical idea, with every appearance of a "contrasting" shape, yet a structural affinity cannot be denied. This affinity is further "proved" by the continuation of the two themes, for the second theme is none other than an expanded version of Motif II (Ex. 74):
Furthermore, the next phrase of the new theme is clearly a replica of Motif IV (Ex. 75):

Ex. 74.

Ex. 75.

To reach his conclusion that "in its outer appearances, in the gentle mood of its curved lines, the second Allegro theme indeed contrasts with the energetic first, yet it is a complete restatement of the latter's inner content and design" Reti conveniently breaks off the second subject at the C# (see Ex. 75), regardless of the fact that it continues down to G and up again before the cadence; and he appears to have jettisoned Motif III, which had only been made apparent under strain right from the beginning. However, his evidence is certainly significant, and remains so when he examines the relationships of the subsidiary themes in the other movements, so that, at the end of his analysis he can conclude triumphantly, "Thus, as a result of the symphony's thematic analysis, a picture of the most manifold, the most effective and most logical architectural inter-connection has unfolded itself, far beyond that hitherto attributed to a classical symphony".
It is interesting to see that Reti largely discounts the traditional view of Romantic music (already outlined, see pages 53-66), and demonstrates that the music of Schumann, Chopin, Mendelssohn, Brahms, Tchaikowsky, Dvořák and Berlioz also owes its power and significance to the achievement of organic unity through the thematic process. He feels that the classic criticism of romantic large-scale works as disintegrated is a result of our having lost the true (i.e. thematic) way of assessing music. To "understand" music in the romantic period, he argues, too frequently meant to translate it into poetic symbolism almost with a reluctance to touch technical ground, and this changed our musical outlook. But, he maintains, the Romantics, and post-Romantics too, used the thematic process - "the new melodic shapes, capable of expressing an almost infinite range of human experience, were uttered by means of a structural mechanism of timeless validity and enduring power." Owing to lack of training in thematic conception "historians and aestheticians are inclined to see in Romantic music mainly the sensitiveness, beauty and emotional strength that emanate from its characteristic melodic lines, often missing the elaborate structural complexity by which these lines are manifested and through which they are unified to artistic entities of the highest order. Indeed, from the structural point of view, the works of the classics and their Romantic and post-Romantic successors form one uninterrupted evolutional growth, one continuous embodiment of the thematic principle". Reti studies, among his illustrations, Tchaikowsky's "Pathétique" symphony, and Berlioz' "Fantastic Symphony", and once again, his actual demonstrations of the inner relatedness of themes are convincing. He refers to the use, in the
Fantastic Symphony, of idée fixe, which has so often been denounced as an obvious, contrived means of securing unity, and says that in this work there are two layers through which the thematic unity is expressed. The one, the outer layer, is the literal reappearance of the idée fixe at decisive moments. But beneath these obvious thematic reiterations, there is a second structural layer, brought about through the thematic homogeneity of all the other themes in all the other movements. "This inner thematicism is naturally not as conspicuous as the first, since its core is not repetition, but transformation".

Although Reti does not mention Sibelius, he does consider works which, like the most characteristic examples of Sibelius' music, do not begin with recognisable themes, but seem to be built up out of motivic fragments, and he says that "if the composer then wishes to maintain his work's structural consistency, his technique has to be centred largely on motivic transformation, rather than transformation of themes. By such treatment, a compositional design will emerge, different in some respects from the usual structural picture". Reti demonstrates this difference from a study of Debussy's "La Cathédrale Engloutie", and of Beethoven's Quartet in F major, op. 135. In much of his commentary on the latter, Reti might almost have been referring to Sibelius' music, for he says that it is based on the idea of evolving a full compositional picture from one or two short motivic particles. This is particularly apparent in the first movement, which presents the interesting and
unusual picture of having no actual "themes" in the full sense of the word, though it is distinctly divided into thematic groups and sections.

"From the opening motivic thematic particle, Beethoven developed the intricate design of the whole movement in utter consistency". Reti might well be discussing Sibelius' second symphony as he comments upon, and analyses, this movement of Beethoven. He continues by explaining that this omission of real themes and their replacement by motifs imposes a certain strain upon the listener. For it is more difficult to follow a structural design built by constant reiteration and transformation of short motivic phrases than one centred on easily discernible full-sized themes. "Here we have the reason for that oft-voiced, erroneous opinion which holds the last quartets to be "formless."
Thematic Unity: Walker

The concern shown by Reti to explain the underlying unity between apparently contrasted themes is shared by Alan Walker, who continues the consideration of organic unity to include works written in the 20th century atonal idiom, and using serial technique (18). Like Reti and many others, Walker feels the need for a sound basis of judgement in musical criticism and believes that this is "perhaps the most compelling reason why musical analysis is important". He also states that it should be the purpose of analysis to reveal the causes of unity, to solve the "one overriding problem", namely, why do particular themes belong to particular movements? Why do particular movements belong to a particular work? This is the same problem as that which prompted Reti's investigations. Walker makes bold claims for the importance of structure in music when he asserts that "Real analysis not only brings about a greater understanding of musical structure but it offers an important, objective criterion for evaluating music; a critical yardstick for forming value-judgements about music is the examination of a work's contrasts from the standpoint of their underlying unity".

Walker divides thematic connections into two categories, those which adhere to the notes of the theme, and those which do not. He includes in the first group connections where the strict organisation of the actual notes of the two musical ideas explains their own unity, (for example, between an idea and its inversion), and he claims that
devices such as the mirror forms are musically audible and not mere academic juggling with notes. This claim he substantiates with details of experiments which proved that listeners did grasp relationships brought about by the mirror forms. This section of Walker's investigations is concerned specifically with 20th century music and the accusations aimed at Schöenberg and other composers, which we shall consider later.

In his second category, Walker includes examples where such strict organisation does not exist, and where the demonstration of unity is more difficult, for "in these cases, the manifest notes tend to obscure the true nature of the unifying connection". Walker acknowledges the work done by Reti in connection with this second type of relationship, especially in the demonstration of what the latter had called "interversion" (namely, the interchanges of notes within a melodic entity.) Interversion can be briefly illustrated from the first movement of Beethoven's A minor quartet, op. 132, where it explains the unity of the contrasting first and second subjects. (Ex. 76a and b):

Ex. 76 (a) first subject

Ex. 76 (b) second subject
In addition, Walker draws attention to two related unifying principles which Reti did not discuss, and to which Walker himself was first led by Hans Keller's discussions of Mozart's chamber music. The first is the "principle of reversed and postponed antecedents and consequents", and the other is the "principle of postponed tonal sequences". The interdependence between an antecedent and its consequent, and between statements in a sequence are generally recognised, but Walker (following Keller) demonstrates that an idea can often be shown to stand in an antecedental or consequential relationship to another idea that exists outside the confines of the movement. "Under these conditions, the relationship is a postponed one, and may or may not be reversed. The existence of postponed antecedents and consequents explains much about the continuity aspect of contrasts, and is itself symptomatic of a deeper and more powerful background unity". The unity between the first and second subjects of the finale of Mozart's C major quartet (k. 465), for example, depends upon their antecedent - consequent relation. (Ex. 77a and b):

Ex. 77 (a) first subject

\[\text{Allegro molto}\]

\[\text{Antecedent}\]

Ex. 77 (b) second subject

\[\text{Consequent}\]
Reduced to their underlying melodic structure, the two themes provide the following pattern (Ex. 78):

Ex. 78.

A simple example of a postponed tonal sequence unifying two apparently contrasting themes occurs in Brahms' Piano Concerto in D minor, where the first movement's lyrical second subject provides the sequential model for the aggressive rondo theme in the work's finale. (Ex. 79).

Ex. 79 (a) first movement

Ex. 79 (b) third movement

Walker feels that such principles as these operate because of the overriding influence of the single background source of the related themes.

While he does not embark upon a detailed investigation of the principles of rhythmic and harmonic unity, Walker nevertheless realises
the limitations of Reti's inquiry into purely thematic unity, and Schenker's preoccupation with harmony. After dealing with principles of thematic organisation, therefore, he does include reference to rhythmic and harmonic unity, because "the sort of total integration each envisaged is theoretically and practically impossible without complete unification in all the three dimensions of music". "While this unity may manifest itself more spectacularly through one dimension than through either of the other two; while the emphasis may shift from one dimension to another, we may nevertheless expect to find complete three-dimensional integration at every point of the structure" of a masterpiece. In his consideration of rhythmic unity, Walker discovers that "in Schubert's second symphony, at least three of its contrasting themes hang together rhythmically in a way that is at once convincing and easy to demonstrate." (Ex. 80):

Ex. 80

\textit{I. Allegro vivace} \hspace{1cm} \textit{II. Andante} \hspace{1cm} \textit{III. Presto vivace}

\begin{align*}
\text{I} & : \quad \text{pp} \\
\text{II} & : \quad \text{f3} \\
\text{III} & : \quad \text{f3}
\end{align*}

In his G minor Quintet, (k. 516), Mozart himself demonstrates the connection between the first and second subjects at the end of the development section. He develops his second subject figure (Ex. 81 b) into a six-note quaver motif; (81 c) which is a reaccentuation of the initial six-note idea (81 a) :
Especially interesting is the connection between the first and second subjects of Beethoven's eighth symphony, where the same principle of rhythmic reaccentuation is at work in a masterly way. (Ex. 82) :

Ex. 82: (a) first subject

Ex. 82: (b) second subject

If Ex. 82 (b) is rewritten, as at Ex. 83:

Ex. 83.
the connection becomes obvious.

Walker uses all these and many more examples to support "a point of view that I wish to emphasise most strongly ... that foreground organisation in composition is the result of background unity ..... it is only possible to understand the foreground when the background influences have been revealed. It is these influences which are responsible for unity and continuity in music".
Thematic unity: Keller

As we have seen, Walker acknowledges his debt to the teaching of Hans Keller, who is also especially concerned with the unity of contrasting themes. "My method of musical analysis aims at nothing more obscure than showing the unity of contrasting themes". (19) Noting that it had received a certain amount of unwelcome journalistic attention, Keller considered the need to find a name for his analysis which would indicate his aims. "Anti-analysts", by which he meant those who "mistake description for analysis", had suggested that Keller's was a method of dissection, but he protested that this is exactly what it is not, and the name must make this clear. "What is dissection is the traditional form of analysis" which labels sections of musical works as first subject, bridge, second subject, codetta, and so on (20). This kind of investigation, Keller, like Hutchings, considered to be "essentially anatomical", while his own method, on the other hand, "is essentially physiological", in that it attempts to elucidate the functions of the living organism that is a musical work of art. From this consideration, Keller evolved the name "Functional Analysis" to describe his approach. Eschewing words altogether, because of their ambiguity and difficulty, he composes "analytical scores", which are played without verbal commentary, giving the same kind of opportunity to observe the processes and integration of music as we derive from attending a rehearsal. The first violin or 'cello may play his part several times alone, then with the ensemble;
sections small enough to be called themes are isolated, but are then immediately repeated in context; the larger and larger context is shown, and the whole movement is played at least twice without a break. In an article describing his Functional Analysis, Keller discusses an aspect of the structure of the first movement of Mozart's D minor quartet, namely the way in which the second subject (Ex. 84) when it reappears in the recapitulation has, "under the combined influence of the first subject and the tonic key ..... moved away from itself, from its exposition, in the direction of the first subject," (Ex. 85 (a) and (b) shows the first subject, and the second subject as it appears in the recapitulation.)

Ex. 84:
2nd. subject (exposition)

Ex. 85 (a) 1st. subject

Ex. 85 (b) 2nd. subject (recapitulation).

The chief melodic contrast is now no longer between the first and second subjects, as we expect in a sonata form movement, but between
the second subject and itself, that is, between the recapitulation and the exposition versions of the second subject. Keller recognises the difficulty of dealing with such a situation in words, indeed he mentions it deliberately to illustrate that very difficulty. He advises us, therefore, to listen to his analytical score, which develops from the first subject (A) into the recapitulation of the second subject (B), back to A, and only then into the exposition version of B. In this way, the whole evolution becomes clear simply as music, whereas "if I attempted a close verbal description I would have to change my very terms in midstream - where the second subject ceases to be the second subject".

After this discussion of the difficulty of explaining music by verbal analysis, Keller asks what it is in the music that actually needs explaining. "It is not that the D minor quartet's second subject is a new theme - we can hear that, and the sine qua non of experiencing sonata form is awareness of contrasts". "Functional Analysis, on the other hand, is concerned with the unity of contrasts; the question of how contrasting themes and movements hang together". The unity of contrasts, says Keller, (and Walker repeated this), is a Background unity, and is not usually recognised as a matter of course. Functional Analysis, as well as being analysis, is also synthesis, for since it is the elements of unity which the analytical scores bring to the fore, they inevitably "put together" the contrasting themes they analyse. The result of this putting together can be momentarily confusing, for someone who does not know the work so analysed; the listener may be
unable to tell which theme is which. Keller fully recognises the possibility of such confusion, and says that this is exactly what is intended - the confusion or the fusing together of contrasting themes. By feeling this confusion, the listener shows he is experiencing the common background of themes, which Keller believes "is all that matters". (19) In another essay, Keller's emphasis upon unity and contrast is reflected in his reference to "great, (i.e. extremely contrasted and extremely unified), music."
Structural Unity: Schöenberg

Although Reti frequently commented upon what he considered to be the uniqueness of his discovery, a similar search for the principles of organic unity had led Arnold Schöenberg, as early as 1919, to form the concept of the Grundgestalt, or basic musical shape, as the basis of organic unity, and Walker readily acknowledges that Schöenberg's concept was the corner-stone of all later theories of musical unity. The fact that Schöenberg was well aware of the need for organic unity, and had studied the principles by which such unity might be achieved might lead us to expect that in him there would appear a composer capable above all others of producing works which, if previously examined claims prove correct, could be demonstrated to be undoubted masterpieces, "better integrated" and therefore presumably "greater" than any previous composition. An evolutionary view of musical history, where events are all ordered to lead on to a final example of supreme integration, is encouraged by, for example, Cherniavsky's assertion that the development by Sibelius of the use of thematic germs to attain to a high degree of organic unity was of far-reaching importance to future developments in music; and it is implied in Reti's statement that "from the structural point of view, the works of the classics and their Romantic and post-Romantic successors form one uninterrupted evolutorial growth". It will be interesting, therefore, to examine Schöenberg's theories and concepts, and to compare the theoretical assessment of his work with the reactions of music lovers.
There can be little doubt that Schönberg's main preoccupation in his composition lay in the realm of structure, especially thematic structure, which, by serving as a means to organic unity and coherence, alone rendered musical communication possible. That he shared Walker's view that demonstration of a work's thematic integrity provides a criterion for assessing the composition is shown by his list of first considerations for evaluating a work of art. (21) He expressed the opinion that "a composition is valued more highly if its themes and melodies are significantly formulated and well-organised; if they are interesting enough to hold attention; if there is a sufficiently great number of ideas; if they are well-constructed so as not to offend musical logic .... if monotony is avoided by good contrasts; if all ideas, HOWEVER CONTRASTING, CAN BE PROVED TO BE ONLY VARIATIONS OF THE BASIC IDEA, THUS SECURING UNITY ..........."

Schönberg was faced with the problem of how to write truly organic music when the very substance of music itself seemed to have disintegrated. He himself contributed towards this disintegration, especially by advancing the extension of the harmonic realm until the possibility of completely atonal music was reached, at which point music lost one of its most important intrinsic unifying features - its tonality. The importance of tonality as a unifying agent is recognised in Schönberg's concept of "musical space", which he expressed thus: "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 ear, they reveal their true meaning only through their
co-operation". (21) Developing this idea in his "Harmonielehre", Schönberg pointed out that each note can be understood in both its vertical and horizontal implications, that is, its overtones can be presented simultaneously, in a chord, or consecutively in a scale. Schönberg realised that this correspondence between simultaneity and consecutiveness, which allowed him to present a note in two different ways, was an important unifying principle of musical composition, because of its effect on the musical organism. He compared it with the "Magic Square", (where the same letters form the same words and the same meaning horizontally and vertically). In tonal music, this relation is maintained through tonality. Broken chords and scale fragments are melody obtained out of harmony, and the same source for both is tonality. When the field of tonality became so vast as to disintegrate, then tonality's function of ensuring this connection between simultaneity and consecutiveness was taken over by the twelve-note series.

The series consists of each of the twelve available notes used once, and it is continually repeated during the course of the piece, the notes occurring in their correct order, and no one note being emphasised more than any other. As well as appearing in its original form, the series may be presented in "mirror" forms (that is, in inversion, in retrograde motion or in retrograde inversion.) It may also be subjected to transposition as a whole, or individual notes may occur in octave transposition. The monotony which might result from constant repetition of the series may also be
avoided, and greater coherence given to the musical tissue, by
distribution of the series between the horizontal and vertical
dimensions, in accordance with the theory of musical space; this
implies taking individual notes or groups of notes out of the
melodic line and sounding them simultaneously with the latter as
a chord, an accompanying figure or a subsidiary part. The series
can also be subjected to a "loosening-up" process, giving it the
possibility of more elastic treatment, by its subdivision into
groups of notes. These note-groups can be regarded and treated as
small, independent series, and may change places with each other
within the original series, especially when they possess an interval
common to two (or more) groups which can thus provide a motivic
relationship. "The series creates shape, form and coherence in the
musical organisation of its piece".

However, the Grundreihe, (or basic series), is not the same as
the Grundgestalt, (or basic shape) in Schönberg's concept of music.
At one point in Rufer's exposition of Schönberg's method, (22), there
is an example of the confusion which exists as to the correct meaning
of these terms. Rufer says that the Grundgestalt "corresponds in its
significance and functions to the 'basic series' of twelve-note music",
thus implying that the Grundgestalt is something which does not apply
to twelve-note music, being replaced there by the Grundreihe. However,
in the translator's preface to the same book, Humphrey Searle says it
is clear that Schönberg used the term Grundgestalt in a wider sense
that this, and Rufer himself is quoted for clarification of this
point (p. vii). Schönberg formed the concept of the Grundgestalt,
(or Basic Shape) as being the musical shape which is the basis of
a work, and from which everything is derived. The Grundgestalt
operates in music of all kinds, not only in twelve-note music, (where
the melodic series is contained within the basic shape).

The investigations of Reti are closely allied to Schönberg's
concept, for the former, as we have seen, analysed works to show their
derivation from a basic shape. Schönberg has apparently left no such
analysis on record, but his pupil and assistant, Rufer, includes an
analysis of Beethoven's sonata, op. 10: no. 1, in his account of
Schönberg's compositional methods, as an example of how universal was
Schönberg's idea of construction, namely, the idea that in order to
"ensure" thematic unification of a work, and "thus the unity of its
musical content", all the events in it are developed, directly or
indirectly, out of one basic shape. Schönberg did, in fact, deal with
the principles of organic unity at two levels; that of a basic row
(Grundreihe) in his atonal compositions, to replace the integrating
force of tonality; and the more fundamental concept of a basic shape in
any musical composition, which would include tonality or the series.
Schönberg's teaching provides the theoretical concepts which Reti
sought to demonstrate.
The Grundreihe, or series, of twelve-note music could not, indeed, play the part of Schönberg’s dynamic Grundgestalt, for the latter contains all the elements of composition, rhythm, phrasing, and harmony, as well as melody, and the row is, for Schönberg at least, rhythmically undefined. Composers after Schönberg who used similar methods of composition did arrive at a stage of “total serialisation” where the use of a series to ensure thematic unity was combined with a highly organised isorhythmic working which provided rhythmic unity. Such developments show the same marked preoccupation with organic unity in music, but seem to place more emphasis upon the external conscious unifying organisation, and to neglect Schönberg’s idea of the Grundgestalt as the "first creative thought", something which arises spontaneously and is organised sub-consciously. However, Schönberg himself, having arrived at the concept of the Grundgestalt, seems to have emphasised the fact that thematic unity is ENSURED by the use of the series, and thus encouraged the attempts of later composers to attain to greater heights of integration, (and thence to "better" composition, is the implication), by greater serialisation. Relating how the basic Grundgestalt functions in the creation of the series, Rufer reflects this emphasis on thematicism. "First the basic conception (which is thematic) has to choose the order of the twelve notes in the series; it arranges the order which fits it, i.e. the one that serves it best. According to this, the notes 'get into series' — a different one for each piece — and are ready for the composition". When it is thus
formed, "the twelve-note series ensures musical coherence in a work by unifying its content". (22) Further emphasis upon the sureness of the achievement of unity through thematic processes lies behind Schönberg's own summing up of the principle of logical thought and coherence which lay behind his method of composition. "In music, there is no form without logic, there's no logic without unity. I believe that when Richard Wagner introduced his leitmotif - for the same purpose as that for which I introduced my basic set - he may have said, 'Let there be unity'. " (21)

Schönberg's pupil, Webern, whose music shows a very strict and concentrated use of serial composition, and who was the model for later composers who advocated "total serialisation", repeated the same emphasis (23). He demonstrated that Schönberg and himself stood in the traditional sequence of composition by tracing the constant effort throughout music to derive as much as possible from one principle idea, in the interests of unity; an effort particularly noticeable in Netherland polyphony, in the music of Bach, and in the works of classical composers. "To develop everything from a single idea - that's the strongest unity - when everybody does the same,(but differently); ..... the watchword must always be thematicism, thematicism, thematicism".

In the development of the law of twelve-note music, Webern, like Schönberg, saw the fulfilment of the urge towards the utmost unity. Those who were present at London performances of Schönberg's early atonal
music, however, saw rather the fulfilment of the urge towards "ugliness
galore", and "beauty starved to death". The "Five pieces for orchestra",
for example, were described as "wailings of a tortured soul", "the dis­
ordered fancies of delirium", "formless, incoherent, disjointed" -
phrases recalled by C. Stuart as he looked back, in 1951, over fifty
years of music criticism. (24). Since those early performances, the
average music lover has continued to find serial and atonal music strange
and meaningless, and has responded to explanations of Schönberg's theories
and principles with irritated abuse. E. Newman, who found, in 1923, after
listening to three performances of "Pierrot Lunaire", that he still did
not like the work, spoke disparagingly of its lack of appeal to musicians,
and continued, "It is no use telling us that Schönberg's harmony and
general procedure are new. Nothing is easier than to do something new
in music; the difficulty is to be at once new and interesting .... Do
not imagine that if you use harmonies that have never been used before
you are absolved from the old necessity of making your harmonies talk
sense". (54) Newman supported his claim that newness alone does not
make music incomprehensible by repeating his firm belief that no composer
has ever been so far in advance of his generation that only a very few
people could understand him, (a belief at which he had arrived after
comparing other periods of revolutionary and new music in "A Musical
Critic's Holiday".) In another essay in 1930 (55) Newman showed that
his attitude had not changed, for he asked, "what amount of justification is there in the audacious challenge of the new music? How much of it is the instinctive striving after the spirit of the new age towards a genuine expression of itself, and how much of it is mere scientific experiment, how much of it the purest bluff?" Only a few weeks later, Newman again expressed his discontent with the new music, and quoted the following, (Ex. 86) from Webern, as an example of "early" modern music, and described it as "a lunatic outburst". 

Ex. 86.

\[
\text{Sieht auf ihr lieben kinderlein der Morgen stern mit}
\]

\[
\text{heilem schein lässt sich sehr frei gleich wie ein Held -}
\]

\[
\text{und leuchtet in die ganze Welt.}
\]

The suspicion expressed by Newman that much modern music may be "scientific experiment" was made the basis of a vehement attack on "Modern Music" by Pannain (25). He wrote that 20th century music
lost touch with popular taste and became "the prey of isolated cliques whose musical taste was intellectual rather than intuitive", giving rise to a new conception of aesthetic values, an objective conception, the essence of which lay in the technical appreciation of music as a detached combination of sounds, not as an expression of emotional experience. Pannain described the result as "the tangled cult of dissonance in music, linked to a weird angularity of form". This "scientific objectivism" considers music in its physical reality solely as so many sounds in such and such an order. The idea of division between form and expressive content, evident in so many aesthetic discourses, is seen in Pannain's remark that "until recently, the sentimental side .... has dictated the form of a work; it is now the task of the form to dictate the sentiment".

Schönberg's true nature appeared to Pannain to be revealed in his opus 1 to opus 10, as "a reproducer of stale ideas, a purveyor of outworn romanticism", in music which seriously lacks real warmth and personality. In the quartet op. 10, the desire "for a new and fantastic expression began to stir in the darkness of a tumultuous consciousness, which obeys no laws. Spiritual imperfections develop into a deformed style". "Everything about Schönberg may be legitimately decried, except his logic. He is all logic - in this lies his artistic doom", for it results in "his pretended art".

A writer who agrees with Pannain's description of Schönberg as a decadent romantic is Constant Lambert, who saw 20th century music as
"music in decline", with each new development ending in a "psychological
cul-de-sac". (12) Schönberg, the "born sentimentalist", escaped
from the academic rules "only to be shackled by his own set of rules,
and this self-imposed tyranny is taken over en bloc by his pupils".
Again the controversy regarding form versus content is brought into the
discussion, for Lambert says, "The more advanced and revolutionary
Schönberg's methods become, the greater is our sense of confusion
between his subjective vision and his objective technique". "While in
many of the early works, the emotional force has not received the
necessary definition by the technique, in too many late works, the
technique is unleavened by any emotional force, and Schönberg's method
unaccompanied by the morbid fire of his best (early) works is frankly
dull and pedantic, with its monotonous inversions and mathematical
contortions of ordinary procedure. The musical interest is at its
lowest, and the mathematical complexity most acute in the works between
'Pierrot Lunaire' and the Orchestral Variations, where the devices are
the be-all and end-all".

Lambert had had the opportunity, by 1934, to investigate "modern
music", and to read explanations of twelve-note method, but he
remained unconvinced, considering that "the fact that a work is capable
of elaborate analysis proves nothing, for a bad work may be just as
interesting from the analyst's point of view as a good one". His con-
clusion is significant, in view of Schönberg's concepts of structural
unity, for he considers that the weakness of the final section of the orchestral variations, op. 31, and of the Five pieces for orchestra suggests that Schönberg, "in spite of his technical dexterity, is unable to build up a symphonic structure that will satisfy our sense of organic form".

Eric Blom, (26), who had read Krenek's explanation of the twelve-note system before penning his reactions in 1937, does not find that the explanation helps him to assess the music. He is prepared to recognise that "a man of real creative power can produce convincing work in spite of all self-imposed obstacles", (significantly enough, he cites Alban Berg, whose use of twelve-note composition was less strict than Schönberg's, as an example of such a man); but Blom reckons that composers are subjecting themselves to severe and unnecessary penance in "the discipline of twelve notes". He compares such music with a crossword puzzle of a particularly rigid, difficult and complex type, and concludes, "If such crosswords were possible at all, think how ingenious they would be - and think how utterly devoid of any sort of use or emotional significance".

Leonard, representing the "average music lover" twelve years later, (27), repeats the commonest attack upon the music of Schönberg, for he finds that "after more than a quarter of a century, this music remains, for the general musical public, in the field of abnormality. Opinion persists that it is abstruse, and involved to the point of pervarosity .... frigid as so many exercises in mathematics. It is
music that has been removed from contact with life, and taken into
the laboratory, into the world of passionless formulae and experimenta-
tion in the abstract".

A similar criticism was voiced by Vaughan Williams in a lecture
on modern music, when he confessed himself unable to find out what it
was trying to express, what attitude of mind was behind it; and
Fox Strangeways, commenting upon this, considered that what remained
obscure was the music's underlying purpose, - "its spiritual values.
For if one cannot believe of music that it comes from the centre of a
man's being, and that that being has a purpose, tenaciously held, no
technical ingenuity will keep it alive". (28)

The classic expression of hostility towards Schönberg was made
in Thomas Mann's novel, "Dr. Faustus" in 1947, in which the hero, a
twelve-tone composer, achieves a "breakthrough to the subjective", an
equivocal redemption through a diabolical pact whereby he renounces
humanity and even reason, and enters into a cold bond with the math-
ematical and the occult, in order to gain the strictest objective
mastery over arbitrary resources.

In his attempts to answer such criticisms as these, Schönberg,
referring directly to "unflattering references to myself" as a
mechanic, architect or mathematician, offering the products of a brain,
not a heart, used the illustration of the centipede who, when asked
which leg he would move next, found himself paralysed, to show that he
realised the danger of allowing too much thought to interfere with
spontaneous processes; but he protested that he was given a brain to use it. However, "an idea is not always the product of brain-work - it may invade the mind unprovoked". (21)

Exponents of contemporary musical methods frequently seek to dispel the view of Schönberg as a mathematician, or juggler with notes, incapable of spontaneous expression, by citing examples of serial technique and dodecaphony in works composed before Schönberg had evolved his theories. Hans Keller's analysis of Mozart's quartets, demonstrating Mozart's use of serial technique, is a notable example; and Rufer supports his claim that dodecaphonic ideas can, and did, arise from the creative imagination by quoting from pre-atonal works. He mentions, for example, (a) Strauss' "Also Sprach Zarathustra", and (b) Reger's String Quartet in F# minor, opus 121, first movement (see Ex. 87).

Schönberg, also, relates (21) how, after he had completed his "Kammersinfonie" he "worried very much" about the apparent absence of any relationship between the two themes, (quoted at Ex. 88a. and b.) His doubts were so strong that he was tempted to cross out the second theme, but "fortunately I stood by my inspiration". About twenty years later, he saw the true relationship between the two themes, and was of the opinion that "it is of such a complicated nature that I doubt whether any composer would have cared to construct a theme in this way; but our
subconscious does it involuntarily”. In 88c. the true principle tones of the first theme (a) are marked, and (d) shows that all the intervals ascend. The corresponding inversion (c) produces the first phrase of the 2nd theme, (b) (See Ex. 88):

Ex. 88. (a)
Schönberg deliberately puts forward this illustration to support his repeated assertion that his method of composition rested as much upon inspiration as did that of traditional composers; and along with it he quotes an example of Beethoven's use of mirror forms, (from the finale of F major Quartet, op. 135), to demonstrate his claim that his method was based on the compositional processes of the classics.

However, although Schönberg has described music as a kind of message from a musical poet, he has strongly denied that his music should be capable of interpretation in terms of human experience. Rufer quotes Schönberg on this subject: "Although music is an art of expression, there are relatively few people who are able to understand what it has to say purely through their musical faculties, while the supposition that a piece of music must evoke images of some kind, and that if these are not forthcoming the work is unintelligible or worthless is as widely believed as only false and banal ideas can be". (quoted in 22) The feelings of the creator and of each individual listener differ widely in kind and intensity, and that feeling cannot be taught, learnt or measured. It is the imponderable in a work of art; therefore anything said about its role must be arbitrary and not universally applicable, and therefore meaningless. Instead of interpreting his spiritual message in verbal terms, Schönberg says that it will be communicated to the listener through "the logic of the music". And were we to ask how we may understand that "logic" we might
well find a typical answer in, for example, Rufer's reference to bars 27-28 of the fourth quartet's first movement, whose "definite musical logic" is accounted for in the following way.... "The first and second violin parts come from the original series, the viola and 'cello from the inversion at the lower 5th. The parts are coupled in pairs and present all the twelve notes horizontally and vertically in half-bar units, by the combinations of both pairs of parts". Although Schönberg insisted upon the expressive qualities of his music, bewildered listeners might well be excused their hostile, or at least irritated reaction if their introduction to the strange works consisted of such technical analysis, (as it so often does, a point to which we shall refer later - see page 177). Even in the 1960's, there are those professional musicians who have had opportunity to become very well acquainted not only with Schönberg's music, but with the music of many later composers, who still feel that serialism is "a technique which has been accused of being cold and mathematical ..... and which has never properly nullified the accusation". (29). J. Kermann, who feels that this is the case, expresses the view that "The fantastic apparatus of mathematical set theory and acoustical formulae, the shibboleth of 'total organisation' - these belong to the most extreme new serialists, not to Webern or Schönberg. Nevertheless, in a quieter form, the idea of artistic success through increasingly firm control undoubtedly played its part with the original twelve-tone composers". Kermann finds that the trouble with Schönberg's explanation that
serialism is merely a working method, and not a mystical key to the musically good, is that "serialism, viewed merely as a working method, seems to everybody else acoustically arbitrary, imposed from the outside, and above all, laboured".
Part II. The Expressive Function of Music

The fact is that despite assurances that the music of Schönberg and other 20th century composers can be proved to possess a degree of organic unity which equals that found in the accepted masterpieces of earlier composers, and despite the claims that have been made for the importance of organic structure in music, this music has not yet convinced the musical public of its value, even after fifty years. Demonstration of structural integrity, important though it is, will not convince an audience that a work deserves that admiration which we accord the works of the great classics. Something more is needed.

There is a widely held belief, implicit in many of the criticisms of "modern music" quoted above, and explicitly stated by Deryck Cooke (30) that what is needed is a clear and convincing outline, by non-tonal composers and theorists, of "the expressive aims of the new language" .... "to offset ever so slightly the present welter of aridly technical, not to say purely mathematical exegesis." These are the words of a writer "who whole-heartedly admires such of this music as he has found expressive of emotion", and who is, moreover, so firmly convinced that music is, and should be, a language capable of translation in terms of human emotion that he has undertaken detailed research into the possibility of coming to some objective understanding of the "emotional content" of "pure music". In stating the considerations which led to his research, Cooke writes: "It is hoped that this book will serve as a foundation on which eventually to build a more comprehensive classification of most
of the terms of musical language; and that it will thereby make it ultimately possible to understand and assess a composer's work as a report on human experience, just as we do that of a literary artist”.

Comparing Cooke's investigation into the "emotional content" of music as an objective means of assessing a composition, with the investigations examined above which sought to present "organic unity" of structure as the criterion of value, we find ourselves faced with yet another manifestation of the argument between Absolute form and Referential content in music. Examples of the interpretative, referential type of description, from which the musical autonomists turned away, may be found in the literature surrounding the music of Sibelius, offsetting the technical analyses already examined; and as they represent an important part of that background of belief in music's referential content against which Cooke developed his theory, I quote from several writers.

Ralph Downes, (31), states the belief that "there is no such thing as pure music; it is always a crystallisation of human emotions; and the fact that its story can be told only in music does not mean that it has none"; nor, apparently, does it mean that Mr. Downes may not attempt to tell it also in words. For example, in seeking the "meaning" of the second symphony, Downes recalls that it belongs to the same period as the symphonic poem "Finlandia", and, knowing as he does, something of the background to that work's composition, he "translates" the symphony via the tone poem. In "Finlandia" he finds "a tragic
undertone, .... but not a note of resignation. It opens in sullen anger and menace. After a prayerful, hymnlike interruption, the agitation grows to a blazing defiant climax". The second symphony can be interpreted as having "the same political feelings", and Downes, believing that in Finland the symphony is accepted as a symphonic drama of liberation, quotes the programme which the Finnish Schneevoight attached to it, thus; the first movement represents the quiet pastoral life of Finland; the second, marked "lugubre", is a lament, charged with patriotic feeling; the Scherzo suggests some bleak, snow-scurried landscape, portraying the awakening of national feelings, while the finale is a mighty chant of triumph, bold, spacious music of a monumental simplicity. In a similar way, Downes "translates" the fifth symphony, in terms of the background against which it was written, seeing it as an expression of the terrible pessimistic months of the war.

"Interpreters" of Sibelius' music are most likely to take into account the profound influence of nature upon the composer, and his love for his native landscape, associating the character of his Northern homeland — bleak, grim, remote, with an almost magical quality — with his music; or else to consider his position as a young patriot at a time when his oppressed countrymen were becoming increasingly restless and inspired with ideals of liberty, a time of wars and struggle.
Granville Bantock, for example, (32), with the traditional image of the Northern landscape in his mind, and, like Downes, recalling that the fifth symphony was written during war time, describes it thus: "In the music of this symphony we are brought face to face with the wild and savage scenery of his national land, the rolling mists and fogs that hover over the rocks, open lakes and fir-clad forests; while, in the continuous rumble of the threatening storms and war's alarms, we are made to feel how the iron has entered the soul of this hard land, where winter holds its relentless grip for eight months of the year".

Bernard Shore (33) asserts that the symphonies are not written to a programme. However, "we are given the feeling that Sibelius' music makes its own form .... Exposition, development and recapitulation are subject to the poetic thought". It is presumably this poetic thought which Shore attempts to mirror in his writing, when he treats the second symphony to a fanciful description which certainly makes for more interesting reading than any technical analysis could provide. For example, we read that "the two bassoons with their hurrying call" make "the flutes suddenly shiver into a tremolando". In the development, "the violas .... have begun one of the composer's weird backgrounds of running notes as if, in some dark forest, the air were crowded with unseen spirits. The music is eerie, as the strings become obsessed with anxiety, while the swinging phrase appears from behind the trees like an apparition" – and there is much more in the same vein. Shore, who sees in Sibelius' big works "the translation into music of some saga of a whole people", suggests that the finale represents Finland's
invincible courage, and bids us imagine an indomitable people, attain­ing after fearful vicissitudes, (expressed in the second movement), to the ideal of their faith. After Shore's description, it is surprising to be reminded that the composer has firmly denied any programme to this work, but Shore exclaims that it is "impossible not to be carried away by the feeling of a spiritual nation's liberation and triumph".

Cecil Gray shares Shore's impression of the second symphony as an expression of the feelings of all patriotic Finns at the time of its composition, and of their struggle for liberty. For example, in the slow movement, "the familiar principle of contrast between a lyrical first subject and a more virile second subject is here intens­ified into an almost epic conflict, involving several groups of thematic protagonists". He also sees the first symphony as a musical representa­tion of the political situation of the time, for he notes that while the principle subjects are predominantly Slavonic in character, the subsidiary ones are often distinctly Finnish, and the atmosphere of storm and conflict which pervades the entire work is largely the outcome of a kind of revolt on the part of this thematic rank and file against their lords and masters. In this way, the symphony presents a symbolic picture of Finnish insurrection against Russian tyranny and oppression. Gray qualifies his own interpretation of the symphony by adding, "Not that I would suggest ..... that the composer had any such purpose in mind while writing it, but there would be nothing surprising in it if there were an unconscious correspondence between the state of mind of the composer and the position of his unhappy country at the time when
the symphony was conceived." (8)

Karl Ekman, (34), Sibelius' earliest biographer, sees the music as a revelation of the composer's inner spiritual development, rather than as a reflection of external events, and this approach sometimes leads him to different interpretations from those of writers already quoted. For example, as if in answer to Gray, he writes that "the heroically tragic feeling of the first symphony, its constantly recurring key-note of a defiant manly attitude towards existence, misled many of his contemporaries to interpret it as a symbolic image of Finland's readiness to resist the threat from the East." But "the symphony was something more than that. It was first and foremost a profound human document. It describes the struggle of a soul full of conflict for its salvation. It communicates to the world its composer's self-searching; a résumé of what has been, and a view of the heavily-clouded horizon, it proclaims his sound resolution to accept whatever fate had in store for him."

In contrast to Gray, Shore and others who see in the second symphony undeniable evidence of conflict, Ekman regards the work as "radiant", "a spiritual confession, like the first, but of a brighter temperament, in which melancholy was softened by a more optimistic view of life, and a joyful feeling of the delight of creating".

Referring to outward circumstances, Ekman recalls that the Russians renewed their attack on Finland's rights and constitution in 1910, and the position became more threatening than it had ever been -
"Sibelius watched the terrifying course of events with gloomy foreboding, but did not try to find forgetfulness and relief from his anxiety in fruitless theoretical arguments". Instead, he worked on the composition of the fourth symphony, which Ekman regards as "throbbing from first to last with the proud and severe gravity of a suffering and triumphant being". Ekman mentions the programme relating the work to a visit by Sibelius to the Koli mountains, which was published in a Helsinki newspaper by a critic, only to be publicly denied by Sibelius himself; and he suggests that Sibelius' denial arose from his objection to the fact that impressions from the outer world of reality should be interpreted as decisive in a work which, above all, describes experiences of an introspective, spiritual nature, arising from pondering over the most important problems of existence, life and death. One wonders how Ekman gained the knowledge which his comments suggest he possessed, concerning the composer's inner spiritual experiences.

Ekman's interpretations, as we have seen, differ from those of other writers, and his comments on the fifth symphony differ from the interpretations of Bantock and Downes, who saw it as a symbol of the pessimism produced by the war. Ekman considered that by the time of its composition, Sibelius had passed beyond the years of change and stress, (which he feels were characterised by the fourth symphony). Hence he can describe the fifth as "that monumental work in which the master's creative spirit soared like an eagle in the sun above a tortured and broken world."
The symphony proved an expression of its author's strong optimism, gained through suffering in an evil time, an uplifting testimony to an indomitable faith in life's ever-renovating power.

Similar to the admissions of Shore and Gray that their programmes to the second and first symphony respectively were not authorised by the composer, but were suggested by extra-musical considerations, is a statement by Simon Parmet in the preface to his study of Sibelius' symphonies, (35). Although Parmet states that there are some things connected with music which cannot be expressed in words, yet "on the other hand, there are certain things which can and must be put into words when an attempt is made to make a work understood through other means than those of the music itself". Lamenting that the dividing line between what can be grasped intelligibly and what is unintelligible is too often overstepped by the use of too much imagination, he yet confesses to the use of verbal expression "beyond the boundaries of what is supplied by the music". For example, describing "Finlandia" and the first symphony together as "the Magnificat of a beloved fatherland in distress", Parmet immediately qualifies his description by admitting that this is not apparent in the music. "True symphony as it is, it avoids every reference to the composer's sources of inspiration, and appears to us in the pure form of absolute music. Nevertheless, our knowledge of the political situation of Finland at the time of writing, ...... and of Sibelius' central role in that situation, is bound to influence our assessment of the work and its non-musical background". This view reflects the idea that the content
of music is something outside the actual musical substance, for Parmet refers to the symphony as cast in the "pure form of absolute music", and yet attributes an extra-musical programme to it. Once again, the fact that the idea he suggests may well have been in Sibelius' mind does not justify the assertion that this is what the work actually expresses.

Parmet's description of the third symphony in relation to its two predecessors also suggests the use of his imagination at least as much as his musical perception; for he describes the second and third symphonies as "pastoral" - "but whereas, in the first and second symphonies, the music often expressed direct and deeply felt experiences in the woods and meadows by a man who was on intimate terms with the mysteries of nature, here the music evokes a pastoral vision as seen through the inner eye only. Sibelius turns his back on the world of reality and embarks on the way which leads him to the spiritual domain of the last symphonies." But before Sibelius reached that "spiritual domain", he had to pass through the crisis which Parmet, (like Ekman), sees reflected in the fourth symphony. Parmet says of the "tragic music" of the fourth, "it seems as though a cyclone has ravaged the Sibelian landscape, leaving him in a world torn to shreds". "The quietness of the final expression can be interpreted as a sign that Sibelius had made his peace with a strange world, its resignation as a token of his frustrated hope of subduing that world". After this tempest in the fourth, the fifth symphony appears to Parmet as a return, a homecoming, with Sibelius now sure of himself, and sure of his course, so that in the
sixth symphony he is ready to enter "that country of the soul which in his heart of hearts he had always longed for .... the silent country".

Most writers who seek to interpret Sibelius' music in the extra-musical way illustrated above, do so, it appears, in order to express or communicate their own enthusiasm for the music. However, at least one writer, Neville Cardus, writing in a similar vein, (36), expresses his dissatisfaction with Sibelius' music, and, by implication, his approval of Beethoven's. For, comparing the two, he finds Sibelius lacking in what he (Cardus) considers the most crucial respect - "there is no ethical appeal in his music. Sibelius is never concerned with the soul of mankind, and does not speak of the 'Umschlungen Millionem' ..... Sibelius does not express any individual emotion, he does not speak from the heart to the heart .... no spiritual or psychologic al problems are stated and conquered ..... The music of Sibelius is as though the sights and sounds of his country ... had, by some inner generative force, become audible in terms of rustling violins, horn calls out of a void, brass that swells to us in short gusts like music blown on a wind, beginning and ending almost as soon as heard, oboes and flutes that emit the clucking of weird fowl, bassoons that croak in the swamps and mists. It is the music of animism". Cardus goes on to express his disapproval at the austerity and lack of emotion and warmth in Sibelius' later symphonies in more detail, and
arrives at an unfavourable assessment of these works. Most of the writers quoted acknowledge to greater or less degree, that their evaluations were arrived at from primarily extra-musical interpretations which they felt might be applied to the music they discussed. However, by the enthusiasm and sympathy they displayed in their writing, they implied that the works were entitled to be regarded as valuable pieces of music. In most cases, the subjective evaluation was only implied, but with Cardus, who interprets the music of Sibelius in a similar way, and then turns from it to a "better composer", we find this subjective referential approach definitely being used as the basis for assessing the value of a composer's work. While it is generally agreed that a man's environment, his character, and the events of his life, will most probably affect his artistic output, any claim that the value of that output rests in the message which can be translated in the way illustrated, is immediately rendered vulnerable by the very fact which has been acknowledged in the foregoing illustrations - the music itself does not provide the means for this kind of interpretation, which must be inferred instead from the commentator's knowledge of the composer's biography and then projected on to the music; and as we have seen, it is possible to attach more than one such extra-musical interpretation to a single work. Thus agreement among writers is by no means guaranteed, and we have no objective means of verifying the truth of any one representation of a work's "message".

We have already examined the general theoretical ideas concerning
descriptive interpretations, and seen how the theory of complete
musical autonomy was developed largely as a reaction to the less-
controlled emotional wallowings of romantic "analysts". The extreme
view against the theory of music as expression is summed up in the oft-
quoted words of Stravinsky, "I consider that music is, by its very
nature, powerless to express anything at all, whether a feeling, an
attitude of mind, a psychological mood, a phenomenon of nature ...."(37).
Stravinsky is here offering an expression of opinion. He does not
adduce any proof, and furthermore, he is forced to accommodate the
large body of testimony to the contrary by adding, "if, as is nearly
always the case, music appears to express something, this is only an
illusion and not a reality". "One could not better define the
sensation produced by music than by saying that it is identical with
that evoked by the contemplation of the interplay of architectural
forms". (37) It is reasonable to believe that Stravinsky has formu-
lated a theory of this kind as a reaction to the excessive emotional-
ism of some romantics, (a reaction evident, too, in Schönberg's
approach). Cooke suggests (30) that it is this view of Stravinsky's,
which has been widely accepted as coming from such an eminent source,
that has had a most harmful effect on contemporary aesthetic thought,
for "it is worth noting that, until Stravinsky came out with his flat
statement to the contrary everyone naturally assumed that music was
expressive". This is not strictly accurate, for, as we have seen,
Stravinsky's is not an isolated view, but it is indeed well-attested
that the majority of listeners and composers have regarded music as an expressive art. A. Copland, himself a pupil of Stravinsky, has put the latter's remark in perspective with his attempt to explain it as "due to the fact that so many people have tried to read different meanings into so many pieces", a situation which we noted in connection with Sibelius' music. But Copland also says, "Heaven knows, it is difficult enough to say what it is that a piece of music means, to say it finally, so that everyone is satisfied with your explanation. But that should not lead one to the other extreme of denying to music the right to be expressive". (38). The value, indeed, of the subjective writings of Shore, Downes and the many others who have professed their enthusiasm for particular composers in similar ways, is that they do testify to the fact that music is expressive, even though they are open to the criticism that they are not necessarily related to the music, and thus cannot be regarded as valid means of musical evaluation.
The Language of Music: Preliminary Surveys.

It was in an effort to solve the problems expressed by Copland that Cooke undertook his very thorough analytical studies of hundreds of compositions, in an attempt to come to some objective understanding of the emotional content of pure music. If this can be done, the most powerful argument against the concept of music as an emotional language, (namely that we have no way of interpreting that language), will lose much of its force. As Cooke says, "If only we could come to understand the language better, we might well find ourselves agreeing more and more as to what any given piece expresses."

Cooke bases his investigation into music's language upon the recognition that in musical composition since 1400 at least, certain arrangements of notes, certain musical formulae, can be found to correspond to the expression of a particular emotion; and from his study of these musical formulae he has demonstrated the semantics of melodic shapes and other features of musical expression over five centuries. Although Cooke's is the most recent and the most comprehensive published study of the language of music, his methods were certainly recognised and practised by earlier writers, and the concept of music as an emotional language functioning through conventional formulae is at least as old as the 18th century doctrine of Affekts, and its 16th century predecessor, "Musica Reservata". The use of chromatic intervals and melodic progressions to express emotions of a painful nature is an oft-quoted example from a host of more obvious
formulae which were the stock-in-trade of the 16th century madrigalists, and 17th century opera composers; and this use of chromaticism survived, the Crucifixus of Bach's B minor mass and the ground bass underlying Dido's Lament in Purcell's opera being but two places where the connection is obvious. Bukofzer has undertaken a detailed study of the use of "Allegory in the Baroque", wherein he demonstrates many more such relationships, while Schweitzer's study of Bach's cantatas and chorales in relation to their texts was of considerable importance in its contribution to a deeper understanding of Bach's musical language.

Acknowledging the work of Mosewius, who, in "J.S. Bach in seinen Kirchenkantaten", (1845), tried to comprehend Bach's art as the art of characteristic musical representation, Schweitzer looked for the immost connection between poetic thought and Bach's musical expression. The many striking instances of tone-painting, (an oft-quoted one is the use of falling 7ths. in the bass of "Durch Adam's Fall"), led him to enquire whether other characteristic themes and figures were not also prompted by the pictures and ideas suggested in the text, and whether Bach's "Stimmung" "is not so much a generalised emotional state as one woven out of concrete musical ideas". As a result of his study, Schweitzer found that "if we arrange the themes and motifs of the chorales, fantasias, cantatas and Passions according to their formal affinities and congruence with the text, we see that whenever Bach has to find music for analogous ideas, a whole group of pictorial associations of ideas comes forward as if in obedience to an inner law". Schweitzer
could thus classify the motifs into step motifs, motifs of beatific peace, motifs of grief, of joy, of tumult, of exhaustion, of terror, and many others. He also found that "certain feelings are expressed in the same formulae as the pictorial ideas to which they correspond, for example motifs proceeding by sure strong steps symbolise strength, authority, confidence, faith; others, uncertain in gait, symbolise vacillation or the lassitude of death". And Schweitzer concluded from the evidence, "In view of this regular return of definite musical formulae in Bach's works we cannot but attribute to him a complete tonal language". Schweitzer considered an understanding of this language to be important not only for performance of the cantatas and Passions, but also in interpreting purely instrumental works. "Many pieces in the Well-Tempered Clavier, the violin sonatas, and the Brandenburgs speak quite definitely to us, as it were, when the meaning of their themes is explained by the text accompanying similar themes in the cantatas". (39)

Schweitzer confined his analysis of musical language to the music of Bach. Ernest Newman began his related studies with the music of Beethoven, and discovered that the composer was "obsessed by a certain little figure from first to last", especially in his slow movements. (40). The little figure in question consists of three ascending notes in conjunct motion, which generally come in about the same place relatively to the melodic design as a whole, and "are unconsciously used to perform
the same expressive purpose." The occurrence of this figure in Beethoven's rapid movements is rare. In the slow movements it "has the creation of a feeling of uplift, of tension, of emotional intensification at a climactic point in the melody." Newman asserts that Beethoven "is the only composer in whom you will find such a sequence of three notes used with such frequency always at the same equivalent point in the melody and always as the obvious expression of a certain state of mind." "Always he is found unconsciously turning to the melodic and rhythmic formula that for him is inseparably associated with that mood or that effect".

After studying Beethoven's "finger-prints" in detail, Newman worked at this subject in connection with other composers, and came to the conclusion "that each of them proceeds along similar lines and thus it is possible by careful analysis to establish in each composer's work a physiology of style that is the basis of his psychology". Such knowledge of "the elements of a composer's style" has a practical aesthetic value, "for while on one hand we see a certain mood always realised through a certain formula, on the other hand, whenever we meet with the formula we are entitled to infer the mood". Newman proposed that the establishment of "a preliminary physiology of each of the great composer's styles" should be the concern of writers on music, instead of the "psychological" approach, which seeks to read meanings into music; and in his numerous essays, Newman sought to describe some of the finger-prints, which various composers used. In so far as he claimed that each
composer had his own personal set of formulae, which, even if they resembled those of another composer, might well still have a unique individual meaning, proceeding from an individual subconscious, Newman's studies differ from later attempts, by Cooke and others, to interpret music as a universal, or, more accurately, a localised language, where all composers within a related culture and tradition use similar common formulae to express similar emotions. However, Newman certainly recognised the possibility of music being such a language. This is evident in, for example, his essay on Tchaikowsky's "Pathétique" symphony, where he comments upon the tremendous importance attached by some musicians to the similarities between the symphony's opening theme, (Ex. 89) and the opening of Beethoven's "Pathétique" sonata. (Ex. 90):

Ex. 89.

Ex. 90.

Newman argues that what had been overlooked was the simple fact that the supposed reminiscence was no reminiscence at all, but merely one more use
of "a grief motif which is very common in music", and which he also finds in, for example, Wagner's "Tannhauser" prelude (Ex. 91) and the first of Brahms' Four Serious Songs.

Ex. 91. From: Tannhauser's "Pilgrimage".

How completely the figure had taken possession of Tchaikovsky's imagination is shown by the way it reappears in an inner part in the second subject, (Ex. 92):

Ex. 92.

Newman concludes that Tchaikovsky, in fact, being "a very natural composer who wrote just as he felt," had unconsciously packed his symphony with this and other "natural" expressions of grief, (for example, the wailing descending theme, in the above extract, (Ex. 92); and he adds in parenthesis, "The music of the last two or three hundred years is largely based on these "natural" motifs; a card index of them could easily be compiled and would be very instructive". (41).
Anticipations of the compilation of such a "card index" are found in the writing of Walford Davies, (42), who saw music as "a localised language, acquiring associative meanings, upon which composers and listeners can find themselves, by usage, tacitly agreed". Spoken language grows because of common agreement that a certain sound is associated with a certain act, fact or feeling. For example, "Ja", in Germany, means "Yes", but it would be unintelligible in another country. Similarly, if, say, the following (Ex. 93) were to be played on any piano in Western Europe, all Westerners would understand it to mean a conclusion, but Easterners would have to learn such a meaning, by education, or accumulated experience and association.

Ex. 93.

\[
\begin{pmatrix}
4 & 2 \\
\end{pmatrix}
\]

Western musicians have agreed to use these two chords with this meaning over a long time, so that the formula has "passed into the language", though there is still an immense variety of individual ways of making this particular well-worn musical remark, "just as there are ways of saying 'Goodbye'. The latter can vary between the pompous old gent who phrases his farewell thus; 'I wish you a very good evening', and the bosom pal who playfully substitutes "Bye-bye" and is answered by "Cheerio". A musical conclusion can vary in similar ways, and Walford Davies quotes three examples to illustrate:
Davies anticipated the work done by Cooke, when he attempted to "explore in detail the workings of music as a 'local language' of Western Europe", and when he outlined the investigations which he foresaw would take place. "One can imagine how entrancingly interesting it must be to philologists to make a parallel pursuit of .... words, and to track out the ways in which a mere aboriginal grunt may gradually develop into a sort of word, destined to harden .... at last into a recognizable well-defined shape"; and "doubtless there will arise in time musical philologists whose job it will be systematically to track rhythms and melodic terms and, later on, chords of every known kind, in every variety across whole continents, showing us what significance they have acquired down the musical ages .... But it is, alas, early days for this; nor must we in our lifetime expect such good fortune as to get much light thrown upon so deep a matter .......

Davies uses the musical chord as analogous to a word, as the basis of his investigation, considering that both words and chords have special associations "in context". (He stresses the importance of considering
the chords in their context). Here, he believes, "lies the link between the accustomed languages of associated words, and the great language of associated chords which Western Europe has been slowly forging" ..... "For musical sentences (become) eloquently communicative of the inmost mind by the very ordering of the chords themselves". Because of this, Davies believes that the compilation of a "chord dictionary" will one day be acknowledged as a valuable aid to the understanding of music. He gives an imaginary example of a specimen page from such a dictionary to show the form it could take, as follows:

\[
\begin{align*}
\text{E minor chord} &= \text{a chord generally associated with sadness or depression, but capable of conveying many shades of quite opposite character, e.g. depth of gloom or comparative peace, according to context. Used in contrast with its companion major chord, (see page so-and-so ) it can represent the passing from a carefree to an anxious state and vice versa. The following are some of its characteristic shades of meaning .....} \\
\end{align*}
\]

Davies considers that the dictionary might well begin with "the two most significant chords", thus;

\[
\begin{align*}
\text{open perfect fifth, signifying clearness, optimism, faith and a thousand similar ideas.} \\
\text{an augmented fourth or tritone,}
\end{align*}
\]
signifying obscurity, uncertainty, and many similar ideas.

An important anticipation of Cooke's theories can be found in Davies' recommendation that "in trying to discover a working list of inherent and associated meanings, it is essential to think of the intervals lying within each chord". (Compare page 153, Cooke's "tonal tensions".)
The Language of Music: Cooke

Schweitzer examined Bach's musical language as it was manifested in the chorales and cantatas; there the expressive significance of the music was revealed to him in the words, and Schweitzer recommended a study of these works with texts as the basis of an understanding of the instrumental works, where the expressive content was not revealed in words; for "the meaning of their themes is explained by the texts accompanying similar themes in the cantatas". Cooke, too, establishes the terms of music's vocabulary by numerous quotations from works where there is a text, (and he deliberately avoids using examples where the genuineness of the text is in doubt), or a programme, to establish the emotive significance of the musical examples before dealing with "absolute" music. (30)

Cooke first explains how the musical language is built up from basic elements. The basic material of music is notes of definite pitch, and musical works are built out of the tensions between such notes. These tensions can be set up in three dimensions, pitch, time and volume; and the setting up of such tensions, and the colouring of them by the characterising agents of tone-colour and texture constitute the whole apparatus of musical expression. Pitch tensions can function as "tonal tensions", (what the actual notes of the scale are), and as intervallic tensions (in what direction and at what distance the notes are from one another). These two kinds of tensions, though disentangled for the
The purpose of analysis, are in reality always indissolubly united into a single expressive whole, and they can occur melodically or harmonically. The dimension of time functions in a greater variety of ways. Music need not set up time-tensions at all (for example, plainsong does not, with its fluid, unmeasured rhythm). The first expressive function of measured time which Cooke notes is that of rhythmic accent - which makes some notes stronger than others. The only other kind of time-tension beside that of accent is duration (notes longer or shorter than each other), and this tension functions in three ways, as tempo, movement, (even - jerky) and phrasing (staccato - legato). Thus Cooke enumerates the basic elements of music, and is then faced with the problem of "disentangling the multifarious interactions of all these elements upon one another", to discover which is the fundamental one, on which the others act as qualifying agents. He concludes that pitch is the fundamental element, and that ultimately the fundamental element of pitch itself is tonal-tension - "this is the basis of the expressive language of music; the subtle and intricate system of relationships which are known as tonality". Within tonal tensions we find the basic terms of music's vocabulary, each of which can be modified in countless ways by intervallic tensions, time-tensions, and volume-tensions, and characterised by tone-colour and texture. (Cooke refers to all of these latter as "qualifying agents".)

Cooke demonstrates "the bed-rock nature of tonal tensions" by showing
that a group of four adjacent descending notes, played slowly and quietly, legato, to the rhythm of 1 - 2 - 3 / 1, in triple time, (as in Ex. 95a), that is, with all the qualifying agents established and understood, means precisely nothing unless we show exactly what notes they are. But once we make clear the tonal tensions between the notes, by adding a treble or a bass clef, all becomes clear. A treble clef gives 8 7 6 5 in the major scale, and the opening of Dowland's "Awake, Sweet Love" (Ex. 95b); a bass clef gives 8 7 6 5 in the minor scale, and the opening of Bach's "Come, Sweet Death". (Ex. 95c.).

Ex. 95 (a) Slow (b) (c)

"Here, though the qualifying agents have a kind of general expressive quality of their own, the particular expressive effect in each one is entirely individual, there being all the difference in the world between falling from 8 to 5 in a semitone, tone, tone, and falling from 8 to 5 via tone, tone, semitone". On the other hand, the basic terms of the tonal language have no more than a general significance until brought to life by the activity of the qualifying agents. If we consider 8 7 6 5 in the major scale, we must see that its "latent power to express a mood of fulfilment" can be brought out in quite different ways, according to the way in which it is brought to life by the qualifying agents. Cooke
quotes three examples to demonstrate; (Ex. 96):

Ex. 96.

(a) Slow  (b) atempo ordinario  (c) $J = 92$

Here the qualifying agents make each version of the basic term quite different in its specific effect. "In fact, the qualifying agents are really vitalising agents, for they give the basic emotional connotation of any given set of tonal tensions a vivid and entirely individual life of its own".

Cooke isolates these various elements of music language, dealing with them in detail. In his consideration of tonal-tensions, he isolates each note of the scale, and by tracing its use in works of all kinds, from Dufay onwards, demonstrates that each has acquired an emotive meaning, dependent upon its relation to the key-note, and its need to resolve to another note of the scale. Cooke also seeks to explain the emotive associations of notes by appealing to the natural hierarchy of the harmonic series, where the octave is seen to be the firmest, fixed relation, and the fifth, which occurs next in the harmonic series, as the next most satisfactory, firm, confident sound, and so on. It is from this consideration of the harmonic series that Cooke justifies the traditional
association of the major tried with pleasant emotions, and the minor with painful ones, and the expansion of these associations to include major and minor keys. As support for his view that the minor third functions expressively as a "depression of the major third", and has a definite aural significance as such, he bids us consider Act Two of Wagner's "Valkyrie", when, Wotan's world having collapsed about him, he laments his fate in a low-pitched recitative, ("Als junger lieber"), in A minor. This is supported only by a low, sustained A on 'cellos and double-basses, the harmonic series of which can actually be heard sounding, (in a 'live' performance), as far as the fifth note that is, as a ghostly major chord; and the minor third of the vocal line can be heard jarring with the major third of this chord as a gloomy depression of it. "Here one can experience the musical expression as an acoustical phenomenon".

Cooke summarises his findings in a table which relates each of the twelve notes to its basic expressive function, for example;

1 : Emotionally neutral; context of finality.

Minor 2 : Semitonal tension, down to 1, in a minor context;
spiritless anguish, context of finality.

Major 2 : as a passing note, emotionally neutral. As a whole-tone tension down to 1, in a major context, pleasurable longing, context of finality.

Minor 3 : Concord, but a depression of natural 3. Stoic acceptance of tragedy.

Major 3 : Concord, natural 3, pathos.

He continues this table, dealing with the other seven notes in the same way.
Referring again to the ambiguities in the equation of major keys with pleasure and minor keys with pain, (apparent, for example, in the use of major keys for Orfeo’s lament for Euridice, "Che faro", in Gluck’s opera, and the Dead March from Handel’s "Saul", and in the use of a minor key for Mendelssohn’s fairies in the music for "A Midsummer Night’s Dream"), Cooke concludes that "a composer does not express pleasure or pain simply by using the major or minor system, but by bringing forward and emphasising certain tensions in these systems in certain ways. This emphasis and these ways derive entirely from the use of the vitalising agents - volume, time and intervallic tensions". Of these vitalising agents, volume is the simplest, and can be easily described. Basically, the louder the music gets, the more emphasis is being given to what is expressed, and the converse is also true. However, beyond a certain point of softness, a new kind of emphasis appears, the emphasis of secrecy or of understatement.

Time, another vitalising agent, "functions in music as in life; it is a dimension in which things occur in succession. Hence in music it expresses the speed and rhythm of feelings and events - in other words, the state of mental, emotional or physical animation". The time dimension functioning as rhythmic accent throws emphasis on to a given note in the scheme of tonal tensions, and thus qualifies the emotional expression of a phrase of two or more notes. The chief expressive power available in the time-dimension is tempo; the faster the tempo, the greater is the animation. (Cooke refers in parenthesis to the obvious connection with
walking and running feet, and the beat of the heart.) The effect is seen most clearly in a theme which the composer uses at different tempi, for example the main theme of the finale to Beethoven's ninth symphony, which is used at the end of the movement at a faster tempo, and in quavers (which produce double the speed). The effect of tempo on emotional expression is clearly all-important, since every basic emotion can be experienced at many levels of animation.

When considering pitch as a qualifying agent, Cooke first recognises the use of ascending and descending groups of notes to illustrate suggestions of movement, (that is, music functioning as tone-painting). He then goes on to consider "up and down" in its emotional aspect, for rising and falling pitch can express a rising and falling vitality in a given emotional context. "The expressive quality of rising pitch is above all an 'outgoing' of emotion; depending on the tonal, rhythmic and dynamic context, its effect can be active, assertive, affirmative, aggressive, striving, protesting, aspiring. The expressive quality of falling pitch is of an 'incoming' of emotion: depending on the context, it can be relaxed, yielding, passive, assenting, welcoming, accepting or enduring".

Sometimes pitch functions by not fluctuating at all, as in repetitions of a single note. Such repetitions may be fast or slow. When slow, the level of animation is low, and there is no sense of outgoing or incoming emotion, but only of a monotonous deadness. In consequence, this procedure is used in funeral marches and other music connected with the idea of death.

These vitalising agents function also in the field of speech, and we
can get a broad idea of their effect by considering their behaviour in this field. If we think of a group of people talking, it is obvious that, the more excited they become, the louder, quicker and higher their voices will get; the more relaxed they become, the softer, slower and lower will be their speech. However, what remains of prime importance are the words themselves, and so, having elaborated upon the vitalising agents, Cooke returns to the "tonal tensions" which he regards as the nearest equivalent in music to words. Now, after he has broken down music into its basic elements, Cooke can begin "to put the parts together again, with a better idea of how they are likely to interfuse with one another for expressive purposes". He isolates and examines sixteen different combinations of notes into those short phrases which he describes as "the basic terms of music vocabulary", and once again he gathers examples from different periods and different composers, to establish the emotive significance of each term.

As his first basic term, Cooke takes the "Ascending 1 - (2) - 3 - (4) - 5, (Major)", and deals with it as follows; "We have postulated that to rise in pitch is to express an outgoing emotion; we know that, purely technically speaking, the tonic is the point of repose from which one sets out, and to which one returns; that the dominant is the note of intermediacy towards which one sets out, and from which one returns, and we have established that the major third is the note which looks on the bright side of things', the note of pleasure, of joy. All of which would suggest that to rise from the tonic to the dominant through the major third ..... is to express an outgoing, active, assertive emotion of joy."
Composers have in fact, persistently used the phrase for this very purpose". Cooke illustrates the use composers have made of this formula with examples from Byrd, Purcell, Handel, Mozart, Berlioz and Liszt, all from works where the composers were setting words to music. (Ex.97)

Ex. 97.

a) Byrd. 1611.

\( f \) Blow up the trumpet

\( f \) O praise God.


\( f \) Trumpet.

(f) Ev’ry valley

e) Handel. Allegro

(f) For he is like—

(f) Und bringe mich und bringe

g) Mozart. 1789.

(f) (strings)

(h) Mozart. 1791.

(f) Triumph, Triumph, Triumph!
The three Mozart examples show that a composer can use a single term over and over again; there are many examples of this re-use of the same term in the works of every tonal composer. The first (Ex. 97 f) is the climax of Belmonte's opening aria in "The Seraglio", where, waiting to see his beloved Constanze again after long separation, he prays to Love to "bring him to his goal". The second is the orchestral opening of Fiordiligi's aria in "Cosi fan tutte", where she sings with glad confidence that her fidelity to her lover is "firm as a rock". The third is the greeting of the chorus to Tamino and Pamina in "The Magic Flute", after they have passed through their ordeal triumphantly. The Berlioz example (Ex. 97 i) is from the Easter Resurrection Chorus in "The Damnation of Faust", while the Liszt quotation comes from the Magnificat as the "Dante Symphony" proceeds to the upper reaches of Purgatory near to Paradise.

Cooke also includes, among his examples for this basic term, a quotation from an instrumental work, the character and expressive purpose of which is not established by words or a programme - Strauss' "Blue Danube" Waltz. Usually, as we have said, Cooke does establish the emotive power of the formulae from works which make the connection obvious,
before going on to apply this connection to "pure music", as he does at the conclusion of his discussion of each of the sixteen basic terms. For example, after providing evidence that the formula 1 - 3 - 5 has indeed been used by composers to express an outgoing feeling of joy, he concludes, "Does not (his set of examples) show how the opening of the finale of Beethoven's fifth symphony can be legitimately said to express triumph? (1 - 3 - 5, major, fortissimo, allegro, 4, alla marcia, with a rhythm of three even hammer blows played on trumpets non legato with a full orchestral texture consisting of the major triad). And can we not say that the opening of Brahms' second piano concerto (see Ex. 98), definitely expresses a serene, romantically dreamy, yet rock-firm feeling of joy? (1 - 2 - 3, (432) 3 - 5, major, mezzo-piano, allegro non troppo, 4, 4, evenly flowing rhythm, played on the romantic horn, unaccompanied.)"

Ex. 98.

Having demonstrated how it is that small fragments of musical tissue are expressive, Cooke has to consider the suggestion that, while single themes may in themselves be expressive of particular emotions, they have to be built up into an overall structure, and this building-up must proceed by the laws of "purely musical logic", heedless of expressive considerations. He must answer the question, "Can a musical structure function continuously as expression in reality, is it not rather a purely musical pattern, woven out of fragments of expressive material?"
answer, Cooke asserts that "Music is no more incapable of being emotionally intelligible because it is bound by the laws of musical construction than poetry is because it is bound by the laws of verbal, grammatical construction". "We should laugh at a literary critic who maintained that verbal language had a logic of its own which made it incapable of coherent emotional expression; then let us laugh at the theorists who say the same of musical language". Cooke firmly maintains that "our so-called purely musical logic" is just as much an expressive logic as is "purely verbal logic". "The laws of musical construction which are supposed to preclude coherent emotional expression are used, by the great composers, for the very purpose of achieving such coherent emotional expression". For a very simple example of musical form functioning as "expressive form", Cooke bids us consider "the shattering and completely unambiguous emotional effect" which Tchaikowsky achieved in the finale of his "Pathétique" symphony by adhering to a simple and well-worn formal procedure: "A (first subject) - despairing 5 - 4 - 3 - 2 - 1 in basic context of tonic minor, forte, eventually alleviated by B (second subject) - consoling 8 7 6 5 in the subsidiary context of relative major, pianissimo swelling to forte, eventually swept aside by return to A, again the despairing 5 4 3 2 1 in basic context of tonic minor, forte, swelling to fortissimo, leading to B again, which this time, however, is the despairing 8 7 6 5 in the basic context of tonic minor, fortissimo, dying away to pianissimo. Here at the second statement of B, an orthodox adherence to an iron "law" of classical sonata form, - that the second subject must be recapitulated
in the tonic key, - plus the exercising of the choice whether that tonic should be major or minor, is the actual means whereby Tchaikowsky has achieved the final and clinching expression of emotional catastrophe".

Music's method of coherent emotional expression is, in short, "nothing more mysterious than the presentation of some general, but clearly-defined attitude towards existence by the disposition of various terms of emotional expression in a significant order. And musical form is simply the means of achieving that order". When he refers to "musical form", Cooke is fully aware of the new approach to formal analysis which we have observed. He refers to "all those musical analysts who are apparently only intent on demonstrating formal unity", and clearly reveals his opinion that purely formal analysis is not sufficient, by his adaptation of "the new methods" to his own purpose of demonstrating the emotional effects achieved through the structural organisation. He quotes, for example, some of the themes from the Eroica symphony to show not only "the most obvious instance of formal unity", but to prove his contention that "a work must have formal unity because it must have expressive unity". All the examples he provides show "the continual transformation of that familiar basic term, the major (5) - 1 - 3 - 5, which occurs in the opening theme, into new melodic shapes". Cooke considers that although the formal unity considered on its own is striking, the real point is that the "Eroica" owes a large part of its formal unity to this continual transformation of the basic term announced at the outset - "which is only natural in a heroic symphony, since the
phrase is a conflation of the joyful major 5 - 1 - 3 and the
triumphantly joyful major 1 - 3 - 5, and its minor version is a
conflation of the heroic minor 5 - 1 - 3, and the protesting minor
1 - 3 - 5. "A theme from the Eroica symphony will not fit into the
Pastoral symphony because it does not make formal sense there, true;
but the more fundamental reason is that themes like those of the
Eroica simply will not 'come into the head' of a composer intent on
expressing emotions arising out of contact with natural surroundings,
because they are not attached to those emotions in the unconscious.
Likewise, the diverse themes of the Eroica are bound to have a family
resemblance, are bound to have a common derivation from the original
inspiration, because all the various emotions of the complex which the
work as a whole expresses are closely related to one another ...."

Cooke concludes his study with complete analyses of Mozart's
Fortieth symphony, in G minor, and Vaughan Williams' Sixth symphony,
recognising that these works "present a challenge, in the shape of a
problem which has always been regarded as insoluble". His claim, the
claim of a semantic study of the language of music, is that by such
study, this challenge can now be met, and the means are at last at hand
to solve the problem of establishing objectively the meaning of a piece
of "pure" music. And the "meaning", according to Cooke, will consist
of the expression of a certain complex of emotions which the composer
experienced and put into such a form that the listener recognises and
experiences that same complex of emotions. "Our task is to discover, in each case, exactly what complex of emotions has been expressed by them, that affects the listener so profoundly".
The Rival Claims of Structure and Semantics in Music

Most attempts to describe the emotional or expressive content of music prior to Cooke, depended, as we have seen, upon a knowledge of the composer's environment, character, personal philosophy and other extra-musical considerations, and thus were vulnerable to the charge that such interpretations were invalid musically, being subjective accounts of individual emotional experiences, or at best, "interpretations" suggested by extra-musical circumstances projected on to the music. Formal structural analysis, which alone considered what Galvocoressi called the "direct data" of the music, consistently pressed its claim to be the only valuable way of talking about music, as it alone could provide the basis for objective opinions. However, Cooke now claims to have provided us with equally objective methods of verifying the expressive content of music, from a consideration of musical material and procedures. And he makes it clear that he considers his investigation has provided much-needed support to the view that music is an expressive art to counter the overwhelming claim from others that music's meaning is "all a matter of structure".

As we can see from Cooke's preface, and from his discussion on whether music is an expressive art, as well as from his passing references to "all those music analysts who are apparently only intent on demonstrating formal unity", he clearly believes we have to deal with two opposing points of view. When introducing his subject, Cooke comments that when we try to assess the achievement of a great literary artist, "we feel that .... what he has said .... is as important as
the purely formal aspect of his writing. Or rather, these two main aspects of his art, - 'content and form' - are realised to be ultimately inseparable: What he has said is inextricably bound up with how he has said it; and how he has said it clearly cannot be considered separately from what he has said". "The same is unfortunately not felt to be true of the artist who makes his contribution to human culture, not in the language of speech, but in that of music. Music is widely regarded nowadays not as a language at all, but as a 'pure' inexpressive art, and even those who do feel it to be some kind of language regard it as an imprecise one, incapable of conveying anything so tangible as an experience of life or an attitude towards it". "Hence attempts to elucidate the 'content' of music are felt to be misguided ... the writer on musical matters is expected to ignore ... what the composer had to say and to concentrate entirely on how he said it .... he is expected to concentrate entirely on the 'form' which is not regarded as saying anything at all. Thus the two inseparable aspects of an expressive art are separated, and one is utterly neglected - much to the detriment of our understanding of the other. Instead of responding to music as what it is - the expression of man's deepest self - we tend to regard it more and more as a purely decorative art .... By regarding form as an end in itself, instead of as a means of expression, we make evaluations of composers' achievements which are largely irrelevant and worthless".

"The writer .... is expected to concentrate entirely on the form, which is not regarded as saying anything at all". Much depends upon what
Cooke means by this. There are certainly those who feel that the central effect of music, as of the other arts, lies in its beauty of "configuration". Osborne and Stravinsky, as we have seen, consider that music is "powerless to express anything at all", and that its effect rests in the interplay of architectural forms. But Cooke himself suggests that it "was no doubt the wild and baseless conclusions of some of the writers of those days that led the aestheticians of our own time to lay an embargo on the interpretation of musical works".

Now a disinclination to interpret musical works verbally in terms of life-emotions, in favour of a study of the structural organisation of those works, does not necessarily lead to the view that musical form "says nothing" or that music is not expressive. Cooke does not mention formal analysts by name (except for a passing reference to Keller), and so we cannot be certain that he is referring to the analysts we have discussed when he speaks of writers who have laid an embargo on the interpretation of musical works. But in so far as he means "interpretation" in terms of life-emotions, this is precisely what Reti, Walker, Keller and others have done, Schönberg in particular declining to "interpret" his music in this way even when subjected to very heavy pressure to do so. Yet all of them have stressed that music is a means of communication, and that it is this first and foremost. "If the composer expresses unconscious musical ideas, appreciation must be an act of unconscious identification with those ideas on the part of the listener ..... the composer-listener relationship is really a communion of unconscious minds". (Walker).

"Music as a process of communication is an emotional experience; if it
is not emotional, it is nothing" (Keller) "So much talk about structure and thematic derivations may disappoint the reader who has been overwhelmed by the emotional force of the seventh, (that is, Sibelius' seventh symphony). But if he has been overwhelmed, that is enough". (Abraham) If music is thus regarded by these writers as a process of communication, then it seems that the form upon which they concentrate must indeed "say something". Why then do they not embrace the sort of interpretation which Cooke represents as essential to a well-integrated view of music? Where, if anywhere, do the structural and semantic approaches meet?

Because Cooke regards these analysts of perpetuating the theoretical division between form and content in music, he feels it necessary to devote some space to re-stating the argument that form and content are one, and cannot be separated in an evaluation of a musical work. He compares the elements of music, (technical elements such as key, basic term, sequence of note values, tempo), with the separate parts of a watch, which function together in the watch. But there is, he points out, another part to the watch - "its ability to tell the time", which is not a mechanical part but something much more intangible - the interpretation which we put upon the working of its mechanism. Likewise, in a piece of music, we have to admit that there is another "part" beside the technical elements - its ability to move us - which is not a technical part, but something more elusive - the interpretation which we put upon the interaction of the technical elements. He also suggests, using another
apt analogy, that the "content" of music consists of the emotion "contained in the music as an electric current is contained in a wire. If we touch the wire we shall get a shock, but there is no way whatsoever of making contact with the current without making contact with the wire".

Now I suspect very strongly that these are words with which Reti, Walker, Schönberg and Keller would wholeheartedly agree. In fact, so fully do they agree with this kind of argument that the very agreement explains why they differ in their approach. Some words of Cooke are very revealing and significant here. For when he is discussing one of the central points of his theory, "the process of musical communication", he asks: "How, precisely, does music communicate the composer's feeling to the listener? ..... how is a musical phrase made to bear a particular 'content'? What is content? ..... How does it get into the music? And HOW DOES IT GET OUT OF IT AGAIN AND INTO THE LISTENER? " And here, I believe, we have the key to the matter. For while Cooke asserts that contact with music's content can only be made through contact with the music, he bases his whole enquiry on the matter of how this content, which can only be experienced in the music, "gets out of it again, and into the listener". Cooke, no less than Walker, Reti and Keller, is faced with the problem of discussing in words something which can only be expressed in music. Although he bases all his interpretation strictly upon consideration of the music itself, and does not rely upon any extra-musical, pseudo-psychological help, nevertheless what he finds as a result of his search is the content after it has "got out of the
music again" - as any verbal analysis cannot help finding. And in this sense, he too has to separate music's "content" - not from its "form" - (in so far as "form", too, is expressed in words, he has equated the two quite convincingly), - but from the "form - which - is - the - actual - experience - of - the - content - within - the - total - musical - experience". What Cooke talks about are real-life experiences, human emotions which are a result of real-life situations. He talks of music expressing, and arousing in the listener a sense of grief, of despair, of sadness. But these states of mind come to us not as the result of listening to music, but out of our situation in real life. If Tchaikowsky's "Pathétique" awoke in the listener that same grief and despair which come: from bereavement, frustrated love or warped human relationships, would its performance really fill the Albert Hall and many other great concert halls year after year. No normal human being deliberately seeks real pain, it is only because these life-emotions are transformed and made bearable, even pleasurable, through the total artistic experience that we return again and again to music which "expresses" them, but which is not the cause of them.

Keller, when asked at a lecture to comment upon Cooke's explanation of music's meaning, expressed the view that Cooke erred, in ascribing definite names to emotions which could not be named. "In musical expression, certain combinations of feeling are expressed for which we have no name. Cooke's mistake is to give a verbal description of indescribable feelings". However, "Cooke's mistake" is of considerable value to, (and has been widely read and acclaimed by) those who have
always assumed that music is related to life, is not something outside, and apart from our human experience, and who have been accustomed to evaluate composers according to what they expressed.

This association of art with life needed to be reaffirmed, and Cooke has done this in the only really convincing way, not by abstract philosophising but by demonstrating that composers themselves have associated music with emotions so consistently as to exclude all possibility of these associations arising from "meaningless" formal patterns by sheer coincidence.

Those who deny the validity of writing which relates music to describable emotions may possibly have forgotten that psychologists have found within the human mind a strong tendency towards association, both conscious and unconscious. Similarly, Cooke has discovered in the minds of composers over five centuries a strong tendency to associate certain combinations of notes, dynamics and rhythm with particular aspects of our common life experience. Cooke's procedure, as we noted, was to demonstrate the "meaning" of the basic terms by showing their alliance with words expressive of the specific emotional meaning, before going on to adduce a similar association of basic term and emotion in purely instrumental, non-programmatic works. It seems, indeed, that the psychological theory of (frequently unconscious) association based upon previous experience and learning would serve well to explain the findings of Cooke and of the multitude of music lovers who know that music does speak to them of human things.

Cooke himself has not developed this idea of association in his
consideration of the process of musical communication; when he seeks
to explain how music is transferred into feeling, he asserts that "it
can only be by stimulating our emotional faculties themselves". There
must, however, be more to the process than the simple cause-and-effect,
or direct stimulus-perception-response situation which Cooke appears
to envisage. For as we have said, the emotions which Cooke sees music
arousing in us are extra-musical emotions, identical to life-emotions.
They do not represent our direct response to the musical stimulus. But
by the operation of an inner, unconscious association of ideas we may
recognise that the music is about grief, (or joy), and may fully
recognise that it is "a record of human experience" with which we can
identify our own experience, yet, still, because music is not the
actual grief-producing stimulus, preserve what theorists delight to call
an aesthetic detachment, which enables us to go on loving the music —
whereas we do not love, nor wish for a r é p é t i t i o n of the bereavement, or
financial ruin, or whatever it is which actually arouses the real emotions
of grief or despair.

Having referred to "aesthetic detachment" and thus touched upon a
philosophical concept, let us look, for further elucidation, to L.A. Reid's
consideration of artistic experience, (43 and 44), for Cooke's investigation
into musical semantic is related to the contemporary tendency, reflected
in Reid's writings, to regard art as a symbolic language. It is signi-
ficant that Reid rejects the view that art is an expression of life-
emotions in the sense of cause and effect, although he recognises that
it may arise from consideration of art as symbol. "An over-simple
application of the principle of 'symbolisation' very easily leads us to the view that because poetry, (he includes all forms of art), is 'symbolic', and symbols, in their very nature, refer to what is beyond themselves, therefore the 'meaning' of poetry is to be sought in sources outside poetry, in 'life' experiences, or 'life' emotions'. But Reid refutes this view, for "Artistic activity, when it comes to its fruition, is never just expression in art of anything that existed completely before it, but is discovery of new embodied meaning". However, Reid accepts that though art is not identical with life, it is not outside life, and in explaining the relationship of works of art to life-experiences, he suggests; "An approach to the understanding of the aesthetic operation of symbols can be made via the apprehension of meaning through association. Experience of meaning can arise through association of words or ideas or affects or percepts or of all together". For example, he cites the fact that the smell of chloroform may suggest to the patient fear, or other unpleasantness, while the sight of a matchbox might suggest to him a fire, a mantlepiece, his pipe, and the feeling of a warm cozy study. In these cases, the things first mentioned, (chloroform, matchbox), do not "mean" what they suggest or call up - "yet the ideas or things as experienced, and chiefly as felt, do, in another sense, 'mean' an associative context of which the focal idea is one part". It is mainly in this way, I believe, that Cooke's "descending 5 (4) 3 (2) 1, minor" basic term "means" discouragement and depression.
Both Cooke and Schweitzer lean heavily for their interpretation of music's language upon music's connection with words. It is interesting to remember along with this, that when Schönberg first began to compose in the new musical-language, he composed mainly works using verbal texts, in the belief that the meaning and coherence of the texts would help to convey the effect of unity, at a time when he was still learning how to organise his musical material so as to achieve purely musical unity. There may be a tenuous link here with the approach of another musician for whom the principles of classical construction are utterly foreign. It is generally agreed that Delius was not a great symphonic composer. He has been regarded by many critics who note the natural diffuseness of his musical materials as having no grasp of form, no mental survey of a work as a whole. It is not possible here to enter into a detailed examination of his music, to see if this is a valid criticism or not, but what is significant is that those who love Delius' music and maintain that his grasp of form is extraordinarily sure in any inspired work, appear to be attracted by the "emotional unity", the unity of feeling, or the spiritual message of this composer, and, significantly, regard him as first and foremost a choral composer, that is, one whose music is closely related to verbal texts. A comment characteristic of descriptions of his music is that by A.J.B. Hutchings (45) that, in "Sea Drift", Delius' primary concern is to express the emotion embodied in the text. The total effect of the music of Delius seems, indeed, from this account by one of his admirers, to be closely associated with the ideas suggested
by his texts. It seems that there is a fruitful field for investigation in the relationship of words and music in our total artistic experience, a field which has so far been mentioned mainly by purists who repudiate such an investigation on the grounds that it will reveal nothing about "the nature of music". But in a sense, the nature of music qua music only exists in the purist's abstract theories; this study is concerned more with approaches to an understanding of the concrete nature of music qua experience, and we cannot avoid the fact that in this total experience, many non-musical, or extra-musical associations must be involved.
"Form" and "Content" as parts within the total musical experience

During this essay we have regarded structure and semantic of music as presenting "rival claims". For structural analysts claim that since what music means cannot be expressed by substitutive verbal description, any attempts to discover music's meaning which do not concentrate upon music's structural relations are vain and "meaningless". Yet such analysis cannot reveal to us fully whether a musical work is trivial or sublime, nor indeed can it fully reveal to us the integration of the work, for as has been frequently remarked, a patient enough musical craftsman could contrive an intricately related construction that was merely joined and glued; and in concentrating solely upon the wonderful structural organisation of musical masterpieces we are likely to forget that an artist's stature "is finally measured by the extent and depth with which he expresses our common humanity". The teacher most likely to lead others to a deeper understanding of, and greater love for music, "Knows his classics, but knows also that responsive humanity, not a congress of teachers, made them classics; he sees them as supreme records of expression, their technical processes being fascinating means to greater ends". (Hutchings - 45)

We have seen that the semantic approach to music emphasises this need for "responsive humanity", and it is important that we realise that each of the structural analysts referred to in the foregoing survey have laid a similar emphasis upon the need for spontaneous response to music, just as they recognised music as a process of communication. It is in
the actual artistic experience alone that the "rival claims" of form and content, structure and semantics will be reconciled. For as soon as we seek to analyse our reactions, to discuss this musical experience, we have brought not only the content but the structure too out of the total experience which is the music and at this point apparently conflicting ideas arise, mainly because the nature of the response to music varies with each individual, depending among other things, on personal temperament, (which leads to differences of taste), and previous musical experience. We have already seen one way in which the latter will affect our response; if music does contain a body of conventional associative formulae, then only our previous experience of these formulae will enable us to "learn the language". It is a truism that Chinese music is as incomprehensible to an Englishman as is a Chinese poem, if his previous experience of both the Chinese language and Chinese music is nil. A similar situation exists in the contemporary breakdown of communication between composer and public. Cooke's demonstration of the way in which music has functioned as a language for five centuries provides an explanation of the criticism that atonal music is "not expressive" and is "meaningless". For if we have been conditioned by our knowledge of traditional works to associate certain melodic formulae with expressive ideas, and if, as Cooke suggests, the basis of musical expression lies in the use of tonal tensions, then quite obviously music written in a non-tonal idiom, and therefore presumably paying no heed to the traditional 'emotional' language will, if it does not leave us indifferent, provoke
in us feelings of bewilderment and frustration. Indeed, the latter reaction will most likely occur, since the music is sufficiently like traditional tonal music (in that it relates sounds of definite pitch at all, and especially in its use of the vitalising agents), to arouse in us feelings of expectation, to begin, ever so fleetingly, to provoke those responses and their attendant associations which would enable us to find the music expressive, comprehensible and satisfying — and yet, it proceeds in a manner so unlike traditional music that all our expectations and half-experienced responses are continually inhibited; and an inhibited tendency to respond will produce frustration rather than indifference. No amount of demonstration of the superb integration and logic of atonal music will overcome the difficulty. All the associations, conscious or unconscious, in the listener's mind are thrown into confusion by a music which refuses to obey the laws of the musical language to which he has been conditioned. Only by more, and still more hearings of the music itself will we stand any chance of learning the new language, of acquiring new associations through experience, to provide the terms of reference within which composers may communicate their meaning to us.

That the nature of artistic response, as it appears when discussed in verbal terms, also depends upon, and is conditioned by, the personal temperament of the listener, has been suggested and supported with substantial evidence by psychologists who have attempted to classify musical personality types. Hanslick was among the first to suggest that it was the "musically uneducated" who understood music only through the association of extra-musical images, while the "true musician" could
appreciate music in the "pure" way in which it should be appreciated. Later investigators, such as Vernon Lee, Max Schoen, and, more recently, Valentine, have found similar tendencies in the musically untrained to express their responses in terms of extra-musical associations, and in the professional musician to reject such means of describing response. But it should continually be remembered, in connection with any such study of response, that the very demand to analyse a spontaneous reaction and communicate its essence in words will in itself contribute much towards the apparent differences. Those who have been trained to speak of music in terms of musical processes will naturally describe their responses differently from those who have no technical vocabulary, but the nature of the artistic experience may be the same in each case, and might not necessarily be adequately described by either group. The difficulties involved in describing musical experience in words are found not only when we try to analyse emotional effect. Hans Keller evolved his Functional Analysis to "take the thorn out of the flesh of musical analysis", describing the "thorn" as words - "words in general, and technical terms in particular". Technical terms, he finds, usually mean nothing, and hardly ever the same thing, because terms are static, while music is dynamic. We have already seen this in relation to Keller's analysis of Mozart's D minor quartet (see page 101).

The difficulties caused by attempts to communicate response to music in words are many, and only emphasise that the place at which our two apparently opposed schools of thought are properly reconciled is in their insistence that what is of primary importance is the music itself,
and above all, in an agreement that basic evaluation of a work is intuitive and spontaneous, and that analysis is an attempt to explain things we already intuitively know. If we explain them "wrongly", according to another person's analysis, this does not invalidate the reality of our response itself. This is evident when we remember that Gray was deeply moved by Sibelius' music, although later studies have shown that his technical observations were inaccurate. Similarly, the demonstration by analysis of a work's technical weaknesses, will not necessarily affect our appreciation of music which has moved us to a sympathetic response. The endless essays which admit to structural deficiencies in Romantic symphonies do not prevent performances of Tchaikowsky's "Pathétique" or of Schumann's "Rhenish" or many other academically "unsound" Romantic works from filling the concert halls with eager audiences. While, on the other hand, no amount of intricate structural analysis can initiate a response, as has been all too evident in our approach to 20th century music. Parallel with Cooke's effort to counteract the welter of aridly technical descriptions of music in the 20th century, and to direct attention to the music itself, we find Walker, commenting significantly upon the present day musical situation. "Our present insistence on the importance of terminology as a means of understanding music is essentially a product of our own times. Classical music was not explained to classical audiences, for there was then no problem of communication". But "we do not properly understand
much of the music of our own time, and we compensate for this unique situation in words .... It is the rule rather than the exception to find new works accompanied at their first performance by technical essays of varying length and obscurity, often written by the composer himself". "We are said to be educated when we can work back from the (verbal) terms to the music, but the fact is that the language of music can be comprehended only in terms of sound; and when such comprehension is not forthcoming, words are superfluous".

This belief was echoed by Keller in a series of lectures on Schönberg's quartets, when he suggested that the safest thing for anyone who found the music actually boring was to 'Run away'. Basic musical understanding, he maintained, is always emotional, and there is nothing to be gained from an intellectual approach if the point of communication has not even begun to be felt. "Pseudo-understanding is an intellectual defence-mechanism". Directing attention to the supremacy of the actual musical experience itself, in referring to his Functional Analysis, Keller wrote: "Wordless Functional Analysis goes into the essence of the listener's own emotional understanding of the music as much as into that of the music itself. Any kind of analysis which does not do just that is a waste of time, and replaces musical understanding by an intellectual game".

This emphasis upon the importance of intuitive response to music as a prerequisite to analysis or criticism is, as we might expect, repeated by Cooke. "Musicality, - that is, a sympathetic emotional response to a work - is a sine qua non of valuable criticism; and when our musicality deserts us for a moment, revealing a blind spot, we should remain silent".
The real point of music study is not to initiate intuitive appreciation but to satisfy a need which we may feel after that intuitive experience - to explain the experience. Walker and Keller chose to concentrate upon explaining the means whereby a work gives us the experience of organic unity, basing their explanation upon structural analysis: but the motivation behind their investigations was their intuitive, pre-analytical recognition that musical masterpieces are characterised by organic unity. Walker, in a slightly different, though related context, recalls a phrase of Pascal which aptly describes his own analytical approach. "You would not have sought me unless you had already found me". Since many things are involved in the total musical experience, any method of analysis which concerns itself with some aspect of the total situation in which music and man combine is valuable in so far as it contributes towards the fulfilling of the mission which man undertook at the very start - when he first began to philosophise, as a Greek, and evolved the slogan, "Know thyself". Cooke accuses those who concentrate upon music's structure of impoverishing our cultural life by a one-sided view, but Walker aptly justifies his work, claiming that it is on the one hand, extra-musical, in that it cannot influence his aesthetic experience of the music: on the other hand it is highly intra-musical, in that it is concerned with something without which he would have no aesthetic experience at all.

Further enquiries into the nature of musical experience

We have already suggested that Cooke's investigations might
profitably be linked with the psychology of association to reveal more fully the way in which music is connected with, and can enrich and deepen our experience of life. Psychology has, in fact, begun to link hands with musical analysis, and it seems that some very interesting and significant revelations, particularly about "the essence of the listener's own emotional understanding of the music" may result from future studies. Similar revelations about the essence of the creative mind from which the music proceeds were anticipated, with trepidation, by Schönberg, who considered music as "the language in which the musician unconsciously gives himself away .... one day the children's children of our psychologists will have deciphered the language of music. Woe then to the incautious who thought his innermost secrets carefully hidden, and who must now allow tactless men to besmirch his most personal possessions with their own impurities." (21) One of the most oft-quoted examples of the psychological motivation of a composer's musical procedure is that which relates how the young Mahler, forced to witness a specially painful scene between his parents, rushed away from the house, only to come upon a hurdy-gurdy player who was grinding out a popular Viennese air. "In Mahler's opinion" reported Freud, "the conjunction of high tragedy and light amusement was from then on inextricably fixed in his mind, and the one mood inevitably brought the other with it". (Quoted by Walker). This incident can be regarded as "illustrating the importance of childhood in the formation of the associative material which lies at the back of the artistic experience", and as "a beautiful example of the way in which a musical style is predetermined by non-musical factors". (Walker).
It is interesting to note that it is those analysts who might well be regarded at first glance as divorcing music from human experience in their analyses, who are, in fact, pioneering the psychoanalytic approach to musical experience. Schönberg was conscious of this approach, as we have seen, and Walker devotes the last part of his book to an enquiry into unconscious motivation, although he deliberately limits his enquiry to what he calls the "musical unconscious" and does not examine that "associative material which lies at the back of the artistic experience". He deals with unconscious motivation for one purpose, to explain the underlying causes of background unity, and does not "show how this might be linked up with the non-musical unconscious, vital though such links may be". However, he does suggest that the psychoanalytical concept of repression might combine with the idea of association in an explanation of how music gets its meaning. "Each work is motivated by an unconscious musical idea, which forms the dynamic common background of its contrasting themes. Its dynamic energy is due to its being in a repressed association with other non-musical material. Such a repression is probably infantile in its origin .... musical ideas which find themselves as part of an unconscious thought-complex probably act as a substitutive means of expression for non-musical ideas which have no other channel through which to discharge their psychic energy".

Walker declines to investigate further the link between the musical and the non-musical unconscious. Study of these links has however been
begun, but it calls for a thorough knowledge of psycho-analytic methods, such as that possessed by Theodor Reik, who was a pupil of Freud, and who has made an important contribution to this research in his book "The haunting melody". However, a survey of the ideas presented there must remain outside the scope of this present study. Hans Keller, who, as we have already noted, considers that musical understanding begins with an emotional experience, and seeks to discover the essence of that experience, is also engaged in psychoanalytic research, his aim being "a really scientific musicology which will have to be partly based on the psychology of musical composition". Some of Keller's essays, like the more tentative attempts of Walker, seek to explain the unconscious motivation behind structural aspects of music, particularly behind the background unity of foreground contrasts. He investigates the subconscious motives which govern a composer's behaviour, and has not, as yet, published records of any attempt to relate the musical unconscious with non-musical unconscious material. (The book in which Keller will presumably relate the results of his researches has yet to be published). One aspect of his work is, however, particularly interesting with regard to our study, for whereas we saw that the emotions Cooke claimed were directly aroused by music are in fact presented to us more by an indirect process of association, Keller does deal with the direct emotional response and the meaning thus communicated, without relating it to other associated ideas.

Keller appears to base his theory upon a version of the conflict
theory of emotions, expounded by Dewey as early as 1894, modified by Angier, 1927, and reasserted in 1925 by the psychoanalyst McCurdy. The basis of this theory is that emotion, or affect, is aroused when a tendency to respond is arrested or inhibited. The relationship between the stimulus and the responding individual must be such that the stimulus produces a tendency in the organism to think or act in a particular way. If there is no tendency, but only indifference, there is no emotional response. Special emphasis is given, in psychoanalytical adaptations of this theory, to the fact that it is the blocking, or the inhibiting of a tendency which arouses affect; and the affective experience, as distinct from the affect itself, includes an awareness and cognition of a stimulus situation involving particular responding individuals and specific stimuli. The belief that affect and emotions are in themselves undifferentiated, but that affective experiences differ (and thus produce a variety of emotional states), because they involve the stimulus situations which themselves differ, (a belief held by Meyer (1), one of the most recent exponents of this theory of emotions in relation to musical experience), is important, "because it explains and accounts for the existence ... of the intangible, non-referential affective states experienced in regard to music. For in so far as the stimulus situation, that is, the music, is non-referential, there is no reason to expect that our emotional experience of it should be referential. The affective experience made in response to music is specific and differentiated, but it is so in terms of the musical stimulus situation rather
than in terms of extra-musical stimuli". (Meyer).

It is this musical stimulus situation which Keller seeks to analyse. Whereas in everyday experience, the tensions created by inhibited tendencies often go unresolved, dissipated in the press of irrelevant events, in art, the inhibition of tendencies becomes meaningful, "because the relationship between the tendency and its necessary resolution is made explicit and manifest. Tensions do not simply cease to exist; they are resolved; they conclude". Another difference between musical affective experiences and non-aesthetic experiences is that in life, inhibitions may be different from the factors which activated the tendency in the first place; but in music, the same stimulus, that is, music, activates the tendencies, inhibits them and provides meaningful and relevant resolutions.

Keller considers that the series of responses which form the tendency to react in music are implanted in our minds by our experience of those elements of organisation which two or more musical works have in common, and which we can see in a general way as the "form" of those pieces. 'Form', to Keller, represents only that which is common to several pieces of music. This constitutes the Background, against which we hear a new work, and it provides the terms of reference within which the composer can communicate with his audience, to the extent to which both share the same background. This Background obviously depends upon previous musical experiences, for the chain reactions forming the tendency are learnt by the brain, and become ingrained as habits of perception in the artist and in his audience.
Keller differentiates between Form and Structure. Form is the Background, the basis of communication, and against this each new work presents its Structure, which is new and unique to the new work. The Background Form is what we expect to hear; the Foreground Structure is what we actually do hear. The meaning of music, Keller believes, lies in the tensions between the tendencies aroused by the Background, and the inhibitions presented by the Foreground structure, in so far as it departs from the Background.

To be comprehensible and meaningful, music must keep a balance between Background and Foreground. If it is all Background, the composition will be a poor one, dull, monotonous and meaningless, only fulfilling expectations. If on the other hand, it is all Foreground with very little reference to the Background, no communication can take place, as we have no basic terms of reference and the music will therefore be incomprehensible. For music to be comprehensible and meaningful, there must be enough Foreground to arrest expectations, but enough Background to arouse these expectations in the first place, and to provide meaningful resolutions in the end. Keller explains the contemporary break-down of communication between composer and audience by this depth, or two-dimension, approach to musical meaning. In the music of a composer such as Schönberg, who developed at an extremely rapid pace, the Background already assimilated by Schönberg contained much that was still Foreground (new and unexpected) to many of his listeners, and the Background basis of communication was
therefore lacking, at least for a time. For structural Foregrounds, as we assimilate them, become themselves part of the pattern reaction which is thus constantly changing and enabling us to develop our understanding of music. Keller suggests that the listener's failure to understand contemporary music is due to a difference in the stage of development of composer and listener. The disturbance of communication will be resolved in time, as the listener's experience, (again we have that emphasis on practical experience), enlarges his background associations, and music previously incomprehensible will assume meaning. He considers however that some avant-garde composers are in fact producing poor works, which are one-dimensional, not in the more usual sense of being all Background, but in that they are so self-consciously divorced from traditional associations and backgrounds that they remain all Foreground and are therefore incomprehensible, in so far as there is no two-dimensional tension. It is possible, as Keller concedes, that works which thus appear to be all Foreground may, with increased experience on the listener's part, and an increasingly developing Background, yet reveal themselves as meaningful. If it is possible for the listening public to "catch up with" revolutionary composers, in this way, we have to face the fact that we may sooner or later grow out of musical works which at present are still full of meaning and value for us. It is a commonplace that we can no longer experience musical works of even fifty years ago in the same way in which their first audiences received them. Stravinsky's "Rite of Spring" is but one example of a work which has
lost much of its original shattering impact, and it is a testimony to the greatness of the classic composers that we might still listen to their music with enthusiasm after two hundred years or more. So much other music became mere tedious Background years ago and passed into oblivion. The transitoriness of much popular music, which is designed to make few demands upon the listener and to have an immediate appeal, is due, it seems, to its being all Background and no Foreground. Structure becomes form, and form becomes mere formality. There may be excitement, but often very little communication in much "pop" music.

For a simple example of how Schönberg conveyed a precise musical meaning in the way outlined above, Keller refers to the first four bars of his fourth quartet. (Ex. 99)

Ex. 99. Allegro molto, energico

Keller suggests that the background here is one of rhythmic structure, because we expect "a missing background bar", (that is, "bar three", which would provide the expected sequence). This contraction of the background by missing a bar "gives the listener an emotional kick - and the musical meaning is that kick". This, says Keller, is roughly what happens throughout music. Musical meaning chiefly works in terms of compressions
and contractions rather than expansions, (because the Background is already in us, and to expand upon something we already know would only be boring).

Keller is presumably developing this approach at length in his researches, and the publication of a full application of it to music will be an interesting event.
Some Final Considerations

It is significant that the thematic analyses which claim to demonstrate the unity characteristic of masterpieces, have been applied, by Reti and Walker, to those very works which, as we saw earlier, have for so long been regarded as poor examples of structural integrity. Walker, indeed, considers that Tchaikowsky's fourth symphony, is "one of the masterpieces of the 19th century". Everybody, he says, notices the foreground significance of the recurrent "fate theme","and everybody ignores its immensely more important function - that of providing the background unity. Apart from its obvious task of thematically connecting the outer movements, this 'motto' theme serves a triple background purpose; it defines all the important rhythmic, melodic and tonal progenitors of the symphony. The rest of the work is a diversification of the material compressed into these few bars .... "

These conflicting opinions of 19th century symphonies lead to the realisation that minute structural analysis may fail to take sufficient notice of the very thing it is continually stating: that the single background idea manifests itself in contrasting sections; and these contrasts have to be arranged in musical paragraphs. It is so busy working backwards from the variety to the unity that it does not deal with the quality of the material in which this unity has manifested itself. Walker does, actually, recognise that an important matter for musical analysis to consider is "the chronology of a work's contrasts" - ("why can't we successfully change the chronology of a work's ideas?") -
and he says that the particular sequence of events in a work's musical foreground, the exact context of each contrasting theme, is crucial to its meaning. However, Walker does not dwell upon this matter, and we are left with the feeling that all these analyses do have a lamentably one-sided tendency; - a feeling which can only be strengthened by such a quotation as the following: "one of the most important things about a musical idea is its potentiality. In a masterpiece, ideas give birth to ideas, and these in turn to still newer ones, a network of relationships is established, everything belonging to everything else, and ultimately to a single progenitor. The fundamental task of analysis is to show how a piece of music hangs together, by demonstrating this progenitor", and "a critical yardstick for forming value-judgements about music is the examination of a work's contrasts from the standpoint of their underlying unity".

One fears that the inevitable extreme of this approach has been reached by those post-Webern composers represented by Herbert Eimert whose claims for the "discovery of the single note" are considered in an article by Alexander Goehr (46). Choosing Webern as the key-figure for musical development, these composers "apply a kind of statistical analysis to Webern's music which bears no resemblance to musical reality. They isolate single events, durations, pitches and dynamic levels: they analyse statistical ratios in the minutest detail - and so they ignore the audible development of complex forms" .... Serial composers of the post-war
era cite Webern to show that the single note can be regarded as a structural entity, like a motif. The isolated note forms the only "historically correct basis for the creation of musical form", and we now find, from Eimert, that "music is a logical development of a certain duration of silence".

Perhaps the musician who poured most scorn upon the teaching that organic unity could be ensured by thematic interrelations was Tovey. He was considering mainly the analyses of those more obvious external unifying devices in the Romantic symphony. Since Tovey, as we have seen, the purpose of thematic analysis has altered, yet one wonders if his words may not apply with equal force to these later, more sophisticated studies, and by correcting the tendency towards a one-sided approach, lead to considerations which are relevant to the effects of that "chronology of contrasts" which Walker refers to future investigation.

Tovey was constantly stating, in his many essays and lectures, the belief that "of all the pastimes of musical analysis, the easiest is the identifying of melodic figures". "The art of transforming musical themes is omnipresent in music that does not conscientiously object to it". For example, it constitutes most of the art of Wagnerian leit-motif, yet Wagner thinks not in motifs but "in enormous musical ideas". Nothing, maintained Tovey, is easier than to derive any musical idea whatever from any other musical idea, and "sad nonsense is often preached about it by theorists and teachers who imagine it to be the basis of logical development
in music", for "a large chain of such derivations is often supposed to embody the logic of music, whereas in itself, it can give us no security that it is more logical than a series of puns". (48) Tovey recognises the need to examine that variety in which the unity manifests itself, for he says that "the composer whose themes are all linked together by an outwardly logical constructive tissue is neither vital nor logical, except in so far as there are differences in all his identities". (47)

The idea which Tovey emphasises, to counteract the "sad nonsense" is that thematic transformations are insignificant apart from the art of paragraph-building. He develops this idea particularly in relation to the "heresy" that the first movement of Beethoven's fifth symphony is "built up" from the initial four notes. "No great music has ever been built-up from an initial figure of four notes .... you might as well say that every piece of music is built from an initial figure of one note". (and it has been said!) "Musical figures represent ideas only when the figures have been incorporated into musical paragraphs. The abrupt statement of the first four notes of the C minor symphony misled Spohr into taking the single word for a whole idea .... As a matter of fact, the first sentence does not come to a stop till the twenty-first bar, and then it is obviously only the first half of the statement". "The C minor symphony is really remarkable for the length of its sentences". (49)

Of especial importance is Tovey's consideration of time in music. "Upon the handling of the time-dimension depends the whole series of
movement in music, from the smallest and most immediate effects of rhythm to the most extensive matters of form and contrast. Perhaps no general aspect of music is less understood at the present day than that of movement, and no power of classical music has been so completely lost in recent times." He reflects that though this is popularly considered the age of pace, we have lost the sense of pace in music. (47)

With regard to pace and movement, Stanford and Parry, before Tovey, had begun to use the word "kinetic" when explaining the cohesive energy of music. It is interesting that Tovey's half-humorous description of Liszt's "Ce qu'on entend sur la Montagne", a work which, though by a composer whom Reti praised for his use of thematic relations to achieve organic unity, yet manages to remain "sectional and diffuse", should be quoted by an aesthetician who develops the idea of kinetic unity in music. Beardsley (3), acknowledges the work done by Reti, and agrees that the fundamental musical relations are important; but he believes that there is another aspect of musical structure that is equally important; he proposes that a musical composition has, besides these formal relations, a kinetic pattern. Music may be described as rushing, hesitating, pausing, picking up speed, becoming calm, driving ahead and overcoming resistance, all terms borrowed from physical motion to describe music's energy.

Beardsley believes that it is possible to map out the dominant kinetic pattern of a musical movement, and that the completeness of large-scale works is a function of this dynamic pattern. If, for example,
a work moves into a passage with "introductory" or "transition" quality and then comes to a full stop, there will be anti-climax, and a destruction of completeness. Tovey's description of Liszt's symphonic poem certainly seems relevant to Beardsley's theory, which is valuable in that it does take account of the manifest foreground, which is, after all, what we actually hear. Of Liszt's composition, Tovey wrote, "This work consists of an introduction to an introduction to a connecting link to another introduction to a rhapsodic interlude, leading to a free development of the third introduction, leading to a series of still more introductory developments of the previous introduction, leading to a solemn slow theme (which, after these twenty minutes, no mortal power will persuade any listener to regard as a real beginning) and so eventually leading backwards to the original mysterious opening by way of conclusion".

Related to this explanation of music's kinetic function are the attempts to trace in music a reflection of "morphology of feeling", an idea suggested by Langer and Reid to explain music's connection with life-processes. This again is a field where musicology will benefit from the help of psychology; the idea apparently appealed to Gestalt psychologists such as Koffka and Koehler.

Certainly there is a need for analysis of music's expressive function, for an account of the feelings of "responsive humanity". But analysis which describes music's content directly in terms of real life emotions does not deal fully enough with the matter; and Cooke himself, at the end of his survey, admits that "I am only too well aware that, by using
the simple everyday words for human emotion to make my classification of the terms of musical language, I have only scratched the surface of a problem of well-nigh infinite depth. The magnitude of the task of any interpreter of music's emotional language lies in the fact that "emotion is specific, individual and conscious; music goes deeper than this, to the energies which animate our psychic life;" (Sessions). The basic difficulty in discovering the true meaning of music comes from the need to discuss musical technique at the point where it cannot be described in purely musical terms. The demonstration of "logical thought" is an example of this, for after the most minute and detailed analysis of music's structural organisation and logic, the vital source of life, the supreme integrator remains elusive. The fullest possible understanding of the organic unity of great music must concern itself with the way in which man and music combine, when music penetrates "to the energies which animate our psychic life." Any theoretical proposition which seeks to explain the nature of music qua music does less than justice to the rich reality and fundamental importance of music qua experience. Each method of analysis, whatever its emphasis, may reveal some new truth about music. And the conflicts which appear as a result of varying methods of describing music verbally, seem most likely to be resolved when music analysis links hands with philosophy, metaphysics, and psychology to lead us to a deeper understanding not so much of "the nature of music", but of the nature of human experience.

The End
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