

A SOCIOLOGICAL APPROACH  
TO THE  
UNDERSTANDING OF MUSIC

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## DECLARATION

Certain parts of Chapters One to Five have already been published in article form:

- (a) " 'Serious' Music - an 'A-social' Phenomenon?", Contact (14), Autumn, 1976.
- (b) "A Cross-cultural Theory for the Significance of Music", The Journal of the Canadian Association of University Schools of Music (VI), 1976.

## ABSTRACT

The thesis is concerned with establishing theoretical and empirical links between music as a mode of symbolic mediation and the world sense of the society in which the music occurs. The principal aim is to demonstrate how music, as a totally non-referential symbolic mode, can be viewed as forming part of the ongoingly constructed realities of different groups and societies and how, as a result, it might be possible to relate the analysis of a musical language to the analysis of other aspects of the relevant group or society.

In order to realise these aims it has been necessary to assume a theoretical perspective of symbolic mediation wide enough to accommodate music, but which, at the same time, would not preclude the application of similar principles to other forms of art or to other symbolic modes. The main problem encountered is that the traditionally visual-tactile world sense of modern industrial man precludes the easy adoption of a frame of reference which will allow for the non-referential aspects of the social symbology. It is difficult, for example, to conceive of music as having 'meaning' beyond the usual verbal or iconic connotations of that word; the suggestion that works of literature and representational works of art are imbued with 'social' meaning is not nearly as contentious as the suggestion that music has 'social' meaning.

Constructing a frame of reference of sufficient depth to include music has therefore necessitated examining some of the

assumptions that underly modern industrial societies, an examination that is carried out in Part I of the thesis. The position adopted is that the media man externalises in order to collectively construct social realities play a fundamental role in the structuring of both individual consciousnesses and societies as a whole. In particular, the visual bias of industrial man may be traced to the phenomena of phonetic literacy and typography. By reference to existing literature in the sociology and aesthetics of music it is then demonstrated exactly how the assumptions generated by literacy and typography prevent a 'full' or 'adequate' appreciation of the musical process.

Part I of the thesis concludes by constructing a view of the world which allows for both non-referential symbologies and the fact of creativity. Because of its highly developed division of labour modern industrial society has tended to relegate creativity to the realms of artistic and, to a lesser extent, academic activity. Since social theorists have largely ignored artistic activity as a facet of modern industrial life, most social theory fails to adequately cope with the phenomenon of creativity. Clearly, any attempt to consider the artistic function as part of people's life and experience needs to incorporate creativity as a major aspect of its conceptual approach.

The second part of the thesis bears out the theoretical approach of Part I by comparing the musics and world senses of



certain societies. The comparisons made are between:

- 1) the general characteristics of pre-literate musics and what may reasonably be taken to be the general characteristics of pre-literate world senses.
- 2) the structure of plainchant and classic feudalism.
- 3) the structure of tonality and post-Renaissance European society.

As a result of the theoretical and empirical evidence presented in the thesis, it is argued that musical languages, in being culture-specific to different societies and to different groups within societies, have social significance. This is of great relevance for the value-laden stances adopted in our own society with regard to different types of music.

The thesis concludes with a consideration of the legitimacy of writing about music. How justifiable is it to use the very medium which has prejudiced a 'full' appreciation of the musical process in order to 'translate' and explain that same experience?

## INTRODUCTION

It is customary, in the Introduction to a thesis, to indicate the relationship that thesis has with other work in the same field. This kind of Introduction assumes that the general background and framework in terms of which work in a discipline progresses are both generally understood and agreed upon. Because this thesis is concerned with a discussion of some of the fundamental premises underlying musicology (rather than with any specific substantive area within the discipline), such an Introduction is not possible. Indeed, the relation of the arguments and evidence presented in this thesis to other work in musicology (and, to a much lesser extent, aesthetics) can only become fully apparent as the thesis progresses. To this end, both Parts of the thesis, together with most individual chapters, contain their own brief Introductions, which make the relationship of their contents to overall lines of argument as clear as possible.

The contribution this thesis seeks to make may best be introduced by referring to the way in which it was conceived. The significance of analysis (that is, the question of what conclusions may legitimately be drawn from analysing a piece of music) is a subject on which there is unlikely to be total agreement when that subject is being considered for itself. But on a day-to-day basis it does not seem that musicians find the analysis of functional tonality inherently problematic. The analysis of a Bach fugue or a Beethoven sonata as often as not

seems self-evident in its significance, and is not something whose logical status or legitimacy is thereby brought into question. However, there are other kinds of music where analysis is more problematic. Work on this thesis began as a result of difficulties experienced in analysing the music of Delius. This music quite clearly makes reference to isolated segments of functional tonal syntax. Yet analytical tools derived from that syntax become hopelessly inadequate when applied to Delius's music as an 'organic entity'. Initially, such inadequacy raises the question as to what the correct analytical tools should be. But this question inevitably leads to others, for if analysis itself becomes problematic then so does the formulation of any conclusions which might be drawn from that analysis. The significance of analysis is not something that can be divorced from matters of analytic method. Ultimately, the entire question of the basis, legitimacy and significance of analysis, seemingly unproblematic in the case of functional tonality, once again comes into court.

The central problem with which this thesis deals may thus be summarised as follows. On the one hand, there is little doubt that much analysis successfully parallels the aesthetic experience. On the other, it is not at all clear how this parallel comes about. There are, in other words, two broad lines of thought within musicology, the analytic and the aesthetic, which are far from incompatible, but whose precise relationship

remains something of a mystery. One of the purposes of this thesis is to throw some light on that mystery.

Solutions to problems sometimes come from unexpected quarters. In this case, an insight into the solution of the above problem resulted from the reading of two books (The Structure of Scientific Revolutions by Thomas S. Kuhn, and The Social Construction of Reality by Peter L. Berger and Thomas Luckmann) which, on the face of it, have absolutely nothing to do with music. The importance of these two books is extensively discussed in Appendix I. Briefly, Kuhn's book describes how the occurrence of intransigent problems in science can often give rise to fundamental reorientations in the outlook of a scientific community. One such problem, that of the observed velocity of light, gave rise to Einstein's two theories of relativity which in turn instigated a major reorientation in scientific thought. It would seem that a resolution of the dichotomous state of musicology indicated above could only come about as the result of a similar fundamental reorientation. However, although Kuhn was able to document instances of scientific revolutions, and although he was able to argue persuasively that such revolutions were essentially non-scientific in their origins, he was unable to satisfactorily locate these origins.

A way round this difficulty was suggested through a reading of Berger and Luckmann's book. It may be verging on the tautologous to say that all knowledge is a result of human

creativity. Yet the consequences of this fact are frequently ignored or forgotten. It appeared that this kind of obviation was responsible for the difficulty experienced by Kuhn. In short, scientific revolutions occur not just as the result of debates within the scientific community, but as a reflection of and contribution to the wider social reality within which scientific work is carried out.

These lines of thought immediately suggested three consequences of relevance for musicology. Firstly, if the dichotomy indicated above was as genuinely problematic as it seemed, then such intransigence could probably be traced to the wider social reality in terms of which traditional approaches to the understanding of music are formulated. Secondly, they suggested that a solution of this problem could only be achieved through a change in our socially constructed outlook on the world. But finally, and most importantly, the lines of thought themselves indicated what the nature of this reorientation should be. For if reality is taken to be a social construct, then to treat music (which surely constitutes a part of our reality) as something other than a social construct would seem to be somewhat perverse. The fact that musicology has studiously avoided a serious consideration of this possibility was encouragement enough to pursue it in some depth. The central issues of the thesis therefore became, on the one hand, the relationship between musicological theory and underlying social reality, and, on the other, the relationship between musical languages and the

wider social realities of which they form an integral aspect.

The possibility that music could form one aspect of a wider social reality is not one to have escaped sociologists, however. One of the founding fathers of the discipline, Max Weber, wrote a treatise on that very subject (it was published after his death). But sociologists have always faced a difficulty with music, and that is how to translate analyses of such an 'abstract' mode of communication into terms of social significance. The problem, in other words, remains that of 'how is music significant'. A conundrum is therefore reached, for the suggested solution which sociology is able to offer musicology for its problem is by virtue of that very problem problematic for sociology. And because musicians have traditionally been suspicious and sceptical of sociology, little progress has been made.

This thesis is an attempt to bridge that gap. Such an attempt, however, is fraught with difficulties. In the first place, the implications of discussing this particular area are very far reaching. There is hardly an aspect of musicology, or presumably, ethnomusicology, which at least in principle could not be affected by this kind of undertaking. Conversely, there is hardly an article or book written on the aesthetics, theory, sociology or anthropology of music which would not be relevant to it. Consequently, exhaustive discussions of these areas could not be attempted within the scope of this thesis. Instead, in criticising traditional concepts in aesthetic and theory,

recourse was had (respectively) to the work of Susanne Langer and Leonard B. Meyer. This was not only because these figures have commanded the centre of the stage for some time in their own particular areas, but also because their work provides good (although not, of course, exclusive) examples of the way in which predominant 'psychologicistic' assumptions have found expression. Again, writings by sociologists on music are only considered when they have a direct bearing on the central issues of the thesis. Because work in the sociology of music seldom addresses itself to these issues, it was not felt necessary to engage in an exhaustive survey. Consequently, publications which are of direct relevance to the arguments presented in the thesis are to be found at the end of each chapter. For reasons outlined above, the compilation of a complete bibliography would clearly have been a mammoth task and has thus not been attempted.

The attempt to create a bridge between music and sociology is also liable to create as many problems as it solves. Kuhn has noted this tendency in the early stages of many scientific revolutions. For this reason the thesis must be regarded as the culmination of the first stage in a continuing project. From a theoretical viewpoint this culmination is reached in Chapter Seven with the discussion of the implicit-explicit paradigm. From the point of view of actual musical analysis, the culmination occurs at a rather more basic level. For within the context of this thesis, it has

only been possible to discuss what Hans Keller would refer to as 'background', that is, the 'deep structure' of musical languages, and not the different ways in which individual composers articulate and comment upon those structures. Quite clearly, the difference between a Dittersdorf and a Mozart lies in the fact that whereas a Dittersdorf will do little more than reproduce the musical (and social) status quo, a Mozart will have something of fundamental importance to say about it. That is perhaps why less 'great' composers might well be more symptomatic of their own generation. The theory put forward in this thesis has not as yet been developed in enough detail to take account of this difference, nor, indeed, of the substantial differences in style to be found within given musical languages.

The same kind of limitation applies to the sociological arguments put forward. The emphasis has been to describe, in ideal-typical fashion, broad underlying trends in different societies. It is evident that such descriptions must precede more detailed analyses of the way these trends act back on and occasionally contradict one another. Further, detailed local analysis which is not cross-culturally grounded frequently fails to see the wood for the trees.

Without denying that localised analysis might give rise to difficulties and problems requiring modification of the basic concept put forward in the thesis, it would seem unlikely that this kind of modification would lead to a fundamental re-orientation. If the concept does not hold good at the greatest



level of generality then it appears logically impossible that it could hold good at a more localised level. If, for example, it cannot be successfully established that functional tonality both encodes and creatively articulates the structure of life and experience for educated post-Renaissance man, then it seems unlikely that an inherent social significance could be demonstrated for the music, say, of Mozart. Refinement of the theory would thus appear to require time rather than any major new theoretical departure.

Nevertheless, a thesis such as this undoubtedly lays itself more open to criticism precisely because of the subject matter it discusses. This subject matter is general and does not admit of certain or incontrovertible answers. In the opinion of Leonard B. Meyer, however, such undertakings are none the less valuable for that. Speculation is a necessary pre-requisite for understanding:

Disheartened and perhaps dismayed by the speculative uncertainties of theory, criticism and, one should add, history as distinct from chronicle, too many humanists, particularly those in music, have tended to follow the well-worn path of safe scholarship. But to choose prospective certainty over present insight is both mistaken and misguided. It is mistaken because the search for final, definitive answers is an unattainable goal for those disciplines concerned with understanding and explanation. For, since the future is open and influential, it can change our understanding both of past compositions and of past historical events. It is misguided - paradoxically so - because the enduring monuments of scholarship, which have shaped men's minds and beliefs, far from being cautious and circumspect, have been those which illuminated a relationship, a work of art, or a past epoch through a bold, encompassing hypothesis. Though in all probability they will subsequently be revised, or even rejected, such works and theories endure because they are exciting and seminal:

they lead to new discoveries and further formulations, and thereby continue to affect language, thought, and behaviour.

Whilst not claiming that this thesis is necessarily exciting or, indeed, seminal, it is to be hoped that it will be taken as a serious attempt to link two disciplines whose cross-fertilisation cannot be anything but productive.

The general scheme of the thesis is as follows. The first four chapters of Part I show how prevailing social reality has given rise to a musicological dichotomy, and why this reality makes the alternative view suggested by sociology a difficult one for musicology to take seriously. Chapter Five then puts forward a different outlook on the world (that is, a different social reality) which allows for a social theory of music, thus superseding the dichotomy. Chapter Six concludes Part I by considering the implications that traditional and radical approaches hold for the process of 'writing about music'. Part II then attempts to translate the predominantly sociological and aesthetic discussions of Part I into musical terms. Pre-literate, sacred medieval and functional tonal music are considered in relation to the wider social reality of which they form an integral aspect. In this regard it should be noted that the discussions of different social realities to be found in Part I serve two purposes: firstly, they underpin the criticism of traditional theory which take place in that Part; secondly, they form the background against Part II seeks to elucidate the inherent social significance of music. The thesis concludes, in Chapter Thirteen, with a brief assessment

of the implications that it holds for future possible orientations within musicology.

PART I

THE PROBLEM AND ITS SOLUTION

## INTRODUCTION

The central assumption of this thesis is that any significance assigned to music must ultimately and necessarily be located in the commonly agreed meanings of the group or society in which the particular music is created. This assumption, in the final analysis, can neither be proved nor disproved.<sup>1</sup> However, it will be the principal purpose of Chapters Two, Three and Four to argue that prevalent 'a-social' views of music are inherently problematic, and that these views form an integral aspect not only of industrial man's outlook on the world, but of the political structures within which he lives and which he largely takes for granted. Chapter Five will then put forward a view of the social process which eliminates the problems referred to, and allows for a vital and acceptable social theory for music. Finally, Chapter Six demonstrates how prevalent modes of writing about music both encode and articulate the outlook and structures indicated in Chapter Three.

This Part of the thesis begins, however, with a brief discussion of the two fundamental propositions which underlie the entire work.

### NOTE:

1. The logical status of competing theories and their underlying assumptions is fully discussed in Appendix I.

CHAPTER ONE

BASIC PROPOSITIONS

## THE AESTHETIC PERSPECTIVE

Implicit in the central assumption of this thesis is the view that the meaning of music is somehow located in its function as a social symbol. It is the word 'meaning' which creates the greatest problem in this context. For most people a symbol has meaning because it refers to something outside itself. Pictures have meaning because they refer to something in physical reality, and words have meaning because they refer to concepts and ideas. But to suggest that a piece of music has meaning because of extra-musical references is, at the least, highly contentious. The logical alternative has thus been to look for the 'meaning' of music within the structure of individual pieces, an alternative whose strictest formulation, as Leonard B. Meyer indicates (1956, p.33), is to be found in the attitude of the absolutists:

The absolutists have contended that the meaning of music lies specifically, and some would assert exclusively, in the musical processes themselves. For them musical meaning is non-designative. But in what sense these processes are meaningful . . . they have been unable to state with either clarity or precision . . . . This failure has led some critics to assert that musical meaning is a thing apart, different in some unexplained way from all other kinds of meaning. This is simply an evasion of the real issue.

The real issue can be stated in terms of the following comparison. Because their meaning is 'located outside them', words and pictures may be thought of as 'carrying' their meaning and 'giving' it to the recipient. The symbol, in other words, survives the divulgence of its message. If, on the other hand, musical meaning is acknowledged to lie within the musical process

itself, then in 'giving away' that meaning, a piece seemingly compromises the very being or essence responsible for the meaning in the first place. As Susanne Langer (1960, p.236) has put it, the absolutists "seem to feel that if musical structures should really be found to have significance, to relate to anything beyond themselves, those structures would forthwith cease to be musical".

This difficulty results from confusing a symbol which has no referent in the world of objects and ideas with one which is informationally a closed system. Music certainly falls within the former but not, as the absolutists imply, the latter category. It is this distinction which facilitates the theories of Meyer and Langer. Broadly, both authors locate musical significance in "psychological constants" (Meyer, 1973, p.14) or "psychological laws of 'rightness' " (Langer, 1960, p.240). That is, since all music originates in the minds of individual people, and since all minds are assumed to possess similar psychological characteristics, it is taken that there will be a certain conformity of patterning or structure between all music and all minds. Consequently, all minds are presumed to be suitably predisposed for the superimposition of the particular structure that constitutes a piece, and there is no longer any need to have recourse to the notion of symbols which divest themselves of externally referential meanings. 'Information' is conveyed by another method.

On the surface, this might seem to be a suitable and adequate explanation of musical process. It is ultimately compromised, however, by resulting from exactly the same mode of



thought responsible for the original difficulty. In order to understand this anomaly and the failure of aestheticians and music theorists to circumvent it by invoking a social theory of music, it is necessary to make two basic assumptions. The first is that the collective reality of any society is mutually constructed by its members rather than being externally given, and the second that the form the reality of any particular society takes is pervasively influenced by the medium of communication prevalent in that society.

#### THE SOCIAL CONSTRUCTION OF REALITY<sup>1</sup>

An approach to the understanding of the social construction of reality may best be made through a consideration of the role played in that process by symbols. A symbol may be thought of as any occurrence in the world, whether or not produced by man, which carries a generally agreed meaning for the members of a particular group or society.

Societies can only arise and continue to exist through communication, that is, the creation and exchange of symbols<sup>2</sup>. Symbols are not self-contained phenomena. They are not God-given, but created by people to cope with the many varied situations in which they find themselves. The meanings of symbols and sets of symbols are originally derived from specific and real situations. But there is another side to the coin. Once a symbol or set of symbols has been created in response to a new situation these symbols, in retrospect, colour that situation.

When people look back at a series of events they do so by means of and through the symbols created to define it. Furthermore, the new symbols may be used in other situations. Since the symbols are not specifically created for these other situations they bring to them meanings which although not necessarily irrelevant or wrong, are obviously coloured by previous usage. The reverse, of course, is equally true, for new situations modify the meanings of the already existing symbols used to denote such situations. In other words, situations and symbols have a mutually interdependent, but not determinant<sup>3</sup>, relationship crucial to the constantly changing dynamics of the social process.

This relationship is most easily understood with regard to words, which constitute man's most important symbolic mode. Not only do the meanings which arise in social situations give rise to words and continually modify the meanings of pre-existing words, but words and complete symbolic languages bring pre-conceived meanings to bear on our everyday sense of the world. Indeed, any new situation and/or symbol is mediated to an extent by pre-existing adjacent meanings. The world we live in has meaning for us only because we symbolically mediate the events that take place in it with other people, and we do this primarily with words. Reality - often conceived as an objective fact which cannot be changed, but only misconstrued - is thus constructed by people through the mutual agreement by words and other symbols on experiences undergone by individual people:

"World-view" is an elusive term, but when we speak of someone's world view in any sense, we do not mean simply the world impressing itself upon his passive receptors, sensory or intellectual. A person does not receive a world view, but rather takes or adopts one. A world view

is not a datum, a donné, but something the individual himself, and the culture he shares partly constructs; it is the person's way of organising from within himself the data of actuality coming from without and within (Ong, 1969, p.634).

For the purpose of clear understanding, a theoretical distinction may be drawn between environment and everyday reality: environment is the unqualified situation (reality as we might imagine it to be as objective fact) in which a person finds himself; everyday reality is the result of that person's interaction with the environment and the interaction of this subjectivity with other subjects. In practice, the distinction is invalid for two related reasons: firstly, no person finds himself without society and therefore pre-existing cultural support; and secondly, subjectivities and ensuing inter-subjectivities become legitimated or integrated into a world sense<sup>4</sup> through which the environment is mediated to people.

Society is thus quintessentially symbolic. That is to say, world senses and the legitimating structures that integrate inter-subjectivities into a world sense - the meanings of society - are created and maintained in and through people's collective externalisations. Every perception made and every symbol externalised is done so as a contribution to and in the context of the symbolically mediated and, since new situations are constantly arising, dialectic field of meaning peculiar to any group or society. To put it another way, people's consciousness both of themselves and the world they live in is mediated by and through an all-encompassing man-made filter whose influence is utterly inescapable.

Any culture-specific field of meaning is predicated upon assumptions which evolve as a result of the inter-subjective legitimations of perceptions, events and situations that articulate that field. These assumptions may be regarded as the paradigmatic framework or structure upon which all sensory or intellectual interaction is unconsciously grounded. The realisation of the existence of such assumptions does not negate the dialectic concept of society (one might conclude that it encouraged people to perceive the nature of all perceptions, thoughts and externalisations as mechanically determined). Assumptions serve, on the contrary, to mediate, process and in some cases repress socially efficacious information in one way rather than in any other. Society is not a one-level mono-linear cause and effect sequence, but a mosaic of simultaneously interacting and complementary fields of action and influence. It must be further emphasised that assumptions are implicitly agreed upon inter-subjectively, and as such are themselves, at times of great stress and rapid or fundamental change, subject to change through the dialectic processes of society.

#### THE IMPORTANCE OF MEDIA

The principal line of argument in the three succeeding chapters is that the assumptions underlying the world sense of industrial man are ultimately responsible for current difficulties in music aesthetics. The form the assumptions or world sense of a particular society takes would most obviously seem to depend,

perhaps, on the way the symbols of that society depict, denote and categorise what might be imagined as a previously undifferentiated world. Many people have had the experience of trying to understand, even in closely related European languages, words for which there are no direct equivalents in English. A true understanding of these words involves a change in their outlook on the world, however slight. What is about to be suggested here, on the other hand, is rather different. That is, that the way people communicate in constructing their reality (whether the face-to-face oral-aural situation of spoken discourse, the visuality of handwriting and printing or the aural-visual immediacy of electronic forms of communication) affects their outlook on the world at a very deep level. It is not so much what is conveyed that is important, but how it is conveyed.

The view that media are highly influential in the structuring both of individual psyches and entire civilisations has most notably been put forward by Marshall McLuhan. His arguments have tended to be ignored by the academic world<sup>5</sup>, and when taken account of have received a considerable amount of frequently pertinent criticism<sup>6</sup>. While it seems reasonable to conclude that many of McLuhan's arguments are over-stated and ill-founded it would also seem that the criticism they have received has caused other scholars in the field to be overly cautious. Kathleen Gough (1968, p.84), for example, puts forward the following considered opinion concerning the influence of writing on complex societies:

Writing, like other communication media, is

problematic because it forms part of both the technological and ideological heritage of complex societies, as well as being intricately involved with their social structures. Difficulties arise because it is hard to disentangle the implications of literacy from those of other techniques (for example, plough agriculture, settled cultivation, rapid transport or power industry), or of other institutions (for example, specialized priesthoods or powerful governments) commonly found in advanced societies. Literacy appears to be, above all, an enabling factor, permitting large-scale organization, the critical accumulation, storage and retrieval of knowledge, the systematic use of logic, the pursuit of science and elaboration of the arts. Whether, and with what emphases, these developments will occur seems to depend less on the intrinsic knowledge of writing than on the overall development of the society's technology and social structure, and perhaps, also, on the character of its relation with other societies. If they occur, however, there seems little doubt of contention that the use of writing as a dominant communication medium will impose certain broad forms on their emergence, of which syllogistic reasoning and linear codifications of reality may be examples.

Most media philosophers would seem to assume, as Gough does here, that the creation and influence of media constitute integral aspects of any society's development. Yet it has perhaps been a central weakness of media philosophy that the implications of this assumption have never been fully explored in any theoretical fashion. Indeed, it was not until 1969 that the clear connection between the sociology of knowledge and media philosophy as areas of academic enquiry was made by Walter J. Ong<sup>7</sup>. In Gough's case, for example, lack of a theoretical framework appears to result in a paradox. For although, at the beginning of her statement, Gough seems to acknowledge the dialectic relationship of media to all other aspects of the social process, she later implies something quite different. Namely, that if a social structure is pre-disposed to develop in a certain way, then the presence of the appropriate media will permit or facilitate that development. In

this sense, the influence of media can only be said to be passive or negative, this latter if the appropriate media is not in existence. There is little question of media having a dialectic and therefore active influence on the future development of a society.

Because it would require a deeper consideration of the social construction of reality than is appropriate to the main body of the thesis, discussion of the relationship between media and the social process is carried out in the first half of Appendix II. As this discussion concludes, at a theoretical level, that media are liable to be more pervasive in their influence on the structures of different social realities than any other aspect of the social process, it seems reasonable to adopt a more positive attitude than Gough. The position taken in this thesis, therefore, is that different media not only facilitate but actively encourage the development of certain modes of cognition, thought and social organization. The legitimacy of this position would seem to be borne out by the substantive discussions of the two succeeding chapters.

But this does not mean, as McLuhan often infers, that there is a determinant relationship between media and certain modes of cognition, thought and social organization, nor that the influence of media is exclusive. The fact that there has been anything but a smooth and even transition from pre-literate to industrial social structures in different areas of the world attests to the influence brought to bear by other facets of social development. Indeed, as the fall of the Roman Empire so strikingly

demonstrates, the transition has not uncommonly been in the reverse direction, despite the survival of different forms of literacy.

Before proceeding to a discussion of the way writing and typography have engendered certain fundamental categories of analysis in the industrial world sense incompatible with an adequate understanding of the musical process, it is necessary to indicate why such a discussion should involve a consideration of pre-literate society.

Sociology is concerned with the study of human relatedness in society - in practice mostly modern industrial society. It is apparent that if a sociologist wishes to understand the relationships people enter into in an area of society in which he is interested then, to produce a description or explanation that is as meaningful as possible, he must attempt to lay bare the assumptions upon which the structure of the relationships is grounded. If the sociologist does not attempt this, he may well fall prey to two related dangers. Firstly, if the society is other than his own, he may see the workings of the other society in terms of the unspoken assumptions prevalent in his own. This would serve to render his description or analysis useless. The avoidance of this danger not only involves the sociologist in the process of exposing the assumptions of the other society, but also in making clear the underlying implications of his own position, which are part and parcel of his own existence. Secondly, if the society under examination is his own, the sociologist, by explaining human relationships in terms of the unspoken



assumptions common to himself and his society, achieves little else but a reinforcement of those assumptions and, consequently, of the status quo. The workings of his own society, in other words, remain a mystery towards which he has contributed, a process which hardly adds to the understanding of that society. Whether the society is his own or not, therefore, the sociologist must constantly question his own position. In this particular case, the questioning will be achieved by making a comparison with a vastly different world sense, that of pre-literate man.

Because the focus of attention in the following two chapters is that of music aesthetics and not media philosophy, the discussion of the influence of different media in specific societies will be restricted in the main to an ideal-typical scheme involving pre-literate societies on the one hand and phonetically literate societies on the other. It must not be thought, however, that this distinction is as clear cut as the contents of succeeding chapters might imply. In the first place, there are many types of literacy which are not fully phonetic or even phonetic at all. Furthermore, societies which are completely pre-literate or which are universally literate are rare in the extreme. Some of the great variety of development to be found between complete non-literacy and typographically phonetic literacy is briefly indicated in the second half of Appendix II.

NOTES:

1. The discussion in this section owes much to the work of Berger and Luckmann (1971), and Cicourel (1973).
2. This proposition is argued by Duncan (1968, pp.44-46).
3. The necessity for this indeterminacy or creativity is argued below in Chapter Five.
4. The term "world sense" is used in preference to the term "world view", since "world view" betrays the strong visual orientation of modern industrial man and so encourages the same culture-specific concepts that Chapter Five attempts to transcend. "World sense", on the other hand, continually underlines a social construction of knowledge which is mediated by the effect of all media on the balance of the senses. The distinction will become clear during the course of Chapter Two.
5. Reasons for this are put forward in Chapter Three. See the sub-section entitled 'In Defence of McLuhan'.
6. See, for example, Miller (1971).
7. See Ong (1969).

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CHAPTER TWO

THE INADEQUACY OF PSYCHOLOGICAL THEORIES

## INTRODUCTION

Against the background provided by a discussion of the comparative outlooks of pre-literate and phonetically literate people, this chapter argues that psychologically based theories for the significance of music as typified in the works of Langer and Meyer are anomalous and inadequate.

## THE ORAL-AURAL WORLD OF PRE-LITERATE MAN

Practically all communication in pre-literate societies takes place in face-to-face situations. And it is because sound thus takes on a great importance in pre-literate man's world<sup>1</sup> that, in order to understand the way this world is structured, it is necessary to understand the inherent qualities of sound as a perceived phenomenon. For sound has certain qualities not generally associated with the other phenomena that impinge on our senses.

Sound is evanescent. It can only exist as it is going out of existence. It is never static and can only be considered sequential by the application of discontinuous analytic thought to its existence. A sight, on the other hand, can generally be more easily isolated in its ongoing effect and examined without destroying the inherent quality of the experience to anything like the same extent. The only way a sound can be so examined is by repeating it in its entirety if, indeed, the circumstances of its creation allow this.

Sound is thus more symptomatic of the flow of time than any other phenomena that impinge on our senses. Although all other phenomena occur within a stream of time, the fact that they may be generally isolated and examined at leisure demonstrates that, as far as the influence on the arrangement of man's sensorium is concerned, they are not so inexorably tied to that stream as sound is.

Sound evokes a sense of space very different from that evoked by other phenomena. A person can only look in one direction

at a time, and can easily rid himself of an unpleasant sight by closing his eyes or turning away. Taste is very much a sense of acceptance and rejection, and the power to escape a tactile stimulus is obvious. Smell, although it has something of sound's all-encompassing quality, may still be avoided by holding one's nose or moving away. In all these cases avoidance involves the parameter of visual space. The sound of the world, on the other hand, impinges on our ears from all directions and all distances at once, and the ability to totally cut out or ignore sound is severely limited:

Auditory space has no point of favoured focus. It's a sphere without fixed boundaries, space made by the thing itself, not space containing the thing. It is not pictorial space, boxed in, but dynamic, always in flux, creating its own dimensions moment by moment. It has no fixed boundaries; it is indifferent to background. The eye focuses, pinpoints, abstracts, locating each object in physical space, against a background; the ear however, favours sound from any direction. We hear equally well from right or left, front or back, above or below. If we lie down, it makes no difference, whereas in visual space the entire spectacle is altered. We can shut out the visual field by simply closing our eyes, but we are always triggered to respond to sound. (Carpenter and McLuhan, 1970, p.67).

Sound is symptomatic of energy. Something has to be going on for sound to be generated, and with sound that is not electronically conveyed (if we treat the loudspeaker as a translation device), the source usually occurs within a geographical range that means it can have an immediate effect upon the listener. Total staticity and the generation of sound is very rare. An example of this aspect of sound is given by Ong (1967, p.112) when he points out that "a primitive hunter can see, feel, smell and taste an elephant when the animal is quite dead". When,

however, "he hears an elephant trumpeting or merely shuffling its feet, he had better watch out. Something is going on. Force is operating".

Sound is therefore dynamic. It requires a more immediate response, and does not allow so much time or the space necessary for initial avoidance, subsequent, cooler exposure, and considered rationalisation.

Pre-literate man thus sees himself as being at the centre of a sound universe, which is dynamic and bounding with energy. Furthermore, since the paradigm of sound for people is the human voice, he imputes power and influence to the physical phenomena that surround his existence as he would impute it to the human voice. This orientation of pre-literate man to his world is noted by Mary Douglas (1970, pp.103-104):

In all the cosmologies mentioned so far, the lot of individual humans is thought to be affected by power inhering in themselves or in other humans. The cosmos is turned in, as it were, on man. Its transforming energy is threaded on to the lives of individuals so that nothing happens in the way of storms, sickness, blights or droughts except in virtue of these personal links. So the universe is man-centred in the sense that it must be interpreted by reference to humans.

The world of pre-literate man is a revelatory and relatively unpredictable world over which he exercises comparatively little conceptual control. This lack of control over environment is reflected in, and partly caused by, a lack of control over knowledge, which again relates back to pre-literate man's orality. There is thus much impetus for the creation of a firm and comparatively unyielding legitimating structure:

Man knows what he can recall - all else is so ephemeral as to be negligible. In an oral culture this



means he knows what is cast in fixed thematic formulatory patterns. Anything else will seem unreal, nonknowledge, reprehensible and dangerous. This is the noetic foundation for the traditionalism stemming from oral cultures. What is non-traditional . . . is dangerous because it is slippery and unmanageable. Oral-aural man does not like the non-traditional because, beyond his limited means of control, it advertises the tenuousness of his hold on rationality (Ong, 1969, p.640).

The hermetic and revelatory world of oral-aural man, with its tight grip on the supporting mythological structures, militates against the easy acceptance of change in pre-literate societies. Freshly perceived phenomena tend to be contained by and mediated through the rock certainty of orally accretive legitimations. This does not mean that the legitimating structures in pre-literate societies do not change in a manner that would prove historically contradictory, but merely that pre-literate man, because of his orality, is unlikely to realise the contradictory nature of successive legitimations, a fact illustrated by Goody and Watt (1963, p.309):

Early British administrators among the Tiv of Nigeria were aware of the great importance attached to . . . genealogies which were continually discussed in court cases where the right and duties of one man towards another were in dispute. Consequently they took the trouble to write down the long list of names and preserve them for posterity, so that future administrators might refer to them in giving judgment. Forty years later, when the Bohannans carried out anthropological field work in the area, their successors were still using the same genealogies . . . However, these written pedigrees now gave rise to many disagreements, the Tiv maintained that they were incorrect, while the officials regarded them as statements of fact, a record of what had actually happened, and could not agree that the unlettered indigines could be better informed about the past than their literate predecessors. What neither party recognised was that in any society of this kind changes take place which require a constant readjustment in the genealogies if they are to continue to carry out their functions as mnemonics of social relationships.

Neither does the orality of pre-literate man's noetic foundation mean that relatively sudden breaks in the legitimating structures

that are quick enough to impinge on his consciousness do not occur. But unless the break was occasioned by a literate society, it would seem more than likely that the new world sense would quickly assume the features already described. Change in pre-literate societies, then, tends to be continual and gradual rather than infrequent and radical, and something of which pre-literate man is not obviously conscious.

Pre-literate man's attitude and relationship to change is symptomatic of his sense of time. Just as he exists in a man-centred world where events in space are threaded onto the lives of himself and significant others, so events in the past and potential occurrences in the future are mediated by him in terms of the present. This is evidenced by Goody and Watt's story concerning the Tiv of Nigeria. In this sense pre-literate man lives within time. And against the background of industrial man's spatialised and objective concept of time, with its sense of the pastness of the past, and the futurity of the future, it is not being merely redundant to say that, for pre-literate man, all past and potential events are irrevocably tied to the present.

Living within time and therefore having little consciousness of time as we conceive it, pre-literate man may not be said to have any abstract temporal sense. Time unfolds and is revealed to him through specific events which recur and which are of great importance for the ordering of his existence<sup>2</sup>. Such events, as Edmund Leach has pointed out<sup>3</sup>, are most likely to be seasonal changes of some sort. It must be emphasised, however, that these recurring events

are not used as a means of dividing up abstract continuous time into a mechanical succession of separate segments or instants<sup>4</sup>.

As A. I. Hallowell put it (1937, p.660) in discussing the time concept of the Saulteaux Indians, "the 'moon' is not a division of continuous time, it is a recurrent event".

Experiencing time in a concrete and cyclical fashion, therefore, pre-literate man does not conceive of time as regressing or progressing into the vanishing points of past or future infinity. Although pre-literate man undoubtedly has a sense of the past, it is seldom lineal and quickly melts into the contemporary simultaneity of mythology:

On the whole, then, events that are believed to have taken place 'long ago' are not systematically correlated with each other in any well-defined temporal schemata. There are discrete happenings, often unconnected and sometimes contradictory. Yet the past and present are part of a whole because they are bound together by the persistence and contemporary reality of mythological characters not even grown old (Hallowell, 1937, p.668).

Corroboration of this feature of pre-literate time is to be found in Dorothy Lee's (1970) description of Trobriand time concepts.

All these aspects of pre-literate time are, of course, closely inter-related, and are best summarised by Edmund Leach (1954, p.114):

Primitive time can be regarded as a recurring cycle. Certain events repeat themselves in definite sequence. This sequence is a continuity without beginning or end, and thus without any clear distinction between past and present. The most important time-sequences are seasonal activities and the passage of human life. Both these cycles are conceived as of the same kind. For such thinking there is no chronology, and time is not measurable.

For pre-literate man, then, time is a revelatory circumjacence of concretely recurring events, which is constantly in flux, and

over which, in Western terms, he exercises relatively little control.

This 'lack of control' is also evidenced in pre-literate man's concept of space. His ordering of space results from the particular and immediate configuration of objects and not from a preconceived abstract framework. With Western man space is an empty hopper made up of horizontal and vertical dimensions into which objects are placed with direct relevance to the visual relationship that an observer has with these objects. This is reflected in art during and after the Renaissance. In this art, "everything is dominated by the eye of the beholder". There is "a space conception that is graphically depicted by the perspective projection of long level vistas upon a plane surface" (Giedion, 1970, p.74). And within this unified and centrally-oriented perspective there is a lineal ordering of objects which presupposes and reinforces sequentially segmented time. Pre-literate art completely denies any such abstraction however:

It is this manner of seeing things without any "relation to myself" that distinguishes primeval art from all later art. It is not disorder but a different order that is being followed - an order to which we, in our sophistication, have lost the key (Giedion, 1970, p.78).

Not surprisingly, perhaps, a vital characteristic of this different order is a total lack of emphasis on a vertical-horizontal framework or background:

The distinguishing mark of the space conception of primeval art is the complete independence and freedom of its vision, which has never again been attained in later periods. In our sense there is no above and no below, no clear distinction of separateness from an intermingling, and also, certainly, no rules of proportional size . . . .

Primeval art never places objects in an immediate surrounding. Primeval art has no background . . . . This

is inherent in the prehistoric conception of space: all linear directions have equal right and likewise all surfaces, whether they be regular or irregular. They can be tilted at any angle with the horizontal throughout the entire 360 degree range. To the eye of primeval man, animals that to us appear to be standing on their heads, do not appear inverted to him because they exist, as it were, in space free from the forces of gravity. Primeval art has no background (Giedion, 1970, pp.85-87).

With its concrete situation in specific objects, its lack of concern with fixed boundaries and backgrounds, its easy acceptance of intermingling and consequent lack of concern with separateness, pre-literate space is essentially auditory in nature<sup>5</sup>. And just as the visual bias of industrial man links his temporal and spatial orientations, so are those of pre-literate man linked through his oral-aural bias. This is most easily demonstrated with regard to the lack of concern for spatial separateness:

All is within the continual present, the perpetual flow of today, yesterday and tomorrow . . . Whenever possible previous lines are not destroyed, but the lines of both earlier and later works intermingle till they sometimes - but only to our eyes - appear inextricable. It was recognised quite early that this superimposition was not due to idle chance but to a deliberate reluctance to destroy the past (Giedion, 1970, pp.85-86).

The juxtaposition of past and imminent events in the ongoing present, in other words, requires a spatial sense that transcends the mutual separation of all objects in visual space. As industrial man has tended to spatialise time, it could equally well be said that pre-literate man temporalizes space.

From whichever angle it is approached, therefore, the world of pre-literate man displays an instancy and immediacy which industrial man, given his rational control over the events of the world, finds it difficult to empathize with. It is dynamic, in

a constant state of flux, and at all times pregnant with happenings. It is a world whose encroaching massivity is constantly requiring response.

#### THE FORM/CONTENT DICHOTOMY

Literate man possesses the ability of storing the information of his socially constructed reality, which then attains a permanency and safety not before possible. . Within this innovation lies the potential for preserving inviolate discrepancies between succeeding legitimations, and so for the emergence of an historically based dialectic and the concomitant growth of a comparatively based rather than mythologically mediated critical method. The keeping of records therefore makes possible a sense of the pastness of the past, of historical perspective, and so lays the foundation for the separation of history from myth.

As well as encouraging an historical and analytic perspective, literacy also emphasised the visual at the expense of the auditory. And whereas sound underlines the dynamic immediacy of the environment, visual stimuli underline the distancing and separateness of events and objects both from each other and individual people. As sound underlines immediacy in time, so vision underlines distancing in space. Further, since literacy facilitates the safe and permanent storage of information apart from people's consciousness, it also induces a psychic spatiality. This

psychic spatiality is, as we shall see, closely inter-related with the physical distancing just indicated.

Literacy may be broadly divided into two categories: ideogrammic and phonetic. Whereas phonetic literacy encodes the sounds people make in speaking, ideograms directly encode the objects and concepts about which people speak. Ideograms therefore require a knowledge/acceptance of the ideas they ideally represent, because, in terms of the already existing set of ideograms, there is no way in which the ideas may be critically discussed. This aspect of ideogrammic literacy has considerable political consequences, as will be made clear in Chapter Three. The point at issue here, however, is that the world sense of an ideogrammic culture can only be transcended with great difficulty, because the ideograms are only capable of encoding that world sense, and not what people say in it, or about it. And since orally mediated knowledge is, as we have seen, slippery and elusive, its power to avoid assimilation of important aspects of ideas encoded ideogrammically (which are more manageable, permanent, and therefore influential) is very limited. The power of literacy to radically alter orally mediated knowledge is so all-embracing and massive compared with the ability of oral people to influence literately encoded knowledge that, when a literate and oral society come into contact, the thought patterns of the former always tend to be superimposed on those of the latter. Any meaningful or consequential questioning of ideogrammic intellection is thus severely circumscribed.

When the sounds of words are encoded in written words, however, oral questioning of visually encoded ideas may itself be

encoded visually in terms of already existing symbols. Criticism which was originally oral may more easily influence knowledge which was literately encoded at the time the original criticism was made. In this way sound and sight provide mutual yardsticks of comparison and criticism. Not only may the written word be questioned in terms of the spoken word, therefore, but the efficacy of the spoken word becomes such that questioning it in terms of the written word is deemed to be a continuing necessity. As well as questioning what people meant in contradistinction to what they 'actually' wrote, then, one may also question what people meant in contradistinction to what they 'actually' said. The word is no longer restricted to face-to-face communication, and the idea may be prised out of its pictorial prison.

In thus facilitating a divorce between meaning and symbol, phonetic literacy creates an epistemological dichotomy, that between content and form, which has been extremely pervasive in the thinking of modern Western man, and which is clearly of the greatest importance to any discussion of music aesthetics. Of more importance to the present line of thought, however, is the manner in which the divorce between meaning and symbol encourages a comparative and analytic, rather than mythological dialectic, and so aids the growth of historical dialecticism implicit in any literate society. One concomitant of this growing historical/analytic approach is the ability a phonetically literate person may develop to put a great deal of temporal/spatial distance between himself and the phenomena or knowledge he is examining. Initially,



of course, this ability derives from the permanent storage of information in a place entirely removed from human consciousness. Gradually, however, the possibility of critically examining the spoken word in a manner similar to the written word leads to the distancing principle being applied to face-to-face communication. The distinction between meaning and symbol, content and form, and the distancing involved have become so pervasive in industrial man's cognitive and intellectual orientation, that it is extremely difficult for him to understand the immediate power words possess for pre-literate man. Indeed, without a conscious realisation of how this distinction and distancing arose, any meaningful insight into the role played by language in pre-literate societies is almost impossible.

Because the spoken word in pre-literate societies cannot be divorced from its everyday use in face-to-face communication, and because of the indissoluble links that exist in those societies between man, the universe and sound, words come to have an immediacy and power unknown in industrial society. And because of the imposing massivity of pre-literate man's world, there is no way in which this immediacy and power can be diluted or questioned. Words and referents are inextricably intertwined, a phenomenon illustrated by J. C. Carothers (1959, p.309) through reference to his non-literate son:

Some years ago my little son said: "Is there a word 'pirates', Daddy?" When I replied in the affirmative, he asked "Are there pirates?" I said, "No, not now, there used to be". He asked, "Is there a word 'pirates' now?" When I said, "Yes", he replied, "Then there must be pirates now". This conversation, which might have come straight

from Parmenides' doctrine of twenty-four centuries earlier, is a reminder that, for a child, a thing exists by virtue of its name; that the spoken or even imagined word must connote something in the outer world<sup>6</sup>.

As J. W. Carey has put it (1967, p.10), words in pre-literate societies "become icons, they do not represent things, they are themselves things". They are instrumental in all their aspects, and certainly efficacious over and above any hard information that we, industrial men, might distill from them. There is no attempt on the part of pre-literate man to separate meaning from symbol, content from form, and then to relegate symbol or form to a position of neutral insignificance. As sound the word is dynamic and pregnant with consequence<sup>7</sup>.

#### THE INNER/OUTER DICHOTOMY

In view of this comparison of the different kinds of significance assigned to words in pre-literate and industrial societies it may be concluded that, firstly, the distinction between content and form that we take so much for granted is in fact specific to phonetically literate societies and that, secondly, the conundrum the absolutists find themselves in is inextricably linked to that distinction. That is, if the form of music is its content, how can it have any content (or significance) at all?<sup>8</sup>

What is not so clear is that there is a second distinction, interdependent with that just indicated, on which the theories of Langer and Meyer are predicated. Because this second distinction

is interdependent with the first, the significance assigned to music by Langer and Meyer is largely spurious, and the positions they adopt are not very far removed from that of the absolutists. This distinction, its interdependency, and the consequences that interdependency have for the theories of Langer and Meyer will now be described.

The distancing inherent in the meaning/symbol dichotomy of phonetic literacy greatly reinforces the emphasis on visual space that results with any form of literacy. This reinforcement has important consequences for man's relationship to himself, to others, and to the physical environment. The inter-subjective designation of self no longer exclusively requires the presence of the 'significant other', since socially efficacious information may be received in writing. If one thinks of consciousness, which is socially mediated through communication with others, as communication with self, then it follows that the reception of written information, which originates with others, but whose perusal (silent or oral) is essentially communication with self, induces a shift of emphasis to self. Literate man can put others at a distance and in so doing becomes self-conscious to a degree not possibly with pre-literate man.

In the same way that literate man may put others at a distance he may also put the environment at a distance. The analytic method inherent in phonetic literacy serves to reduce pre-literate man's lack of conceptual control over his man-centred universe<sup>9</sup>. Not only does literacy enable comparisons through time of environmental events, but, in enabling man to be increasingly

conscious and analytic of self and others, also permits the energy and events of the environment to be unravelled from the lives of people. In other words, as phonetically literate man distinguished symbol from meaning, so he began to draw a line between himself (the words he uttered) and the external world, (the things to which the words referred). A vital distinction between the physical and the mental thus grew up, in marked contrast to oral societies, where the difference between physical and mental, non-human and human, 'outer' and 'inner' is of relatively little significance.

The spatiality and distancing of literacy provides the essential link between increased self-consciousness and 'objectivity'. Through the provision of a surrogate other, literate man possesses the capability of becoming conscious of his consciousness, and of his position in the universe - of partially stepping outside himself and, in a move formalised by Copernicus, of vacating his central, orally-enveloped position in the cosmos. This, as we have seen, is simply an impossibility for pre-literate man: "for early man, the world was something he only participated in, not an object to be manipulated in his consciousness" (Ong 1969, p.635).

This 'objectivity' is closely linked with industrial man's sense of time. The historical perspective (distancing) possible with literacy leads to a straight-line or linearly sequential sense of time:

In our culture, the line is so basic that we take it

for granted, as given in reality. We see it in visible nature, between material points, and we see it between metaphorical points such as days or acts. It underlies not only our thinking, but also our aesthetic apprehension of the given; it is basic to the emotional climax, which has so much value for us, and, in fact, to the meaning of life itself. In our thinking about personality and character, we have assumed the line as axiomatic (Lee, 1970, p.142).

Furthermore, through his ability to record events and through his sense of the pastness of the past, literate man can halt the events of time in their ongoing flow and so, in effect, halt time.

Coupled with the development of his analytic ability, therefore, literate man also developed a tendency to examine time, as it were, from the outside, a tendency which reached full fruition with the Renaissance:

With the end of the Renaissance the feeling of spontaneous intercommunication in all individual activity within the cosmic becoming has also disappeared. Human thought no longer feels itself a part of things. It distinguishes itself from them in order to reflect upon them, and is thus no longer upheld by their own power of enduring. From the motion of bodies which inexplicably and incessantly modifies it, human thought feels itself to be disengaged by the very act of thinking, for in this act it places itself outside the motion which is its object (Poulet, 1956, p.13).

Literate man therefore exists outside time in the same way as he can partially exist apart from himself and his society, and in the same way as his self-consciousness and 'objectivity' allow him to unravel the events of the environment from a human-like volition. But in becoming conscious of his consciousness literate man also becomes as conscious of his own temporal flow from which he cannot totally escape, as he does of the events of the environment which he can now fix in a sequential linear order. There thus rises up in Western thought a distinction between time concepts as relating to the physical world and to the mental:

When Hermann Weyl claims that the objective world is and does not become, he has to admit that at least our "blindfolded consciousness" creeps along the world line of its own body into the area of the universe called "future", or when it is said that we meet the pre-existing future events on our way to the future, we concede that even if the future is completed, our way to the future is still going on . . . . Thus arises an absurd dualism of the timeless physical world and temporal consciousness, that is, a dualism of two altogether disparate realms whose correlation becomes completely unintelligible (Capek, 1961, p.165).

This "absurd dualism" clearly underpins the human/non-human, mental/physical, inner/outer, subjective/objective epistemological split already noted.

#### PSYCHOLOGICAL THEORIES RECONSIDERED

It is now possible to understand why neither Meyer nor Langer transcend the limitations of their own intellectual tradition. For by restricting musical significance to the inner, emotional and subjective side of this split, they have in reality failed to transcend the first, interdependent form-and-content dichotomy. By restricting music to the inner and mental worlds, in other words, they are in fact still denying music any substantial significance beyond its 'mere existence' as form. Indeed, a purely psychological significance can only be assigned to music - and the difficulty of the absolutists' position thereby overcome - by unjustifiably denying the interdependency of the two dichotomies.

This criticism implies that the significance attached to music by these two authors is largely spurious. Symptomatically, Langer claims music to express "the Unspeakable" (1960, p.235)<sup>10</sup>,

and goes on to assign such significance a low rational priority:

Music is a limited idiom, like an artificial language, only even less successful; for music at its highest, though clearly a symbolic form, is an unconsummated symbol. Articulation is its life, but not assertion; expressiveness, not expression. The actual function of meaning, which calls for permanent contents, is not fulfilled; . . . (1960, p.240).

Because she assigns such a low rational priority to musical significance, Langer's stance seems to come perilously close to that of the absolutists. Meyer, on the other hand, allows for a much more explicit significance through his emphasis on rigorous analysis. Yet it is again symptomatic that this analysis, by Meyer's own admission, ultimately fails as a method of elucidating that significance. He tells us that ethetic relationships - which constitute the "kinesthetic sensing of the ethos and character of a musical event" (1973, p.242) - "are unquestionably important . . . but . . . hard to analyse with rigor and precision" (1973, pp.245-246), that "there is an absence of an adequate theory of ethetic change and transformation" (1973, p.246), and finally, that "the rigorous analysis of ethetic relationships is beyond my knowledge and skill" (1973, p.267).

At this stage in the argument, the reader may think that Meyer's difficulties can be traced to the fact that music does indeed encode that which is genuinely "unspeakable" or unutterable. It might be thought, for example, that because music refers outside itself to psychological contents, the inner-outer distinction has been truly transcended. But as a symbol may only have meaning in relation to something outside itself, so a thought or feeling may only exist because it too relates to something in the outside world.

More specifically, there exists an equivalence between the inner-outer distinction as it applies to both symbols and consciousness: a symbol may only refer outside itself to something because a thought (itself having the same external referent) gave that symbol its meaning; conversely, a thought may only exist because it possesses an external referent implanted by a symbol (itself having the same external referent). This point will become clearer in the light of arguments presented in Chapter Four.

Now although there is little doubt that people possess deep-seated desires which are genetically programmed, there is equally little doubt that a high proportion of the way we relate to the world results (as already argued) from symbolic interaction with other people. As far as each of us is concerned, these other people exist 'out there' in 'objective reality'. If, therefore, it is maintained that there is no need to transcend the inner-outer distinction as it applies to the mind (because all psychological constants or psychological laws of rightness are genetically programmed, thereby making reference to the outside world unnecessary), then that is something the aesthetician or music theorist needs to argue in some detail. Symptomatically, neither Langer nor Meyer undertake this argument.

Meyer does, however, paradoxically indicate the possible solution to his difficulties by concluding that it is impossible to distinguish between psychological constants and the conventions of a particular musical language:

In theory it is possible to distinguish between archetypal patterns and schemata. The former would be



those patterns which arise as the result of physiological constants presumed innate in human behaviour. The latter would be those norms which were the result of learning. But the distinction breaks down in practice. For most traditionally established norms have some basis in innate constants, and on the other hand, patterns derived from innate constants become part of tradition (1973, p.214).

If this is the case, why does Meyer not seek the basis of ethetic relationships in these different and identifiable norms? To pose a parallel question, if Langer can reach the conclusion that "what music . . . actually reflects is only the morphology of feeling" (1960, p.238) why does she not further enquire into the origins of that morphology? Why does she implicitly doubt, with Meyer, "that the explanation of musical practice needs to be pushed back this far" (Meyer, 1973, p.8), and thereby effectively ignore the entire sociological tradition?<sup>11</sup>

## NOTES:

1. The reader may have difficulty in gaining an insight to this importance. It may help, therefore, to draw a comparison with typographical civilisations where the printed word tends to take on an authority and importance that is not always warranted. In a different way, messages conveyed in and through sound have an equal kind of authority and importance for pre-literate man.
2. See Hallowell (1937, p.669).
3. See Leach (1954, pp.115-120).
4. The contrast between industrial man's spatialised concept of time, and pre-literate man's intuitive processual understanding is reinforced through the structure of their respective languages. See Whorf (1971, pp.142-143).
5. See above p.20.
6. Further substantiation of this 'sense' of the word for non-literates is given by Riesman (1970, pp.109-110).
7. Another way of approaching this rather difficult subject is to realise that, in a pre-literate society, everything that is, is mediated in terms of the present and that there are no words which do not (in terms of their recurring use) occur in the here-and-now. Pre-literate man cannot therefore put any temporal distance between a word and its referent. An object cannot exist which has no name and neither can a word survive the eclipse of its referent in the collective consciousness of such a society. And because pre-literate man finds it extremely difficult to think of words and referents as totally separate entities, he is unlikely to think of a word as having a meaning 'located outside it' which can then be 'varied' and 'given' to a recipient. Words cannot be brought out of cold-storage in a dictionary-like fashion. They quite literally evoke a dynamic world and are therefore powerful.
8. See above pp.4-5 .
9. See Ong (1967, p.45).
10. Langer is here referring to a statement by Wagner in Opera and Drama that "orchestral language expresses just what is unspeakable in verbal language, and what, viewed from our rationalistic standpoint, may therefore be called simply the Unspeakable".
11. For a more detailed application of this line of thought to Meyer's most recent (1973) publication, see Shepherd (1976, pp.42-43). This review is included as Appendix III.

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CHAPTER THREE

THE INDUSTRIAL WORLD

## INTRODUCTION

Answers to the question posed at the end of the preceding chapter only emerge in the light of an understanding both of industrial man's world sense, and of the highly pervasive political structure which is a dialectic correlate of that world sense. These two aspects of industrial man's world are discussed respectively in the two sections of this chapter. Against the background parenthetically provided by this discussion, Chapter Four will then set out a number of answers to the question posed at the end of Chapter Two.

## A STRUCTURAL AMBIGUITY

Literate man's ability to view time as a lineal sequence of discrete instants<sup>1</sup> gradually fed back upon his understanding of language until all language, whether spoken or written, was conceived in terms of the sequential and segmented nature of the written word. One discrete word, in other words, was thought of as following another in set order to give a specific meaning. Pre-literate man, by contrast, did not think in terms of the discrete homogeneous word, but rather in terms of utterances relevant to the face-to-face situation in which meaning was to be conveyed:

Man without writing thinks in terms of sound groups and not in words, and the two do not necessarily coincide. When asked what a word is, he will reply that he does not know, or he will give a sound group which may vary in length from what we call a word to an entire line of poetry, or even an entire song. The word for "word" means an "utterance". When a singer is pressed to say what a line is, he, whose chief claim to fame is that he traffics in lines of poetry, will be entirely baffled by the question . . . (Lord, 1964, p.25).<sup>2</sup>

It was the concepts of lineal segmented sequentiality and arrested time that made possible the invention of movable type printing; the visuality of chirography acted back upon itself and created the potential for mentally arresting and splitting up the action of scribing. Furthermore, the difference inherent in phonetic literacy between word and meaning, form and content, enabled man to conceive of the blank page as a container into which could be poured meaning in the shape of interchangeable bits of type, linearly and sequentially arranged. Finally, consciousness of linearly segmented processes itself facilitated the invention of the actual process of movable type printing, which involves a

number of different steps, sequentially arranged<sup>3</sup>.

It was undoubtedly the invention of movable type printing which both facilitated and actively encouraged the formulation of Western man's epistemology in its most extreme and crystalline form. Although manuscript literacy permitted the rise of all the visual concepts mentioned in the preceding chapter, it could not allow for the rise of uniformity (homogeneity) and repeatability to the extent possible in post-Renaissance society. Manuscripts of the same 'article' or 'book' were copied at different times by different people with different handwriting. Quite clearly, a copy made by one person would, in all probability, look quite different to a copy made by another, and there was no guarantee that the wording of one copy would be identical with the next<sup>4</sup>. Furthermore, the number of copies that could be made by this method was obviously limited. Movable type printing, on the other hand, made possible the production of hundreds of copies all of which were identical.

This development of uniform outlook may be said to have two aspects, one physical, the other mental. Firstly, the extreme visuality and segmentation encouraged by printing, together with the regularity and repeatability of the printed page, instigated the concept of a unified functional space. The encroaching immediacy and tangibility of pre-literate man's environment, his disunified, multidimensional but "uniquely structured spaces and times" (McLuhan, 1962, p.178) were eventually syncretized into the depth of a single three dimensional space. The visual stress of



printing thus gave a focal point to the distancing and spatiality of phonetic literacy.

But this development of a single physical point of view has an intellectual analogue, as Goldschmidt indicates (1943, p.113):

It cannot be doubted that for many medieval writers the exact point at which they ceased to be 'scribes' and became 'authors' is not at all clear . . . . We are guilty of an anachronism if we imagine that the medieval student regarded the contents of the books he read as the expression of another man's personality and opinion. He looked upon them as part of that great and total body of knowledge, the scientia de omnia scibili, which had once been the property of the ancient wises.

The organic wholeness of knowledge is split into segmented and individual points of view, a development that Marshall McLuhan links to the advent of silent reading<sup>5</sup> (1962, p.125): "The reader of print . . . stands in an utterly different relation to the writer from the reader of manuscript. Print gradually made reading aloud pointless and accelerated the act of reading till the reader could feel 'in the hands of' his author." But it was not only the reader who reacted to this desire for uniformity of feeling:

Individual writers throughout the 16th Century varied tone sentence by sentence, even phrase by phrase, with all the oral freedom and flexibility of pre-print days. Not until the 17th Century did it become apparent that print called for a stylistic revolution. The speeding eye of the new reader favoured not shifting tones but steadily maintained tone, page by page, throughout the volume . . . . By the 18th Century the reader could depend on a writer controlling the purr of his sentences and giving him a swift smooth ride. Prose became urbane, macadamized. The plunging, rearing horses of 16th Century journalese were more like a rodeo (McLuhan, 1970, p.129).

Instead of partaking of the dialectically ongoing scientia de omnia scibili therefore, typographic man internalized a segmented, permanent, finished and individually propagated piece of knowledge<sup>6</sup>.

In the same way that historical dialecticism inculcated a lineal sense of the past, so the predictable repeatability of the printed page reinforced the lineality of the future. This reinforced sense of lineal futurity found its clearest expression in the concept of applied knowledge: "The Medieval Book of Nature was for contemplatio like the Bibel. The Renaissance Book of Nature was for applicatio and use like movable type" (McLuhan, 1962, p.185). The analytic method inherent in phonetic literacy and historical dialecticism coupled with the concept of repeatability gave typographical man the idea of projecting the analytically examined causes and effects of past events into the future. Science as we have understood it since the Renaissance grew out of this one level (the single point of view), lineal, mono-causal epistemology. And the acid test of the accuracy of scientific prediction lies in the visual observance of repeatability, an approach unknown before the Renaissance. As McLuhan (1962, p.184) points out in referring to the work of Nef (1958, p.27):

Observation and experiment were not new. What was new was insistence on tangible, repeatable visible proof. Nef writes . . . . "Such insistence on tangible proof hardly goes back beyond the times of William Gilbert of Colchester, who was born in 1544. In his De magnetate, published in 1600, Gilbert wrote that there was no description or explanation in the book that he had not verified 'with his own eyes' ". But before printing had had a century and more to build up the assumptions of uniformity, continuity and repeatability, such an impulse as Gilbert felt or such a proof as he offers would have attracted little interest.

Indeed, nowhere is the epistemology of modern industrial man so clearly evidenced as in the Newtonian/Laplacian view of the universe. As words are locked into the homogeneous printed page,

so the universe is viewed as homogeneous empty space peopled by discrete and ultimately immutable units of matter. The indestructability of matter is itself a concept analagous to the idea of permanence engendered by the keeping of written records, and the juxtaposition and motion of matter in space may be predicted by invoking laws derived from the past observation of matter in space. Future events may thus be determined and ultimately controlled, and the increased control of knowledge resulting from the distancing and 'objectivity' of phonetic literacy may be said to have reached its highest pitch.

The Newtonian/Laplacian view of the universe, in being induced by an epistemology generated by phonetic literacy and typography, in turn reinforced that epistemology to the extent that modern Western man failed to differentiate between what was legitimately predictable and controllable in terms of Newtonian mechanics and what lay outside the field of those laws. The crucial step in formulating this all-inclusive cosmology is the unfounded assumption that all reality consists in the material. This assumption derives from conceiving matter, which is not maintained by people, in the image of eternal unchanging type, which is maintained as such by people. In this way matter was assigned a spurious eternity and immutability which encouraged people to think of it as somehow basic or fundamental to the operations of the universe. As a result the concept of matter tended to obscure all else: "For psychological reasons<sup>7</sup>, the concept of matter sometimes obscured the concept of void or both concepts obscured that of motion; and nearly always the concepts of space, matter and motion

tended to obscure that of time" (Capek, 1961, p.135). It was this assumption that all reality was ultimately grounded in the material that both facilitated and encouraged the hegemony of scientific thought in modern Western culture:

Science is, of course, the unquestioned source of authoritative knowledge in the modern world. Scientific myths enjoy the claim of being factually true even if they are in no way demonstrable, even if they must be taken on faith, even if they attempt to answer what are, after all, unanswerable questions. Scientific myths have the great advantage in this self-conscious society of not appearing as myths at all but as truths, verified or capable of being verified by the inscrutable methods of the scientist (Carey, 1967, p.38).

This hegemony was in many ways inevitable, because not to support it would have necessarily resulted in a questioning of the single unified pictorial space upon which Newtonian physics is predicated, a questioning hardly likely to be undertaken in view of the enormous practical benefits derived therefrom. In this way the seduction became complete, and typographical man assumed that the behaviour of all phenomena could ultimately be explained and predicted in mechanical terms. As Helmholtz put it, "To understand a phenomenon means nothing else than to reduce it to the Newtonian laws" (Quoted, Hanson, 1965, p.91).

A similar, if paradoxical<sup>8</sup>, process occurred with the more 'mental' aspects of industrial man's world sense. As people gradually filtered out experiences which did not conform to the order of matter in space, so they began to filter out the inflectionally coded information of spoken discourse:

Inflectional complexity, in written form, is not only burdensome for the ear; it is also in conflict with the spatial order that the scanning eye finds natural. To the eye, inflections are not part of the simultaneous order of linguistic variations, which they are for the ear. The

reader's eye not only prefers one sound, one tone, in isolation; it prefers one meaning at a time. Simultaneities like puns and ambiguities - the life of spoken discourse - became, in writing, affronts to taste, floutings of efficacy (McLuhan 1970, p.125).

Because of this inherently paradoxical parallel with industrial man's approach to the material world, it is important to make perfectly clear the relationship between the Newtonian/Laplacian view of the universe and the more general 'material-factual' mode of thought intimated by McLuhan. For, from the point of view of the analysis of industrial ideology, the Newtonian/Laplacian world view is no more than a particularly lucid expression of that ideology. The ideology also finds expression in the analysis of other spheres of activity which, on the face of it, have little to do with classical physics. But so seductive is the Newtonian/Laplacian world view, and so strong is scientific mythology that some people, such as Helmholtz, believe that, at least in theory, every phenomenon can be reduced to its constituent material parts and satisfactorily explained through classical physical theories. All that such people will usually admit is that in many cases this procedure is prohibitively complex and detailed. This constitutes the strictest formulation of the industrial world sense. A further, less strict, formulation remains possible without, however, resurrecting those aspects of experience filtered out through the approach under discussion. That is, that although all phenomena may theoretically be reducible to their constituent material parts, a completely adequate explanation of these phenomena according to material-factual modes of thought does not require this. This latter position is the one that has been unconsciously

adopted by many people in European civilizations since the Renaissance. For them everything is rationally explicable when reduced to the appropriate analytic constituents. Anything which cannot be so reduced and which therefore cannot be made visually explicit, immediately becomes non-knowledge:

The inflectional suggests, rather than expresses or spells out, relations. Technology is explicitness. Writing was a huge technological advance in this respect. It expressed, it made explicit, many relations that were implicit, suggested in inflectional language structures. And what writing couldn't make explicit quickly got lost. Far more than writing, printing was a technological means of explicitness and explanation. But those auditory inflections and relations which could not be made visually explicit by print were soon lost to the language . . . . (McLuhan, 1970, p.132).

This is not to say that the power of this mode of thought has not varied considerably over the last five hundred years<sup>9</sup>. At no time, however, was it as pervasive as during the Enlightenment:

Seeing the beautiful demonstrations of Descartes and Newton as they explained the heavens with their coordinates, the great classical minds sought to rival this perfection and simplicity on earth. Philosophers used the geometric method to arrive at moral and religious truth; social scientists reduced government to mechanics; the tragic muse imitated the tight deductive gate of Euclid; and I am not merely playing with words when I say that poetry itself adopted one common meter as if scientific accuracy depended on it. In all the imponderables of life, conduct, and art, the test was no longer the flexible, "Is it good, true or beautiful for such and such a purpose?" but "Is it correct?" (Barzun, 1943, p.40).

The paradox indicated at the beginning of the previous paragraph occurs because the epistemological dichotomy of industrial man is capable of acting back on itself at more than one level. In other words, the tendency described in the previous two paragraphs for industrial man to suppress the inner, mental, subjective and emotional side of the dichotomy and emphasise the outer, physical

objective and intellectual, operates in both the physical and mental (oral) aspects of his world sense. This paradox thus points up the central ambiguity of the world sense, an ambiguity already indicated in respect of industrial man's temporal sense<sup>10</sup>. For although industrial man tends to think that all phenomena are susceptible to material-factual modes of thought, he cannot, if pressed, deny the temporal flow of his own consciousness. Unfortunately, because world senses are processual phenomena to be lived in rather than examined, industrial man is seldom pressed. His consequent inability to differentiate between what is genuinely material-factual in the universe and what isn't has thus led to an unfounded assumption of total objectivity. He has, in other words, unconsciously slid into the position of thinking himself to be totally outside time and ultimately totally capable of knowing about everything, including himself (a proposition which is inherently schizophrenic). Industrial man tends to see existence projected before him on one long flat and colourless vista.

It is, however, important to stress that this approach to reality does only constitute a tendency, albeit a strong one. For if the above exposition of the industrial world sense is strictly interpreted, two contrasting and mutually exclusive epistemologies emerge. For convenience these epistemologies may be labelled the 'universal' and the 'dichotomous'. The dichotomous asserts that any particular phenomenon may be understood either in terms of the physical, outer objective world, or in terms of the inner, mental

subjective world. This is the epistemology that, for obvious reasons, most musicians implicitly support. The universal, in repressing this latter side of the dichotomy asserts that all phenomena are explicable in terms of the physical, outer and objective world.

It should be understood that this rigorous formulation of the industrial world sense is only possible in the light of the knowledge of how that world sense came into being. For people who do not question the assumptions upon which their sense of the world is founded and who consequently live largely unconsciously within the industrial world sense, the categories of understanding derived therefrom do not appear nearly so clearly formulated. Rather there is an uneasy and nebulous vacillation 'around' and 'between' the two epistemologies that passes for one homogeneous epistemology appropriate to the common understanding of the world.

This third, vaguer, epistemology is best referred to as the 'epiphenomenal'. According to its precepts, if it were shown that a phenomenon is not an integral aspect of the material or objective world, it would be possible to avoid assigning it exclusively to the world of subjective emotion by asserting that it was 'epiphenomenal' to the objective world. That is, the phenomenon could be conceived as being beyond the realms of purely material-factual activity, but a phenomenon which nonetheless remains no more than a secondary symptom or manifestation of some material-factual process within the universe. For reasons to be made apparent in the next chapter, this is the epistemology to which most sociologists and music theorists are driven when required to consider explicitly the relationship between music and society.



## In Defence of McLuhan

Before proceeding to the next section of this chapter, it is useful to briefly indicate why Marshall McLuhan's theories have met with such a tentative and negative response in many quarters. It will be remembered that one of the corollaries of the meaning/symbol split was a concentration on what somebody 'actually' meant, in contradistinction to what they may have spoken or written. The result of this process is a desire to fix the hard information from the uncertain flux of the original utterance. In this sense content may be thought of as the significant matter which may be poured into the empty form provided by the spoken, written or printed word. As McLuhan has so succinctly put it (1962, p.252): "The effects of the phonetic alphabet in translating the audile-tactile world into the visual world was both in physics and literature to create the fallacy of 'content' ". Since content has been equated with the side of the epistemological dichotomy traditionally assigned the higher reality, it is not surprising that, for typographical man, media, the forms into which meaningful content is poured, are inconsequential, neutral and certainly not, in themselves, constitutive of knowledge.

As already suggested, this 'view' of media is fallacious. Media influence the balance of the very sensory processes that people use to filter the information coming to them from the environment. In the worlds of the crowning McLuhanism: "The medium is the message" [my emphasis] <sup>11</sup>.

## MEDIA AND SOCIAL STRUCTURES

This section seeks to situate modern industrial man's social structuring both historically and across the boundaries of the class stratifications which are symptomatic of it. The historical perspective serves to emphasise the necessarily culture-specific nature of any structuring, while the concern with anti-classical political movements within the structure serves to demonstrate that despite shifts in power between social classes, and despite an increasing degree of democracy, the overall structure remains essentially the same. Anti-classical movements, in other words, tend to be articulated in terms of classical structures, and are seen to be all the more dangerous because of it.

Social structures are primarily the result of the inter-subjective legitimations of political-economic power groups dialectically mediated through the influence exerted by media on man's sensory and cognitive faculties. Because of this influence, it should immediately be stressed that all social structures are dialectic correlates of the respective world sense on which they are ultimately predicated.

The process of legitimation - whether achieved by all the members of a society turning their attention to the process at one time, or by specific members appointed by society who do little else - involves encompassing the entirety or a part of everyday reality, and putting its imposing massivity, within which everyday tasks are carried out, at a distance. The automatic acceptability of everyday reality is potentially suspended, and the

legitimators voluntarily place themselves in a position where they are more exposed to the impact and implications of fresh phenomena and events. The recession from everyday reality that is inherent to legitimation thus results in an intensification of individual awareness, the degree to which this awareness may progress being determined ultimately by the means of communication and media available to a society.

So, for reasons already discussed<sup>12</sup>, increased awareness in a pre-literate society cannot help but be re-integrated or sublimated into the collective ego during the ritual that symbolises legitimation. The potential for divergent opinions which impinge closely on the assumptional framework of these societies is low, as the political-economic power group is, to a large extent, constituted by the entire society.

Ideogrammic literacy, however, encourages the formation of a distinct group of legitimators who align themselves with the ruling elite in a society. Ideogrammic languages usually entail a vast number of signs (some 50,000 in Chinese, of which 3,000 are necessary for a reasonable degree of literacy<sup>13</sup>) which can thus only be learnt and manipulated by a small group of specialists, a phenomenon which in itself brings about an emergent division of labour. Because of the vast potential contained in any form of literacy for the improvement of the administrative and commercial activities of a society, these specialists were of great importance to rulers. There thus existed a natural propensity for scribe and ruler to act together in common purpose. As a result of this propensity, and the fact that ideograms do not code

sounds<sup>14</sup>, the only information coded is that relevant to the ruling elite; to become literate is to unavoidably acquire both the outlook and the ideas of the ruling class, ideas which are of little use or relevance to the ruled oral classes. Goody and Watt have noted the emergence of these characteristics in ancient Oriental civilizations (1963, p.314):

. . . it is a striking fact that . . . in Egypt and Mesopotamia, as in China, a literate elite of religious, administrative and commercial experts emerged and maintained itself as a centralised governing bureaucracy . . . Their various social and intellectual achievements were, of course, enormous, but as regards the participation of the society as a whole in the written culture, a wide gap existed between the esoteric literate culture and the exoteric oral one, a gap which the literate were interested in maintaining. Among the Sumerians and Akkadians, writing was the pursuit of scribes and preserved as a "mystery", a "secret treasure".

Unlike the various forms of ideogrammic literacy, phonetic literacy is relatively easy to learn, the number of symbols involved usually varying between twenty and forty. Also, as it is possible for phonetic literacy to encode the spoken language of the entire society, it does not inherently militate against the interests of any particular group in that society. Phonetic literacy could thus be viewed as a potential democratizing influence on a previously autocratic regime. Whether or not this influence held sway in any particular society depended on other factors which are not directly germane to the concerns of this chapter<sup>15</sup>.

There can be little doubt, however, that phonetic literacy also aided the incipient division of labour facilitated by ideogrammic literacy (that is, a basic split between mental and physical tasks). As the concepts of spatialism, segmentation,

sequentiality and control developed from the influence of phonetic literacy, so that literate elite were more and more exposed to the conceptual parameters within which it was possible to conceive the idea of fragmenting the individual processes of a physical task, and assigning them to different persons. Once this stage had been reached, it was then possible to conceive of tasks which could not be completed by one man, or by a very few men working according to the principles of a relatively unsophisticated division of labour, but which, for reasons of time or skill, would necessarily require the efforts of several men working in succession. This principle, as will be shortly indicated, can then be applied to the whole existence of a society, so that its different activities can be achieved with the maximum of skill and efficiency. Consequently, not only is the role of the legitimator entrenched by the division of labour, but the division itself, facilitated by the legitimator's intellectual orientation, allows for the growth of class and enables the ruling classes to utilize the services of the legitimator in preserving the status quo. As instigator and as part of the division of labour, the legitimator tends to have a vested interest in its preservation. Until at least the end of the eighteenth century, therefore, a literate elite governed the 'civilized' world in autocratic fashion.

Typography is as equally a double-edged weapon for encouraging democracy as phonetic literacy. On the one hand, the typographical process, in which individual bits of type can be changed around to form the desired page, engendered the projection of organized mechanization and regimentation throughout society.

As uniform printing gave rise to the mechanistic view of space and matter, so it gave rise to the idea of using men like the mechanically interacting parts of a machine. Man has become, in the industrial process, the inter-changeable atomistic parts of a mono-causal lineal process, and, as the interchangeable cog in the nation's machinery, he became necessarily homogeneous. The division of labour reached a new peak in efficiency.

The homogeneity of industrial society was achieved through the destruction of the 'mutuality' of feudal society. No longer did a person play a universally understood and specific role in his local society. Through increasing urbanisation he became a de-personalised source of labour to be slotted into a huge centralised scheme. McLuhan describes the transformation in the following way (1962, p.162): "The feudal system was based on oral culture, and a self-contained system of centres without margins . . . . This structure was translated by visual, quantitative means into great centre-margin systems of a nationalist mercantile kind . . . ." As the simultaneously divergent viewpoints<sup>16</sup> and time-spaces<sup>17</sup> of medieval man were snapped into three-dimensional focus, so the disparate functioning of feudal units were unified into a single national point of view. But as society changed from one of centres without margins to one of a centre with margins, so did man. Formerly a 'centre' whose activities were mediated by the oral immediacy of other 'centres', industrial man floats comparatively rootless in a constantly changing social milieu. No longer is the rationale of social

existence to be located in an immediate self-contained society, but in a remote centre - that of nationalism:

. . . the development of writing and print ultimately fostered the breakup of feudal societies and the rise of individualism. Writing and print created the isolated thinker, the man with the book and downgraded the network of personal loyalties which oral cultures favour as matrices of communication and as principles of social unity (Ong, 1967, p.54).

Industrial man, in other words, must provide his own margins, a process increasingly facilitated through the advent of literacy, that 'surrogate' other. The alienation of homogeneous atomistic individuality essentially constitutes the agony of post-Renaissance 'objective' self-consciousness.

Besides being encouraged by the uniformity of function induced through the homogeneity and repeatability of print, the growth of nationalism was also aided by the improved control at a distance made possible by the easier production and propagation of knowledge. Clearly, this control yet again helped to entrench a high division of labour. Moreover, since the market potential for printed books was greater than could be satisfied by a clerical elite reading in Latin, an increasing number of books were published in the vernacular. Ethnic groups thus became more conscious of their own national identity because they could, in a very literal sense, see themselves.

But, as suggested earlier, typography may also act as a force for 'democracy'. This possibility - and hence the 'double-edged' nature of both phonetic literacy and typography - ultimately exists because of the central ambiguity inherent in the industrial world sense. The nationalism just described, for example, both

contains and is predicated upon the suppressed distinction of physical and mental time indicated above. For while homogeneous individuality is a necessary adjunct of nationalism, in that men with self-contained 'margins' are required to act interdependently for the centrally dictated aims of the nation, those same men, increasingly more literate and critical, come to be more conscious of the self and its relationship to others, and so gained an increased possibility for formulating and voicing anti-classical opinions: "individualism, whether in the passive atomistic sense of drilled uniformed soldiery or in the active aggressive sense of private initiative and self-expression, alike assumes a prior technology of homogeneous citizens" (McLuhan, 1962, p.209). The growth of self-expressive individuality fostered and was in turn reinforced by the emergence of the concept of authorship in post-Renaissance Europe, a concept, as noted, that is uncommon in the Middle Ages.

The possibility inherent in phonetic literacy for an analytic approach towards the discrepant bodies of knowledge that may be stored in a society thus approached something like full fruition during the Renaissance, and the phenomenon of cultural lag consequently becomes of importance in examining the entire body of knowledge in modern society. The vast dissemination of books and knowledge that has resulted from printing has encouraged divergent opinions simply because the actual body of knowledge a person may be exposed to could well be, and probably is, different in every case. No one man can now know 'everything'. As Goody and Watt have pointed out (1962, p.324): "the content of the cultural



tradition grows continually, and in so far as it affects any particular individual he becomes a palimpsest composed of layers of beliefs and attitudes belonging to different stages in historical time". In literate societies, therefore, where the legitimator, as assignor of values, constitutes the class of person most intimately exposed to discrepancies and contradictions, there exists the potential for the legitimator's high degree of self-consciousness to be at variance with his role as maintainer of the established social symbology. Which direction he takes will largely depend on whether he has a vested interest in a status quo or is indifferent or hostile to it. Those legitimators who choose to erect new symbolic structures act as catalysts and initiators in the process of change or 'progress', a process which figures prominently in the consciousness of modern Western man.

The role played by printing in creating the intellectual fervour of the Renaissance need not be recounted. However, it was not until the late eighteenth century that anti-classical movements took on a strong class orientation. Raymond Williams (1961, p.50) tells us that "from the third and fourth decades of the eighteenth century there had been growing up a large new middle-class reading public, the rise in which corresponds very closely with the rise to power and influence of the same class". Because of this increased market, the author no longer needed to work for a patron but could make his money in the open marketplace. As Dr. Johnson indicates (writing in 1750), a change of subject matter results:

The task of our present writers is very different; it requires, together with that learning which is to be gained from books, that experience which can never be attained by solitary diligence, but must arise from general converse

and accurate observation of the living world. Their performances have, as Horace expresses it, plus oneris quantum veniae minus, little indulgence, and therefore much difficulty. They are engaged in portraits of which everyone knows the original, and can detect any deviation from exactness of resemblance. Other writings are safe, except from the malice of learning, but these are in danger from every common reader . . . . (Quoted, McLuhan, 1962, pp.273-274).

The result was that, in reading material produced for them and about them, the middle classes began to gain a consciousness of their political position and of its desirability. This consciousness gradually spread to the working classes during the nineteenth century<sup>18</sup>.

Increasing class consciousness was aided by other developments, such as the mechanisation of transport systems and the close proximity of the working classes in the emerging urban areas, both of which can be related to the growth of industrial nationalism. Consciousness led to and went hand in hand with a demand for increasing education, until the foundations were laid for a continuing critical, political and economic dialectic. The legitimator in society, instead of exclusively aligning himself with a ruling elite who have a vested interest in class stratification, may now be found as the representative of practically any class or group.

Phonetic literacy and typography have thus been heavily instrumental in generating a class dialectic, but within the framework of political and economic nationalism. From the situation where individual feudal units were very much the people that constituted them, industrial society has moved to a situation where the nation state has become a big hopper in which occupants can be

placed and shifted in a highly mobile fashion. Nationalism is founded upon the fallacy of form and content; it is not of the people because it contains them. It is permanent while people are mortal. And as the nation is not constituted of 'specific' individuals it has appeared as a pre-existing and generally unquestioned fact of life: "Because the national state does not belong to the citizens of any particular generation, it must not be revolutionized" (McLuhan, 1962, p.221).

Class dialogue has thus been overwhelmingly concerned in practice, if not in theory, with who shall wield the centralised power of nationalism and to what effect. Only very recently have there been signs of a general awareness of the inherent paradoxes of industrial man's social and intellectual organisation, and a general realisation that perhaps only a fundamental restructuring of that organisation will remove some of its major problems<sup>19</sup>. In a parallel fashion anti-classical legitimating structures have generally been conceived within the intellectual, political and economic frameworks outlined in this section<sup>20</sup>, and so grounded very much on the noetic structures induced through phonetic literacy and typography. Literate legitimators, in other words, in self-reflexively receding from the immediacy of everyday reality, have had great difficulty in recognising the consequences of their own literacy.

\* \* \*

Having discussed the principal characteristics of industrial man's world sense and social structuring, Chapter Four will now proceed to describe the major barriers which militate against the

adoption of a social theory for the significance of music. The description, of course, will be carried out against the background provided by this chapter.

## NOTES:

1. This view results both from industrial man's ability to 'halt' time in its continual flow and from the importance the line plays in his mode of thought.
2. The transition indicated in this paragraph was, of course, extremely slow, and one which went through many stages. One such stage is represented by the way in which 'words' were frequently 'joined up' in the writing of antiquity. Oral flow, in other words, still permeated some chirographic literacy. See Goody and Watt (1963, p.319) and Kenyon (1937, p.35).
3. See Ong (1967, p.48).
4. See Chaytor (1970, p.123). This difference in look meant that recognition of a particular 'article' or 'book' was as much aural as visual, a fact which again underlines the gradual nature of the shift from oral-aural to visual culture (cf. n.2 above). Further evidence of this gradual change is provided by the comparative difficulty that medieval and ancient civilisations experienced in reading (see Chaytor, 1970, p.117 and p.122) and by the way in which reading aloud persisted as the norm until well into the Renaissance (see Ong 1967, p.21, p.55 and p.58).
5. cf. n.4 above, especially Ong (1967, p.58).
6. This move towards uniformity and the single point of view is reflected in the standardisation of spelling and of the meaning of words. In this latter regard McLuhan (1970, p.129) comments that "even nowadays a medieval dictionary would be impossible, since individual writers assumed that they were free to define and develop any given term as their thought proceeded".
7. Capek (1961, p.135) makes a direct connection between these psychological reasons (which correspond very closely to the arrangement of industrial man's sensorium) and the repression of certain aspects of experience he is indicating: "In the classical model physical reality was constituted by four fundamental entities: space, time, matter and motion. All other concepts, including that of energy and momentum, were derived ones; similarly, attempts to reduce the number of basic entities to fewer than four were not successful . . . . Tactile sensations disclosed the reality of matter, visual sensations the reality of space. Since visual and kinesthetic sensations disclosed the reality of motion, motion, too was a sensory datum. But to what sensory datum did the reality of time correspond? It can neither be touched nor seen; it manifests itself most conspicuously in the auditory sensations which since the time of the ancient atomists have been excluded from physical reality; or in the emotional introspective qualities which by definition do not belong to

the physical world. It is true that in the sensory perception of motion we concretely experience succession and that the concept of motion presupposes the concept of time; but it is psychologically understandable that this logical order was forgotten and, as motion in the form of spatial displacement was more accessible to perception and imagination, it was made the very basis of the concept of time in the relational theory".

8. This paradox is explained in the subsequent paragraph.
9. Generally speaking, it may be thought of as gradually increasing until the Enlightenment, and then decreasing until the beginning of the present century, when changes of a rather different nature began to take place. Although pervasive, the mode of thought never went unchallenged, even at its height. One can think, for example, of the eighteenth century satire of the book, or Blake's opposition to Newtonian thought.
10. cf. above p.34.
11. This brief defence of McLuhan's central thesis is not meant to imply that there are not substantial parts of his work which invite pertinent criticism. It is meant to highlight the likelihood that even if McLuhan and his critics were to agree on their facts, there would still remain a fundamental and incommensurable philosophical difference of opinion. Reasons for such differences are given in Appendix I.
12. cf. above pp.19-27. More specifically (see Carothers, 1959, p.308), pre-literate man is relatively unable to partially step outside himself and be reflexive or 'intellectual' where his own reactions to events are concerned. The facility for discussing a problem internally with 'self' is severely restricted, and so the problem is acted out externally with others. Ong (1967, pp.132-133) relates an incident which supports this analysis: "The riots in the Republic of the Congo at the achievement of independence a few years ago perhaps provided more recent evidence of oral-aural anxiety syndromes. I recall in particular the press report of a Congolese officer whose comment when he was asked about the riots was quite simply, 'What did you expect?'. That is to say 'Don't armies everywhere riot this way from time to time when the pressure builds up?'"
13. See Goody and Watt (1963, p.313).
14. cf. above pp.28-29. The ossifying influence of hieroglyphic literacy is referred to by Goody and Watt (1963, p.313): "Any system of writing which makes the sign stand directly for the object must be extremely complex. It can extend its vocabulary by generalisation or association of ideas, that is, by making the sign stand either for a more general class of objects, or for other referents connected with the original picture by an association of meanings which may be related to

another either in a continuous or discontinuous manner. Either process of semantic extension is to some extent arbitrary or esoteric, and as a result the interpretation of these signs is neither easy nor explicit". Again (p.315): "the conservative and antiquarian bias of hieroglyphic societies can perhaps be best appreciated by contrasting it with fully phonetic writing; for phonetic writing, by imitating human discourse, is in fact symbolising, not the objects of the social and natural order, but the very process of human interaction in speech: the verb is as easy to express as the noun; and the written vocabulary can be easily and unambiguously expanded. Phonetic systems are therefore adapted to expressing every nuance of individual thought, to recording personal reactions as well as items of major importance " [my emphasis] .

15. The different degree to which phonetic literacy aided or hindered the growth of democracy in Ancient Greek and Roman civilisations, for example, is discussed by Fisher (1936, p.44) Goody and Watt (1963, p.318 and p.322), Kitto (1951, p.66), McLuhan (1962, p.61), and Ong (1967, p.34).
16. Marshall McLuhan, for example (1962, p.136) has pointed out that: "it was disturbing to scholars to discover in recent years that Chaucer's personal pronoun or his 'poetic self' as narrator was not a consistent persona. The 'I' of medieval narrative did not provide a point of view so much as immediacy of effect. In the same way grammatical tenses and syntax were managed by medieval writers, not with an idea to sequence in time or space, but to indicate importance of stress".
17. Georges Poulet (1956, p.7) tells us that: "For the man of the Middle Ages . . . there was not one duration only. There were durations, ranked one above another, and not only in the universality of the exterior world but within himself, in his own nature, in his own human existence". Further, medieval man's concept of matter has clear implications for his concept of space (since space is ultimately articulated or 'marked out' by matter): "To change was to pass from potentiality to actuality. But this transition had nothing about it necessarily temporal. By virtue of the Christian doctrine of omnipotence, it could have a temporal quality only if there were some cause which did not allow the immediate transformation by divine action of the potentiality into the act. And this cause which required that time be involved in the change was a certain defect of matter . . . . From this point of view, matter was nothing other than a resistance which, manifesting itself in the substance of a thing, hindered that thing from assuming instantly the fullness of being which its form would confer upon it; a resistance which introduced distance and tardiness, multiplicity and delay, where everything,

it seemed, should have happened simultaneously and at once" (Poulet, 1956, pp.4-5). This high degree of interdependency between matter and different 'times' or durations necessarily involves a diversity of different 'spaces' or extensions.

18. This growing consciousness is evidenced in the change of meaning with words such as 'class' and 'democracy'. See Williams (1961, pp.14-15).
19. This awareness has become possible because the media of our communication are again in the process of altering the arrangement of our sensorium and the orientation of our noetic foundations. Electrical forms of communication are restoring the immediacy and simultaneity of our awareness of world events. See McLuhan (1964).
20. Marx is probably the first thinker to have broken from these frameworks and dispensed with the fallacy that knowledge is somehow absolute, permanent and ultimately 'discoverable'. In 'turning Hegel on his head', he and Engels provided a theory of historical and economic processes that saw these processes as manifestations of human constructs acting back upon themselves. And there is little doubt that media philosophers, in extending such an approach to the very language that mediates our existence, have vastly expanded the scope of the critical sociological tradition that began with Marx.



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CHAPTER FOUR

THE BLOCKS AGAINST A SOCIAL THEORY

## INTRODUCTION

The purpose of this chapter is to show how the world sense and prevailing social structure of industrial man have jointly militated against the acceptance of a valid social theory for the significance of music. The arguments put forward in this chapter ultimately rely on the background provided in the previous chapter.

## MUSIC AND THE CENTRALISED SOCIAL STRUCTURE

The intellectual correlate of the social structure described in the previous chapter is not difficult to identify. Due to the high division of labour, hierarchical class structure and centralism of nationalism, the legitimator, in all spheres of society, remains very much in the position of producing and defining knowledge for other people.<sup>1</sup> This trend was noted in the eighteenth century by Adam Smith when he said that:

In opulent and commercial societies to think or to reason comes to be, like every other employment, a particular business, which is carried on by a very few people, who furnish the public with all the thought and reason possessed by the vast multitudes that labour (Quoted, Williams, 1961, p.52).

For the centralised dissemination of knowledge to remain intact in the face of challenge, it is necessary that knowledge is 'arbitrarily' conceived. This 'arbitrariness' is closely inter-related with the notions of 'objectivity', and 'form' and 'content' described in the previous chapter: form and content because the matter of a message is removed from the social location of its communication, and objectivity because reality is thought of as given rather than socially constructed. The supremacy of this independent and objective knowledge over that resulting from social mediation was first symbolically asserted through Plato's expulsion of the poets:

Plato's banishment of the poets and his doctrine of ideas are two sides of the same coin. In banishing the poets from his Republic, Plato was telling his compatriots that it was foolish to imagine that the intellectual needs of life in Greek society could still be met by memorizing

Homer. Rather than deal in this verbalisation, so much of a piece with the non-verbal life-world, one needed to ask more truly abstract questions (Ong, 1967, pp.33-34).

Thought and action, mind and body, self and physical environment were separated to such a degree that a considerable amount of importance was able to be given to the cerebrally derived at the expense of the socially experienced:

In classic Hegelian thesis-antithesis fashion Plato's ideas, the "really real", were polarized at the maximum distance from the old oral-aural human life-world. Spoken words are events engaged in time and indeed in the present. Plato's ideas were the polar opposite: not events at all but motionless "objective" existence, impersonal and out of time (Ong, 1967, p.34).

Meaning is thus isolated from its social context and comes to be grounded in a scheme of absolutes:

In oral culture words - and especially words like "God", "Justice", "Soul", "Good", - may hardly be conceived of as separate entities, divorced both from the rest of the sentence and its social context. But once given the physical reality of writing, they take on a life of their own; and much Greek thought was concerned with attempting to explain their meanings satisfactorily, and to relate these meanings to some ultimate principle of rational order in the universe, to the logos (Goody and Watt, 1963, p.330).

It is precisely with this type of absolute and arbitrary concept that art has traditionally concerned itself since the time of the Ancient Greeks. As far as the modern world is concerned we are told by Williams (1961, p.56) that the argument that "an artist's precepts were . . . the 'universals' (in Aristotle's terms) or permanent realities" is one which "had been completed in the writings of the Renaissance". And as the same author goes on to point out, it is also an argument which united the otherwise disparate creeds of Classicism and Romanticism:

The tendency of Romanticism is towards a vehement rejection of dogmas of method in art, but it is also very

clearly, towards a claim which all good classical theory would have recognised: the claim that the artist's business is to 'read the open secrets of the universe'. A 'romantic' critic like Ruskin, for example, bases his whole theory of art on just this 'classicist' doctrine. The artist perceives and represents Essential Reality, and he does so by virtue of his master faculty Imagination. In fact the doctrines of 'the genius' (the autonomous creative artist) and the 'superior reality of art' (penetration to a sphere of universal truth) were in Romantic thinking two sides of the same claim. Both Romanticism and Classicism are in this sense idealist theories of art; . . . (1961, p.56).

This concern with truth as the ultimate aim of art and culture has persisted into the twentieth century, albeit in rather less explicit forms. In his book, Notes towards the Definition of Culture, for example, T. S. Eliot argues that diversity of cultural activity is essential to the maintenance of a valid spiritual life. Dialectic is a necessary pre-requisite for truth:

As in the relation between the social classes, and as in the relation of the several regions of a country to each other and to the central power; it would seem that a constant struggle between the centripetal and centrifugal forces is desirable . . . there should be an endless conflict between ideas - for it is only by the struggle against constantly appearing false ideas that truth is enlarged and clarified, and in the conflict with heresy that orthodoxy is developed to meet the needs of the time; . . . (1948, p.82).

It could be argued that the first notable challenge to the centralised definition and dissemination of knowledge did not occur until the late eighteenth century, with the rise to power and influence of the middle classes. But it was precisely because this anti-classical political movement was articulated in terms of classical structures that it appeared such a threat to the status quo, and thus occasioned an explicit retrenchment in lines of thought already implicit in an elitist view of art<sup>2</sup>. It was at

this time, for example, that the notion of art as an approach to essential reality "received significant additional emphases"

(Williams, 1961, pp.60-61). Faced with a deviant cultural reality, in other words, writers and artists were forced back on the notion that all culture attains to one, indivisible, essential truth.

But this is only the first step in the line of defence, because it is equally possible for the perpetrators of a deviant cultural reality to claim that they too have access to the essential nature of truth. Further, they may claim that their art-forms interpret this essential reality more successfully than the traditional art-forms with which they vie. Those who produce such traditional art-forms are therefore driven firstly to claim that it is their art-forms which best reveal the inner nature of essential reality, and then to maintain that it is only a limited number of highly-tuned minds (such as themselves) who are capable of appreciating this reality in an unaided fashion. F. R. Leavis (1948, p.143) puts this view most explicitly:

In any period it is upon a very small minority that the discerning appreciation of art and literature depends: it is (apart from cases of the simple and familiar) only a few who are capable of unprompted, first-hand judgement. They are still a minority, though a larger one, who are capable of endorsing such first-hand judgement by genuine personal response. The accepted valuations are a kind of paper currency based upon a very small proportion of gold. To the state of such a currency the possibilities of fine living at any time bear a close relation.

The reverse side of the coin, of course, is a disdain for the critical abilities of the culturally untutored. Although such disdain is necessarily implicit in the very notion of a centrally



defined culture, it is again interesting to note that the attitude became more deeply entrenched at the beginning of the nineteenth century:

Writers had, of course, often expressed, before this time, a feeling of dissatisfaction with the 'public', but in the early nineteenth-century this feeling became acute and general. One finds it in Keats: 'I have not the slightest feel of humility towards the Public'; in Shelley: 'Accept no counsel from the simple-minded. Time reverses the judgement of the foolish crowd. Contemporary criticism is no more than the sum of the folly with which genius has to wrestle'. One finds it, most noticeably and most extensively, in Wordsworth (Williams, 1961, p.51).

Coupled with the belief that art reveals higher truths fathomable only by a minority of superior minds is the idea that these minds are thus responsible for preserving the cultural values of a society. This idea is as prevalent in the twentieth century as it was in the nineteenth. The early nineteenth-century writer, we are told, continued:

. . . to insist, in fact, on an Idea, a standard of excellence, the 'embodied spirit' of a People's knowledge, as something superior to the actual run of the market. This insistence, it is worth emphasizing, is one of the primary sources of the idea of Culture. Culture, the 'embodied spirit of a People', the true standard of excellence, became available, in the progress of the century, as the court of appeal in which real values were determined . . . . (Williams, 1961, p.52).

Over a century later, F. R. Leavis (1948, pp.144-145) states that:

Upon this minority depends our power of profiting by the finest human experience of the past; they keep alive the subtlest and most perishable parts of tradition. Upon them depend the implicit standards that order the finer living of an age, the sense that this is worth more than that, this rather than that is the direction in which to go, that the centre is here rather than there.

It is this last line of thought in the complex under discussion that is most obviously allied to the central dissemination of

knowledge in industrial society. Yet it is important to understand that this line of thought cannot be adequately maintained without the presence of the other two. In other words, unless there are a set of objective values and standards against which all cultural activity can ultimately be judged, and unless it is the case that only a minority are capable of perceiving the essential truth underlying those values, then the legitimacy of the role played by that minority quickly comes into question.

It is further interesting to note that this elitist attitude towards culture is based on the questionable premise that society is divided between those who have inherently superior, and those who have inherently inferior intellects. This premise in turn gives birth to a circular or self-maintaining view of cultural apprehension: it is only those with superior minds who can fathom the ultimate realities of art, yet it is those who can fathom these realities who by definition have superior minds; equally those with inferior minds cannot fathom the ultimate realities of art, yet it is precisely those who cannot fathom these realities who by definition have inferior minds. This circularity is implicitly acknowledged by T. S. Eliot (1948, p.107) when he says that: "It is an essential condition of the preservation of the quality of the culture of the minority, that it should be a minority culture", and through Arnold Schoenberg's famous aphorism that: "If it is art it is not for all, and if it is for all, it is not art".

Not surprisingly, the attitudes so far described in this section are to be found in the musical as well as the literary

worlds. The idea that the composer mediates between 'the open secrets of the universe' and the music he writes finds classical expression in the work of Victor Zuckerkandl. For Zuckerkandl, musical significance is located in laws which may only be discovered by the composer in objective reality:

It is not that the mind of the creative artist expresses itself in tones, words, colours, and forms as its medium; on the contrary, tone, word, colour, form express themselves through the medium of the creative mind. The finer that medium the better tone, word, colour, form can express themselves. The greater the genius, the less it speaks itself, the more it lends its voice to the tones, the words, the colours, the forms. In this sense, then, music does write itself - neither more nor less, by the way, than physics does. The law of falling bodies is no invention of the genius of Galileo. The work of the genius consists in bringing the mind, through years of practice, so into harmony with things, that things can express their laws through him (1956, pp.222-223).

A similar view has more recently been expressed by Ruth Gipps.

For her, music is a mystic experience founded on truth:

I know that from one God comes music and all musical gifts. Some of us were composers from the beginning of our lives; we had no choice in the matter, only a life-long duty to make the most of a given talent. This talent may be large or small, but without it a person is not a composer . . . . My own conception of God is of a limitless contrapuntal mind; perhaps this concept lacks humanity, but that is my own business. From personal experience I know that mysticism is founded on truth . . . . (1975, p.13).

Consequently,

. . . no human being has ever created anything. The most that a composer can do is to present to other people, in comprehensible form, music that already existed. Bach wrote 'S.D.G.' at the end of works. None of his music was a product of the cleverness of J.S. Bach (1975, p.13).

The idea that a minority of people are imbued with a special gift of musicality which may subsequently be cultivated into genius is a commonplace in many people's thinking about music,

and needs no further comment in the present context. But such belief in the other-worldly nature of musical inspiration, and the ability of only a minority to exploit it in turn leads to the concept of an objective aesthetic. That is, it is assumed that there are a fixed set of musical criteria against which all music can ultimately be judged. Not surprisingly, these criteria tend to be rooted in the musical language of the ruling classes<sup>3</sup>. Leonard B. Meyer, for example, has spent a large part of his working life attempting to extrapolate a universally applicable theory of music from albeit insightful analyses of tonality. Again not surprisingly, pre-literate music does not fair very well:

The differentia between art music and primitive music lies in speed of tendency gratification. The primitive seeks almost immediate gratification of his tendencies whether these be biological or musical. Nor can he tolerate uncertainty. And it is because distant departures from the certainty and repose of the tonic note and lengthy delays in gratification are insufferable to him that the tonal repertory of the primitive is limited, not because he cannot think of the other tones. It is not his mentality that is limited, it is his maturity (Meyer, 1967, p.32).

The tendency to judge all music in terms of tonality finds its clearest expression at the hands of Ruth Gipps (1975, p.14):

The corollary of the truth that all real music comes from inspiration is that all so-called music written without inspiration is not music at all, and the people who write it are not composers. Ranging from the super-intellectual to the wildest and woolliest lunatic fringe, we have for years been given performance of worthless nonsense, while real composers have been labelled backward-looking, unenterprising, or 'unwilling to experiment'. The extremes of the avant-garde eventually meet the extremes of amplified 'pop', which leads young people through sheer volume and physical excitement of an unhealthy kind . . . to total selfishness . . . .

Opinions of this sort are not infrequently backed up with arguments of a technical or analytic nature. Marshall Stearns, for example,

reports the following conversation with a friend about jazz:

"Jazz", he told me one evening, "is unnatural, abnormal and just plain unhealthy." I know of no effective way to answer this sort of pronouncement on any human activity. When pressed for reasons, however, he fell back on more rational assertions: "the harmonies of jazz are childish, the melodies are a series of clichés, and the rhythms are monotonously simple." Here is something technical and specific. What is more these criticisms are reasonably typical and comprehensive. Since my friend (and others like him) occupies an important position in the world of music on the strength of his unquestioned merits, his comments should be taken seriously (1956, p.183).

It is not essential to the present line of discussion to establish that such criticisms are invalid, (although it is certainly the view of this writer that they are), only that they are made in the way in which they are. It is worth noting, however, that Schuller, who is probably the greatest authority on the subject (and a classically-trained musician as well), devotes the first chapter of his book on jazz to spelling out the precise musical differences between early jazz and the classical tradition<sup>4</sup>. Further, it is a corollary of the attitude being described that whereas most jazz and rock musicians are quite happy to concede that classical or serious music operates according to a set of criteria which are simply irrelevant to their musical requirements, many classical musicians, in their firm belief that they are in a position to judge other types of music, simply end up exposing their ignorance to those who actually create and perform these other types. Peter Townsend of 'The Who', for example, has stated that:

I'm sure it will surprise a lot of people when I tell you that I can read music and I know how to arrange it; I also know about counterpoint. But as soon as I had learned all the theory, I realised that it was utterly useless to me. All it allowed me to do was to understand what other composers were trying to do, and once you've

understood you've got to go and use today's terms to produce new music, . . . (Quoted, Palmer, 1970, p.131).

But conversely the black jazz musician Cecil Taylor reports that:

I've spent years in school learning about European music and its traditions, but those cats don't know a thing about Harlem except that it's there. Right away, when they talk about music they talk in terms of what music is to them. They never subject themselves to, like, what are Louis Armstrong's criteria for beauty and until they do that, then I'm not interested in what they say. Because they simply don't recognize the criteria. (Quoted, Spellman, 1970, p.34).

The Head of Music in a technical college has put this point rather more forcefully with regard to 'pop' music. Most music teachers' view of 'pop', he maintains,

is simply based on sheer ignorance; they've just got no idea what sort of music today's kids listen to. If I had some of these teachers here for two days playing the records from our collection they would soon have to change their ideas concerning 'pop' music (Reported, Vulliamy, 1972, p.95).

Since, as Pleasants puts it, the musical "Establishment is concerned with the preservation of what it regards, sincerely, I think, as immutable cultural criteria" (1969, p.118), its criticism of music which does not conform to pre-ordained technical or analytic criteria frequently carries an accompanying moralistic component. This tendency in the denunciation of various forms of jazz, rock and 'pop' music is so well known that it hardly requires substantiation. One need only refer, for example, to Merriam's cataloguing of the tirade launched against jazz in the United States between the 1920's and 1940's<sup>5</sup>, or, as far as 'pop' is concerned, to the unfailing Ruth Gipps:

In fact, the pop craze has done much serious harm to thousands. Every time a misguided teacher uses commercial pop in school the children concerned are being led away from the good and spiritual in their natures towards the evil and hypocritical - (and for sensitive children who have

naturally good taste the enforced listening to this rubbish must be agony). It is the equivalent of a teacher of literature instructing a class to write dirty words on a lavatory wall, or of a priest teaching novices to defile their church . . . (1976, p.17).

This moralistic attitude carries an opposing perspective. For whereas the music establishment see it as their task to preserve and maintain standards, those who are in receipt of such criticism view it as an attempt to destroy their own, perfectly valid culture. This opposing perspective is piquantly expressed by Cecil Taylor:

I've known Negro musicians who've gotten grants, but it's very interesting that no Negro jazz musician ever gotten a grant. If you're a black pianist who wants to learn to play Beethoven, you have a pretty good chance of getting a grant. That's that fucked-up liberal idea of uplifting the black man by destroying his culture. But if you want to enlarge on culture, forget it; your money will have to come from bars and that cutthroat record industry (Quoted, Spellman, 1970, p.48).<sup>6</sup>

It is now possible to indicate why aestheticians and music theorists are unlikely to assign music (by which they almost without exception mean 'serious' music) an inherently social significance. For if the significance of music is taken to be socially located, then it must be understood to form an aspect of the socially constructed reality of the group of society responsible for producing the music in question. In other words, the music can only be legitimately understood in terms of the categories of analysis which themselves form an aspect of the reality of that particular group or society, and there can consequently be no question of recourse to the notion that musical significance is derived from the 'open secrets of the universe' or some form of mystical, other-worldly truth.

It is at this point that the pedigree of Langer's and

Meyer's theories becomes fully apparent. Quite clearly, the elitist view of music depends on a unidirectional information flow from essential reality, through the genius of the individual composer to society at large. As just indicated, there can be no question of a reverse information flow by which society informs the composer. Rather, the mass of people are informed, edified and improved through the composer's insights into truth. Now neither Langer nor Meyer make any explicit reference to essential reality or a higher truth. But they maintain the unidirectional information flow by locating the significance of music in the "psychological constants" or "psychological 'laws of rightness' " which are common to all men, but which only the composer is able to interpret with any degree of insight. To this extent Langer's and Meyer's theories remain implicitly elitist. While, therefore, they are able to distinguish between a symbol which has no referent in the world of objects and ideas on the one hand, and one which is nevertheless an informationally open system on the other<sup>7</sup>, they are still constrained to restrict the degree of that openness. It is this restriction which is ultimately responsible for the contradiction outlined in Chapter Two, because although it is admitted that music may refer 'outside itself' to the psychological world, it is implicitly denied that it can refer 'outside itself' to the symbolic interaction which is arguably responsible for a large measure of that world. This point is taken up again in the next chapter.

It quickly becomes apparent that once the significance of music is taken to be socially located, the circle of argument predicated on the notion of inherently superior and inferior minds



is broken. Difference in cultural values is due not so much to questions of inherent intelligence as to the existence of socially constructed and different cultural criteria which not infrequently display a mutual incompatibility<sup>8</sup>. With this central pillar of the elitist position removed, the right of the institutionalised musician or aesthete in industrial society to approach all music<sup>9</sup> in terms of certain arbitrarily defined categories thus comes into serious question. Consequently, the propensity for such musicians and aestheticians to attempt to impose a certain kind of musical knowledge on the rest of society would also come into question.

The fact that an acceptance of the social mediation of music might result in a weakening of role-security is significant, but is perhaps not the most telling point against such acceptance. Quite clearly, any assertion that the reality or knowledge of a society is socially constructed<sup>10</sup> not only brings into question the notion of absolutely and objectively conceived knowledge, but thereby questions the right of one group in society to use that notion in order to attempt a centralised manipulation and control of knowledge and values for all other groups. Because centralised social structures ultimately depend for their survival on such modes of cognitive manipulation and control, questioning of the sort indicated would ultimately result in the scrutiny of the entire centralised structure of nationalism.

The connection may to some people seem a distant one, but there can be little doubt that the lack of a disposition on the part of musicians and aestheticians to accept the significance of

serious music as socially located is due to the fact that such acceptance would implicitly require a questioning of the social and political structure within which they live. Not only would it mean accepting that the various forms of jazz, rock and 'pop' music are equally as 'good' as serious forms, but it would also mean accepting the social and moral relativity of the deviant realities they have come to represent. Against these trends the institutionalized musician is constantly driven back to a search for objective standards of value, as this statement by Leonard Meyer so graphically illustrates:

At this point some of our social scientist friends, whose blood pressure has been steadily mounting, will throw up their hands in relativistic horror and cry: "You can't do this! You can't compare baked alaska with roast beef. Each work is good of its kind and there's an end of it". Now granted both that we can enjoy a particular work for a variety of reasons and also that the enjoyment of one kind of music does not preclude the enjoyment of others . . . this does not mean that they are equally good. Nor does it mean that all modes of musical enjoyment are equally valuable. In fact, when you come right down to it, the statement that "each is good of its kind", is an evasion of the problem, not a solution of it. And so we are driven to ask: are all kind equally good? (1967, pp.34-35).

It is, of course, an essential part of the elitist's case that all types of 'non-serious' music should be taken to form an integral aspect of the group or society in which they occur. For in allowing that these other types of music might be inherently 'a-social', the elitist would open the way for the suggestion that they too have some kind of meaningful relationship to essential reality, and are therefore on some kind of equal footing with serious types of music. It is not essential, however, that absolutely no relationship be taken to exist between different forms of 'non-serious' music and essential reality, only that these

forms are so greatly influenced by the social content of their creation that the revelation of inner truth that might otherwise occur is distorted and blurred beyond recognition. Consequently, it is often a distinguishing feature of 'non-serious' musics that they are taken to be socially significant, and that such significance is taken to be a mark of disapprobation.

#### MUSIC AND THE INDUSTRIAL WORLD SENSE

If, as was argued earlier, social structures are dialectic correlates of the respective world senses on which they are ultimately predicated, then the relationship of traditional views of music to the industrial world sense should display two related features. On the one hand, that world sense should at least allow for the 'a-social' understanding of serious music (and high culture in general) which is so essential to the elitist's position. On the other, in order that the centralised structure of industrial society should not come under close scrutiny, it should also actively militate against the formulation of any social theory for the significance of music.

It is evident from discussion in the previous section that the elitist's position depends on a strict differentiation between cultural and social processes. In turn, this differentiation is predicated on the dichotomous epistemology set out at the end of the first section of Chapter Three. Quite simply, the elitist divides the entire social process between those elements which are

'material', that is, the people and the environment on which they depend, and those which are 'mental', that is, the meanings conveyed through symbolic exchange. This distinction between the 'socio-economic' and 'cultural' aspects of the social process depends on a multi-level interpretation or transformation of the dichotomous epistemology. In the first place, as we have seen, the 'matter' (or content) of a message is given a higher rational priority than the medium (or form) of its conveyance. But precisely because the 'matter' of a message is divorced from the materiality of its 'unconsequential' conveyancing medium (all symbolic transfer involves some articulation of the material universe), it appears as thoroughly metaphysical in comparison with the materiality of people and the goods they manufacture. (Were the materiality of symbolic transfer not discounted in this fashion, such division of the social process would be impossible.)

Having made this division, therefore, the elitist is obliged to restrict the notion of the social process to the material half of his split, and that of cultural process to the mental. For were he to suggest that society and culture were somehow immanent 'in' each other (which for political reasons he is not disposed to do), he would be suggesting that both society and culture were explicable in terms of both halves of the dichotomous epistemology. This, of course, would be to transgress the fundamental condition of the dichotomy, namely, that any particular phenomenon or process may only be understood either in terms of the physical, outer, objective world, or in terms of the

inner, mental and subjective world. In this fashion the metaphysics of high culture come to be totally inaccessible to the material-factual modes of thought which underlie mass industrial society<sup>11</sup>.

This division of the social process is difficult to establish categorically, since all culture presupposes some manipulation of the physical environment, and all actions are incipiently symbolic and therefore 'cultural'. It should be remembered, however, that this particular application of the dichotomous epistemology merely facilitates an 'a-social' view of culture (and therefore serious music), and was, in all probability, not as instrumental in the active creation of that view as the emergence of a heavily centralised social structure. Further, it should be reiterated that because industrial man lives very much within his world sense, the categories of understanding specific to that sense are not as clearly or consistently interpreted as post hoc analysis might seem to require that they should be.

One pertinent illustration of this lack of consistency is to be found in the elitist's idea that 'non-serious' forms of music (or, to put it more generally, different forms of mass culture) contain an essential social element. On the one hand, the elitist cannot completely consign these 'inferior forms of culture' to the material-factual world of mass society. If he did so, he would be admitting that they were generically different phenomena to his own forms of culture, and there would be no point in making any value judgement concerning them. On the other hand,

the elitist cannot make a clear distinction between mass culture and its social content. Apart from the political considerations mentioned at the end of the preceding section, such a distinction would contravene the fundamental condition of the dichotomous epistemology. While the elitist's view of high culture must be based on this dichotomous epistemology therefore, his view of mass culture cannot help but be predicated on the epiphenomenal. 'Non-serious' musics cannot be completely explained in terms of the material-factual modes of thought which underlie mass industrial society, yet they nevertheless remain secondary symptoms or manifestations of those same modes. This point is taken up again in the next section.

In his article, "The Politics of Popular Culture", Bryn Jones has observed that "the field of cultural analysis is [currently] dominated by four major tendencies" (1974, p.25). The first two of these, which Jones refers to as the 'conservative' and the 'liberal-humanist' correspond in their essentials to the elitist position already described<sup>12</sup>. The remaining, the 'technical-rationalist' and the 'vulgar-marxist', are predicated respectively on the universal and epiphenomenal epistemologies, and between them actively militate against the acceptance of a social theory for the significance of music.

The 'technical-rationalist' approach to cultural analysis finds expression in:

positivistic sociology and social psychology [and] introduces a supposedly scientific quality to its research. It has liberal aims, notably in the sphere of social policy, and employs scientific terms. Its classic study is the scientific analysis of the effects of mass media on the audience. The cultural object is reduced to its quantifiable elements by content analysis;

the participants are reduced to their socio-economic categories or ranged along various axes of sociological variables by such techniques as audience research; and the activities are reduced to clinically isolated simple communication flow models such as those developed in psychology. It has an absent theoretical heart, its place taken by a set of routinised research practices. Its social engineering and reformist outlook imply an unquestioned adherence to consensual aims founded on myths of democratic decision making . . . . (Jones, 1974, p.26).

Whether or not other forms of culture and art are amenable to such analysis must remain an open question in the present context. Music, however, poses a considerable problem. This is not so much because of the central aesthetic difficulty involved in attempting a content analysis of music. Indeed, because his outlook is firmly rooted in the universal epistemology, the 'technical-rationalist' is constrained to deny the epistemological dichotomies of form and content, symbol and meaning, and subjectivity and objectivity around which traditional concepts of musical significance vacillate. He is forced rather to seek the significance of music in the technical-rational processes taken to be identical with the unidirectional information flows involving society, people and music. This line of thought parallels that used by Meyer to overcome the absolutist's position, with the exception that 'psychological constants' are now replaced with psychological characteristics determined by the rational social process<sup>13</sup>. And since this line of thought negates all epistemological dichotomies, it is impossible to bring the same charges of inconsistent interpretation that were earlier laid against the theories of Langer and Meyer. The central problem with this line of thought, then, is that technical-rational

analysis can never successfully elucidate musical significance. This lack of success is, of course, admitted by Meyer in his discussion of ethetic relationships. However, Victor Zuckerkandl brings to bear an argument which puts the matter beyond all reasonable doubt.

Zuckerkandl points out that there exists an important difference between a series of tones which are musical nonsense and a series of tones which go to make up a melody. In the latter case the series of tones may be said to convey some sort of 'meaning' which is totally lacking in the former. The melody clearly 'has something' that the random series of notes does not. Zuckerkandl then goes on to argue that what the tones of a melody 'possess' that the isolated tones or tones of a meaningless series do not is a dynamic quality. They create a feeling over and above their simple existence which reveals a great deal about their relationship to other tones in the melody. It is precisely this dynamic quality which cannot be described or quantified in purely material or physical terms. A physical description of a tone is the same whether the tone is isolated from other tones, part of a random meaningless series, or part of a meaningful melody. Because of this, it must be accepted that the musical quality of a tone is beyond the realms of explanation in physical reductionist terms:

Among the qualities that belong to the tone as an acoustical phenomenon there is none that is not determined by a particular element of the physical process and only changes, and always changes, if something changes in the physical process. Nothing in the physical event corresponds to the tone as a musical event (Zuckerkandl, 1956, p.22).



"When we hear a melody", therefore, "we hear things that have no counterpart in physical nature" (1956, p.23)<sup>14</sup>. Although the physical properties of a tone may be made perfectly explicit in a visual fashion,<sup>15</sup> music seems to present us with 'something' not accessible to material-factual modes of thought<sup>16</sup>.

This is precisely the difficulty encountered by Alphons Silbermann in his book, The Sociology of Music. With its emphasis on a thoroughly scientific method, and its concern with the social determinants of music, the structure, function and behaviour of socio-musical groups, and the need for socio-musical planning, the book conforms to Jones's description of the 'technical-rationalist' approach to an almost embarrassing degree. It is the scientific method which most concerns us here, however. For Silbermann, society and its study (and this includes music) can only exist inasmuch as they are explicitly rooted in the material-factual world:

Sociology is the study of social life as such, of its forms and origins, its processes and aims; and it studies the social wherever it may directly be perceived and grasped. Thus, for instance, everything contained in the concept 'society' is perceptible and tangible. Under this heading comes every type and degree of human relationship, whether organized or unorganized, conscious or unconscious, direct or indirect. Culture - for our purposes music - with all its modes of effectiveness, may also be grasped directly, and the study of culture is thus the study of a social force (1963, p.37).

Human affairs should furthermore be investigated in a scientific and objective fashion, and every effort should be made to avoid speculation about the nature and origin of the social 'facts' fundamental to such an investigation:

Since ours will be an approach in which disputes over methodology will be left aside and practical and

applicable sociology will be pursued, we shall be less concerned to define the sociology of music in itself than to describe its tasks through penetration into the matter itself. We shall therefore employ concrete results of research without yielding to the temptation to indulge in philosophical speculation about them; although this might well give an impression of subtlety, it would also stand in direct contradiction to that principle of sociology which enjoins us to study human affairs dispassionately and objectively. The sociologist of music must ever be ready to take up a scientifically objective attitude to socio-musical facts, to observe them independently of his own desires and interests, and to steer clear of any kind of religious, racial, national or class prejudice (1963, p.46).

It goes without saying, of course, that Silbermann thinks of musical experience as a 'social phenomenon'. But in so doing, he inevitably runs into the problem just outlined. For although sound - and, therefore, in one sense, music - is directly perceptible and, within the broader sense of the word, 'tangible', it is extremely doubtful whether musical experience can be so described. Yet it is precisely because Silbermann thinks of musical experience as a 'social phenomenon' that he cannot relegate it, as Langer and Meyer do, exclusively to the realm of inner psychology. At the very least, musical experience of the inner world must have correlates in the external world.

Silbermann gets round this difficulty by means of the epistemological vacillation mentioned at the end of the first section in Chapter Three. On the one hand he invokes the dichotomous epistemology in asserting the validity of emotion in music: "The countless possibilities of emotional experience have in many cases been wilfully suppressed, and it is with such negative attitudes as these that we must take issue in the strongest possible manner" (1963, p.74). On the other, he maintains the universal by strongly implying that emotional experience is

ultimately dependent on the perceptible and tangible phenomena which 'exclusively' constitute 'social' life. Although he does not go so far as to say that "the arts are merely 'the designs embossed upon the textile of social life' " (1963, p.58), and although he admits of "a reciprocal action between the musical experience and the groups which consume it" (1963, p.77), the great emphasis placed by Silbermann on the 'social determinants' of musical experience leads one to think that the reciprocal action is only possible because of the initial dependency just mentioned:

'In what way is the musical experience socially determined?' and 'In what way does the musical experience socially determine other elements?'; to the treatment of these fundamental questions, the words of Romain Rolland are very relevant: "Art is not influenced by art alone, nor by thought alone, but by everything which surrounds us - people, things, gestures, movements, lines and light'. In fact, the musical experience is dependent upon so many factors that the attempt to grasp and describe them sometimes leads to despair (1963, p.83).

The validity of imputing this epiphenomenal line of thought to Silbermann is underlined when he claims that "sociological analysis of music as such [is] extremely difficult, if not impossible":

Hence then the failure of those pseudo-sociologists who, in spite of frequent warnings, persist in undertaking the impossible: in trying to analyse music as such sociologically. Music, as the inner concern of the composer, the musician or even of the whistling amateur, has not the slightest value as reality. Only when this inner concern becomes objectified, when it takes on concrete expression, has it value as a social reality, only then does it express the 'something', (I use the word deliberately) which must be understood or which will call forth a social effect (1963, p.68).

The notion that "music . . . has not the slightest value as reality" seems essentially to be at odds with the earlier statement that "culture - for our purposes music - with all its

modes of effectiveness, may be grasped directly . . . ." [emphasis mine]<sup>17</sup>. And this disparity in turn points to the extreme difficulty of attempting to analyse the musical experience according to the canons of a positivistic sociology. Indeed, the only means by which positivistic sociology can accommodate the musical experience is by momentarily adopting the infrastructure-superstructure mode of thought usually associated with Marxism. That is, because music is viewed as a secondary symptom or manifestation of the rational social process, there is no longer any need for musical experience to be analysable in terms of the material-factual modes of thought which are taken to underlie that process. It is this infrastructure-superstructure mode of thought which constitutes Bryn Jones's fourth and final tendency in cultural analysis:

The conventional wisdom of orthodox Marxism has consistently devalued the significance of culture, seeing it, in the main, as simply the reflection of the base, the economic infrastructure of society. So culture is produced by the economic relations in a fairly direct way, and is thus mere illusion or delusion, bourgeois ideology or false consciousness. This economist version of Marxism has its roots in some of the more positivistic assertions by Marx about the place of ideology. What is left out, however, is any sense of the relative autonomy of the superstructure, of the reciprocal determination of the base by the superstructure which precludes any such undialectical analysis as that conducted by vulgar Marxism (1974, pp.26-27).

This tendency in cultural analysis is undoubtedly predicated on the epiphenomenal epistemology described above. By asserting that culture is a secondary symptom or manifestation of the material processes of society, in other words, and by acknowledging that the bourgeois elitist invokes a strict society-culture dichotomy in order to pass moral judgments on society as a whole,

the Marxist is able to claim that the bourgeois concept of art is an illusion and therefore one aspect of its ideology. Yet, at the same time, many Marxists seem unable to accept that symbols act back on society in any other sense than that they reflect and reinforce a pre-existing social reality.

But the infrastructure-superstructure mode of thought need not be restricted to the critical tradition of Marxism. It is, as we have seen (and this is the main point towards which this section has been moving), the only remaining mode of thought founded on the industrial world sense by which music may be assigned any sort of social significance. In other words, if the traditional aesthetician or music theorist is forced to seriously consider the notion that the significance of music is in some way social, then this is the mode of thought that will inevitably come into play. However, to the traditional aesthetician or music theorist, this mode of thought in turn paradoxically guarantees the a-social nature of music. For it is nothing if not synonymous with the view that a symbol has meaning because it refers to something outside itself, in this instance some process in the infrastructure. The music theorist or historian who wishes to acknowledge a social influence on musical style is thus placed in a dilemma. On the one hand, he may be all too aware that fundamental stylistic changes frequently correspond with fundamental social change. Organum, for example, began to develop with the breakdown of classic feudalism, and functional tonality emerged during and after the great changes wrought by the Renaissance. On

the other, he is prevented from situating the significance of music in its full social context because such situation would again invoke the notion of extra-musical concepts. This dilemma is fully reflected in Meyer's attitude towards the subject:

Yet the explanations furnished by reference to political, social and cultural history tell only part of the story. For stylistic changes and developments are continually taking place which appear to be largely independent of such extramusical events. Although an important interaction takes place between the political, social and intellectual forces at work in a given epoch, on the one hand, and stylistic developments on the other, there is also a strong tendency for a style to develop in its own way. If this is the case, then the causes of these changes must be looked for in the nature of aesthetic experience, since for composer and listener style is simply the vehicle for such an experience (Meyer, 1956, p.65).

Once again, the music theorist is caught on the horns of industrial man's epistemological dichotomy.

#### MUSIC AND SOCIAL ORGANIZATION

So far this chapter has been concerned with showing how the predominating world sense and social structure of industrial man have prevented the adoption of an adequate social theory for the significance of music. But while the world sense and its concomitant social structure constitute necessary conditions for the maintenance of implicitly 'a-social' views, they are not in themselves sufficient. If the proposition that the significance of music is inherently social is correct, then there must be some feature of the relationship between 'serious' music and other

activities in industrial society which prevents that inherent sociality from being self-evident. This feature may best be highlighted by considering the different situations of music in pre-literate and industrial society.

It should first be noted that the potential for the development of role-specific knowledge in industrial society is far higher than that in pre-literate societies. Reasons for this difference in potential may be traced to the varying abilities that pre-literate and industrial people have both to recede from the imposing massivity of everyday reality and to develop a high division of labour. In pre-literate societies the division of labour upon which role-specific knowledge is predicated<sup>18</sup> tends to occur largely along lines of age and sex and may thus be said to be relatively underdeveloped<sup>19</sup>. Consequently, the amount of distancing and separation that may occur in pre-literate societies between different bodies of role-specific knowledge and the universally shared knowledge appropriate to everyday reality is minimal. This lack of distancing is consistent with, and a dialectic correlate of, the view that pre-literate man's potential to recede from everyday reality is circumscribed by the predominantly oral-aural nature of his communications<sup>20</sup>. Industrial society, on the other hand, is characterized by an extremely high division of labour. Thus, although there exists a sizeable body of knowledge which may be thought of as common to the everyday reality of the vast majority of people, role-specific bodies of knowledge in industrial society tend to be hermetically conceived and articulated, and so to have the minimal of

relationships with each other and the central core of knowledge appropriate to everyday reality. Again, this distancing and separation is a dialectic correlate of the possibility inherent in phonetic literacy for industrial man to mentally recede to a substantial extent from everyday reality.

The distinction being drawn here may be highlighted by reference to Berger and Luckmann's discussion of ideal-typical extremes as regards the scope and modes of institutionalisation in different societies. On the one hand:

It is possible to conceive of a society in which institutionalisation is total. In such a society, all problems are common, all solutions to these problems are socially objectivated and all social actions are institutionalized. The institutional order embraces the totality of social life, which resembles the continuous performance of a complex, highly stylized liturgy. There is no role-specific knowledge, or nearly none, since all modes are performed with situations of equal relevance to all actors (1971, pp.97-98).

On the other hand:

The opposite extreme would be a society in which there is only one common problem, and the institutionalization occurs only with respect to actions concerned with this problem. In such a society there would be almost no common stock of knowledge. Almost all knowledge would be role-specific (1971, p.98).

Examples of such societies do not exist. However, Berger and Luckmann feel able to conclude that "primitive societies approximate the [first] type to a much higher degree than civilized ones" (1971, p.98). Further, "it may even be said that in the development of archaic civilizations there is a progressive movement away from this type" (1971, p.98).

Secondly, it is necessary to understand that there are quite probably very different attitudes towards creativity in pre-



literate and industrial societies. In Chapter Two it was argued that because pre-literate man's knowledge is mediated in a predominantly oral-aural fashion, his control over that knowledge, and hence over his environment, is slippery and elusive. Thus although pre-literate man dislikes the non-traditional, he must constantly be ready to react to a world which is essentially dynamic and unpredictable. To this extent he may be said intuitively to accept as necessary and even faintly desirable activities which we label as 'creative' or 'deviant'<sup>21</sup>.

The situation in industrial society is very different, however. First of all creativity, which involves the spontaneous coming into being of something that was both unmediated and unpredictable, is clearly incompatible with the supremacy of a reductionist and deterministic epistemology. A unified field of cause and effect cannot possibly tolerate the capriciousness of the genuinely creative event. Further, because industrial man has such a comparatively good control over the events of his world, he might be said to find creativity not only unnecessary, but a threat to the rationally ordered status quo. Again, the unity and conformity essential to a centralised social structure does not, as we have seen<sup>22</sup>, easily tolerate radical acts for their own inherent value.

Because of the 'underdevelopment' of the division of labour and, consequently, of role-specific knowledge in pre-literate societies, the degree to which any activity can be distanced from the central core of everyday reality is severely circumscribed. Moreover, because creativity has a high degree of intuitive

acceptance, there is no desire to remove activities which we might label as creative from the central concerns of society. Pre-literate man, therefore, relates to music in its full social context. In industrial society, on the other hand, the high development of role-specific knowledge allows different activities to be removed to a considerable distance from the central core of everyday reality. Further, because creativity is so incompatible with the deterministic rationality which constitutes the overriding mythology of industrial society, the temptation has been to institutionalize the creative element of the social process on the periphery of predominant social concerns in artistic and, to a lesser extent, academic activities. As one of the arts, music in general has tended to suffer this fate. This assignation of a socially peripheral role to music is consistent with the traditional assignation of a higher rational priority to the material-factual side of industrial man's epistemological dichotomy.

Now although few people today would say that any type of music in industrial society is of fundamental social significance, there is an undoubted tendency to think that 'popular' forms of music are of more social relevance than 'serious' forms. Reasons for this attitude, together with the modes of thought which facilitate it, have already been discussed. In order to understand how the organization of industrial society further permits this attitude, however, it is necessary to refer back to the phenomenon of cultural lag mentioned in the previous chapter. This phenomenon, it will be remembered, results from the ability of literate man to commit new ideas to paper at various times in history. (In pre-literate societies, on the other hand, where all

knowledge must necessarily be mediated in the ongoing present of face-to-face situations, the possibilities for cultural lag are minimal). Coupled with highly-developed role-specific knowledge, the consequence of this phenomenon in industrial society is that a new piece of role-specific-knowledge may take a long time to filter through to the core of everyday reality if, indeed, it ever filters through at all.

But the 'historical time' to which such knowledge belongs need not, from the point of view of the common stock of knowledge, be in the past. Indeed, the more 'advanced' or 'consciously creative' a piece of knowledge is with regard to that common stock, the more likely it is to 'belong to the future' and to be seemingly irrelevant as far as the majority of people are concerned. This kind of relationship certainly seems to exist between high culture and the populace in general, as Marshall McLuhan indicates (1964, pp.70-71):

The percussed victims of the new technology have invariably muttered clichés about the impracticality of artists and their fanciful preferences. But in the past century it has come to be generally acknowledged that, in the words of Wyndham Lewis, "The artist is always engaged in writing a detailed history of the future because he is the only person aware of the present" . . . . The ability of the artist to sidestep the bully blow of new technology in any age, and to parry such violence with full awareness, is age-old. Equally age-old is the inability of the percussed victims, who cannot sidestep the new violence, to recognise their need of the artist . . . . The artist is the man in any field, scientific or humanistic, who grasps the implications of his actions and of new knowledge in his own time. He is the man of integral awareness.

This same trend has been apparent in 'serious' music since at least

the beginning of the nineteenth century, and is clearly in evidence today. The latest technique in electronic or serial composition, for example, is a lot less likely to impinge on the collective consciousness than, say, the sort of music played on Radio One.

To say this, however, is not to admit absolute and 'arbitrary' cultural values by the back door. The distancing or lack of distancing here being described is, of course, very closely associated with the existence of differing cultural realities which cannot admit of one, universal set of cultural criteria. It is the traditional elitist view which utilises this difference in degree of distancing to maintain and reinforce its own position, as we shall see in a moment. It should further be noted that the difference in degree of distancing does not coincide in all instances with traditional categories of 'popular' and 'serious' music. It could be argued, for example, that artists such as Bob Dylan distance themselves from the central core of everyday reality much more than some 'popular' classical composers (for example Malcolm Arnold), and are therefore just as much 'men of integral awareness' as many, more 'serious' classical composers. However, it is the general coincidence of degrees of distancing with traditional categories of 'serious' and 'popular' music which allows the elitist to hold the position being described in this section.

The fact that, at any time in history, 'serious' music tends to be placed on the periphery of social concerns does not mean that its lines of communication with the remainder of society are cut, nor, consequently, that its significance is inherently

'a-social'. Yet it is precisely because 'serious' music has this extreme peripheral status with regard to the central core of everyday reality that aestheticians and music theorists have been able, as it were, to slide surreptitiously into the position of thinking it 'a-social', and so of maintaining successfully that its significance is ultimately located in an essential and mystical reality. Equally, 'popular' forms of music are seen as retaining a social significance, not only because their position vis-à-vis core reality is less peripheral, but also, of course, because their 'inferior value as music' precludes them from revealing 'inner truths'. These correlations are nicely indicated by Francis Routh (1972, pp.x-xi):

The term music is taken to include as many aspects of the composer's work as fall under the heading art-work. An art-work is one which makes some claim on our serious attention. This implies a creative, unique purpose on the part of the composer, and an active response on the part of the listener; it implies that the composer possesses and uses both vision and technique, and that the listener in return is expected to bring to bear his full intelligence. This excludes non-art music, such as pop music, whose purpose is chiefly, if not entirely commercial. Pop groups are big business; they are socially significant; there is no question that they form a remarkable contemporary phenomenon - but this does not make the result into an art-work, and to consider it as if it were is an illogical affectation.

## CONCLUSION

It should now be abundantly clear why music theorists and aestheticians cannot possibly locate musical significance as an

aspect of socially constructed reality. For not only does such location go against any possible interpretation of the industrial world sense, but it also ultimately brings under scrutiny the entire centralised social-intellectual structure of industrial society. No music aesthete is likely to even implicitly begin such a scrutiny, for as an institutionalised academic he has an unconscious vested interest in that structure. In other words, if a musician or aesthete questions not only what he says about music, but in so doing his right to speak exclusively to and on behalf of other people, he potentially puts himself in the unenviable position of questioning the legitimacy of his own socially designated role. The workings of the musical process tend to be conceived as absolute, permanent and ultimately discoverable beyond the vagaries of human thought and perception because such an approach aids mystification and so role-security. To ignore the social nature of music is thus to articulate the social-intellectual structure of industrial society.

The tendencies described in the previous paragraph do not arise from any conscious political motive. There can be no question of an 'autocratic conspiracy'. They result rather from the unconsciously-seated inability of musicians and aesthetes to follow through the logical implications arising from the related aesthetic and political problems surrounding the 'meaning' of music. And given the particular characteristics of the industrial world sense and the inter-related social structure of industrial society, there can be little doubt that these problems have been extremely intransigent. Because of its inherent nature,

music, perhaps more than any other phenomenon to impinge on our sensory and cognitive faculties, has highlighted the assumptions and deficiencies both of our social organisation, and of our traditional outlook on the world.

In this respect, one final point can be made. At the beginning of Chapter One it was stated that the question of meaning in the representational arts is not necessarily problematic. Meaning in these arts can be 'adequately' located in 'content'. Consequently, analysis in social terms becomes easier and, moreover, of little danger to the traditional social structure, because it is carried out in terms of the categories interdependent with that structure (that is, the categories of 'form' and 'content'). What is said within a structure is of little consequence to the structure unless it actively questions the assumptions upon which the structure is grounded. It is precisely the very great difficulty of coming to grips with the 'meaning' of music in terms of 'form' and 'content' that has paradoxically made arbitrary and central definition with regard to music so very easy and, in some cases, so very extreme<sup>23</sup>.

To put it another way, there can be two possible responses to the difficulty of the 'meaning' of music. One is to avoid the difficulty. In this case, because traditional ways of looking at the world are totally unsuited for an adequate understanding of music, it becomes extremely difficult to use the categories of that world sense to question any central and arbitrary theories<sup>24</sup>. The other response is to confront the difficulty, and construct a sense of the world which allows for an adequate understanding of the

musical process. This is the purpose of the following chapter.



NOTES:

1. Dissension among and between members and groups in nation states is not evidence of conflicting and different social-intellectual structures, because the dissension generally arises from the essential structural paradox of nationalism and so pervasively articulates that very structure. Legitimizers still centrally define knowledge for their group, even if that knowledge conflicts with the knowledge of other groups, whether at the same or a lower or higher level in the overall hierarchic structure.

2. The lines of thought which became so prevalent among artists at the beginning of the nineteenth century were, of course, ultimately taken over by the middle classes as they became the more powerful element in society. This adoption could not be viewed as being complete until well into the twentieth century, however. The 'art for art's sake' movement of the late nineteenth century, for example, was essentially a reaction on the part of writers and artists against those who refused to accept the values they propagated.

3. There would seem little doubt that functional tonality still represents the established musical norm for those with power in the political and educational systems. The 1975-1976 Arts Council expenditure on music for example, breaks down as follows (see the 31st Annual Report and Accounts of the Arts Council, pp.A 10 - A 11):

Royal Opera House:	£3,410,000.
English National Opera:	£1,848,000.
Other Grants:	£2,589,127.

Of these other grants, only about £26,000 went to music of an Afro-American origin, in this case jazz. Thus less than  $\frac{1}{3}$  of 1% of the total music budget was spent on jazz, while rock music received no subsidies at all. In this respect, the notion that rock music and pop music are 'commercial' and 'imposed from above thus exploiting the musical tastes and emotions of young people' is criticised at length in Vulliamy and Lee (1976). Similarly, only about £44,000 was spent on experimental or avant-garde music. Again, it should be noted that the curriculum of the public examination system in music is taken almost exclusively from the tradition of functional tonality. Only in music colleges and university departments of music is a minority of attention paid to contemporary music and, even more occasionally, jazz and rock.

As reflected through its music budget, the attitude of the Arts Council is more generally stated by its chairman, Lord Gibson: "There is, however, a new creed emerging, to which we are totally opposed. This is the belief that because standards have been set by the traditional arts and because those arts are little enjoyed by the broad mass of people the concept of quality is 'irrelevant'. The term cultural democracy has been

invoked by those who think in this way, to describe a policy which rejects discrimination between good and bad and cherishes the romantic notion that there is a 'cultural dynamism' in the people which will emerge if only they can be liberated from the cultural values hitherto accepted by an elite and from what one European 'cultural expert' has recently called 'the cultural colonialism of the middle classes' ". (31st Annual Report and Accounts of the Arts Council 1975-1976, p.7).

4. See Schuller (1968) pp.3-62. Schuller's concluding remarks to this first chapter are particularly pertinent (1968, p.62): "It is thus evident that many more aspects of jazz derived directly from African musical-social traditions than has been assumed. Very few discussions of the pre-history of jazz have gone beyond the simplistic generalizations that jazz rhythm came from Africa but jazz melody and harmony from Europe. The analytic study in this chapter shows that every musical element - rhythm, harmony, melody, timbre, and the basic forms of jazz - is essentially African in background and derivation".
5. See Merriam (1964), pp.241-242.
6. For further substantiation of the attitudes described in this section with regard to music, see Vulliamy (1972).
7. cf. above, p.5.
8. Although, of course, it should not be forgotten that the different realities exist because of the growth of a cultural elite traditionally associated with those who hold political and economic power in society. It is, therefore, rather hypocritical of this elite to criticise the cultural values of dispossessed groups, because it is ultimately through the growth of this elite that those values came into existence in the first place. In short, an elite of necessity implies the existence of dispossessed groups.
9. This trend has recently become a lot less marked in relation to pre-literate musics. Yet it is interesting to note that while musicians are more disposed to recognise the relative musical and cultural worth of pre-literate musics, they still feel unable to extend the same courtesy to different musical traditions within their own society. François-Bernard Mâche achieves the most explicit of contradictions in the same article, for example. In one breath we are told that "sound recording . . . brought to ears which were . . . willing to hear . . . the voices of other musical civilizations, thus calling to mind the relativity of aesthetic dogma" (Mâche, 1973, p.108); and in another that the output of 'serious' music "is almost insignificant . . . as compared with the vast mass of sonorous banality liberated by the advent of the music industries" (1973, p.101).

10. cf. above, pp. 6-9 , and also Appendix I.
11. As we have seen, the emphasis was exactly the reverse. It was precisely because the roots of high culture were taken to have little or nothing to do with the processes of mass society that high culture itself could provide a better alternative to the conditions of that society. Raymond Williams highlights these two inter-related aspects of culture as they began to emerge at the beginning of the nineteenth century: "I wish to show the emergence of culture as an abstraction and an absolute: an emergence which, in a very complex way, merges two general responses - first the recognition of the practical separation of certain moral and intellectual activities from the driven impetus of a new kind of society; second, the emphasis of these activities, as a court of human appeal, to be set over the processes of practical social judgement and yet to offer itself as a mitigating and rallying alternative. But in both these senses, culture was not a response to the new methods of production, the new Industry, alone. It was concerned, beyond these, with the new kinds of personal and social relationship: again, both as a recognition of practical separation and as an emphasis of alternatives. The idea of culture would be simpler if it had been a response to industrialism alone, but it was also, quite evidently, a response to the new political and social developments, to Democracy" (Williams, 1961, p.17).
12. The conservative ideology: "is implicit in the oldest form of cultural analysis, which I call pessimistic cultural criticism. Here the only real and authentic culture is art, against which everything else is set. Theoretically it explains the current state of supposed cultural decline and malaise by a mass society thesis, in which the valued civilized culture of an elite minority is constantly under attack from a majority or mass culture which is inauthentic and a denial of life. Its main task in analysis is evaluation and discrimination, a search for the true values of civilization, commonly to be found in the organic community, the countryside, Renaissance art, the great nineteenth century novels and so on" (Jones, 1974, pp.25-26). The 'liberal-humanist' tendency: "is essentially not much different from the conservative view of culture, except that culture is now positively rather than negatively valued. The criteria for evaluation draw on the same source, high art. Similarly, it approaches popular culture in the same way as it does art, in order to appreciate it and usually the appreciation has a sentimental character. So mass culture is now not all bad, or alternatively mass culture is bad but there is some good popular culture or folk culture. At a more theoretical level, its analysis is founded on liberal myths of pluralism, of change through liberal education and so on. Since the analysis begins and ends in evaluation, culture occupies a space in which history, politics, economics and

social context are absent" (Jones, 1974, p.26). Both approaches, therefore, maintain absolute and a-social cultural criteria against which all cultural manifestations must ultimately be judged.

13. This view of musical significance assumes the identity theory of mind, namely, that all mental events are one and the same thing as the neurophysiological events with which they are at least irrevocably associated. The implication here is that the rational social process is the sum of all symbolic interaction between minds. As an expression of one of those minds, a piece of music has a technical formulation which will occasion similar neurophysiological responses in all minds within the given society. In other words, the positivistic sociologist posits a strict cause and effect chain of which neurophysiological events constitute a generative link.
14. The use of the words 'corresponds' and 'counterpart' in Zuckerkandl's statements is not completely satisfactory. As the discussion in n. 16 below illustrates, there is a very real sense in which dynamic qualities have counterparts in physical nature. Zuckerkandl's thought may be formulated more precisely by saying that dynamic qualities have no counterparts in physical nature which are any different from mere acoustic events, and which might therefore be said to correspond to dynamic qualities alone. Dynamic qualities thus have absolutely no status in the material world.
15. The classic example of this is provided by the display of sound waves on an oscilloscope.
16. The objection might be raised against Zuckerkandl's argument that although no single note can be responsible for the dynamic quality which accompanies it, all the notes of a piece acting together produce all the accompanying dynamic qualities. Any piece of music is constituted by a unique configuration of notes and it could be that unique configuration which produces the precise sequence of dynamic qualities. The objection does not succeed, however, since it still remains the case that the dynamic quality has no counterpart in physical nature which alone corresponds to that quality.
17. It is just conceivable that Silbermann's statements could be construed as being consistently epiphenomenal throughout. One would have to take note of his initial assertion that sociology "studies the social wherever it may be directly perceived and grasped" - with its implication that there are those aspects of the social which cannot be directly perceived and grasped - and then assign the word 'music' in the page 37 quote a rather different significance to the one it later takes on (p.68). But even if this interpretation is correct,

it still remains the case that Silbermann has highlighted the impossibility of understanding musical significance according to the canons of a truly positivistic sociology. A degree of epiphenomenalism becomes essential.

18. Berger and Luckmann indicate the connection between the division of labour and role-specific knowledge in discussing secondary socialization (1971, p.158): "Secondary socialization is the internalization of institutional or institution-based 'sub-worlds'. Its extent and character are therefore determined by the complexity of the division of labour and the concomitant social distribution of knowledge. Of course, generally relevant knowledge, too, may be socially distributed - for example, in the form of class-based 'versions' - but what we have in mind here is the social distribution of 'special knowledge' - knowledge that arises as a result of the division of labour and whose carriers are institutionally defined. Forgetting for a moment its other dimensions, we may say that secondary socialization is the acquisition of role-specific knowledge, the roles being directly or indirectly rooted in the division of labour".
19. Evans-Pritchard, for example, would define 'primitive' societies in terms of the comparative 'simplicity' of their social organization: "It suffices to say . . . that when anthropologists use [the term 'primitive society'] they do so in reference to those societies which are small in scale with regard to numbers, territory, and range of social contacts, and which have by comparison with more advanced societies a simple technology and economy and little specialization of social function" (1951, p.8).
20. cf. above, p.56 . Berger and Luckmann also note that "Maximal success in socialization is likely to occur in societies with very simple division of labour and minimal distribution of knowledge. Socialization under such conditions produces identities that are socially predefined and profiled to a high degree. Since every individual is confronted with essentially the same institutional programme for his life in the society, the total forces of the institutional order is brought to bear with more or less equal weight on each individual, producing a compelling massivity for the objective reality to be internalized" (1971, pp.183-184).
21. cf. below in Chapter Eight, the discussion of ambivalent attitudes in some pre-literate societies towards the deviant behaviour of musicians.
22. cf. above, pp.79-84, the discussion of the attitude of the musical establishment towards the deviant cultural reality of

jazz, rock, 'pop' and experimental music.

23. Not infrequently, jazz, rock and 'pop' music have been referred to as 'non-music', for example. In this respect see Gipps (1975, p.14).
24. The situation is aggravated of course by the fact that the 'central' and 'arbitrary' theories are themselves grounded in the categories of the industrial world sense. If they are questioned in terms of these same categories, they will necessarily be confirmed, cf. above, pp.13 - 14, the brief discussion of sociological method.

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CHAPTER FIVE

THE 'MEANING' OF MUSIC

## INTRODUCTION

It is evident from previous discussion that the music theorist or aesthete who wishes to assign music a social significance faces two related problems. On the one hand, the suggestion that music has meaning because of extra-musical references is generally agreed to be inadmissible. Yet, on the other, the only major trend of cultural analysis which in all other respects allows for a social significance for music (the infrastructure-superstructure trend) itself seemingly invokes the very same notion of extra-musical reference. This chapter seeks to overcome these two related problems by transcending the dichotomous and interdependent categories of analysis which are fundamental to both of them.

## SYMBOLOGIES

It was argued in Chapter Three that the positive feedback operating in post-Renaissance societies between visual stress and written language has been responsible for repressing important facets of life and experience to the collective unconscious. As a consequence of this process educated industrial man has tended to relate to the world solely in material and reified terms - terms which he has not unnaturally equated with the 'rational objectivity' of typography. This outlook has acted back on language so that in all its forms - even the spoken form responsible for the vastly different world sense of pre-literate man - it is ultimately conceived in terms of, and measured against the norm of 'rational objectivity'. The oral and emotional (that is, those aspects of reality which cannot be so successfully mediated in a visual form) both in life and language has at best been relegated to a position of secondary importance.

It was also argued in Chapter One that society can only arise and continue to exist through symbols externalised by members of society, and that although words constitute the most obvious and important symbolic mode, they do not constitute an exclusive symbology. The emphasis placed by industrial man on 'rational verbal objectivity', however, has led him to relegate in significance the realisations of any symbolic mode which implicitly challenge his world sense. The unspoken - or more appositely, 'unwritten' - assumption is that everything that is real can be expressed in 'objective rational' language and its

extensions<sup>1</sup>, and that reality as embodied in the rational word is somehow 'higher' than, or ontologically prior to any other evidence of reality accruing from other sources. But although language constitutes the most important symbolic mode from the point of view of maintaining the technically highly developed civilisations of industrial man, it does not follow that the reality comprehended through language is more real than that articulated by other modes, nor, concomitantly, does it follow that language is potentially an 'exclusive' mode in the sense of all other non-verbally coded experience being reducible to verbal terms.

Whilst it remains true that the different symbolic modes emphasise different aspects of reality by reason of their different media, it must not be thought that language and other symbolic modes additively contribute their different realities to the total field of meaning in a society. For the sake of discussion, it is convenient to think of the meanings of society as displaying two different aspects: those of relata and relationships. These terms are explained by Hugh Dalziel Duncan (1968, p.46):

It has long been realised that any mode of social analysis will produce at least two types of entity: first, analytical elements called 'social facts' which can be observed easily enough, and second, the entities (not so easily observed) that arise in a system because analysis was made in the particular way in which it was made. In more specific terminology the easily observed elements are called relata, while the elements 'underlying' the system are called relationships of those relata.

Structures in society are revealed to people through the relata (other people and symbols) that they perceive, but the structures

would not exist as such unless the relata were maintained in certain relationships that people cannot directly perceive but can only sense in consciousness through the individual constructions made possible by the transfer of symbols. The symbolic mode of language as conceived by industrial man has emphasised the relata of society at the expense of the relationships because the relata of society display a materiality consanguinous with the objects of the material universe - objects, however, which are not necessarily maintained in structural relationships. It was this emphasis that induced industrial man to apply a materialist and reductionist philosophy to human existence, an application which, as we have seen, still finds expression in the positivistic social sciences. Yet it can be understood from the present discussion that language does not simply signify objects and reified concepts, as its rational written form might lead us to think. Rather, objects and reified concepts are the word-embodied 'materials' or relata by and through which cultural constructs are articulated. Further, it is of crucial importance for an understanding of how music functions to realise that it has a tendency to emphasise relationships at the expense of relata, since its own relata are non-material and non-referential. Different symbolic modes, therefore, are quite capable of encoding similar structures but may, because of their method of encoding, stress different aspects of these structures.

As it affects individual consciousnesses the transfer of symbols in society presents two aspects. Firstly, as already

indicated, there are the constructions instigated by the reception of socially efficacious symbols. Secondly, there are those constructions which result in socially efficacious utterances and externalisations. It is essential for a full comprehension of the concepts put forward in this chapter to emphasise that the dialectic process of consciousness indicated here cannot function without an element of creativity. By creativity is meant, in any specific situation, the formulation of a structure in consciousness which is both facilitated and, to a greater or lesser extent, pre-conditioned by the structures of previous symbolic transfer, but whose precise configuration could not have been predicted at the deterministic level of materiality appropriate to symbols themselves<sup>2</sup>. Such creativity may be efficacious at any level of generality, whether that of a comparatively inconsequential situation in everyday life, or that of the largely unconscious articulation of a group or society's assumptional framework<sup>3</sup>. It is the process of creativity at this greater level that is of most relevance for this chapter.

The possibility for creativity as described here is indicated by Lévi-Strauss (1968, p.79):

. . . between culture and language there cannot be no relations at all, and there cannot be 100 per cent correlation either. Both situations are impossible to conceive. If there were no relations at all that would lead us to assume that the human mind is a kind of jumble - that there is no connection at all between what the mind is doing on one level, and what the mind is doing on another level. But, on the other hand, if the correlation were 100 per cent, then certainly we should know about it, and we should not be here to discuss whether it exists or not.

The latter part of Lévi-Strauss's argument may be extended, for if

the correlation between 'culture' and symbol were 100 per cent, then society would be reduced to the determinism and prediction of the industrial world sense. The extreme rigidity of such a society would make dialecticism a logical impossibility, and it is very difficult to see how society could either come into existence or survive under such circumstances. The creative element of individual minds is thus as necessary a pre-condition of structural changes in society as the flexibility of human behaviour in the face of environmental changes (social or physical) is for the survival of human individuals as biological organisms.

The position adopted, then, is that all symbolic modes are permeated by all-pervasive social symbolic constructs which are dialectically and therefore creatively articulated by and through specific consciousnesses and symbols. As a consequence of this position, it is impossible to conceive of 'society' as somehow basic or fundamental to the 'culture' or symbols of that society. For the inclination to regard the kinship/political/economic sphere of society as the sphere in which rests all primary causation for symbolic activity implicitly denies the efficacy of all symbols as potential instigators and pre-conditioners for subsequent utterances and externalisations. Further, the concept under discussion reifies society, for what is society if not the totality of mutually efficacious and dialectically related individual consciousnesses and symbols? In this context it is again useful to emphasise that society can only arise and continue to exist by and through the symbols externalised by members of that

society. Finally, it is not difficult to realise that both reification and the notion of 'primary causation' are themselves symptomatic of the reductionist, determinist and materialist industrial world sense which it was necessary to elucidate in order to arrive at the position here adopted.

The fallacies of this concept of primary causation as a mode of social analysis may be parenthetically illustrated by reference to the attitude of politicians towards music during the development of early Soviet Russia. For some years after the October Revolution, politicians were generally of the view that art would be influenced by political-economic events and that, consequently, there was not or should not be any need for political interference. Trotsky, for example, did not believe it was possible for a truly Soviet culture to emerge until the period of the dictatorship of the proletariat had ended, and Soviet society had become truly classless:

The cultural reconstruction which will begin when the need of the iron clutch of a dictatorship . . . will have disappeared will not have a class character. This seems to lead to the conclusion that there is no proletarian culture and that there will never be any, and in fact there is no reason to regret this (quoted in Krebs, 1970, p.34).

If the true Soviet culture is to emerge naturally from the synthesis of all classes, then state interference would merely be detrimental to this development: "Art must make its own way, and by its own means. The Marxian methods are not the same as the artistic. The Party leads the proletariat but not the historical processes of history" (quoted in Krebs, 1970, p.35). Lunacharsky,



who was the first Commissar of Education and Enlightenment, formulated an analysis of the relationship between the socio-economic situation of a class and the underlying nature of its artistic production which supported a liberal view of the arts. We are told that " . . . the logic of his aesthetic categories showed the logic, if not the letter of Marxism, and since Marxist logic was inevitable, then a liberal view encouraging a dialectic development should be adopted" (Krebs, 1970, p.38). As Commissar, Lunarcharsky did everything possible to encourage any serious artistic enterprise. It may be concluded then, that at least until 1927:

The Marxist-Leninist view on culture and art . . . was that they formed a part of the superstructure of whatever historical mode prevailed. The implication . . . was that the superstructure changed automatically with the change of the material basis of society. Although this concept was later shattered by Stalin it meant now that the State's sole leverage on the arts was through manipulation of the social mode (Krebs, 1970, p.46).

It is essential for an understanding of subsequent events in Russian musical life to realise that this apparently liberal attitude towards the arts was accompanied by a strain of conservatism. In other words, although artists were given a free hand, artistic production was expected to develop within certain guidelines. Although Lenin, for example, acknowledged that "every artist takes it as his right to create freely, according to his ideal, whether it is good or not", he clearly felt that there were limits which should not be transgressed: "But of course we are Communists. We must not drop our hands into our laps and allow

the chaos to ferment as it chooses. We must try consciously to guide this development and mould and determine the results" (Klara Zetkin, quoted in Schwarz, 1972, p.19). In the same vein Trotsky felt it necessary "to destroy any tendency in art . . . which threatens the revolution . . . or [which] arouses the internal force of revolution . . . proletariat, peasantry and intelligentsia to a hostile opposition to one another" (Krebs, 1970, p.35). We are also told that "Lunarcharsky fought one manifestation throughout his years: the perversion and destruction of the classical tradition" (Krebs, 1970, p.38).

By the late 1920s and early 1930s it became clear to those in power that music was not progressing within the basically tonal and classical guidelines required. The liberal line of thinking was thus abandoned and the more conservative strain was drawn on to ensure that the 'culturally safe' classical tradition was not threatened. In 1927, when Stalin had succeeded Lenin, the progressive Association of Contemporary Musicians was absorbed by the more reactionary Russian Association of Proletarian Musicians. In 1936 this organisation was replaced by the Union of Soviet Composers, an official organ of the Ministry of Culture. And in 1936, following the first All-Union Congress of Soviet Writers of 1934, came the criticism of Shostakovitch's Lady Macbeth of Mtsenk. Finally, in 1946 came the crushing general criticism of the country's leading composers<sup>4</sup>.

The point for the present line of argument is the discovery on the part of the Russian authorities that the dialectic processes of society do not involve a slavish imitation of the

material basis of society by a symbolic superstructure, but rather the potentially creative formulation of symbols through which, in any social realm, heretical structures may be articulated.

Although the political-economic realm had come under more determinant control in Soviet Russia it was hardly surprising that the creative element inevitable in the dialectic processes of society should, however, continue to find expression in the unrestricted arts.

The initially paradoxical attitude of the Russian authorities towards music is symptomatic of an interesting contradiction within Marxist thought, that is, the contradiction between a dialectic, and a 'scientific' or determinist and materialist approach to the social process. This contradiction situates the Russian-Marxist movement firmly in its nineteenth century context. It was the essential condition of Romanticism that it attempted to transcend the capitalistic and industrial world sense in terms of the categories produced by that very same world sense. Similarly, the October Revolution sought to replace the old capitalistic order with a new Communistic one, but the attempt was compromised throughout by recourse to methods of rational, determinant control. It therefore became a Revolution which, in some sense, involved 'relata' rather than relationships and structure, one system of centralised control, that of the Tsars, being replaced by another.

It is in terms of this attempt by the Russian system to

halt any creative dialectic in the social process and replace it with rational control that Lenin's attitude to the arts, his combining of "revolution in the social sphere with reaction in the spiritual" (Berdraev, quoted in Krebs, 1970, p.31) becomes clear. For, as is argued below, traditionally tonal classical music both encodes and articulates the structure of a centralised political-economic system, and so was entirely appropriate to the 'new' order of things in Russia. Given this affinity, it was hardly likely that music articulating competing structures would be tolerated. This goes a large part of the way to explaining why the music of Tchaikovsky and Scriabin, which some Marxists might feel expressed aspects of bourgeois decadence, were tolerated, while the clearer, more vigorous language of Prokofiev has often been castigated.

It may be argued, therefore, that the concept of 'dialectical materialism' as applied in Russia provides an implicit contradiction in terms, for to strictly interpret Marx's statement that "it is not the consciousness of men that determines their existence but, on the contrary, their social existence which determines their consciousness" is to emphasise one aspect of the social process at the expense of the other. Moreover, it is to imply a unidirectional and sequentially determinant process where, as this section has attempted to illustrate, none can be unquestionably established. Political-economic and kinship structures are most probably no less symbolic or epiphenomenal than those of language, music or art, and any implicit

categorisation of the social process into physical and spiritual, or objective and subjective realms, in being predicated upon the restricted world sense of industrial man, is of little use for understanding the essentially symbolic and dialectic nature of society.

The position adopted above may now be expanded. Inasmuch as evidence of the existence of society or culture is revealed to us only through the symbols we perceive<sup>5</sup>, culture and society can only be regarded as being immanent 'in' the potentially creative articulations of specific symbols, no matter to which realm of social activity they pertain. Furthermore, since these articulations originate from and are only efficacious 'within' individual minds, society must also be regarded as being immanent 'in' individual consciousnesses. Society, in other words, as a process of order-in-change, is immanent 'in' and 'through' the dialectic interaction of people and symbols.

#### THE 'MEANING' OF MUSIC

It is the theme of this chapter that the meanings of society are encoded and creatively articulated by music to an extent that denies the assumptional assignation of a higher rational priority to both verbally encoded meanings and to the political-economic infrastructure of society. Music has meaning only inasmuch as the inner-outer, mental-physical dichotomy of

verbally referential meaning is transcended by the immanence 'in' music of what we may conceive of as an abstracted social structure, and by the articulation of social meaning in individual pieces of music. In this respect music stands in the same relationship to society as does consciousness: society is creatively 'in' each piece of music and articulated by it.

As we have seen in Chapter One, any meaning that may be assigned to music does not and cannot result or depend on the existence of physically external referents. In this sense music is its own meaning. But this does not imply, as Susanne Langer would have it, that music is an "unconsummated symbol"<sup>6</sup>, for the presence of permanent contents that Langer requires for the fulfillment of the actual function of meaning in a symbol must surely be rooted in the inner-outer form and content dichotomy of the verbal-physical world. Consequently, restricting musical meaning to the "inner-life" as Langer does, and thereby denying an 'outer' transcendent or social meaning, again seems to be a product of traditional industrial epistemology as witnessed in the inner-outer opposition. Music is not an informationally unidirectional mode of symbolism relevant only to "emotive, vital, sentient experience", or "inherent psychological laws of 'rightness' ", but an instantaneous, two-way mode that, through its essentially dynamic structural nature is singularly suited to reveal the dynamic structuring of social life, a structuring of which the 'material' forms only one aspect. Music is consummatory because of the social meaning immanent in the individual consciousnesses and pieces of music of a society and, conversely,

because social meaning can only arise and continue to exist through symbolic communication originating in consciousness - communication of which music forms a part.

It would be wrong, of course, to imply that Langer's and Meyer's psychological view of music goes absolutely no way towards transcending the form and content dichotomy. In maintaining that there is a structural conformity between music and mind they have arrived at a position not totally dissimilar to the one put forward here. The crucial difference, however, is that in only allowing for a unidirectional information transfer they have implicitly assumed mind to be a partially delimited entity. But as the following statement by Gregory Bateson indicates (1973, p.436), it is entirely possible to arrive at a totally open concept of mind consistent with the views expressed in this chapter:

The individual mind is immanent but not only in the body. It is immanent also in pathways and messages outside the body; and there is a larger Mind of which the individual mind is only a sub-system. The larger Mind is . . . . immanent in the total interconnected social system . . . .

The superimposition of the structure that constitutes a particular piece of music onto a suitably predisposed mind is indeed essential to all musical communication. But equally essential is the social interaction responsible for the particular 'structural' disposition of that mind.

Again, it would be unfair to Suzanne Langer to imply that her notion of music as an "unconsummated symbol" is totally without insight. As her support for Wagner's understanding of music suggests<sup>7</sup>, Langer tends to categorise experiences-in-consciousness into the 'unspeakable' and the 'speakable'. The former, implicit,

category consists of those experiences which can only be sensed in consciousness and not specifically referred to; the latter, explicit, category of those objects and concepts which may be definitively indicated. Music is to be equated with the implicit category, writing with the explicit<sup>8</sup>. Now while it remains true that music may emphasise the implicit and writing the explicit, it does not follow that music cannot encode the explicit, nor that writing cannot encode the implicit. As previously argued, different symbolic modes are capable of encoding similar structures but may, because of their method of encoding, stress different aspects of those structures (in this regard, and this regard only, the explicit may be equated with relata, and the implicit with the relationship 'underlying' those relata).

The concepts of explicitness and implicitness as possible paradigms for social and musical elucidation are discussed below in Chapter Seven. However, for the purpose of discussing Langer's theory, the following further relationship between media and world senses may be briefly indicated here. On the one hand, there are those media which communicate 'implicitly' and those which communicate 'explicitly'; on the other there are those world senses (such as the pre-literate') which tend towards the implicit and those (such as that of industrial man) which tend towards the explicit<sup>9</sup>. Music is quite capable of implicitly encoding an explicit world sense, a process evidenced through the entire tradition of tonality. Langer's concept of the implicit and the



explicit thus has substance.<sup>10</sup> But her tendency to rigidly equate music with implicitness, her consequent implied denial of the social process immanent 'in' music, and her subsequent failure to assign any real significance to music, once again points to the inadequacy of the view that music is an 'unconsummated symbol'.

NOTES:

1. The best example of such an extension is provided by mathematics.
2. Although symbols comprised of sound implicitly question the concepts of materiality and determinism (cf. above pp.19-21), sound itself obeys physical laws.
3. cf. above p.9.
4. An excellent account of this incident is given in Werth (1949).
5. It may be thought that other people may be perceived independently of any symbols they emit. But since no person can be arbitrarily isolated from his social milieu (with which he is constantly inter-acting), it may be asserted that the mere existence of the 'other' is incipiently symbolic. People and the symbols they emit cannot, in other words, be legitimately separated in this arbitrary fashion.
6. See Langer (1960, p.240).
7. cf. Chapter Two, n.10.
8. Once again, this division is a clear expression of the epistemological dichotomy of industrial man.
9. The pre-literate world sense may be said to be implicit because it is a sense which is very much 'lived within'. The industrial world sense, on the other hand, is one in which all experience tends to be set out or understood in a totally 'objective' and 'rational' fashion.
10. See Langer (1960, p.245).

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CHAPTER SIX

WRITING ABOUT MUSIC - I

The attempt to establish in academic language that reality as embodied in the non-verbal and non-rational mode of music is equal and coextensive with that embodied in language is, of course, inherently contradictory. If life and experience as encoded by music has equal reality with that encoded by words, why bother to verbalise about music? Is one not in fact denying the very theme being discussed and illustrated? Ideally, one might leave music to speak for itself were it not for the very fact that music, for reasons indicated in Chapter Four, is often regarded as an elusive, epiphenomenal and somehow unreal occurrence, which can only be brought into the fold of reality through verbalisation. The self-evidence of musical reality is therefore insufficient for establishing that very reality. The only recourse available is to attack the 'epiphenomenalist' on his own verbal territory, firstly by showing how his own kind of verbal approach to music is grounded in the physical-mental, form-and-content epistemology of industrial society, and, secondly by attempting to demonstrate that music does code social-intellectual structures.

These two processes are inextricably linked since the approach to musical meaning adopted here - itself a piece of writing - implicitly asserts the inadequacy of the traditional approach to writing about music. Also this traditional approach in itself, and regardless of what it may concretely say about specific pieces of music, belies a certain epistemological approach that makes implicit assertions about the nature of music inconsistent with those arising from the 'socio-structural' approach adopted here. What one says about music cannot be

legitimately differentiated from the approach one takes in saying it, since both activities are but different aspects of the initial process of reflecting on music. As well as putting forward a different view of music and how it may function (that is, a view of music as we might imagine it to be, 'out there' and 'beyond us' as 'objective fact'), it is necessary to constantly take into consideration how and why one is constructing that particular view. A view of music in itself cannot be isolated from the formulation of the view as part of the social construction of knowledge and reality, because such isolationism subscribes to the fallacy of form and content, whilst at the same time ignoring the efficacy of form<sup>1</sup>. Any discussion of music therefore involves, of necessity, a consideration of the method of discussion.

The separation of the objective from the subjective that is typical of highly literate society has resulted in two basically different approaches to writing about music. The first is the descriptive or analytic, which seeks to explain precisely what happens in the music. Realising perhaps that written language, with its overtones of determinacy and objectivity cannot adequately or usefully relate the subject experience that music is, analytic writers seek to explain, or at least bring into high relief, the music as 'objective fact'. The second approach recognises the emotional, psychological and subjective in music and seeks to underline the experience for the listener by means of words. The words in such a situation are usually separated to a degree from their hard 'rational' bias, and the result is predominantly what

Wilfrid Mellers has termed a "prose-fiction". Both approaches have obvious drawbacks. The first fails to go beyond the physical patterns of sound as perceived and notated, and so implicitly supports the notion that all reality is ultimately reducible to and explicable in terms of the visually encodable material of the music. For reasons already put forward, it is therefore absolutely meaningless in itself and adds little or nothing to the aesthetic experience. The second - if well done, which is seldom the case, because it would require the services of a very talented poet - may succeed in paralleling the aesthetic experience and so help to elucidate it a little, but at the expense of totally ignoring the musical 'fact'. Moreover, written language, by its very form, does not have such pliable parameters as music. As a result, the "prose-fiction" used to describe one piece of music can become dangerously similar to the prose-fiction used to describe another, often very different piece<sup>2</sup>.

The inadequacy of both approaches can be traced to their predication on the physical/formal (analytic) - mental/content (prose-fiction) dichotomy<sup>3</sup>, a dichotomy whose continued existence is concomitant with the maintenance of industrial man's world sense. There is consequently a reluctance among some musicologists to try to meaningfully relate the two approaches, for the successful achievement of any such relating would ultimately lead to the articulation of a competing world sense<sup>4</sup>. Robert Lyle, for example (1948, p.158) cannot accept that the findings of analysis might be related to more philosophical considerations:

The scope of music has been, and doubtless always

will be much debated. The problem arises as soon as musical criticism ventures to discuss the philosophical implications of a musical style or idiom. It must be faced, for analysis itself can only clarify; it cannot explain, nor can it relate its particular and highly specialised findings to the wider context of man's preoccupation with truth and beauty.

For Lyle, the creative impulse or generative kernel of a piece of music must either reside 'within' the piece of music or 'outside' it. Meaning cannot transcend. If extra-musical ideas provide the impetus for a piece, then analysis can be of no avail in understanding it:

Much music, especially "romantic" music can be understood only in relation to extra-musical ideas. This will seem obvious enough when we remember that the neglect of a purely musical logic does not by any means prevent a work of music being consistent, convincing and appealing. Only in such a case the consistency must derive from an initially non-musical source. To this division, criticism must constantly adjust itself, for the formal completeness of say 'Sea-Drift' [Delius] can only be subjectively felt, it cannot be objectively demonstrated in purely musical terms [my emphases] (Lyle, 1948, p.158).

A method of writing about music that combines both approaches does serve to eradicate some of the inadequacies mentioned, but it, unfortunately, still fails to realise that music forms an integral part of the social process. With this method, the objective and subjective in music are still often regarded at base as being two separate entities, rather than merely different aspects of the same phenomenon, and the effect achieved is often that of a mechanical mixture, rather than that of the elucidation of the organic social whole that a piece of music is. The a-social view of music discussed in Chapter Four and the specific approaches to writing about music mentioned here



are thus facets of the same social-intellectual structure as manifest in the realm of musical thought and articulation. In the modern Western world music still tends to be regarded as being beyond the pale of even the symbolic superstructure of crude Marxism, let alone being regarded as an active constituent of the social process. Western music critics tend to deny the possibility of the Soviet position with regard to musicology, - that is, that musical form and 'language' have ideological significance. The denial results not because Soviet musicology fails to transcend the categories of form and content, but precisely because, in mechanically equating musical form with the content of social dogma, it starts out on the road to the achievement of that very transcendence.

The traditional approach to writing about music does little but support a musically encoded ideology (that is, the coding through tonal classical music of the industrial world sense) through its own ideological implications (that is, the oppositional epistemological categories and centralised authoritarian structures symptomatic of that world sense), a process that is both ultimately tautological and of questionable critical value. The writer is tied to one viewpoint, the implication being that this viewpoint is sufficiently universal and objective for musical judgement to be authoritatively disseminated.

The centralised definition of what counts as music has already been commented upon<sup>5</sup>. However, two further examples will be noted. Because both writers are concerned with the social implications of musical style, these examples serve to show how

deeply ingrained the centralised or elitist view of culture is in the consciousness of industrial man. The first example is taken from the writings of Theodor W. Adorno, a man, who despite his radical pose, betrays the authoritarianism implicit in many elitist European academic systems<sup>6</sup>. Adorno's musical outlook is rooted very much in the 'highly conscious' and 'rational' aesthetic of Schoenberg and, as a result, he finds it very difficult to tolerate Stravinsky's music which, at least in its early phase, creates effects comparable to those of pre-literate musics:

Authenticity is gained surreptitiously through the denial of the subjective pole. The collective standpoint is suddenly seized as though by attack; this results in the renunciation of comfortable conformity with individualistic society. But at the very point where this is achieved, a secondary and, to be sure, highly uncomfortable conformity results: the conformity of a blind and integral society - a society, as it were, of eunuchs and headless men. The individual stimulus activated by such art, permits the survival only of self-negation and the destruction of individuation; this indeed was the secret goal of the humour of Petrouchka . . . but now this obscure drive becomes a shattering fanfare (1973, p.159).<sup>7</sup>

The second example is taken from the writings of an eminent Soviet musicologist, Israel V. Nestyev. It should immediately be pointed out that his approach lacks any of Adorno's arrogance, and that his discussion of music generally seems interesting, informative and perceptive. Nevertheless, the party line is maintained and judgement delivered. Summing up Prokofiev's achievements as a composer, Nestyev says:

In his affirmation of human virtue and his exposure of negative forces, Prokofiev was not always equipped with clear ideological aims. He never gave enduring expression to the heroism and pathos of the people's life in the period of the victory of socialism. He was more successful in depicting the past . . . than in

portraying revolutionary struggle and socialist creation (1961, p.456).

The principle reason for this attitude towards Prokofiev's music has already been indicated.

It would be self-contradictory to imply that the approach to writing ~~about music~~ adopted here does not also make implicit ideological assertions. It does, but there are two differences. Firstly, the position adopted acknowledges that the writer, as a social animal, is his own prisoner, a phenomenon implicitly denied by those who espouse the traditional approach. Secondly, the realisation of necessary social involvement in what is written, instead of putting blinkers on an observer and diminishing the usefulness and validity of his observations, adds considerably to his insight. The writer may cast off from his safe haven of authoritarian objectivity and realise that no one viewpoint, no one musical language is sacrosanct. Only by uncovering his own material and absolutist assumptional framework, therefore, can industrial man step beyond the aesthetic implications of his own music, and so simultaneously realise the equal worth of other musical languages and the social significance of all music.

NOTES:

1. cf. above, pp. 74 - 75, and pp. 83 - 89 . It is precisely because the materiality of symbolic communication is ignored that ideas may be isolated from the content of their creation.
2. Not all books on music display such a marked dichotomy as has been described here. Moreover, there are some books which tend very strongly in the direction of transcending the strict form and content categories. Wilfrid Mellers, for example, has constantly striven to situate the music he is discussing in the full social context of its creation, and in this regard it is interesting to note that his avowed aim is "to understand rather than to evaluate". In spite of this, however, it does seem fair comment that a great number of books and articles implicitly take this dichotomy, in one form or another, as the assumed methodological starting point for their enquiry and presentation. The number of books written along the lines of "the man and his music" provides some testimony for this assertion, as do the number of books which seek to pass judgement on a work or body of music without making explicit reference (through musical examples or other devices) to the actual music itself. Again, more evidence is provided by the great number of purely analytic articles published each year. This is not to imply, however, that such material is of little value. The reverse is often patently the case. The argument is that by re-arranging the methodological basis for musicological enquiry it will be possible to gain greater insight into the music under examination, whilst retaining a more truly phenomenological sense of the music as music.
3. This formulation of the dichotomy as applied to the traditional approach to music may appear confusing as, in the Newtonian cosmology the physical or material is regarded as the content of a homogeneous, three-dimensional, spatial form. It should be remembered, however, that the Newtonian/Laplacian view of the universe only constitutes one example of the articulation of the industrial world sense (cf. above pp. 50 - 51 ). The fundamental epistemological dichotomy engendered by phonetic literacy finds expression in many ways which, on the surface, may appear contradictory or paradoxical (cf. above pp. 51 - 52).
4. It could be argued, for example, that it was the potential emergence of a competing world sense which caused the impasse in Meyer's Explaining Music (cf. above, pp. 35 - 38 ), a book whose very aim is to reconcile analysis with the subjective element in music. The point, of course, is that such reconciliation can only be fully achieved by viewing the objective and subjective as different aspects of one pre-existing social whole.

5. cf. above, pp.79-84.
6. For a more detailed account of the contradictory pose of such 'radicals' as Adorno and Lukacs, see Wishart (1973).
7. For a more detailed critique of Adorno's Philosophy of Modern Music see Shepherd (1975). This review is included as Appendix IV.

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PART II

THE MUSICAL CODING OF IDEOLOGIES

## INTRODUCTION

The purpose of this Part of the thesis is to indicate the way in which analysis can, within certain limitations, elucidate the social meaning inherent in music. The limitations, of course, result from the fact that analysis is an overwhelmingly explicit procedure, that music is an implicit form of communication, and that some world senses tend towards the implicit. The methodological implications of these relationships are discussed in Chapter Seven, and an analytic paradigm is evolved which as far as possible overcomes the difficulties highlighted by that discussion. Chapters Eight to twelve then examine different types of music as an integral facet of the social content of their creation. The thesis concludes with a brief re-examination of the problems inherent in writing about music.

The approach to musical analysis indicated in this Part of the thesis can be applied at any level of generality, whether that of one work within a composer's total output, the style of a composer as it articulates meaning within his social milieu, or a musical language as it embodies the social-intellectual structure of an entire society. It is best, however, to demonstrate the method at the greatest level of generality, because, until the articulation of a social-intellectual structure through the realm of musical knowledge has been consciously realized, any examination of a composer's piece or style is likely to be compromised through ignorance of its articulation at that greater level. The reverse, of course, is equally true, since the evidence of any musical



language can only be established through the examination of individual pieces. However, until a piece has been examined in the context of other 'culturally adjacent' pieces, and in the light of the culture's particular world sense, it is doubtful whether its significance could be adequately elucidated.

Blacking seems to agree with this evaluation when he says that since musical patterns:

are always acquired through and in the context of social relationships and their associated emotions, the decisive style-forming factor in any attempt to express feeling in music must be its social content. If we want to find the basic organizing principles that affect the shapes of patterns in music, we must look beyond the cultural conventions of any century or society to the social situation in which they applied and to which they refer (1973, p.73).

Blacking further observes that:

if you treat . . . melodies as things in themselves, as 'sonic objects', which is the kind of approach I am objecting to, you can work out several different analyses. This procedure is very common in analyses of European music and may be one of the reasons why music journals are so full of contradictory explanations of the same music (1973, p.93).

The dangers of extrapolating from the particular to the general have been pointed out in Shepherd's (1976)<sup>1</sup> criticism of Meyer's (1973) theories.

The descriptions and discussions which follow therefore explore the musical articulations of social-intellectual structures and frameworks in different societies, and so give an idea of the culture-specific nature of such articulations. The intention of this Part of the thesis is not, however, to give a definitive and

conclusive exposé of the musical articulation of meaning in any group or society. Chapter Eight, for example, is included to show that at least in principle the approach outlined below is applicable to the very different world of pre-literate musics. Whilst the vast diversity of this music naturally precludes any attempt at a definitive study it was felt important to indicate that the ideas put forward in this thesis had some validity outside the literate traditions of the 'civilized' world. Neither is it the intention of this Part of the thesis to present an historical survey, although there is some discussion of the factors affecting the development of tonality from plainchant. Using a restricted amount of material it is rather to argue the validity and legitimacy of a particular sense ('view') of music, and of a way of elucidating the social meaning inherent in music in a practical and specific fashion.

One final comment is necessary by way of introduction. It was argued in Chapter Five that there cannot be a determinant relationship between symbol and social meaning. That is why all symbolic exchange is potentially creative. It follows from this relationship that factors other than social meaning may influence the precise configuration a symbol assumes. Two of the most important factors are biological characteristics of the human organism and the inherent qualities of the material through which a symbol manifests itself. Since biological characteristics are species-specific they can be assumed to be constant or neutral as far as the overwhelmingly 'social' meaning of any particular music

is concerned<sup>2</sup>. But since the harmonic series has clearly been highly influential in the formation of both plainchant and tonality, technical explanations for these languages will be taken as far as reasonably possible in the ensuing discussion. The impossibility of purely technical explanations will, however, point up the ultimate necessity of a social understanding.

NOTES:

1. See Appendix III.
2. This is not necessarily the case. It is entirely possible that the characteristics of different world senses might well emphasise or conversely distort elements of musical expression derived from biological constants. However, precisely because they are constants, it would be extremely difficult, if not impossible, to separate the elements of musical expression originating in them from those culture-specific elements which are socially mediated (cf. Meyer, 1973, p.214). Further, it seems highly doubtful whether elements of musical expression originating in biological constants could have any meaning 'outside' those elements originating in the symbolic exchange essential to the maintenance of any society (cf. the arguments concerning Langer's and Meyer's theories above pp.35-38).

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CHAPTER SEVEN

THE IMPLICIT-EXPLICIT PARADIGM

## INTRODUCTION

Much of the discussion in Part I of this thesis depended on an understanding of the very different world senses that may be said to be typical of pre-literate and industrial man. In attempting to render intelligible these two world senses it was impossible to avoid making or implying comparisons which in themselves assumed the existence of cross-cultural categories of analysis. It was necessary, in other words, to assume (cross-cultural) categories of analysis in order to make the characteristics of others (the culture-specific) quite clear. However, the adoption of cross-cultural categories gives rise to two related but rather different problems. In order to understand these problems it is first necessary to briefly consider the logical status of categories of analysis in general.

Categories of analysis are developed or assumed by people in specific social situations of which the phenomenon under examination forms only a part. The categories therefore result from the interaction of information 'provided' by the phenomenon - that is, the phenomenon as we might imagine it to be, out there and beyond us as objective fact, and the attitudes and preconceptions any person inevitably brings to the analytic situation<sup>1</sup>. The degree to which a person may be conscious of these attitudes and preconceptions and thus in a position to alter the categories should they prove inappropriate is circumscribed by the degree of self-reflexiveness exercised by that person. Further, in the face of the intense dialectic inter-relationship of observer and observed, complete eradication of such attitudes and preconceptions

becomes a futile aspiration<sup>2</sup>. Indeed, truly phenomenological or 'accurate' analyses and descriptions seem more likely to result because a person brings to bear on any particular phenomenon a world sense which itself has characteristics eminently appropriate to those of the phenomenon<sup>3</sup>, rather than because that person has exercised a high degree of self-reflexiveness. However, even if categories of analysis used in relation to a phenomenon are highly appropriate, the fact still remains that the categories can never be the same thing as the phenomenon. It is the distancing between categories of analysis and phenomenon, together with the dialectic interaction of observer and observed which makes the inappropriate transfer of characteristics all too possible<sup>4</sup>.

The first problem to result from the adoption of cross-cultural categories lies in the possibility of ascribing to the social process in general characteristics which are only appropriate to one culture-specific manifestation of that process. At the turn of the century, for example, it was not unusual for pre-literate cultures to be compared to our own in terms of a capacity for 'rational thought' and 'technological development'. Thus Tylor (1903, p.27) states that:

From an ideal point of view, civilization may be looked upon as the general improvement of mankind by higher organization of the individual and of society, to the end of promoting at once man's goodness, power and happiness. This theoretical civilization does in no small measure correspond with actual civilization, as traced by comparing savagery with barbarism, and barbarism with modern educated life. So far as we take into account only material and intellectual culture, this is especially true. Acquaintance with the physical laws of the world, and the accompanying power of adapting nature



to man's own ends, are, on the whole, lowest among savages, mean among barbarians, and highest among modern educated nations. Thus a transition from the savage state to our own would be, practically, that very progress of art and knowledge which is one main element in the development of culture.

The principal criteria for assessing such development and improvement are: "the absence or presence, high or low development, of the industrial arts . . . ." It is clear, in other words, that Tylor ascribes to societies in general a capacity for 'rational thought' and 'technological development'. The degree to which this capacity is used is a measure of any culture's particular civilization. The highly ethnocentric nature of such a view becomes apparent against the background of arguments put forward in the first three chapters of this thesis. Yet its pervasiveness in past thought will be realised in the light of Evans-Pritchard's assessment of Tylor as a man "more cautious and critical than most of his contemporaries . . . .".

Assuming that it is possible to avoid this type of ethnocentrism, however, the adoption of cross-cultural categories of analysis gives rise to another problem which is equally 'ethnocentric' in its implications. For the adoption of cross-cultural categories implies that there is some feature or element of the social process which is common to all groups and societies, and from which the categories may thus be legitimately derived. While it is difficult to see how cross-cultural analysis could begin in the absence of such an assumption, it is by no means certain that there is any feature of the social process which is, in truly

phenomenological terms, common to all societies. It is extremely unlikely, for example, that pre-literate people conceive of 'symbolic interaction' in anything like the same way that it is considered in this thesis. The net result of this second problem, then, is that since cross-cultural categories must ultimately be comprehensible in the society which makes use of them, it is inevitable that they should, to a certain degree, be distortive in their elucidation of other societies' categories.

The purpose of this chapter is to overcome this second problem (as far as this may be possible) in the light of the two propositions put forward in Chapter One. The first step in this process is to arrive at some cross-cultural categories of analysis which take into account the initial problem described in this Introduction. This may be done by consciously isolating some element or feature of the social process which it may reasonably be supposed is common to all groups and societies, and then deriving the categories from that element or feature. Because this conscious isolation carries with it an awareness of the type of ethnocentrism displayed by Tylor, it seems less likely that the categories subsequently derived would be grossly distortive of the social process. Yet because the second problem outlined above has not as yet been accounted for, it remains the case that such categories will, in all probability, be distortive of other social realities in some respects. This distortion represents a necessary stage in the development of the implicit-explicit paradigm, however, for, until some specific categories are adopted, it is impossible for the analyst to tell whether and in what respects the categories are

distortive, and so to proceed to a more sophisticated basis for cross-cultural analysis. The immediate problem, then, is choosing, in a somewhat arbitrary fashion, 'temporary' categories of analysis which will be reasonably adequate on a cross-cultural basis and which, at the same time, will not be grossly distortive of the social process as that process is manifested in culture-specific realities. Only then will it become possible to identify the distancing between categories and phenomenon, and so to reduce the effects of that distancing as far as the two propositions made in Chapter One will allow.

In isolating a 'common' feature of the social process, recourse may be had to an assertion made earlier in this thesis, that is, that societies can only arise and continue to exist through the creation and exchange of symbols. It is an adjunct of this assertion that the existence of society or culture can only be revealed to us through the symbols we perceive. For if society can only arise and be maintained by and through the mutual externalisations and internalisations of individual people, then it follows that any person can only be aware of his (social) existence and can only ascribe meaning to the world as a result of symbolic interaction. It is no answer to this statement to say that people exist independently of the symbols they emit and perceive, for since we cannot know another as we know ourselves, our knowledge is derived entirely from 'external' symbols<sup>5</sup>. Society is totally symbolic and so any 'social' analysis (and this is to say any analysis at all, since our knowledge of the world is ultimately mediated socially) must inevitably be grounded in symbolic analysis.

As Duncan (1968, p.50) has so succinctly put it: "Interpretations of forces 'beyond' symbols must still be interpretations of symbols".

Symbols would thus seem to constitute one 'common' feature or element of the social process which (possibly inter alia) could provide the necessary basis for the evolution of cross-cultural categories of analysis. It is possible to derive these categories from a description of the way in which symbols may be thought of as conveying their significance. It is not to be suggested, of course, that this description will necessarily be appropriate to all groups and all societies. Indeed, it will be the purpose of the next section of this chapter to indicate the limitations of the categories derived from this description.

Symbols are perceived and internalized as delimited experiences whose delimitation implies other temporally and spatially adjacent experiences which are not, however, the focus of attention for self. The abstracted framework for this adjacent experiential environment which meaningfully situates the focus of perception is time and space. Merleau-Ponty argues this with respect to the seeing of objects:

The object-horizon structure, or the perspective, is no obstacle to me when I want to see the object: for just as it is the means whereby objects are distinguished from each other, it is also the means whereby they are disclosed. To see is to enter a universe of beings which display themselves, and they would not do this if they could not be hidden behind each other or behind me. In other words: to look at an object is to inhabit it, and from this habitation to grasp all things in terms of the aspect which they present to it. But in so far as I see those things too, they remain abodes open to my gaze, and being potentially lodged in them, I already

perceive from various angles the central object of my present vision. Thus every object is the mirror of all others (1962, p.68).

Merleau-Ponty goes on:

What we have just said about the spatial perspective could equally well be said about the temporal . . . . each moment of time calls all the others to witness; it shows by its advent 'how things were meant to turn out' and 'how it will all finish'; each present permanently underpins a point of time which calls for recognition from all the others, so that the object is seen at all times as it is seen from all directions and by the same means, namely, the structure imposed by a horizon. The present still holds on to the immediate past without positing it as an object, and since the immediate past similarly holds its immediate predecessor, past time is wholly collected up and grasped in the present. The same is true of the immediate future which will also have its horizon of imminence. But with my immediate past I have also the horizon of futurity which surrounded it, and thus I have my actual present seen as the future of that past. With the immediate future, I have the horizon of past which will surround it, and therefore my actual present as the past of that future. Thus, through the double horizon of retention and protention, my present may cease to be a factual present quickly carried away and abolished by the flow of duration, and become a fixed and identifiable point in objective time (1962, p.69).

Since all symbols are socially mediated, they may therefore be described as articulations in time-space which are taken to be socially meaningful<sup>6</sup>. Moreover, because all social analysis is ultimately symbolic, and since all symbols may be described as articulations in time-space, the categories of time and space or time-space are completely pervasive and so extremely useful. There is no sphere of social activity which cannot be made to render information easily subsumed under them.

From this theoretical argument, it would seem reasonable to assume that categories of time and space (or at least the experiencing of culture-specific durational-extensional qualities)

occur in all known social systems. In turn, this assumption would appear adequately general as an heuristic foundation in terms of which to begin a cross-cultural analysis. This was essentially the position adopted in Part I of the thesis. All the characteristics of pre-literate and industrial societies as described in that Part can ultimately be grounded in the appropriate culture-specific temporal and spatial orientations. However, this grounding clearly does not take into account the second problem described in this Introduction. More specifically, it does not take into account the fact that while some world senses tend very much towards the implicit, analysis as we understand it is an overwhelmingly verbal-rational or explicit procedure. The following section considers this difficulty and puts forward a paradigm for social analysis which largely overcomes it.

## THE PARADIGM AND SOCIAL ANALYSIS

### 'Time' and 'Space' as Categories of Cross-Cultural Analysis.

The first step in the development of the Implicit-Explicit Paradigm is to consider the limitations of time and space as categories of cross-cultural analysis. The most obvious danger of using time and space as a basis for cultural analysis is, of course, imputing to other societies temporal and spatial categories which are specific only to the analyst's society. It would seem that this danger has as far as possible been avoided in Part I. It is nevertheless mentioned at this stage, because the limitation

of time and space as cross-cultural categories which follows from the second problem described above is not unrelated to it.

This limitation may be approached in three different ways. First of all, any concept which might be legitimately subsumed under a 'time-space' label would, in all probability, be meaningless or totally unimportant in certain groups and societies. Most obviously, pre-literate man's ability to live 'within' time, together with his immediate relationship to, and comparative lack of conceptual control over the environment, would seem to preclude the creation of any categories of analysis which could be legitimately subsumed under the abstract 'time-space' label. Indeed, given the abstract and permanent nature of such categories, one would only expect to find them in literate societies.

Secondly, it is necessary to be aware that modern English (and, mutatis mutandis, Standard Average European) possesses the two separate words of 'time' and 'space'. This in itself is not terribly significant. There are other cultures where 'time' and 'space' may only be legitimately approached as two different aspects of one phenomenon, such is the high degree of inter-relationship between the two 'ideas'. Yet in these societies (for example, medieval society<sup>7</sup>) the words 'time' and 'space' (or rather their 'equivalents' in other languages and dialects) are used without fear of distortion to denote the two different aspects. The existence of the separate words does become significant, on the other hand, when they are used against the background of industrial man's temporal and spatial sense, involving as it does a complete independence of time from space. For it then becomes very easy to

unconsciously assign this quality of complete independence where it is entirely inappropriate.

Finally (and this reservation essentially underpins the two already mentioned), it should be noted that the adoption of time and space as categories of cross-cultural analysis can easily give rise to the notion that there exists some generalized concept of time-space which can be used as a means of comparison. If, taking into account all the reservations so far mentioned, it is assumed that all societies have ways of relating to themselves and the environment which may be subsumed under the common label 'time-space', then it must immediately be acknowledged that these ways display vastly different characteristics. If a generalized concept of time-space is to have any genuine standing as a concept separate from all other culture-specific formulations, then it too must possess identifiable characteristics. But the generalized concept is itself culture-specific in its very attempt to have cross-cultural significance. It is formulated in a specific social situation of which these chapters form an important part. If this generalized concept has any identifiable characteristics therefore (as it must do to have any genuine standing), it follows that it amounts to nothing more than yet another culture-specific way of relating to society and environment - a way which may be subsumed under the common label 'time-space'. The generalized concept thus attempts to be a member of its own set, a position which, according to Russell's Paradox, is logically untenable<sup>8</sup>.

Reducing the generalized concept to the level of one of the culture-specific concepts subsumed can only be avoided if it can be



demonstrated that there exists a time-space concept which satisfactorily transcends all others. It seems unlikely that such a construct has ever existed or, indeed, could ever exist. Time-space constructs which have gained common acceptance have all been specific to a temporally delimited culture, and new concepts of time-space created by mathematicians during the last 150 years have been appropriate to different spheres of activity within the 'physical' universe<sup>9</sup>.

The problem now arises of identifying the assumptional framework on which a cross-cultural concept of time-space might be grounded. One thing is certain. If there is no transcendent time-space, then a generalized concept will tend to have characteristics symptomatic of a particular culture-specific concept. Beyond this, however, it seems more than likely that the terms 'time' and 'space' - as a general usage might be assigned to them in the context of these chapters - are ultimately rooted in the industrial world sense. These chapters are conceived in an industrial society, and it is futile to think that one can ultimately escape its structuring.

The limitation indicated here thus represents a concrete example of the second problem indicated in the Introduction. For although the culture-specific notions of time and space have, as it were, been stretched and expanded to avoid the sort of ethnocentrism committed by Tylor, it is inevitable that the impressions of differing realities so far gained from previous discussions should ultimately be filtered back through the content-categories of the specific symbols 'time' and 'space'. It is

intended that the Implicit-Explicit Paradigm should overcome this difficulty. An insight into how this may be achieved can be gained by considering the logical status of reified concepts.

### The Logical Status of Reified Concepts.

So far the discussion in the section has centred round the application of time-space concepts as methods of elucidating specific world senses and social structures. In elucidating these world senses and structures, however, one inevitably becomes involved in an elucidation of social process, since a specific world sense or structure is nothing more than specific and ongoing social process as revealed and made manifest through the symbols<sup>10</sup> pertaining to a particular culture. And although social process is not 'something' which can be legitimately divorced from its ongoing articulation and structuring in any particular situation, it is 'something' in which the nature of the roles played by symbols and consciousness should be made as clear as possible.

Since a particular society may be taken to be a totality of mutually efficacious and dialectically related symbols and individual consciousnesses, and since evidence for the existence of any particular society may only be revealed to us through symbols, it may be concluded that 'society' is of a different order from the consciousnesses and symbols that encode 'it'. Of specific importance to this argument is the assertion that 'society' is of a different order of existence<sup>11</sup> from the

objectified symbols through which it is revealed.

The position with regard to consciousness in society is more complex. It was noted in Chapter Five that creativity was essential to the ongoing functioning of consciousnesses in society, and that such creativity was not possible at the level of (material) objectivation appropriate to symbols. It follows, therefore, that at some stage in the mental process the mind must divest itself of ideas conceived and imagined in the objectified terms of concrete symbols<sup>12</sup>. If this were not done, the inflexibility of such objectified thought would preclude the creative moment. In this sense consciousness may be thought of as having two aspects: a sense of the world which is not symbolically imminent, and a sense which is made 'explicit', either 'in' consciousness or in the 'outside' world, through the objectified mediation of symbols. Concepts belonging to this latter sense must always, to some extent or other, be regarded as reifications<sup>13</sup>, no matter which medium is used to convey them. For any form of objectified expression inevitably freezes and dilutes the fluid and spontaneous nature of concepts originating in those processes of consciousness whose operations are not objectified. Because they involve an objectified mediation, these reified concepts always display characteristics which may be directly denoted rather than indirectly evoked.

In constituting part of the experience that is consciousness, reified concepts should be thought of as one step removed from the society in which they occur. This 'distancing'

or 'separation' is based on the principle that a code cannot be the same 'thing' as the 'entity' being coded<sup>14</sup>. The objectified structuring generated by an individual consciousness is clearly not the same 'thing' as the ongoingly structured and dialectic relationships obtaining between the individual symbols and consciousnesses of a society. Further, however, reified concepts are one step removed from society in the nature of their existence, since the structuring of society (as well as of some aspects of consciousness) is a process that is essentially not objectified, whereas a reified concept depends upon an objectified mediation for its very existence<sup>15</sup>.

#### Reified Concepts and the Analysis of Social Process.

All categories of analysis are reified concepts, since it is an essential feature of their usefulness that they have characteristics which may be directly communicated to other people rather than indirectly evoked in their consciousnesses. Time-space concepts are no exception in this regard. Both medieval man and industrial man, for example, have had ways of relating to themselves and the environment which may be legitimately subsumed under the 'time-space' label (bearing in mind the reservations stated earlier in the section) and which have been directly stated. Time-space concepts, therefore, are essentially of a different order from the ongoing structuring of which they are symptomatic or to which they are applied, and it is totally illusory to think

of a 'time-space' as some sort of 'ultimate reality' in terms of which specific social structuring may be 'explicitly' grounded<sup>16</sup>. The higher reality is in the context of the non-objectified social process, and not the reified concepts through which the process is approached.

The lines of argument so far developed in this chapter may now be summarised. It was suggested in the Introduction that since it was by no means certain that there was any feature of the social process which was, in truly phenomenological terms, common to all societies, it seemed highly unlikely that there could be any truly adequate categories of cross-cultural analysis. This suggestion was then substantiated by examining the limitations of time and space as such categories. The major limitation to emerge was the seeming impossibility of transcending the categories of 'time' and 'space' as they occur linguistically in present-day 'European' culture. It was then established, however, that all content-categories (whether categories of understanding which are an integral part of a social reality, or categories of analysis as applied from outside a group or society) are of necessity reified concepts, and so one stage removed from social process itself. More specifically, the danger of 'looking at' or utilising socially constructed concepts as if they themselves wholly and integrally constitute specific social process was highlighted.

It becomes apparent from this second line of argument that any paradigm for social analysis must somehow reach beyond specific categories of analysis to the non-objectified social process of any

specific culture - this being the case even where the categories are fully phenomenological. For example, since the specific social process of the industrial world is not ultimately grounded in industrial concepts of time and space, it is necessary to go beyond those, or, indeed, any other ('satisfactory') categories in order to sense the characteristics of the non-objectified industrial world sense. But this process shows us how to transcend cross-cultural categories of analysis as those ultimately culture-specific categories are stretched and expanded to facilitate and accomodate insights into substantially different social realities. For as it is possible to ultimately dispense with specific content-categories in the elucidation of the non-objectified world sense in terms of which those categories are fully phenomenological, so it becomes possible to ultimately dispense with those same categories as stretched and expanded to accomodate different realities. As a result, the effect of the 'ethnocentric taint' inevitably contained in these categories as (objectified) reified concepts is substantially reduced. In leaving these reifications behind we can, in other words, think ourselves into differing realities in a much more successful manner. Having made this very important conceptual step, it now becomes possible to indicate the nature of the Implicit-Explicit Paradigm.

#### The Implicit-Explicit Paradigm.

It is an integral aspect of this paradigm that its characteristics may not be directly stated, but only approached

through the descriptions (which in themselves embody 'reified' concepts) of the concepts and ('concrete') symbols put forward in these chapters as symptomatic of different societies. More specifically, the implicit-explicit oppositions of the paradigm correspond to the differing time-space senses and, concomitantly, to the differing world senses of pre-literate and industrial man as set out in Chapters Two and Three. As the different aspects of a specific world sense as described are all dialectically related, so the unified<sup>17</sup> non-objectified social structuring of which they are evidence may be sensed through them 'in' those processes of consciousness which are not symbolically imminent. It is these non-objectified processes of consciousness which approach most closely the non-objectified nature of ongoing social process, and which are therefore most appropriate for sensing such culture-specific processes in a 'seamless' and inseparable fashion. This level of abstraction is not easy to approach, however, because it cannot be directly conveyed in terms of symbols, let alone in terms of industrial man's highly reified and phonetically literate world<sup>18</sup>. 'Rationally', social structuring can only be approached through the objectivation of symbols. 'Irrationally' and ultimately, realization depends upon the creation of constructs 'in' individual consciousnesses, or, as some people might prefer it, upon intuition.

It would be fair criticism to say that the paradigm put forward here would be as meaningless to certain societies and groups as concepts of 'time' and 'space'. For example, it might be as meaningless to present-day scientists as 'time' and 'space' might be

to pre-literate people. Indeed, given the epistemological and cosmological background typical of contemporary society the paradigm would almost certainly come to be assigned an extremely low rational priority. However, it is precisely because the paradigm cannot be directly stated in terms of any symbol or concept that it might approach closest to a phenomenological elucidation (through the conscious, second-order use of symbols and reified concepts as the media of expression) of specific social, group and individual mental structurings. The tendency of previous paradigms has been to attempt to render explicit processes which are directly imperceptible in the direct referential and highly reified terms engendered by the media which made such explicitness possible in the first place. In contrast the role of the Implicit-Explicit Paradigm, as the reader has hopefully been able to intuit it, is to make possible the fully conscious creation in the reader's mind<sup>19</sup> of processes which cannot be directly conveyed. The Implicit-Explicit Paradigm is meaningless only to the extent that many people are not largely conscious of their own or other cultures' social structuring, and not because, as an inherent part of itself, it imports culturally foreign concepts. To put it another way, the paradigm is culture-specific in being grounded on the socially-situated assumption of the universal importance of media (and dialectically related technologies) for the structuring of all human consciousnesses and societies, rather than on any specific categories arising from the effect the feedback operations of such externalisations (the media) have on individual people and societies<sup>20</sup>.



## THE PARADIGM AND MUSICAL ANALYSIS

### 'Time' and 'Space' as Categories of Musical Analysis

In order to show how the Implicit-Explicit Paradigm can be used as the basis for cross-cultural (social)-musical analysis it is, of course, necessary to consciously invoke some second-order reified concept as a means of giving expression to the paradigm. The concept used will again be that of 'time-space'. However, for the notions of time and space to have any meaning in relation to music, it becomes necessary to consider to what musical parameters they may correspond. Of itself this task is not very difficult. Faced with such a question, most people would conclude that the temporal element of music finds expression in rhythm, and that the spatial element finds expression in the relationship between pitches, that is to say, in melodic structure and harmony.

However, it is precisely at this point that the major limitation of time and space as categories of cross-cultural analysis finds specific musical expression. Musical analysis in the terms just indicated is largely appropriate<sup>21</sup> when considering tonality as an encoding and articulation of the industrial world sense. As will be argued in Chapter Twelve, the time/rhythm, space/melodic structure/harmony parameters provide the framework from within which industrial man tends to relate to his music. But it is precisely this equation of time with our 'everyday' notion of rhythm, and space with similar notions of melodic structure and harmony which makes the 'traditional' parameters of 'melody', 'harmony' and 'rhythm' largely inappropriate when applied

to other musics. For, in being predominantly evolved from tonal music as frames of reference for the analysis of that music, the terms 'harmony', 'melody' and 'rhythm' as we typically understand them tend to reinforce the time-space sense encoded in tonality. The use of these terms, and the derivation through them of any culture-specific time-space sense should therefore always be accompanied by a strong sense of the distortion such use might create<sup>22</sup>.

It is possible here to give a brief example of this distortion in order to show the kind of musical (and sociological) issues that can be involved. The example is a particularly good one, since it is drawn from the work of a writer on music who throughout his life has been aware of the sociological implications inherent in music, and so of the fact that different kinds of music can convey different types of social reality. In his book on the Beatles, Wilfrid Mellers makes the following comment on The end, the final number of Abbey Road:

This last number, having asked its question, abandons words for a furious hammering of percussion: which leads into a long instrumental section, all dominant sevenths in rumba rhythm, but rocking a tone lower than the starting point, getting nowhere. Suddenly the hubbub stops; there's a tinkling of A major triads on a tinny piano; and Paul's voice returns to sing . . . (1973, pp.122-123).

It would seem fair comment to suggest that in Mellers' opinion the advent of the A major triads is musically more significant than the long instrumental section preceding it. Mellers, in other words, attaches considerable importance to a 'traditional' type of harmony, where each successive musical moment is clearly separated

and distanced from all others as part of a functional linear drive towards a climactic point - and this at the expense of another, more 'fluid' type of harmony, where the 'vertical' aggregates act as 'internal' timbral colourations of the individual melodic notes which constitute them. It is because the 'encroaching', internally directed musical space of the 'rocking dominant sevenths' appears to be heard in terms of the 'distanced', outer-directed space of conventional homophony that, in comparison, the former seems as something of a "hubbub" and as "getting nowhere". Yet it is this 'directionless hubbub' which is clearly of importance for those immersed in the 'rock' idiom. Graham Vulliamy, for example, is therefore of the conclusion that Mellers' approach "tends to neglect many facets of the Beatles' music which the rock music lover . . . finds the most musically satisfying" (1977, p.194). Thus, although Mellers, in his attempt to 'understand' rather than 'evaluate' the music of the Beatles, has avoided the kind of musical ethnocentrism discussed in the first Part of this thesis (an ethnocentrism, incidentally, which is of the same order as that of Tylor's indicated earlier in the chapter)<sup>23</sup>, he unwittingly creates another by using a musical terminology drawn from tonality, and so invoking the time-space sense and ideology of 'modern educated man'.

Having indicated this particular limitation of time and space as second-order reified concepts in relation to musical analysis, it might now be thought possible to proceed to an analysis of the way in which different musical languages articulate different time-space senses, and so to an understanding

of the way in which they reflect implicit or explicit world senses. However, to do this would be to ignore the fact that music (and, indeed, any other type of symbol) displays two existential levels. On the one hand, there are culture-specific musical languages which may, bearing in mind the above limitation, be approached as articulations of the 'time-space' sense of their particular culture. On the other, there is music as a medium. As such, and regardless of any culture-specific significance it may convey, it may be said to possess temporal-spatial characteristics of its own.

It may be remembered from the discussion in Chapter Two that sound as a phenomenon predisposes man to relate to himself and the environment in a certain way. Any person, therefore, who concentrates on a piece of music, in largely filtering out experiences transmitted through other media, tends to encourage the creation of this sound-inspired world sense. This world sense then acts back on that person's perception of the music, predisposing him to sense it in terms of that world sense. There is, in other words, a dialectic relationship between music and the world'sense that the music encourages man to adopt in relating to it. In pre-literate societies this relationship is likely to undergo great mutual reinforcement<sup>24</sup>, but it is, on the other hand, seriously compromised by the industrial world sense<sup>25</sup>. For the purposes of the present distinction, however, it may be asserted that any externalisation of our perception of music as a phenomenon in terms of 'time-space' will result in a particular formulation of 'time-space' which is peculiar to music as a phenomenon, rather than to any particular culture-specific musical language. Quite

clearly, any use of time and space as second-order reified concepts in relation to musical analysis needs to take into account this 'phenomenal' time-space sense. It is necessary, in other words, to take into account the implicit nature of music as a form of communication.

That this is the case may be demonstrated by a brief reference to tonality. Earlier in this section it was stated that the equation of time with rhythm, and space with melodic structure and harmony was largely appropriate to an understanding of the (social) significance of tonality. Such appropriateness derives from the fact that, within the industrial world sense, 'time' and 'space' are conceived as being completely independent of one another. But as subsequent descriptions will indicate, 'musical' time and space do not display such independence. It is not surprising to find, therefore, that, even in the case of tonality, time cannot be exclusively equated with rhythm, nor space with melodic structure or harmony. This point may be easily illustrated by indicating the necessary inter-relationship of these categories. Melody (conceived as any sequence of notes having some sort of pitch orientation) automatically involves rhythm, and rhythm, in an overwhelming number of cases, automatically involves melody. Further, harmony as we understand it is simply impossible without a pervasive rhythmic basis.

It should be immediately emphasised that the relationship between music as a phenomenon and music as a culture-specific articulation of socially constructed reality is a strongly dialectic one. As such, it parallels that between social process

in general and culture-specific world senses or social structures. As a specific world sense or structure is nothing more than specific and ongoing social process as revealed and made manifest through the symbols pertaining to a particular culture, so music as a phenomenon can only be revealed through individual culture-specific pieces of music.

It is because the qualities of music as a phenomenon can only be revealed through individual pieces of music that it is fallacious to think of musical time-space as some sort of ultimate reality in terms of which all musical significance can ultimately be grounded. For to think that musical time-space can in some way be responsible for musical significance would be to unjustifiably separate the two existential levels of music, and then to give a higher rational priority to music as a phenomenon. Music would thus once again be thought of as 'objective' or 'absolute', and as having its own 'internal laws'. Since these laws would be thought of as ultimately responsible for the particular formulation of specific pieces, the implication would be that music is somehow 'independent' of man. The role of symbol and consciousness would once again be reversed, and the composer reduced to the position of a cipher. This line of thought is clearly illustrated in the work of Victor Zuckerkandl<sup>26</sup>.

The limitations of time and space as categories of musical analysis may thus be summarised as follows. Firstly, there is the danger of investing the culture-specific time-space sense as evidenced in one musical language with the characteristics evidenced in another. More specifically, there is the danger of

hearing all musics through the ears of tonality. Secondly, given the 'inherent nature' of music it is necessary to go beyond the categories of analysis evolved from a particular musical language in order to understand how those culture-specific categories arose<sup>27</sup>. In particular, it is necessary to go beyond categories of analysis derived from tonality in order to fully comprehend the manner in which tonality encodes the industrial world sense. But in giving the 'phenomenal' time-space sense of music equal status with culture-specific articulations, the danger then arises of regarding the 'phenomenal' sense as some kind of 'ultimate reality' in terms of which all other evidence accruing from a particular piece must be grounded. This sort of distortion, which is prone to occur in literate cultures, results in a refutation of the social significance inherent in music.

In the Introduction to this Part of the thesis, the point was made that the analysis of a piece of music as a 'sonic object' could only be legitimately carried out with a heightened awareness of the social reality which the piece helps to articulate. Against the theoretical perspective provided in this chapter, it now becomes more apparent as to why this should be so. For to locate the significance of music either in the workings of music as a medium or in the culture-specific categories of individual musical languages is to open the door for the type of reification which it has been the express purpose of this chapter to avoid. The way in which reification occurs with regard to the location of significance in music as a medium is not difficult to understand, and was described at the beginning of Chapter Four<sup>28</sup>.

It is a little more difficult, however, to understand in quite what way the location of the significance of music in the categories of culture-specific musical languages constitutes reification.

In the previous section great importance was attached, in considering the process of analysis, to keeping second-order reified concepts quite separate in consciousness from the non-objectified concepts of implicitness or explicitness which they were being used to elucidate. In this section, however, the focus of attention has shifted from a consideration of the process of analysis to the analysis of social symbols themselves, and it is this change which makes it possible for reification to creep back into our thought processes. For, in concentrating on a particular symbol - that of music - it becomes easy to forget that 'society' - the ultimate goal of analysis - is of a different order of existence from the objectified symbol through which it is revealed. The implication would be that the concrete sonic event which constitutes the particular (musical) symbol under examination is, of and within itself, the social significance being elucidated.

Social significance in symbols does not and cannot arise because they contain, completely within themselves, dynamic social structuring. Such significance arises because dynamic social structuring is articulated by and through a particular symbolic medium. That, in effect, is why it is necessary to apply categories of analysis to music as a medium as well as to culture-specific musical languages.



The only legitimate approach to the meaning of music, therefore, is one which is always conscious of music as an objectified symbol through which non-objectified social process is revealed. This does not mean to say that categories of analysis, as reified concepts, cannot be applied to the articulation of social meaning through music, merely that such an application must focus on dynamic social structuring rather than just on sonic objects. In order to achieve this focussing, and so to gain an understanding of the Implicit-Explicit Paradigm as it applies to music, it is therefore necessary to consider the way in which the 'phenomenal' time-space sense of music can give rise to different culture-specific time-space senses.

Before proceeding with this task, however, it is necessary to stress the importance of the line of thought just developed. For this line of thought is vital if the discussion in the following chapters is to achieve full significance. Because the dynamic social structuring as revealed through symbols is non-objectified, it must be accepted that it thoroughly permeates the 'objective' characteristics of those symbols. Simply because all music is socially significant, therefore, it does not follow that all characteristics of music as sonic object are, of and by themselves, ideologically significant. For example, it will be argued later in this Part of the thesis that the implicit and melodic language of plainchant changes into the explicit and harmonic language of tonality through the externalisation, in harmony, of structures previously contained within the plainchant.

Yet there are plenty of examples of harmony (in Impressionistic music, the rural blues and quite possibly some pre-literate musics) which are thoroughly implicit in their operations. Of and by itself, harmony is thus not symptomatic of musical explicitness, although in certain cases, such as that of tonality, it may well articulate explicitness. Now this does not mean that music works only through associationism, that is, the arbitrary association of certain musical patterns with certain types of significance. The discussions in the remainder of the thesis seek to illustrate an assertion made earlier, namely, that musical structures are singularly suited to revealing the dynamic structuring of social life. Nor does it mean that there are no musical patterns which, of and by themselves, might be symptomatic of a certain ideology. It seems more than likely, for example, that pentatonicism can articulate little else but a musical implicitness. What it does mean, in the context of this thesis, is that the qualities of implicitness and explicitness as conceived in terms of music and time-space must be considered as ontologically prior to any concrete musical characteristics.

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The remainder of this chapter will now be concerned with an elucidation of the Implicit-Explicit Paradigm as it applies to music. The first step in this process is to summarise the main

characteristics of the 'phenomenal' musical time-space sense. In doing this, substantial use will be made of the work of Victor Zuckerkandl, who has carried out a highly perceptive study in this area. Certain aspects of Zuckerkandl's work have, of course, already been criticised in this thesis. It should be noted, however, that these criticisms are in respect of the conclusions Zuckerkandl draws from the main body of his work, and not in respect of that main body itself.

### Musical Time.

Time as revealed through tonal music is usually associated with three different entities: pulse, metre and rhythm. Of these three entities only one is always heard directly, and that is the actual rhythm of a piece. Although the rhythm may conform to pulse and metre, and so render these entities directly perceivable, it is not necessary for the rhythm of a piece to so conform in order that pulse and metre may be sensed by the listener. Since pulse and metre are very important aspects of tonal temporality it becomes necessary to understand this phenomenon if musical time is to be fully understood. For many musicians the phenomenon is easily explained through accentuation, that is, the stronger or weaker weighting given to the beats of a bar according to their 'position' in it. But although much music will explicitly reveal strong and weak beats according to the strict scheme of the metre, there is much music which depends for its very effect upon

a negation of this classic procedure. The sense of metre is not denied in such music. On the contrary, it is reinforced precisely because strict convention is ignored, and would conversely be weakened to the extent that 'correct' weighting were given to the appropriate beats of the bar. Many examples of music where this phenomenon is apparent will occur to the experienced musician, and it is probable that the vast majority of these examples will involve a degree of syncopation. There is one example quoted by Zuckerkandl, however, where the rhythm is simplicity itself, and that is the opening of the Beethoven Violin Concerto. The Concerto begins with four soft kettledrum strokes on the D below middle C. As Zuckerkandl points out:

The thrilling effect of this opening depends entirely upon whether the player succeeds in producing absolutely equal tones - certainly no easy task. His entire attention must be directed to avoiding the least trace of a difference in accentuation between the tones. If he is unsuccessful, if he involuntarily falls into even the slightest emphasis in the direction of quadruple meter . . . , the effect immediately becomes silly or ridiculous: it sounds as if the leader of an amateur orchestra wanted to count out one full measure aloud to his uneasy troops before they began: one - two - three - four - go! But if the passage sounds as it was imagined, if the player succeeds in producing four really equal tones, our auditive experience still does not coincide with this acoustical datum. Even in the complete absence of any differences in accent, we do not hear one tone four times, but twice two tones: groups, meter, measure (1956, pp.163-164).

The conclusion drawn by Zuckerkandl from this line of argument is "that meter and accentuation are processes on two different planes, which are free to go together or to part company. Neither is dependent on the other - neither meter on accentuation, nor accentuation on meter." (1956, pp.165-166).

Musical time may most easily be approached, perhaps, as a concept which involves the indication of discrete moments in objective time through the sounding of successive notes. The superficial nature of any such concept now begins to emerge. For an essential and extremely important aspect of musical temporality, the sensing of pulse and metre does not, in its innermost quality, require direct and explicit statement in music. It is, as it were, one stage removed from the acoustical event of music itself. Yet such separation does not automatically mean that the characteristics of musical time will necessarily be at variance with those of a sequential or spatialised time.

However, although it cannot be disputed that individual notes succeed one another, and may therefore legitimately be thought of as punctuating a spatialised time, it would indeed seem that the sense of metre - the temporal sense which is separate from the mere acoustical event of music - is not completely compatible with a straight-line view of time. It would appear to be a common experience that a sense of metre involves as much a recurring sense of to-and-fro, arrival-and-departure as it does of progression through time. Zuckerkandl illustrates this experience:

A piece of music is played; there is no accentuation. We count with the tones one-two-one- . . . Why did we say 'one' here instead of 'three'? What peculiarity in our perception of the third beat makes us count thus and not otherwise? If the new beat did nothing but bring us a further fraction forward in time, the phenomenon would be incomprehensible. If we involuntarily and unconsciously count 'one' to beat number 3 this expresses the fact that it is not so much further as back that this beat carries us - and back to the starting point. To be able to come back, one must first have gone away; now we also understand why we count one-two, and not one-one. Here 'two' does not mean simply 'beat number 2' but also 'away from'. The entire

process is therefore an 'away from - back to', not a flux but a cycle, a constantly repeated cycle, for the 'one' that closes one cycle simultaneously begins another (1956, pp.166-167).

Tonality, however, is not the music of a society with a sense of cyclical time. Neither is it a 'single-level' music. Tonality is essentially the music of direction and culmination. Its notes constantly point outside themselves in their desire to 'move on' and 'achieve fruition'. Furthermore tonality is an architectonic music. It displays several 'levels' which 'interact' to produce the particular experience common to all pieces of music conceived in that style. In view of these two characteristics, it is more accurate to think of musical time as revealed through tonality as having a wave rather than a cyclical structure. Firstly, this structure allows for both a sense of recurrence and of continual forward motion:

Since in time there can be no real going back, and hence, strictly speaking, no real cyclical motion either, since, therefore, every new beat does bring us to a new point in time, the process can be better understood and visualised as a wave . . . . which also best corresponds to our sensation of meter. Our sympathetic oscillation with the meter is a sympathetic oscillation with this wave. With every measure we go through the succession of phases characteristic of wave motion: subsidence from the wave crest, reversal of motion in the wave trough, ascent towards a new crest, attainment of the summit, which immediately turns into a new subsidence - a new wave has begun (1956, p.168).

Secondly, whereas it is difficult to conceive of cyclical motion containing different 'levels' within itself, such a concept is relatively easy to imagine with a wave motion. Indeed, it is not difficult to conceive of simultaneous wave motions pertaining to a bar, a four-bar phrase, a sixteen-bar phrase and to

increasing sections of a movement right up to the complete movement itself. Conversely, wave motion is perceptible 'in' all the notes within a bar, no matter how small their value. But although the waves of musical time display these various 'levels' they remain nothing more than aspects of one undifferentiated experience. Not only does the concept of wave in itself illustrate that music is an experience comprised of continual and unceasing motion, therefore, but also that this motion pervades every 'moment' of the musical experience:

It goes without saying that we shall observe an analogous phenomenon if we look in the opposite direction into the individual beat instead of beyond the individual measure. Even if the tones of the individual beat are divided into smaller and smaller time values . . . the temporal succession will not be experienced as a simple sequence; on these subordinate levels too the wave structure will unfailingly assert itself; we shall hear groups . . . . What, as a beat, is a mere phase of the cycle becomes a completed cycle, from the point of view of the next lower level and so on indefinitely. We can continue the subdivision to the limit of the perceptible, but we shall never come to a time value so small that time simply elapses in it, in which the flux is not also a pulse. The picture, then, is the same, whether we look beyond the measure or into the measure (1956, p.179).

The wave is always in motion and is immanent throughout the musical experience. It cannot be halted, neither can it be segmented. Because music is ceaselessly ongoing in its motion and because time cannot be made to elapse within musical experience, the relationship between the unfolding of time in music through the simple succession of notes, and the cyclical or wave structure that exists 'apart' from the music as simple acoustic occurrence, takes on an interesting complexion. It is not just that a succession of notes gives rise to a sense of

metre. It is also that these tones occur within the imminent phasing of a metrical wave:

Certainly, tones follow one another in time, fill their accurately determined portions of time, and thus for our sensation (be it directly or indirectly) divide the time flux into equal fractions. But this is not all. We have seen that, in music, we never have to do with a mere sequence in time. The temporal succession here is revealed not simply as a progression but as a combination of progression and recurrence; it does not represent itself to us in the image of a straight line but in the image of a wave. The equal portions into which musical meter appears to divide turn out, upon closer examination, to be variously directed phases of wave motion; the moment of time at which a tone enters is not a point on a straight line but on a wave; the interval of time that the tone fills in sounding is not a section of a straight line but a fractional phase of a wave. And as the tones fall on the different phases and fractional phases of the wave, the variously directed kinetic impulses of the different phases successively implant themselves to the tones. This is what we hear when we hear music whose structure is metrical: the various directions of the successive wave phases (1956, p.173).

Musical time, therefore, is precisely not an abstract durational shell which permits the existence of music. It is not a silent flow in which discrete instants, punctuated by individual notes, are necessarily separated in conception by a passive nothingness. Every musical moment, every musical phase actively vibrates with temporality. This variance in the characteristics of classical and musical time is made abundantly clear by Zuckerkandl:

"Music is a temporal art" . . . . According to this conception time appeared as a vessel through which tones flow, or as the long empty course down which tones can pass; time made it possible for music to exist - without time no music, as without space no visual art; but that was all. In respect to the musical context itself, time remained perfectly neutral, it had no voice in it; its relation to the world of tonal event was like that of the still empty strip of film to the pictures that are to be taken on it (1956, pp.180-181).



As we have seen, musical temporality is of a totally different nature:

It is not something coming from without, the different accentuation of beats, which creates musical meter; musical meter is not born in the beats at all, but in the empty intervals between the beats, in the places where "time merely elapses". The mere lapse of time here effects something; it is felt as an event, strictly speaking as a wave . . . . The function of time here is, then, no longer that of the empty vessel, which contains the tones . . . ; on the contrary, time intervenes, is directly active in the musical context. It is time which makes differently directed cyclical phases out of beats of equal length, which transforms equal measures into different degrees of intensity. Music is a temporal art not in the barren and empty sense that its tones succeed one another "in time"; it is a temporal art in the concrete sense that it enlists the flux of time as a force to serve its ends (1956, p.181).

So far it has been established that an adequate understanding of musical time runs entirely counter to our traditionally lineal and segmented view of time. Yet, despite the fact that lineal and historical time are dialectic correlates of one and the same ideological structure, that is, necessary aspects of one another, it would still remain possible to squeeze the rethought sense of musical time into what remains of the traditional view, namely, a view with a definite sense of the pastness of the past, and the futurity of the future. For although it has been argued that musical temporality consists in unsegmented wave motion, there is at the moment little in the description of that temporality which would prevent the notion that present musical experience depends upon the remembering of past motion and the conscious anticipation of motion yet to come. After all, a central part of the training for a professional musician involves the development

of an ability both to remember tones that have past, and to complete a melody or piece in the style appropriate to that piece. The professional musician, in other words, is expected to be able to consciously project himself backwards and forwards in musical time with a great deal of 'accuracy'. Furthermore, most laymen who listen to music can easily become conscious that certain tones have passed, and that certain tones are very likely to occur, although their ability to reproduce or 'predict' these tones in an explicitly 'correct' manner is severely circumscribed. Important though this ability may be to a full understanding of the 'messages' implicit in tonality<sup>29</sup>, it would seem to have little to do with the actual experiencing of time in the ongoing present. For to think that musical experience depends upon the recalling in memory of past tones that are now non-existent, or the projection in consciousness of tones that are yet to have existence is to enter into a misconception. As already argued, the temporal aspect of musical experience does not simply result from the succession of notes in time, but is the variously directed kinetic impulses evidenced through the occurrence of different notes as different phases or fractional phases of a wave motion. We do not become aware of a note as constituting a certain beat of a bar and as having a certain motional quality simply through counting, therefore. Counting is not a process whereby the mind externally imposes a consecutive organisation on past and potential musical events. Rather, counting helps us to represent to ourselves a kinetic impulse that is revealed to us and that we experience directly:

Hearing music, we oscillate with its metric wave. Each tone falls on a particular phase of this wave; each phase of the wave imparts to the tone that falls on it - and, through the tone, to the auditor - its particular directional impulse. Not because I count "one" to a tone (or because the tone was emphasized by an accent - for often it is not) do I know that I am at the beginning of a measure, but because I feel that, with this tone, I have reached the wave crest and at the same time have been carried beyond it, into a new wave cycle. But because every tone . . . is characterized for my perception by a particular quality and because in these qualities the place of the tone . . . on the metric wave is expressed, I am able to hear directly from the tone . . . in what part of the entire measure I am at the given moment (1956, pp.204-205).

Musical experience thus contains the listener. It does not occur because the listener steps outside the present and, through the action of his consciousness, brings previous and future non-existent tones into simultaneous existence with present tones. Yet we are aware that different tones can only reveal their full musical temporality if they are played in time, a time, moreover, which seems to have its basis in a mathematical equality. How can we be aware of this phenomenon if not by objective measurement? Surely, the only answer is that two originally successive notes can be objectively measured for length and then compared by having them 'occur in consciousness' simultaneously. Upon reflection, it becomes clear that an awareness of the temporal 'correctness' of tones cannot come about in this way for one of two reasons. Firstly, the procedure indicated could involve the completely schizophrenic standing outside of oneself mentioned in Chapter Three<sup>30</sup>. Only by such a complete split in the self could the procedure be anything more than purely imaginary, or two tones whose musical temporality

depends upon their contextual successiveness have their temporality come under objective and simultaneous comparison without that temporality being partially destroyed. Secondly, if this schizophrenic approach is to be avoided, but the procedure mentioned above still maintained, there is no other alternative but that time should again be completely spatialized - not from the point of view of the analyst, but as far as the tones themselves are concerned. Tones occurring 'in' time would be taken 'out' of time and re-arranged in a quasi-spatial manner, as if they were material bodies. Such spatialization is, of course, a legitimate way of measuring time as it is evidenced in the material sphere of the universe. Here, "the motion of one body, if it is taken as the measure of the motion of another body, is called time". Clearly, if such motion takes place in the mind of the observer rather than 'naturally' in space, there is no distortion or loss of significance as far as classical time concepts are concerned, because the simultaneous motion and situation of material bodies in space is an inherent characteristic of their existence. On the other hand, spatialized time is, as already intimated, completely inappropriate to an understanding of musical temporality in whatever aspect, because the manoeuvring of tones out of their contextual situation destroys not only their full temporality, but their dynamic quality<sup>31</sup>, since essential inter-relationships cease to exist.

But surely, it will be replied, it remains perfectly possible to measure the length of notes and so determine whether

they are played in time? It does, of course, remain perfectly possible to measure the length of notes as acoustical phenomena, but not, it will be remembered, as musical experience. Musical experience was precisely that which didn't lend itself to 'physical' description<sup>32</sup>. The sense of the temporal correctness of a tone is, therefore, no more than that (a sense), and cannot be measured. Not only is it impossible to move tones around as if they were material bodies for the purpose of objectively measuring their temporality, then, but the very immateriality of the tone as musical experience precludes temporal quantification in the strict scientific sense. Although musical time in tonality is based for practical and ideological reasons on mathematical equality, and whilst admitting that gross distortion of this equality will destroy the temporal sense engendered by the music, it has to be acknowledged that this equality and the measurement based on it are ultimately subservient to an intuitional sense of temporal correctness:

Variations from absolute mathematical equality do not disturb us, if they serve to give the metre wave the form that is musically right. There is no such thing as a musician whose performance does not depart from mathematical equality within certain limits; accurate experiments have given amazing proof of how great such departures can be without even being noticed by the listener (even listeners with a thorough musical training). What, on the other hand, everybody notices instantly, what disturbs everyone, is the departures that do not serve the metric wave but go counter to it. The commandment that is broken in a performance in poor time does not, then, refer to equality in length between intervals of time but to symmetry of mutually complementary wave phases (1956, p.211).

Existing within the one-dimensionality of musical space<sup>33</sup>, it is

therefore both logically and practically impossible for the listener to distance himself sufficiently from musical experience to objectively and explicitly situate metrical wave motion:

The one-dimensional creature . . . is still unable to see outside its path; cannot look from without on distances traversed and compare them by measuring them. But it now seems that . . . we can ascribe to it a sort of rhythmic feeling that tells it when phases of its course balance each other. It is as though passing through - or let us rather say living through - a phase of its course had established a demand, has created an emptiness, to fill and fulfill which is the function of the following phase; if the emptiness is filled, the brim reached, equilibrium is restored. The two phases do not stand side by side, are not compared and found equal; the sensation is that of a mutual complementing, a mutual interpenetration, a mutual balancing, (1956, pp.211-212).

Our awareness of the metrical wave does not therefore result from the objective processes of counting or comparing successive tones. Rather, the wave or waves reveal themselves to us through the individual tones which are experienced in the ongoing present. Because of this, any attempt at conscious remembering or anticipation is liable to compromise the direct impact of these waves. Zuckerkandl discusses this phenomenon with regard to a two-beat bar:

Remembrance is making present something that is past: consciousness turns back towards the past things, represents (re-presents) it to itself. But the way in which the past "one" is given in the present "two" is anything rather than a re-presenting. Do we remember "one" when we feel "two"? Does consciousness turn back towards the past moment? Not at all - instead we are entirely concentrated upon "two", on what is directly present. We feel "two" as what it is, as symmetrical completion and fulfillment precisely in relation to something which no longer is, which is not present. If we tried, by remembering, to make "one" present simultaneously with "two", all perception of meter would instantly cease, to be replaced by something as

meaningless as a photographic double exposure (1956, pp.226-227).

The same argument obtains with regard to anticipation:

We may be able to anticipate, in thought or feeling, the course of time, to make a future thing present in imagination. But the advance of "one" toward "two", which constitutes the nature of the first phase of the wave, is the exact opposite of such an anticipatory making present. Do we by any chance think ahead to "two", do we anticipatorily imagine "two", when we are feeling "one"? On the contrary, we are completely and exclusively concentrated upon the present "one"; with it we are directed toward a "two" as toward something that is not yet, that is in no way present, not even as a mere representation in our consciousness. Anyone who anticipatorily represents "two" to himself while "one" is the present can no longer feel "one" (1956, p.227).

The practice of remembering and anticipating therefore destroys the full experiencing of the metrical wave:

On the one hand remembering, on the other foreknowing, forefeeling - far from explaining the phenomenon of meter - are incompatible with it. Complete exclusion of any remembering and foreknowing is the necessary condition for experiencing meter (1956, p.227).

But although it has been established that memory and anticipation positively hamper the full experiencing of music, it nevertheless remains true that what we, with our industrial mode of thought, think of as past and potential events, play a vital role in the creation of that musical experience. The 'back-to' of beat one is only experienced as such because there was an 'away-from' conveyed by a beat two. Conversely, 'away-from' can only be experienced in the context of a sense of a starting-point, a home-base to which a return can be made. Again, the different levels of wave motion that may be sensed in the

ongoing present of the musical experience may only be sensed as such because the phase in some way 'refers' backward and forward to different 'parts' of the work. The nature of this sensing, this experiencing, itself gives a clue as to the true nature of temporality. For if it cannot be the case that the human mind brings past and potential tones together to create the musical experience, then it must be that each tone somehow 'contains' the entire musical work in its own presence:

The remarkable fact, which we also encounter elsewhere in nature, that a part of a whole is, so to speak, aware of its being a part, of its relation to the whole and its place in the whole, and also imparts this knowledge to the observer - that, consequently, the whole is in some manner present in the part - to this fact our thinking seeks to do justice by the field concept (1956, p.205).

The great interest of this concept is that it does not logically allow one to think of past tones as totally gone out of existence:

"Two", then, follows "one" - in other words, if "two" is present "one" is past. Is this pastness equivalent to nonexistence? Could "two" be what it is if "one", because it was no longer, were really nonexistent? "Two" is not simply the beat that follows "one"; it is something quite different, namely, symmetrical complement, completion and fulfillment. The whole course of "two" is in direct correspondence with "one", it is this correspondence; in every instant of the existence of "two" "one" is also contained, as the partner in this relationship, the object of the symmetrical completion. If "one", once past, were lost in nonexistence, extinguished - as, according to the hourglass concept past time is extinguished - "two" would be simply a second "one", and nothing more (1956, pp.224-225).

This, as we have seen, is not a viable possibility. A similar conclusion may be reached concerning the nonexistence of tones not yet realised:

"Two" follows "one" - this too means if "one" is present, "two" is future. Is this all we know about "two" - that it is not yet if "one" is? Yet "one" is something quite different from the beat upon which "two" will



follow; it is the beat which proceeds toward "two", with which we ourselves move toward "two" . . . . Through its entire course we experience "one" as something to be completed; its existence is a need for symmetrical completion. "One" could not be what it is if "two", because it was not yet, were really nonexistent, if the future "two" were not already part of the existence of the present "one" (1956, pp.225-226).

All these considerations lead Zuckerkandl to make what is perhaps one of the most perceptive statements concerning the nature of musical temporality. In it he puts forward a concept of musical temporality which is so obviously at variance with the time-sense of industrial man that no further comment is required:

The present of music meter, then, contains within it a past that is not remembered and a future that is not foreknown - and not as something to be supplied by thought but as a thing directly given in experience itself . . . . What becomes of the point (on the saddle) "now" between the two abysses of "no more" and "not yet", in the face of a present in which "now", "not yet" and "no more" are given together, in the most intimate interpenetration and with equal immediacy? This is a present from which not I, thanks to my particular powers, look backward into the past and forward into the future, but which itself thus looks backward and forward. These particular powers of remembering and foreknowing, then, are not required in order that future things and past things shall not be nothing. The past is not extinguished, but not because a memory stores it; it is not extinguished because time itself stores it, or, better put, the being of time is a storing of itself; the future is not an impenetrable wall, but not because a foreknowledge or forefeeling anticipates time; it is not impenetrable because time always anticipates itself, because the being of time is an anticipating itself . . . the present of musical experience is not the dividing point that eternally separates past and future; it is the stage upon which, for every ear the drama of the being of time is played - that ceaseless storing of itself and anticipating itself which is never repeated, which is every instant new (1956, pp.227-228).

## Musical Space.

The idea that there can be a musical time is one that is likely to go largely unchallenged. In many ways music more obviously depends upon temporal flow than any other art form, with the notable exception of film. But the assertion that music conveys a spatial aspect is not likely to be so easily accepted. In the opinion of Schopenhauer, for example, music is "perceived solely in and through time, to the complete exclusion of space". The precise difficulty of proposing a musical space can be brought to the fore by asking the question: 'Where is music?'. Although it is possible to precisely locate the sources of sound, such as musical instruments or loudspeakers, in Newtonian space, such location is an impossibility with the sound itself. Sound, as stated in Chapter Two, is the medium of circumambience. It surrounds and encloses us in a cocoon of simultaneously ongoing experience. Can one legitimately talk of musical space, therefore? There seem to be one of two alternatives in the face of this question. Firstly, one may define space in the narrow physical sense, that is, as a visual space marked out and presented to us through the precise location of material objects. This narrow but universal definition will result in one of two tendencies: either the spatial characteristics of music will be distortively re-arranged to fit the visual definition of space, or the question just posed will be dismissed as altogether meaningless. Secondly, spurred on by the fact that a temporal

aspect of music may legitimately be said to exist (and the existence of time in all other circumstances so far encountered presupposes that of space), one may hypothesize that musical experience displays characteristics analogous but essentially different from those phenomena we experience in a visual sense as spatial. In this case there is no alternative but to extend the definition of space to cope with a space that is not visual in nature.

The second course is the one taken by Zuckerkandl. Drawing on Heidegger, Zuckerkandl defines space as "that whence something encounters me" (1956, p.271). Since tones are encountered as something apart from the self in the sense of being 'given' rather than created in imagination, it is legitimate to presuppose a space from whence these tones are encountered. Indeed, if space couldn't be presupposed purely on the basis of the encountering of tones, "there would be nothing whence they [the tones] could encounter me and they could not encounter me" (1956, p.271). Having theoretically established a spatial phenomenon solely on the evidence provided through the encountering of tones, Zuckerkandl then goes on to describe how this evidence seemingly transcends the confines of visual or materially presented space. As noted in Chapter Two, sound cannot be precisely located:

We see blue flower; we touch smooth wall; but we hear tones - not sounding string. The colour we see, the hardness we touch, normally leads us directly to the thing, the bodily spatial thing, of which it is a property - hence leads us directly to space. Tone,

on the contrary, does not lead us to the thing, to the cause to which it owes its existence; it has detached itself from that; it is not a property, but an entity. So it might well be that, though tone presupposes space as that whence it encounters me, its connection with [ traditional] spatiality is limited to the source of the tone, to the necessity for the presence of the bodily-spatial thing which produces it but from which it immediately detaches itself . . . . (1956, p.273).

The nature of this transcendence forces a consideration of the characteristics of tonal space, for to be left with a 'whence' or space which is completely amorphous and undifferentiated could seriously undermine the attempt to establish a tonal space. In themselves tones could be held to reveal a featureless space which is nothing other than the classical abstract shell awaiting the depth-giving articulation of precisely located material bodies. Space as presupposed through tones, it could be argued, is identical to that experienced by lying on one's back and staring into a cloudless blue sky. Although we may imagine a whence from which tones encounter us, therefore, we must ask whether the encounter reveals space experientially:

When tone encounters us, does it carry traces of that whence it encounters us? Is the experience "tone" a completely unspatial experience, or do we experience space in tone? Do we hear space as we see and touch space . . . ? (1956, p.273).

In order to establish that space as evidenced through music is experiential rather than 'theoretical' in nature, it becomes necessary to revert to the original question: 'Where is music?' or more precisely; 'Where is the tone?' . Since it has already been acknowledged that tones are encountered as something apart from the self, the most obvious answer, and the one immediately grasped by Zuckerkandl, is that tones occur in the

external world. In so doing they convey to us certain spatial characteristics of that world:

Only what encounters me from without is veritably tone; what I call from memory to consciousness is mere representation. Here then, the question "within or without?" is meaningful, and the answer is given: tones are without. To the tone when it encounters us, there must still cling something of that whence it encounters us, something of space; otherwise we could not definitely feel it as happening "without not within" (1956, p.274).

But what are those characteristics? To the extent that we may be conscious of the external world solely through the tones of music, music may be said to be localized in the external world. But as tones 'detached' from their sources music does not have precise location in that world. Although symptomatic of external reality, music reveals a space which remains a space without places:

The space experience of eye and hand is basically an experience of places and distinctions between places; and the space we see and touch, in which we also move, and which, finally, serves our science of space, our geometry, as starting point, has been defined as the aggregate of all places. The ear, on the other hand, knows space only as an undivided whole; of places and distinctions between places it knows nothing. The space we hear is a space without places (1956, p.276).

There is, furthermore, a difference in the relationship between perception and that which is perceived with regard to visual and aural experience, a difference rooted in the circumambient quality of sound. Whereas visual perception is active and 'outer directed', aural perception is 'passive' and 'inner directed':

The colour I see is the property of a thing; it is with the thing, out there, and it remains with the thing. But the tone I hear is not with the thing that produces

it and does not remain with it, it has detached itself from it; to encounter the tone is, so to speak, something in a different style from encountering the colour (1956, p.276).

This difference in the style of encountering affects the nature of the spatial characteristics conveyed:

As a creature who sees I know space as something that is without and remains without, that confronts me - here I am, there it is, two worlds rigidly and permanently separated; as hearer, hearer of tone, who has no conception of a "being without", I know space as something coming from without, as something that is always directed towards me, that is always in motion towards me (1956, p.277).

Visual space is static, therefore, and tonal space fluid. It is "not sound that has become alive in space", but rather "space that has become alive as a result of sound" (1956, p.277). As such, tonal space reveals another characteristic totally inconsistent with classical formulation of space:

We see - and touch - a space in which things move; the statement that space moves is, for the eye and the hand, meaningless. But not for the ear. We hear space that itself is in a sort of motion; we hear - to try another formulation - "flowing space" (1956, pp.277-278).

Tonal space, then, is not the same as the empty shell of classical space. Although an undivided experiential whole, tonal space is "filled to the brim" and pregnant with motion. But a space which is "filled to the brim" and pregnant with motion presupposes a space that has depth. How can this be when tonal space cannot distinguish between 'here' and 'elsewhere', and knows nothing of visual boundaries. Although it is possible to distinguish between two tones, such distinguishing does not reveal located segments and boundaries:

A new tone added to one already sounding draws no

boundaries in space, occupies no location that belongs to it alone, does not drive the first tone away from anywhere, is not in a different place from the first; they are both in the same place, namely, "without" (1956, pp.283-284).

The answer is that the depth "without" is brought to the hearer through tones. This sensation stands in direct contrast to the sense of touch, which cannot reveal anything that is not in direct contact with the subject:

Whereas we feel the thing in contact with us simply as "there", we hear tone as "coming from . . ." - not from any one location in space, nor yet from all locations in space, as if space were the inactive vessel through which tone approaches us. No, in tone, space itself . . . is in a unique way directed toward the hearer, is experienced as in motion toward him. In this sensation - "directed from . . . toward . . ." - spatial depth is revealed to the hearer. Depth in auditory space, then, refers not to the distance between my ear and the location in space where a tone is produced, does not refer at all to the space in which I encounter tones; it refers to the space I encounter in tones, to the "from . . ." element of the encounter. Depth in auditory space is only another expression for this "coming from . . ." that we sense in every tone (1956, p.289).

Zuckermandl concludes that:

The space of tones . . . is a placeless depth surrounding the hearer or, more properly, directed toward him, moving toward him, from all about. The depth of this space is not the depth that, together with height and width, makes up the three dimensions of visual space. Height, width, depth - there are no such distinctions in auditory space. Here there is only one "from . . ." - which, if we like, we may call the one dimension of auditory space. Here "from . . ." does not mean "from there or from elsewhere" but "out of depth from all sides"; and "out of depth" is not a direction in space but a (nay, the) direction of space (1956, p.290).

## The Paradigm and Music

Having now summarised the main characteristics of musical time and musical space, it is now possible to elucidate the Implicit-Explicit Paradigm as it applies to music. This may be done, it will be remembered, by considering the way in which the 'phenomenal' time-space sense of music can give rise to different culture-specific time-space senses. The first step in this process is to describe the mutual dependency of musical time and musical space.

Zuckermandl's conclusion regarding musical time was that ". . . the present of musical experience is not the dividing point that externally separates past and future; it is the stage upon which, for every ear, the drama of the being of time is played - that ceaseless storing of itself and anticipating itself which is never repeated, which is every instant new". Now although Zuckermandl is clearly thinking here in terms of musical experience, it is just as easy to think of a 'purely' musical moment (that is, a sonic event which is 'out there' and 'beyond us' as 'objective fact') which stores time within itself and then reveals it to the listener. It is the concept of musical space, however, which ultimately defeats this un-dialectic mode of thought, because it is nothing other than the 'present of musical experience' that impinges on us from the "whence-ness" of auditory space. Whereas it is possible to conceive of musical time as being 'independent' of the listener, in other words, such a conception is impossible with regard to



musical space. Through its very nature, the listener is inescapably situated as its 'focus of attention'. Musical time, then, may be thought of as being gathered and revealed within the revelatory present of musical space. It is this 'relationship' which gives a real clue to the nature of the 'phenomenal' musical time-space sense. For as the previous discussion of musical time and musical space suggested, these 'entities' are not independent abstract frameworks which contain musical events. Rather, the experiential musical moment is an event-world<sup>34</sup> which displays certain 'durational-extensional' qualities. It is the ontological priority of this vibrating and organic event-world over its concomitant extension-duration which explains the essential 'here-and-now' quality of musical experience. The 'phenomenal' musical time-space sense should thus be thought of as a seamless duration-extension which informs the actual experiential moment from which it emanates, yet of which, in its virtuality, it still forms an integral and 'internal' aspect. To put it another way, the actuality of the experiential musical moment contains within itself a virtual time-space in which duration cannot be legitimately separated from extension.

The next step in this elucidation should be to describe the qualities of implicitness and explicitness in terms of the 'phenomenal' musical time-space sense. This description would represent an initial degree of distortion, since the qualities of implicitness or explicitness experienced through music

essentially lie beyond the objectivation of that symbolic medium. However, because this description is extremely abstract, the qualities will be described in terms of musical time, and then, separately, in terms of musical space. This, of course, will add a second degree of distortion, because musical time and space are not entities that may legitimately be regarded as independent. Only after these separate descriptions will this second degree of distortion be removed, and a description of the qualities of implicitness and explicitness in terms of the 'phenomenal' musical time-space sense be attempted.

Temporal implicitness, then, may be said to occur when the evanescent musical moment as experienced in the 'saddle' of the ongoing present gains its efficacy from its relationship to previous and potential moments as mediated through that present moment. With temporal explicitness, however, the musical moment gains its efficacy from its relationship to previous and potential moments as mediated through their respective pastness and futurity. In both cases the musical moment possesses 'within itself' the virtuality of moments gone and not yet born. The difference between implicitness and explicitness is a difference in motional tendency as constantly revealed through the 'saddle' of the ongoing musical present.

In spatial terms, an implicit structure is one in which moments actually external to the musical present are perceived to impinge directly on that present, this being the case whether the external moments are in synchronic<sup>35</sup> or diachronic relationship with that musical present. Because all external moments are

mediated through the 'here-ness' of the present, it may be said that the present is central to a circumjacence of such moments. And because all moments, as they attain actuality, imply an adjacency to all others, there is little or no distancing involved in the relationships between them. With a fully explicit structure, on the other hand, there is a greater sense of distancing between the present musical moment and others external to it, principally because any one of these external moments will have its relationship to the musical present mediated through the 'there-ness' of other external moments.

That this description of implicitness and explicitness in terms of separate temporal and spatial categories is distortive may be demonstrated by once again referring to the example of tonality, but this time bearing in mind the description of musical time-space with tonality, the explicitness which we naturally think of as being spatially present in harmony necessarily involves the temporal explicitness (naturally associated with rhythm) which gathers itself up and reveals itself in its virtuality through that 'spatial' harmonic present. Conversely, rhythmic explicitness which we naturally think of as being temporally present in the actual music moment contains within itself the explicit spatiality of melodic structure as well as that of synchronically existing harmonic moments.

In the light of this distortion it is now finally possible to describe the implicit and explicit oppositions in terms of one, undifferentiated, 'phenomenal' time-space sense. An implicit musical structure may be said to occur when the past, potential

and synchronically 'external' experiential moments which pervade the musical present do so immediately and directly. They come in on the present and are indwelling without, as it were, any action on the part of that musical present. An explicit musical structure, on the other hand, may be said to occur when the musical present, as it were, goes out and 'collects' the past, potential and synchronically external moments which constitute its essential quality. Whereas the implicit musical moment points within itself through the other moments which inform it, the explicit moment points to these other moments, which do not have present actuality, but which nevertheless possess a certain virtuality<sup>36</sup>.

\* \* \*

One of the difficulties of explaining the paradigm in terms of differing time-spaces is that it is possible for us, ex post facto, to identify and explicitly set down a great number of the relationships pertinent to the musical moment in an implicit structure. Furthermore, it is only possible for us to conceive a genuinely implicit structure by filtering it through our particular world sense, which has, as one of its characteristics, a desire for clarity and explicitness. The relationships of implicit structures are therefore only immediate or direct in

terms of our explicit orientation to the world. To the person living 'within' an implicit structure, the question of immediacy or directness would never arise. Mary Douglas makes this clear in reference to pre-literate cultures in general:

The anthropologist who draws out the whole scheme of the cosmos which is implied in these [primitive] practices does the primitive culture great violence if he seems to present the cosmology as a systematic philosophy subscribed to consciously by individuals. We can study our own cosmologies . . . . But primitive cosmologies cannot rightly be pinned out for display like exotic lepidoptera, without distortion to the nature of a primitive culture (1970, pp.110-111).

This difficulty points to the central problem of this chapter, namely, the contradiction inherent in trying to account for the implicit nature of the musical/social process in general and of some world senses in particular through the overwhelmingly explicit procedure of verbal-rational analysis. The contradiction has been circumvented by first moving from the common-sense and explicit reifications in terms of which we think, to a paradigm for musical/social elucidation which in its essential nature was purely intuitional or implicit. Having achieved this 'pure intuition', it then became possible to gradually move back to a situation in which reified notions were again used, but this time being fully aware of the distortions they inevitably involve. The following chapters, in discussing different culture-specific musical realities, continue this trend, and so avoid the abstract and difficult argument which of necessity has characterized this chapter. Yet the discussions which follow should be read very much in the light of this present

chapter. For the musical realities do not reside in the verbal-rational reifications used to describe them, but rather in a social process which is of an entirely different order from those reifications. It is thus necessary to read much more 'in' and 'through' the discussions than is normal with verbal-rational descriptions, and so to lodge the realisation and comprehension of different musical realities in those aspects of the mind which are not symbolically imminent.

## NOTES:

1. For a further discussion of this relationship, see below, Appendix I.
2. The implications of this sentence are further elucidated in the final two paragraphs of Chapter Thirteen.
3. A specific example of such an occurrence is provided by the 'discovery' of the laws appropriate to the material sphere of the universe. See Chapter Three, especially pp. 47 - 49 , and also Appendix I.
4. It might be thought that this sentence has a built-in contradiction, since I must be using certain unstated categories of analysis to approach the phenomena of distancing and dialectic interaction taken to be symptomatic of the relationship obtaining between phenomena and categories of analysis. In other words the categories of analysis I use to look at categories of analysis in general may themselves be inappropriate, thus bringing into question the characteristics I assign to the generalised categories. This is no difficulty, however, because if I assume, in using categories of analysis to look at categories in general, that my categories may be inadequate, then it is logically inconsistent to use this assumption to question the idea that all generalised categories may be inappropriate or inadequate. To put it another way, it is logically inconsistent to use the assumptions of a meta-situation to question the characteristics of those assumptions as they may appear in the specific situation.
5. Even if it is accepted that we cannot know another as we know ourselves it might still be argued that people can be perceived independently of the symbols they emit. It could be suggested that we recognise a totally inert person (such as someone in a coma) as a significant other even though he emits no obvious symbols. This line of thought does not overcome the difficulty, however, that no person can be arbitrarily isolated from the social milieu with which he is constantly interacting. Our hypothetical inert person is eliciting a response from us because, in all likelihood, we should want to know why he is inert and what we can do about it. Inert persons are potentially a cause for concern, and so the quality of inertness itself becomes a symbol. The mere existence of a significant other is incipiently symbolic, and people and the symbols they emit cannot be legitimately separated in such an arbitrary manner. On the other hand, it remains perfectly legitimate to distinguish between the

phenomena that we identify as the externalisations of people and those people themselves, provided we realise that this distinction itself lies within the totally symbolic world in which we exist.

6. The assertion that symbols may be described as articulations in time-space which are taken to be socially meaningful implies that there are other articulations or phenomena in time-space which are not socially meaningful. On the face of it, this implication would seem to contradict the assertion that human existence is totally symbolic and that every perception is made in the context of and as part of this symbolically mediated existence. As already argued, however, the fact that all knowledge is rooted in the self and that it is logically impossible to escape the symbolic nature of existence does not mean that there is no data of actuality coming from without which may be conceived of as paralleling our conception of 'reality'. Although all perception is socially bounded, therefore, it remains legitimate to assign certain phenomena a low degree of relevance to that situation. Typically, articulations in time-space which are taken to be socially meaningful are those which, within our totally symbolic existence, we perceive to 'originate' and 'terminate' with people. Less typical would be those 'natural' phenomena to which a specific 'social' meaning is commonly assigned. 'Natural' phenomena which have little direct or immediate bearing on 'social' process would be essentially a-typical. The relationship of self to the symbolic manipulation of the environment is further discussed in Appendix II.
7. See Poulet (1959, pp.3-7).
8. The criticism might be brought that a generalised concept of time-space has been assumed in order to disprove its existence, a situation which would be logically inconsistent. It should be pointed out, however, that the concept has only been assumed to demonstrate its inadequacy, the question of whether a truly transcendent time-space has ever actually existed being discussed in the following paragraph. There is, therefore, no attempt to question the existence of the generalised concept as it exists in men's minds, but rather to demonstrate its exact status in relation to other societies.
9. For example, Einsteinian time-space, which was pre-figured to a considerable extent by the theoretical work of Riemann, is primarily appropriate to frames of reference characterised by great distances and high velocities.
10. In this sub-section, I mean by a 'symbol' something that has



embodiment in the external material world. 'Symbol', therefore, should not be confused with 'reified concept', which has no material embodiment in the external world, although it is taken to be materially mediated in the processes of consciousness. Since a symbol has 'material' embodiment, and since a reified concept is, by definition, materially mediated, they may both be thought of as possessing objectivation.

11. This may raise the question in some people's minds as to whether society, as described here, actually exists. This question is meaningless insomuch as it depends upon one's criteria for assigning existence, and these criteria, in turn, are grounded in one's particular world-sense. A person whose thinking is largely influenced by the 'universality' of a reductionist and deterministic world sense would probably argue that the concept of a society as here described has no actual existential validity, whereas a person who is capable of transcending the reductionist and materialistic straightjacket would probably be more kindly disposed towards it.
12. It is interesting to note that in typographical society, with its great emphasis on materiality, such thought processes tend to be repressed from consciousness. Only those thoughts which have direct physical referents (the written word) and which conform to convergent linear cause-and-effect processes are easily admitted to consciousness. In this context the work of Edward de Bono on lateral thinking is of great relevance. See, for example, Edward de Bono (1971 and 1973).
13. The word 'reification' is here being used in a much wider sense than usual. As a result, it is necessary to realise that there are different types and degrees of reification. Highest reification occurs with the physical referent of the written word, whereas the lowest degree may be said to occur with music, which, as indicated, emphasises relationships rather than relata. Nevertheless, since music, in realising the non-material and directly imperceptible relations of society, momentarily 'freezes' the utter fluidity of those relations, it does reify to a certain extent.
14. This principle, in turn, is based on Russell's Paradox.
15. This sub-section is predicated on the notion of 'ontic levels' developed by Wishart (1973). According to this concept there are different 'levels' or 'spheres' of activity within the universe (e.g., the material, the biological, the social) which display different, and often mutually incompatible, laws and/or norms. Consequently, it is necessary to apply different epistemologies to these different

- levels. Wishart's concept, of course, militates very strongly against a reductionist view of the universe.
16. In this context it may be remembered that the position adopted in Chapter Five with regard to ongoing social process specifically excluded the idea that any sector of social symbolic activity could somehow be regarded as an 'ultimate reality' in which all other activity could be grounded.
  17. The use of the word 'unified' in this context does not indicate a consensual approach to social theory. It may be remembered that in Chapter Three it was specifically argued that the social-intellectual structure of modern industrial society actively facilitated and encouraged conflict along class lines.
  18. There is a strong tendency for conceptualisation at this level of abstraction to be actively repressed from consciousness in the industrial world. Reasons for this were put forward in Chapter Three (see especially pp.49 -52 ).
  19. It is pertinent to point out in this context that, as society 'displays' the two aspects of 'material' relata and non-material relationships, so consciousness may be conceived as a 'pre-existent' and 'whole' phenomenon of which matter and spirit are merely two different aspects. P. F. Strawson is of this opinion when he says that: "the concept of person is logically prior to that of an individual consciousness. The concept of person is not to be analysed as that of an animated body or of an embodied anima" (Strawson, 1959, p.103). This concept of mind in giving equal ontological status to non-material relationships, underlines the desirability of a paradigm which does not rest exclusively on the material aspect of symbolization.
  20. Herein lies the essential difference between this paradigm and any generalized concept of time-space, for whereas the generalized concept has no characteristics (whether directly or indirectly statable) which would seem to distinguish it from culture-specific concepts grounded in particular media, the paradigm does have characteristics (although not directly statable) whose very essence is that they are grounded in the media taken to be important in particular societies.
  21. But see, however, the discussion later in this sub-section.
  22. Although the categories of analysis described here may be distortive they have still been used in the following chapters for two reasons. Firstly, time-spaces other than

industrial time-space are very difficult to describe linguistically unless they are filtered to a certain extent through the industrial time-space sense. What would be gained in phenomenological adequacy would be more than lost to obscurantism. Secondly, the musicological information drawn upon in these chapters has largely been conceived in these terms, and it would again seem counter-productive to indulge in involved 'translation' processes. See the comments at the end of the final section of this chapter.

23. The ethnocentrism predominantly being discussed in this chapter is between different societies. It is, as we have seen, equally possible for there to exist ethnocentrism between different groups in the same highly stratified society. However, there are no qualitative differences between these two types of gross distortion, and exactly the same strictures may be taken to apply.
24. That is, because pre-literate man's world sense is essentially oral-aural in nature.
25. That is, because industrial man's world sense is essentially visual in nature.
26. Zuckerkandl (1956), has carried out a highly perceptive study of the way in which the 'phenomenal' time-space sense of music works, and this study is extensively drawn on later in this chapter. However, having elucidated the main characteristics of ('phenomenal') musical time, space and motion, Zuckerkandl then moves to a position of thinking these characteristics responsible for significance in music. Zuckerkandl's principal conclusion in this regard is set out earlier in this thesis, as part of the discussion in Chapter Four (see above, p.80 ).
27. It is necessary to be conscious of these two existential levels of music, even where the temporal-spatial characteristics of a culture-specific piece of music very closely match those of the 'phenomenal' time-space sense (as, for example, in pre-literate musics). For not to be conscious of these two levels can lead to a reification of the musical process, and so of the social significance inherent in music (see the discussion which immediately follows).
28. See above, pp.74 - 83.
29. See below, Chapter Twelve, the section entitled "Some Comparative Remarks on Form".
30. See above, p.52.

31. See above, the discussion in Chapter Four, pp.93 -94 .
32. Again, see above pp.93 -94 .
33. For an explanation of this one-dimensionality see the following sub-section, on "Musical Space".
34. An event-world because actual musical moments contain within themselves other related moments which are virtual.
35. The concept of an external musical moment which is synchronic with the present musical moment applies to those moments which occur 'at the same' time as the one under consideration. For many people a piece of harmony itself constitutes one undifferentiated experiential moment. For others, however, one aspect of a piece of harmony (such as the 'melodic note') may be given precedence in consciousness over others. In this case these other moments may be thought of as synchronically external to the present experiential moment. Such psychic separation, it should be noted, involves an element of temporality (since it presupposes an ability to shift the focus of attention in time). Whether or not a piece of harmony will involve synchronically external moments thus depends on the mode of consciousness with which it is approached, and so underlines the essentially dialectic and experiential nature of musical moments. The fact that the existence of synchronically external moments involves a temporal element again underlines the great difficulty of separating musical time from musical space (or vice versa).
36. The implicit-explicit paradigm as set out here has much in common with Chester's intensional and extensional categories (see Chester, 1970). Those categories are drawn from a comparison of 'classical' and 'rock' music, Chester's purpose being to demonstrate the ideological distortion involved in judging rock music according to classical standards. Given the limited nature of his purpose, there is no attempt by the author to follow through the implications created by his categorisation. Further, it seems unlikely that Chester would attempt to ground his categories in the role played by media in structuring men's consciousnesses and societies. There would, on the contrary, seem to be a far greater dependence on the dialectical materialism of traditional Marxist thought, a dependence which would preclude many of the considerations discussed in this section. The paradigm would also seem to have a great deal in common with Basil Bernstein's notion of elaborated and restricted linguistic codes (see Bernstein, 1971). Space precludes a detailed examination of this latter parallel.

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CHAPTER EIGHT

PRE-LITERATE MUSICS:  
SOME GENERAL OBSERVATIONS

## INTRODUCTION

Any attempt to generalise about pre-literate musics is fraught with difficulties. Not only are there a great variety of pre-literate cultures whose individual musics can display a vast number of 'contradictory' characteristics, but the implicit nature of these cultures would seem to militate against a high degree of explicit analysis<sup>1</sup>. Initially, therefore, some tentative suggestions will be made about the relationship of 'music' and 'society' in pre-literate cultures. Only then will two possible ideas be mooted about the way in which the internal 'structure' of pre-literate musics might be said to encode and articulate what has previously been described as a pre-literate world sense.

## 'MUSIC' AND 'SOCIETY' IN PRE-LITERATE CULTURE

In view of pre-literate man's relationship to the universe, it seems more than likely he experienced music as an all-enveloping happening. It was the medium of sound, it may be remembered, which was largely responsible for the creation of a world sense through which pre-literate man encountered the universe as revelatory and relatively unpredictable. Unlike literate and typographical man, who fearlessly regards the universe as something to be controlled and manipulated, pre-literate man holds tight to a relatively unyielding legitimating structure, and tends to view anything which does not fall inside the confines or patterning of that structure as reprehensible and potentially dangerous. Non-knowledge in pre-literate societies, that which is disorder to the carefully maintained order, has two opposing but inter-related aspects:

Granted that disorder spoils pattern, it also provides the material of pattern. Order implies restriction; from all possible materials a limited selection has been made and from all possible relations a limited set has been used. So disorder by implication is unlimited, no pattern has been realised in it, but its potential for patterning is indefinite. This is why, though we seek to create order, we do not simply condemn disorder. We recognise that it is destructive to existing patterns: also that it has potentiality. It symbolizes both danger and power (Douglas, 1970, p.114).

There is a striking parallel between this ambivalent attitude towards disorder and the attitude that exists in some pre-literate societies towards musicians. In more than one society<sup>2</sup> musicians hold a lower status:



[ but ] in such cases there is a definite question as to whether the attitude towards musicians is not ambivalent and whether musicians may not in fact occupy a special situation in which behaviour not tolerated in others is considered acceptable, or is at least tolerated for them (Merriam, 1964, p.134).

Thus, although the behaviour of musicians is often regarded as reprehensible, and although they are frequently the recipients of derisory jokes, there can be little doubt that musicians are nevertheless essential to the social process. In Basongye society, for example:

the reaction to the facetious suggestion that these ne'er-do-wells should be banished was one of extreme seriousness and even real horror. Life in a village without musicians is not to be considered, and people spoke of leaving the village were no musicians present. This reaction cannot be taken lightly, for the bonds of kinship and economics which tie an individual to his village are extremely difficult to break (Merriam, 1964, p.136).

In some societies musicians might well provide a form of mediation between order and disorder, between that which is safe and normal, and that which is dangerous and powerful<sup>3</sup>.

This mediation would seem to be reflected in one of the compositional processes to be found in pre-literate societies. By this process, an individual 'receives' a song from the supernatural<sup>4</sup>. In Flathead Indian society, for example,

While it is recognised that some songs are individually composed by human beings, and that some other songs are borrowed from neighbouring peoples, all true and proper songs, particularly in the past, owe their origin to a variety of contacts experienced by humans with beings which, though a part of this world, are superhuman and the source of both individual and tribal powers and skills (Merriam, 1967, p.3).

Moreover, "the Flathead believe that in former times all songs

derived from such experiences and that none were made up by individuals or borrowed from other tribes" (Merriam, 1967, p.3).

One example of an experience can be given:

There was a man who was out hunting. He was sneaking up on the game by sitting at a spot on the game trail when he heard somebody singing. He thought "There must be people around". So he stood there and waited to see who was coming. Pretty soon a spike bull elk came out from the bush and told him, "This is your song. If you really need this song, sing it". It was a love song. So he didn't kill the spike, and never killed an elk again (Merriam, 1967, p.7).

Mediation with powerful and dangerous disorder is further suggested by two aspects of this compositional process. Firstly, whether the occurrence is accidental, as above, or purposefully sought, as in the case of plains or plateau vision quests, the recipient leaves his village. This might be interpreted as a symbolic departure from 'conceptual surroundings' that are normal and safe. Secondly, the power of the supernatural is invested in the recipient:

Songs which derive from the supernatural lead to two types of power for the individual who receives them. In one case this is shamanistic power, while in the other, power is scattered and of such a nature that the individual remains simply a person with special capabilities for doing or effecting special things. Thus while a person may have special powers in love, gambling, hunting, war, or other social situations, the shaman has a concentration of songs which center primarily about curing, although he may have obtained other skills through song as well (Merriam, 1967, pp.3-4).

Whether or not these aspects carry the significance ascribed them may be debatable, but there seems little doubt that the revelatory and unpredictable nature of this compositional process directly reflects pre-literate man's revelatory and

unpredictable world.

In those societies where musicians do not hold an ambivalent position and where composition is not revelatory, it is still the case that music is assigned much greater social relevance and power than it is in the Western world. In other words, pre-literate man possesses neither the 'objectivity' nor the high division of labour<sup>5</sup> necessary to divorce music from the immediacy of its social context. Merriam (1964, p.262) makes this contrast:

. . . we can and do isolate music as a thing in itself and look at and analyse it as an object quite apart from its context. For example, we can turn on the radio, hear a piece of music being performed, and listen to it without having to know who the composer is, what period he represents, or what the function, if any, of the music is. We can take music out of any other context and treat it objectively or subjectively as something which exists for itself. We do this not only in the listening process, but in our analysis of music; the student of music form looks at it as an objective entity which can be divorced both from himself and from its context.

By comparison, "neither the Basongye nor the Flatheads do this. For the Basongye, to the contrary, every song depends heavily upon its cultural context and is conceptualized in this relationship" (Merriam, 1964, p.262). Again, Venda music is clearly of great social relevance:

Venda music is overtly political in that it is performed in a variety of political contexts and often for specific purposes. It is also political in the sense that it may involve people in a powerful shared experience and thereby make them more aware of themselves and of their responsibilities towards each other (Blacking, 1973, p.28).

One aspect of the social relevance of pre-literate music may be described in more detail. Much important knowledge in

pre-literate cultures is commonly stored in tales or songs<sup>6</sup> whose repetition is based on commonplaces, that is, set verbal formulae and themes<sup>7</sup>. These formulae and themes often feature complex but strongly similar rhythmic patterns which are part and parcel of the method by which a reciter remembers the essential unvarying segments of the tale. It seems likely that song as we understand it came about as the result of the vocal inflexions peculiar to each commonplace, (that is, the separation and isolation of 'melodic contours' previously an integral aspect of everyday speech-song). The singing of an epic tale, or songs which are part of a tale, could thus be regarded as a stylization of the everyday speech<sup>8</sup> upon which the creation and maintenance of vital information rests. Since the retention and repetition of the knowledge is essential for the survival of the society in question, the tale takes on a highly affirmative moral value<sup>9</sup>, and the melodic shapes it generates become generally symbolic of the 'emotional' security felt at reinforcement of the legitimating structure.

Walter J. Ong underlines the inseparable intertwining of epic tales and music with the everyday life and concerns of pre-literate men. Talking about the lack of fundamental differentiation between the objective and subjective in pre-literate cultures, he goes on to say that:

by the same token, in one way or another, everything was caught up in the polemic of the human life struggle. The action of the heroic figures generated in an oral economy of narration would naturally at root consist of a battle between forces of good and evil. When so much of the lore of a culture was retained through narrative

tales or songs about great heroes, even what would be otherwise completely neutral material thus acquired a moral flavour by association with the polemic or agonia of the hero and his adversaries. The entire world thus tended to be polarised in terms of 'good guys' and 'bad guys' . . . . (1969, p.641).

Besides straightforward reinforcement of the status quo, music in pre-literate societies can also provide a means whereby a person collectively and externally copes with his problems. Titiev (1949, p.2) describes this process with respect to the Mapuche of Chile. Unaccompanied songs are improvised at social gatherings by men or women:

who take advantage of the occasions to 'blow off steam', or to call general attention to some matter of personal concern to the singer. Songs of this kind are called 'assembly songs', and their moods may vary from naive and joyful to slanderous, bitter or ironic (Quoted, Merriam, 1964, p.203)<sup>10</sup>.

Through this process the integrity of society is maintained. It is interesting to speculate that this is another fashion in which music mediates between the order of the status quo and potential disorder. This disorder may derive from the desire of the singer to alter the status quo, or from his wish to point out some misdemeanour or abuse of power on the part of someone else.

Since pre-literate man possesses neither the 'objectivity' nor the high division of labour necessary to divorce music from the immediacy of its social context, it would seem highly unlikely that he would be able to distance himself to any appreciable extent from the musical experience. Two inter-related aspects of pre-literate man's attitude towards music would seem to substantiate this claim. Firstly, it appears probable that music

is 'composed' or 'manipulated' in a far less determinant and 'conscious' manner than is the case in industrial society. The revelatory process of composition already described partially backs up this assertion, but it would also seem to be true in situations where songs are 'made-up'. It is Merriam who once again draws the distinction between Western and pre-literate culture:

The second factor which, in conjunction with the others, contributes to the total Western concept of the aesthetic is the manipulation of form for its own sake. This is a strong part of Western music culture where change is a value, and it seems logical that where music is treated as an abstract thing in itself the manipulation of form for its own sake might be regarded as a criterion of the presence or absence of abstractability (1964, p.263).

However, in Basongye and Flathead cultures, "there is no apparent verbalized concept of such things as intervals, polyphony, melodic lines, melodic range, tonics, and so forth . . . ." (Merriam, 1964, p.263). Consequently:

If there is relatively little recognition of formal elements of music, it seems doubtful that music form can be consciously manipulated, for manipulation implies a juggling of the elements of music structure in order to arrive at a fresh form (Merriam, 1964, pp.263-264)<sup>11</sup>.

Secondly, because music cannot be 'viewed' or manipulated as an abstract entity, there is little question, as Merriam has already implied, of Western-like aesthetic considerations being applied to it:

The concept of music as 'beautiful' seems to be generally undeveloped in primitive cultures. Informants speak of songs as being 'good'. No doubt the prevailing functionality of music is responsible for this designation, for beauty is an end in itself, while 'good' implies usefulness for a specific purpose: a song may be good for

curing, good for dancing etc. In some tribes informants also describe songs as 'powerful', probably because the songs have some sort of supernatural function (Nettl, 1956, p.20).

The fact that pre-literate man feels it necessary to mediate his relationship with a revelatory and unpredictable universe through music, that he does not possess the objectivity or high division of labour necessary to divorce music from its social context, and that he is not sufficiently distanced from his music to develop 'conscious' modes of composition or a Western-like aesthetic - all these characteristics of his attitude to music speak of a world sense which is essentially lived 'within'. So too do some claims made about the 'internal structure' of pre-literate musics.

#### PRE-LITERATE MUSICS AND THE IMPLICIT-EXPLICIT PARADIGM.

Since pre-literate man lived within time, the difference between the subjective and mechanical temporal span which is symptomatic of industrial man's world sense - together with the tendency to repress the subjective and emphasise the mechanical - was a difference that did not impinge on pre-literate man's consciousness. In the spatialised terms of industrial man, pre-literate man could not have been conscious of time. The rhythms of pre-literate musics, which are either corporeal or spiritual<sup>12</sup>, articulate this 'time-sense':

As the term suggests, corporeal rhythm comes from bodily movements, from physical gestures in time, associated with work or play. It thus tends to be accentual; the regularity of the stresses measures off Time without necessarily having any relationship to melody . . . . The effect of this Time-measuring thus tends to be incantatory and hypnotic. In becoming habituated to Time's beat we cease to be conscious of it, and this unconsciousness of our earth and time-bound condition is precisely the magic effect that primitive man sought through his music . . . . The other kind of rhythm, which we have called spiritual, arrives at a similar effect by the opposite means. Whereas corporeal rhythm is accentual, spiritual rhythm is numerical, having the minimal relationship to bodily movement. It thus tends to be subtle and complex in its organisation; to suggest, indeed, a self-generative spontaneity that counteracts any sense of periodicity or beat . . . . In effect it is liberative and therefore ecstasy inducing (Mellers, 1968, p.3)<sup>13</sup>.

Both the externally emotive nature of the incantatory and hypnotic corporeal rhythm, and of the liberative, ecstasy-inducing spiritual rhythm is indicative of pre-literate man's propensity to externally and collectively mediate his life and consciousness<sup>14</sup>.

A significant proportion of pre-literate music is monophonic. That which is not would seem to demonstrate from its nature that pre-literate man has not really escaped the confines of the monophonic line. He is unable in other words, to place himself to any extent 'outside' his music. Firstly, "the tone systems of polyphonic material in a given style do not often coincide with the tone systems of the individual parts; this discrepancy is strong evidence against the beginnings of polyphony from a feeling of latent harmony" (Nettl, 1956, p.79). Because harmony as we typically understand it depends largely upon the distancing from phenomena possible in phonetically literate society<sup>15</sup>, it would have been extremely difficult for the specific



pitch relationships and more general intervallic structures of pre-literate melodic lines to be externalised in the relationships obtaining between those lines, or, conversely, for the relationships obtaining between those lines to be internalised in the individual lines themselves. It is hardly surprising, therefore, that Nettl claims that "there are no known rules of consonance or dissonance operating in primitive music comparable to the strict European ones" (1956, p.87). As a concept involving the explicit statement of tonal relationships, tonal harmony would most likely have been alien to pre-literate cultures, because it involves a relationship to the sound experience, and so to phenomena in general, that pre-literate man simply did not possess.

The arguments presented in the previous paragraph are certainly consistent with the theories advanced in Chapters Two and Seven. As pre-literate man lives 'within' his world, so he lives 'within' his music, and his 'inability' to externally state in harmony the structures present in melody would seem to be symptomatic of an implicit musical structure. Unfortunately, the categories of implicitness and explicitness cannot simply be equated with the 'internal' or 'external' stating of possibilities inherent in melodic structure. As a major line of argument in the previous chapter sought to stress, the implicit-explicit paradigm was not concerned with the analysis of music as a 'sonic object', but rather with the analysis of the experiential musical moment. It is hardly surprising therefore, to find that there are some pre-literate cultures where the inherent qualities of

melodic lines are externalised in harmony. Blacking, for example, tells us that in some Venda melodies:

The companion tones in a pentatonic scale differ because of the spacing of the intervals, but the basically social principle that a tone must have a companion tone still applies, and it may be expressed explicitly in the "harmonies" improvised by other singers (1973, p.85).

Now it might seem that Blacking's example, with the idea that Venda harmonies involve a certain degree of explicitness, seriously weakens the basic theory being put forward in this thesis - at least with regard to the analysis of music. Consequently, it may appear that the stress placed on the experiential musical moment in discussion of the implicit-explicit paradigm is a nebulous and rather unsatisfactory way of circumventing the 'difficulty' seemingly highlighted through Blacking's example. That it is not may be established by reference to a more modern example.

In Chapter Twelve it is argued that tonality is a highly explicit musical structure which both reflects and contributes to the highly explicit world sense of industrial man. In this discussion emphasis is placed on the important role played in this structure by the dominant seventh chord, which finally and irrevocably points outside itself to the tonic chord that it helps to define. Now this very same chord structure (it is incorrect in these contexts to call it a dominant seventh chord, because it does not perform that function) occurs in the music of Debussy and Delius, and in much of the authentic rural blues. Sonically, it is identical (to all intents and purposes) with the dominant seventh, yet its function is to act as a timbral colouration of

the melodic note. That is, there is an external statement of the harmonic partials existing 'within' the melodic note. In this case, there would seem to be little doubt that the chordal shape is acting implicitly. At the very least it is referring internally to the melodic note, and, in many cases, such as the openings of a number of Delius's orchestral works (where there is sparse melodic material), it is referring internally to itself, the 'individual' notes acting as mutual colouration conglomerates on each other.

Whether or not these timbral colourations constitute an externalisation of melodic structure remains, perhaps, an unanswered question, although the pentatonic melody frequently associated with this colouration is itself drawn from the lower partials of the harmonic series<sup>16</sup>. What has been established is that an external statement in harmony of possibilities inherent in melody is not necessarily evidence of an explicit musical structure<sup>17</sup>. In the case of Blacking's example, the companion note could sound to the Venda as an implicit harmonic reinforcement of melodic pentatonicism<sup>18</sup>. Furthermore, it becomes clear that analysis of any musical phenomena as a sonic object can be very misleading as far as the elucidation of musical significance is concerned.

Because it does not require the assumption of 'linguistic universals' in music, and because it transcends any purely sonic parameters (such as melody, harmony or specific chord shapes)

that we care to assume, the paradigm would seem to provide an extremely useful background against which to approach culture-specific musics. While it provides an essential strength, however, the intuitional nature of the paradigm can make that paradigm difficult to approach and understand. In the chapters which follow, it should therefore be noted that for the purpose of ease of understanding, and ease of understanding only, the notion of implicitness may be approached as being melodic in nature and that of explicitness as being harmonic. This is because plainchant is implicit and melodic, and tonality highly explicit and harmonic. Thus, although implicitness and melody, and explicitness and harmony cannot be strictly equated, the fact that plainchant and tonality parallel the equation will provide the reader with a relatively easy way of approaching the intuitive parameters of implicitness and explicitness as categories of musical/social elucidation. As it affects the development of tonality from plainchant, this topic is again discussed in Chapter Eleven.

## NOTES:

1. An example of explicit 'musical' analysis relating to 'social' phenomena is, however, to be found in Blacking's work on the Venda (see Blacking, 1973, pp.79-88).
2. See Merriam (1964, p.134 ff.).
3. A very interesting parallel is provided here by attitudes towards jazz musicians in the United States during the 1920's (see Merriam, 1964, p.241 ff.). The jazz musician was regarded as undesirably deviant, but he was not tolerated, nor seen as essential to society, precisely because typographical man has such a 'rational control' on his world. Becker's (1963) work on jazz musicians is a classic study of deviance and attitudes towards it.
4. See Merriam (1964, p.167 ff.).
5. See above, Chapter Three, pp.57 -58 , and Chapter Four, pp.100 -101 .
6. See Merriam (1964, pp.280-281).
7. See Lord (1964, Part I).
8. This might well be the origin of the 'elevated speech' to be found in many songs (see Merriam, 1964 p.188 ff.).
9. See Merriam (1964) pp.204-206. The importance of music as a moral reinforcer is also underlined by the great emphasis placed on accuracy of rendition (see Merriam, 1964, pp.115-116). Again, abuse of the power invested in a particular song can have grave consequences for the miscreant. These consequences may include death (see Merriam, 1967, pp.12-13).
10. See also Merriam (1964, pp.221-222).
11. Conscious manipulation of musical material becomes a lot easier, of course, when those materials can be notated in a permanent fashion.
12. It is perhaps instructive to give two present day examples of music which may be taken to have corporeal or spiritual rhythms. A clear example of corporeal pulse is provided by the many different types of rock and pop music which have their roots in various dance forms. The reader must not think, however, that all rock and pop music displays a corporeal pulse. An example of spiritual rhythm is more difficult to find, but the singing of psalms in the Church of England can probably be said to display 'spiritual' qualities. Although the music for the psalm is notated in strict tonal fashion, the singing depends to a considerable

extent upon additive and numeric characteristics resulting from the specific number and distribution of syllables within any particular verse. The chanting by the priest in the responses also displays 'spiritual' qualities.

13. It should be pointed out that Mellers is speaking here with a certain amount of historical hindsight. It is strictly speaking incorrect to say that "this unconsciousness of our earth and time-bound condition is precisely the magic effect that the primitive sought through his music" [emphasis mine] , because pre-literate man was already in the condition which, according to Mellers, he was 'seeking' through his music. It is extremely unlikely that pre-literate man has ever been aware of "our earth and time-bound condition" [emphasis mine] .
14. Berger and Luckmann have also noted the external and collective approach of pre-literate man to life. For heuristic purposes they describe a society in which institutionalization is total: "all problems are common, all solutions to these problems are socially objectivated, and all social actions are institutionalized. The institutional order embraces the totality of social life which resembles the continuous performance of a complex, highly stylized liturgy. There is no role-specific distribution of knowledge, or nearly none, since all roles are performed within situations of equal relevance to all the actors". Although no such society exists, the authors point out that "primitive societies approximate the type to a much higher degree than civilized ones" (Berger and Luckmann, 1971, pp.97-98).
15. See below pp.295-296.
16. See below the argument in Chapter Nine, pp.240-244.
17. The reverse is equally true. The existence of a largely monodic tradition is not necessarily evidence of an implicit musical structure. Songs such as Summer is icumen in, for example, would seem to demonstrate a large degree of explicitness.
18. This, however, is not necessarily the case, because the Venda had been in contact with white men and their music for some considerable time before fieldwork was actually carried out. Although the Venda have as far as possible striven to maintain their identity, it is possible that some aspects of Western thought may have nevertheless surreptitiously permeated their symbolic output. See in this respect Worsley (1970) and Fanon (1970).

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CHAPTER NINE

THE CASE FOR THE UNDERLYING  
PENTATONIC STRUCTURE OF PLAINCHANT



## INTRODUCTION

Although the advent of literacy substantially altered man's orientation towards himself and the world, the strong residue of orality effectively prevented the development of any explicit harmony or metre until the late Middle Ages. The phonetic literacy of Ancient Greece, for example, provided the conceptual framework within which Pythagoras could evolve the mathematical basis of Western melody and harmony, and within which it was thus possible to step outside the all-encompassing confines of the melodic line or, in some cases, of implicit harmony. Yet the orality which largely underlay the society would not allow further musical exploitation of the discoveries made by Pythagoras; the "passionate religious mystical matriarchy . . . remained at war with, and was too powerful to be absorbed by its new, empirical, rationalistic patriarchy" (Mellers, 1968, p.8). This dualism was most probably reflected in the music, as Peter Crossley-Holland points out. "Practising Greek musicians", we are told, although "by no means unaware of the role of the mind in defining their materials, naturally placed more emphasis on the evidence of their ears than on the mathematics of the specialist theorists" (1960, p.100).

Again, in early medieval society, although a certain degree of 'objectivity' and 'reason' were used to maintain a theocratic world, the orality which was still strong and very much at the basis of the theocracy prevented any development of explicit harmony. Man still thought of himself as being at the centre of

the universe, and even the learned stock of knowledge was still reinforced orally. A student in a university, for example, "proved his ability in logic, physics or natural philosophy, ethics, metaphysics, law or medicine, as well as in theology by disputation and possibly a final oral examination in a disputation like form. There were no written papers, written exercises or written examinations at all. Writing was used a great deal, but in connection with oral expression" (Ong, 1967, p.59).

It would be impossible to begin a discussion of any Western musical language<sup>1</sup> without mentioning at least the bare essentials of the Pythagorean discoveries, since it is the social organisation of the natural phenomena brought to man's notice through these discoveries that results in those languages. The discoveries may be summarised as follows: when a note is sounded, certain harmonics are given off above the fundamental, in vibration ratios of 2 to 1, 3 to 2, 4 to 3, 5 to 4 and so on. These ratios constitute the octave, the fifth, the fourth and the major third, and are just the beginning of a whole series of gradually diminishing intervals that constitute the harmonic series, (see Example 1).

EX. 1. THE HARMONIC SERIES

THE NOTATIONS ARE ONLY APPROXIMATIO

1.  
2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16.

As social constructions utilising this series<sup>2</sup>, the underlying structures of the Western musical languages possess the common element of being variously grounded upon the intervals of the octave, fifth and fourth. The keynote in tonality, for example, is dependent on the primacy of the octave, and is also harmonically defined by its relationship to the dominant (at the fifth) and subdominant (at the fourth) of that key. Again, the fundamental interval of the music of Ancient Greece - at least in its theoretical aspect - was the fourth of the tetrachord, two of these tetrachords being put together - "either disjunctly with a note to join them, or conjunctly with a tone to complete their downward series" (Crossley-Holland, 1960, p.102) - to form the octave scale or harmonia. But there also exists another structure, that of pentatonicism<sup>3</sup>, which is based on the intervals of the fifth and the fourth, and which, it can be argued, is the structure underlying a great deal of medieval music.

\* \* \*

It is a principal theme of the remainder of this Part of the thesis on the musical coding of ideologies that both the pentatonically generated modality of plainchant (and of some popular medieval songs) and the subsequently developed language of tonality are mutually exclusive systems derived from the

harmonic series; further, that medieval society retained pentatonicism for reasons of ideological implications, and that post-Renaissance society developed tonality as an integral facet of its own new ideology.

The first step in this argument is to put forward the case for the underlying pentatonic structure of plainchant. Before doing this however, the indigenous nature of the octave, fifth and fourth, both to the music of the Western world in general, and to medieval music in particular, may be more fully illustrated by reference to early organum (that is, parallel singing at the interval of a fifth or the interval of a fourth), and to the reasons that can be put forward for its development. Indeed, starting with the simple element of a monodic line, and assuming that the properties of the harmonic series influenced the manner in which people of different voice ranges sang with each other, it is not difficult to speculate on how parallel singing at the octave, fifth and fourth originated. Not only are the octave, the fifth and the fourth the intervals (audible as harmonics) which occur first in the harmonic series<sup>4</sup>, but the fifth and the fourth provide convenient 'half-way' points between the two notes of the octave (which again, we may assume is the most 'natural' interval for parallel singing) for those whose voice-range does not easily fall within either of the two lines of the octave. Gustave Reese is substantially in agreement with this analysis:

Another explanation [for the 'origins' of parallel organum] is offered by the natural ranges of the four main classes of human voices, which, roughly speaking, lie at pitch levels a fifth away from one another, in consecutive

order from bass to soprano. The congregations that sang responses at services did not consist of trained singers, but sang with ranges they found comfortable. Machabey, on the basis of this, writes: "The division of men's voices into two parallel lines, and of the high-pitched (women's and boys') voices into two other lines paralleling the first, must have followed as a matter of course, without the executants noticing it". In 1908 in France, he heard an untrained congregation singing in organum without apparently, intending to. The men and women each broke into two groups singing a fourth or a fifth from one another, according to the texture of the melody (1940, p.250).

It should be noted in this context that the interval which is midway between the two notes of the octave (that is, the interval comprised by the defining note of this octave and the sixth note of the semitone scale) is the augmented fourth of our tempered scale. This is the only interval that is not even approximated between two adjacent notes of the harmonic series. Moreover, if it is conceived in terms of two non-adjacent notes, the vibration ratio is never the same (5:7, 7:10, 12:17 etc.). In comparison to the fifth and the fourth, therefore, which maintain exactly the same ratios throughout the harmonic series, the unstable augmented fourth seems less of a 'natural' choice as an interval for parallel singing.

The interval of the fourth is, of course, one removed from that of the fifth in the harmonic series, and it could be argued, in the case of parallel organum, that the fourth arises as the inversion of the fifth. Dom Anselm Hughes gives this impression in discussing the organum of the Musica Enchiriadis (see Example 2):

From the Musica Enchiriadis we learn about four types of organum: (1) in parallel fifths, with the plainchant

melody on the top line; (2) in the same, with the higher voice, or vox principalis doubled at the octave below and the lower voice or vox organalis doubled at the octave above, thus resulting in a four part effect . . . ; (3) taking either the higher or the lower pair of these four voices and running on in parallel fourths . . . ; (4) a variant of this last method (1955, p.278).

EX.2. A SECTION OF THE MUSICA ENCHIRIADIS

The musical score consists of four staves. The top staff is labeled 'V.O. DOUBLED' and contains a treble clef with a melody of eighth notes. The second staff is labeled 'VOX PRINCIPALIS' and contains a treble clef with a melody of eighth notes. The third staff is labeled 'VOX ORGANALIS' and contains a bass clef with a melody of eighth notes. The bottom staff is labeled 'V.P. DOUBLED' and contains a bass clef with a melody of eighth notes. The lyrics 'SIT GLO—RI—A DO—MI—NI IN SAE—CU—LA' are written below the second and third staves. The music is in a 4/4 time signature and features a consistent interval of a perfect fourth between adjacent staves.

By inversion, therefore, the occurrence of the perfect fifth also underlines the existence of the perfect fourth, even if the fourth cannot be said to arise in the first place by reason of its position in the harmonic series. But even then, it does not seem legitimate to conceive of a perfect fourth on the fundamental, since no such fourth occurs either in the harmonic series or by inversion of the fifth. However, it could equally well be argued that, once the fourth was established as an equal partner of the fifth, it would not be a very great development for the fourth to become established in its own right as an interval directly relating to the fundamental. Moreover, notwithstanding this theoretical 'difficulty', there still remains much evidence that the fourth, for whatever reason, was as much a 'natural modification' of the 'original' melodic line as the fifth.

## PLAINCHANT AND PENTATONICISM

Given the indigenous nature of the fifth and fourth to Western music, it is not difficult to see how the pentatonic scale could have come into existence<sup>5</sup>. If one takes the fifth and fourth on the original fundamental, and treats them in turn as fundamentals with their own fifths and fourths, then one arrives at a structure of five notes (see Fig. 1). It might seem to the reader that this is a somewhat cursory explanation for the origins of the pentatonic structure in early medieval society. Surely there are many more detailed causes and influences that may be brought to light and put before him? There are two related answers to this possible criticism. Firstly, there can be no ultimate and complete explanation for the occurrence of any social symbol. In the final analysis all that can be said is that this pentatonic structure, as specifically articulated in the plainchant repertory, was creatively evolved<sup>6</sup> in early medieval southern Europe as part of the ongoing construction of social reality. Given this construction of reality, however, other structures with similar features and articulating similar meaning might well have come into being. Secondly, even if it were possible to adduce detailed 'causes' for the creation of this structure - a research project, which, given the almost total lack of written records, would be difficult in the extreme - then such 'causes' would never furnish a complete 'explanation', and, moreover, would be symptoms of continuing structural change, rather than

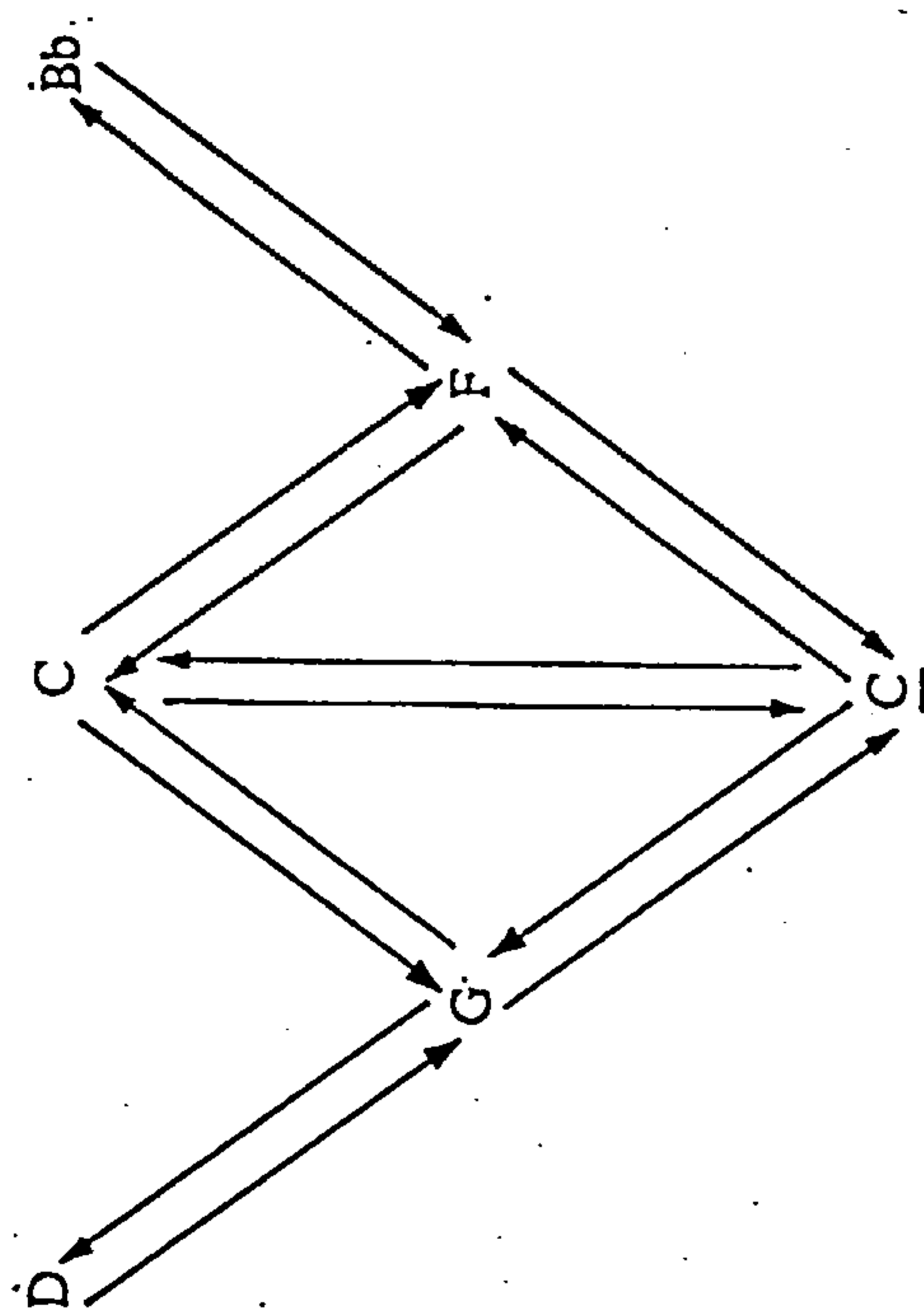


FIGURE 1



causes in the strict meaning of that word.

One of two further questions might also arise in the reader's mind regarding the structure in Fig. 1. The first is that, having accepted the indigenous nature of the octave, fifth and fourth to Western music, why is it that the progression of fifths and fourths shown in Fig. 1 stops at the second level? Why does it go as far as that and no further? The second question is this: once having generated a fifth and a fourth from the original fundamental (the underlined C of Fig. 1), why is it that another fourth and fifth are generated above the G and F rather than other subsequent intervals of the harmonic series? After all, this alternative suggestion does not negate the primacy of the fifth and the fourth, and would allow for the introduction of other intervals (audible as harmonics) into the underlying structure. There are not, and never can be, 'intra-musical' answers to these questions, for the organisation of musical structures is ultimately a dialectic correlate of the social reality that is symbolically mediated by and through the music of a particular society. The answers will only emerge, therefore, as an attempt is made to demonstrate the way in which pentatonicism and tonality have respectively mediated the medieval and industrial world senses.

\* \* \*

There are fundamentally three pieces of evidence<sup>7</sup> which

support the hypothesis that Gregorian chant in particular, and medieval music in general, have an underlying pentatonic structure. Firstly, as Reese has noted, many chants<sup>8</sup> are purely pentatonic: "Whether or not virtually the entire ancient repertoire was based on a pentatonic groundwork . . . the fact remains that a considerable number of Gregorian melodies are clearly pentatonic" (1940, pp.159-160). Furthermore, it is interesting to note that medieval German songs also display a pentatonic character<sup>9</sup>, a feature which, according to Sir Jack Westrup, has "obvious associations with Gregorian chant" (1955, p.259). But even where a Gregorian chant does not display pure pentatonic formulae throughout, there is often convincing evidence from opening phrases and subsequent motives that the pentatonic structure plays a generative role in that chant:

Furthermore, many Gregorian compositions betray their pentatonic origin through characteristic opening phrases of a purely pentatonic nature (usually sung by the cantor alone). These produce an impression of being "principal themes" and are sometimes subsequently developed on a six or seven-tone basis. One finds a still greater abundance of the so-called "trichordal" motives - the nuclei of pentatonic formations. These are composed of three notes within the interval of a perfect fourth and contain no semitones. Thus C-D-F, D-F-G, G-A-C, A-C-D, as well as their various permutations and transpositions, used either consecutively or intermittently are trichordal motives (Yasser, 1937, p.181).

The most obvious objection which can be raised against the hypothesis of pentatonically structured medieval music is that very frequently more than the five notes of the pentatonic scale are in evidence. It seems more than likely, however, that the remaining two notes of the natural gamut which may appear in a chant do so in the role of passing notes:

Still another important piece of evidence should be

taken into account in determining the true scalar basis of mediaeval music. We refer to the quilisma, the symbol for which is today generally believed to have indicated the sounding, within a minor third, of a very light and transient ornamental note (Yasser, 1937, p.182).

As Yasser indicates<sup>10</sup>, a striking precedent for this procedure is to be found in the Chinese pien-tone. Moreover, there is a considerable amount of statistical evidence in support of the theory:

Out of nearly 1600 Gregorian items which at present constitute the principal musical material of the Catholic liturgy, only a little more than 700 contain no quilismas at all. The number of those which do contain quilismas, impressive as it is (amounting to almost 900), must have been greater at the time when, as is supposed, the use of the quilisma was universal for all melodies that employed more than five notes within an octave . . . .

The total number of quilismas found in the 900 compositions referred to is 3100, of which 81.5 per cent are placed within minor thirds, 17 per cent within major thirds, and 1.5 per cent within perfect fourths (Yasser, 1937, p.344).

It may also be pointed out that the passing note theory does much to explain B flat as the sole example of notated 'chromaticism' in early medieval music - that is, it can be heard as one of the two possible passing notes between A and C: "The pien-tone theory, when its implications are fully worked out, shows that B flat is not merely a faintly undesirable substitute for B natural, as the theorists too often imply, but its peer; and the melodies themselves, with their frequent use of B flat, bear this out" (Reese, 1940, pp.160-161). Finally, if the original objection is still maintained by asserting that the passing notes are bound to immediately destroy any feeling for pentatonicism, and are likely to create an incipient feeling for tonality, it may be pointed out that the existence of chromatic passing notes in tonal music

does not immediately imply the destruction of tonality and the creation of atonality. It is not necessary, in order to demonstrate the existence of a particular musical structure, that only the notes of that structure be present in the music itself. What is necessary is to indicate that the structure, as articulated by and through the music, determines both the relative importance and function of the notes as used, as well as the more general characteristics of the archetypal melodic (and harmonic) formulae.

This second line of argument for the generative function of pentatonicism in plainchant has been greatly substantiated by Jacques Chailley in two recent articles<sup>11</sup>. Chailley's position is that the traditional eight modes of plainchant are in fact extensions of pentatonicism:

Qu'est-ce qu'un mode grégorien? Dans l'optique de l'étude ci-dessus, nous pouvons répondre, en simplifiant au maximum: c'est un modèle formulaire provenant de l'amplification ornementale d'un schéma mélodique reliant une tonique à une corde de récitation ou teneur (dite plus tard dominante), sur une échelle pentatonique fixe comblée ad libitum par des degrés faibles plus ou moins mobiles (1970, p.85)<sup>12</sup>.

These modes, it may be argued, cannot be regarded as tonal formations in quite the same way as tonality can. For whereas tonality is a musical language universally evident in European 'cultured' music between approximately 1600 and 1880, many individual chants are either modally ambiguous, or do not convincingly fit into any mode at all. Moreover, without denying that much plainchant does fit into modal analysis, and may therefore be said to articulate different concepts of time-

space within that more generally articulated by the generative pentatonic structure, it seems very likely that the theoretic concept of the eight modes originally had as much to do with theological numeric symbolism as it did with rationalising strictly musical evidence<sup>13</sup>. The theory of tonality on the other hand, was completely derived from the music of the tonal period and is consequently universally applicable to that music.

Chailley takes as his point of departure two 'facts' which, in his opinion, have been largely ignored by traditional theory: the pentatonic nature of very old melody<sup>14</sup> ("le caractère pentatonique de la mélodie la plus ancienne"), and the historical importance of chanting the psalms, and so of the reciting note or tenor used in that chanting ("l'importance historique de la psalmodie et par conséquent de la corde de récitation ou teneur"). The importance of the tenor lay in the tendency of most chants to move around it before descending to the final ("Les usages universels de la cantillation nous enseignent que la tendance la plus courante de celle-ci conduit d'une part à des broderies autour de la teneur, d'autre part à une chute mélodique finale au grave de celle-ci . . .").

These legacies, argues Chailley, were highly influential in the development of both the gregorian chant and the eight modes, these latter evolving from the interaction of four factors:

1. The range defined by the tenor and the final (the final gradually replaced the tenor in importance and traditionally became the somewhat unsatisfactory method

of assigning a mode to a chant). This range could be a minor or major third, a perfect fourth, a perfect fifth (these perfect consonances being the most 'fertile' generators of modes) and, exceptionally, a minor sixth.

2. The shape of the melodic kernel whose range has been fixed by the tenor and final. If one takes a strict pentatonic scale (and Chailley is very precise in his definition: "l'échelle de base étant celle du pentatonique anhémitonique divisant facultativement ses trihémitons incomposés par des piens faibles et souvent mobiles dont la hauteur . . . se seraient vu fixée par l'attraction"<sup>15</sup>), then, by starting in turn on each of the five notes it is possible to arrive at different internal shapes for the intervals of the fourth and fifth (this explains their 'fertility'). i.e.:<sup>16</sup>

Perfect fourth:

|             |   |                         |              |
|-------------|---|-------------------------|--------------|
| C D F G A C | = | $\overline{T\ 3}$ T T 3 | } Shape "I"  |
| G A C D F G | = | $\overline{T\ 3}$ T 3 T |              |
| D F G A C D | = | $\overline{3\ T}$ T 3 T | } Shape "II" |
| A C D F G A | = | $\overline{3\ T}$ 3 T T |              |

The remaining 'scale' does not give an initial interval of a fourth.

Perfect fifth:

|             |   |                          |              |
|-------------|---|--------------------------|--------------|
| F G A C D F | = | $\overline{T\ T\ 3}$ T 3 | Shape "I"    |
| C D F G A C | = | $\overline{T\ 3\ T}$ T 3 | } Shape "II" |
| G A C D F G | = | $\overline{T\ 3\ T}$ 3 T |              |

D F G A C D =  $\overline{3 T T} 3 T$  Shape "III"

The remaining 'scale' does not give an initial interval of a fifth.

3. The fixing by attraction of the weak notes to be found in the two intervals of a minor third created by a pentatonic scale.
4. The manner in which the range of the melodic kernel was extended to give the ambitus (range) of a chant. This determined whether a mode was authentic or plagal.

This analysis by Chailley has the advantage over the traditional classification of being able to account for modally ambiguous chants and chants which do not fit properly into the modal scheme.

Finally, it would seem that the importance of the fourth and the fifth to both the pentatonic structure itself and that structure's generation of chants and modes finds expression in the method of analysis used by medieval theorists in regard to the modes. All eight modes (in the symmetrical systematization of Hermannus Contractus) were viewed as being founded on these two intervals:

The system of the octave-species . . . soon yielded ground in the analytical writings, being replaced in large part by consideration of what might be called the modal nucleus consisting of the notes immediately above the final, and of the various species of pentachords and tetrachords. The admissible pentachords were TSTT, STTT, TTTS and TTST; the admissible tetrachords were TST, STT and TTS; the diminished fifth and augmented fourth were inadmissible species (Reese, 1940, p.156).

This classification is closely linked with the designation of the octave, fifth and fourth as the only admissible consonances in

medieval music, at least until the thirteenth century:

The classified species of the Middle Ages are bounded solely by medieval consonances - the fourth, fifth and octave. To obtain a full complement of early medieval consonances one need add to these only the unison and such octave-compounds as the twelfth. The compass of the authentic modes is often extended downwards by one degree . . . but these modes, nevertheless, continued to be classified according to the species, not of their ninths, but, like the others, of their octaves . . . . The sixths, also, dissonances in the early Middle Ages, are among the intervals that never bound classified species: the hexachord though used for purposes of classification, was not applied to the distinguishing of species. It could not have been, in its Guidonian form, since its TTSTT structure never varied (Reese, 1949, pp.156-157).

The exclusive use of the octave, fifth and fourth as consonances in early medieval music and as the distinguishing features of modal species provides striking parallels to the exclusive role of the fifth and fourth in generating a pentatonic structure. Moreover, given the exclusive use of these intervals as consonances and distinguishing features, it would be surprising to find that any other interval or intervals were fundamental to the structure of Gregorian chant. Indeed, if the melodic formulae of the chant do in fact articulate the fifth and the fourth as basic structural elements, then it is but a small step to the externalisation of these implicit elements as analytic tools.



## NOTES:

1. There are certain forms of twentieth-century music, of course, to which this statement would not apply.
2. The question arises as to how conscious these rationalisations are. The entire question of consciousness vis-à-vis music in any society is very difficult, and cannot be discussed here in any detail. However, some general comments may be briefly made. Firstly, 'explicit' cultures would seem to have a greater degree of consciousness regarding some aspects of the world (including, for example, the harmonic series) than 'implicit' cultures. This degree of consciousness may be musically encoded. But, secondly, the musical encoding itself may be a largely unconscious process. This seems to be the case with both plainchant and tonality. In each case theoretical rationalisation takes place after the language has become established, and in the case of plainchant, it is clear that the generative pentatonic structure is never made explicit. The fact of ex post facto theoretical rationalisation would seem to suggest that the 'rationalisation' of the harmonic series that initially takes place 'in' the music itself is largely unconscious. Thus, although Western man has been conscious of the harmonic series, its influence has still been an unconscious one as far as the formulation of musical languages is concerned. It is only during the twentieth century that a music's 'deep structure' has consciously preceded its composition.
3. It is, in fact, quite possible that Ancient Greek music had an underlying pentatonic structure. Not only do the tetrachord and harmonia demonstrate a predilection for units of the fourth, octave, and subsequently, fifths, but the principle intervals of the diatonic genus (a whole tone) and of the enharmonic genus (a major third) are intervals that circumscribe units of conjunct motion within the scale (e.g. GAB DE). Moreover, the minor third of the chromatic genus is the interval derived from moving conjunctly between such groupings. This argument, however, must remain largely speculative.
4. See Reese (1940, p.250) and Hughes (1955, p.275).
5. There is some argument that a high proportion of pre-literate musics are based on the pentatonic scale. In this respect Reese (1940, pp.256-257) has noted that "all the primitive music based on a definite tonality system displays as its

most important structure-determining interval either the fourth or the fifth. Since the pentatonic scale, which we may indicate by the symbols CDFGac ... is fundamental in all such music, the interval C - F ... governs the melodic structure in some cultures (generally the more primitive) and the interval F - c ... is predominant in others". Yasser (1932, p.335) has also expressed the opinion that "modern musical science ... accepts ... the historic universality of the pentatonic scale may be found in the past or present musical practise of almost every country". It is, in fact, extremely doubtful whether any of the structural elements mentioned can be regarded as universals. Yasser, particularly, is on very doubtful ground. The Balinese Pelog scale, for example, is not very close to the pentatonic. Neither is much Venda music (see Blacking 1973). Yasser's theory smacks of an 'evolutionary' approach to music history.

6. See the arguments above, pp.122 -124, and pp.167 -169.
7. There is the possibility of a fourth piece of evidence in that parallel organum adopts the intervals of the fifth and the fourth, and these can be regarded as externalisations of the implicit melodic structure of plainchant. In that one has to assume the structure for this to become evidence, the argument might be regarded as somewhat circular, a criticism which could also be applied to the rationalisation of the modes in species of fifths and fourths. It has to be realised of course, that the processes under examination are dialectic and do not easily lend themselves to sequential analysis. Even in sequential terms, however, both 'externalisation' arguments take on more significance in the light of the first two pieces of evidence given in the text.
8. According to Joseph Yasser (1937, p.344), some 700 out of the 1600 "which at present constitute the principal musical material of the Catholic liturgy".
9. See Reese (1940, p.233).
10. See Yasser (1937, pp.182-183).
11. Because Chailley's theories are very detailed in their implications and very tightly argued, their full presentation in the text would have taken up more space than was warranted in the light of the overall argument. Although sufficient evidence is therefore presented in the text to show how eight modes (as well as modally ambiguous chants and those chants which fit no mode at all) could arise from the same

pentatonic structure, it was thought more appropriate to present Chailley's ideas in translation in Appendix V.

12. "What is a gregorian mode? In the light of the following article we are able to reply with the utmost conciseness: it is a formulary pattern originating from the ornamentation of a melodic shape which links a tonic note with a recitation note or tenor (latterly called the dominant) in a fixed pentatonic scale. This pentatonic scale is freely completed with weak notes which are more or less mobile".
13. See Werner (1948, pp.211-255). Two of the conclusions drawn by Werner are particularly interesting. The first (p.254) is that "the principle of the octoechos originated not in musical but in cosmological and calendaric speculations. While the principle of eight modes is common to the entire Near East and, through Christianity, conquered Europe, its concrete musical implementations vary greatly according to the indigenous traditions of western folk-lore in the respective orbits". Secondly, (p.255) Werner concludes that "while the existing ecclesiastical modes must be considered post factum constructions of the theorists, the conception of an eightfold modality was an a priori postulate of a religio-mythical nature to which theorists had to adjust the various systems of modes".
14. It is far from clear exactly what Chailley means by this reference to very old melody. The work of P. Delalande and Y. Hameline is mentioned, but without a sufficient reference being given to enable it to be traced. From the context it is possible that Chailley is referring to the chant of the Near East.
15. "the basic scale being that of a pentatonic scale without any semitones in which the unfilled minor thirds are optionally divided by weak and often moveable piens whose exact placement within the minor third would seem to be fixed by attraction [to more important notes]".
16. In the following scheme 'T' indicates a whole tone and '3' a minor third.

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CHAPTER TEN

THE ARTICULATION OF AN IDEAL FEUDAL  
STRUCTURE THROUGH PENTATONICISM

Unlike those of tonality, the fundamentals of pentatonicism are interlocking and mutually dependent; they do not point outside themselves. It is both impossible and invalid to hear any one note of the structure as the one to which all others irrevocably and necessarily tend. Assuming that passing notes are not important structural elements in pentatonicism, six relationships only are possible for a pentatonic melody. The notes referred to are those of Fig. 1. Ex. 1 may also be consulted:

1. Any note can be heard as its own fundamental.
2. All the notes (except B flat) can be heard as the third harmonic relating to a second (perfect fifth).
3. All the notes (except D) can be heard as the fourth harmonic relating to a third (perfect fourth).
4. D can be heard as the fifth harmonic relating to a fourth (major third).
5. F and B flat can be heard as a sixth harmonic relating to a fifth (minor third).
6. C, D and G can be heard as an eighth harmonic relating to a seventh (whole tone).

Which of these relationships will be heard for any particular note will depend entirely upon its position in any particular melody, with the preceding note (ignoring passing notes) most probably being the most important factor. One can, of course, make a similar assertion for tonality. Any note of the major or minor scale may perform a number of different functions, all of which depend upon specific content. But whereas the function

of tonal notes depends upon a definite hierarchy in which certain relationships may be heard as more 'important' or 'fundamental' than others - thus giving rise to the oppositions of concord and discord, and the 'distancing' of modulation - the relationships of pentatonicism have no hierarchy. Any one relationship is as 'important' or 'fundamental' as any other; it exists to a very large extent by and for itself, having no hierarchical function outside itself.

Yet, although no one note of a pentatonic melody can become a basic fundamental to which all others must at some time resolve, many pentatonic and modal melodies give the feeling that one note is more important than the others. This feeling is created simply by stressing one note (such as the tenor of a chant) more than the others, and this sense of importance, as Rudolph Reti has pointed out<sup>1</sup>, is of a 'melodic' rather than a 'harmonic' nature<sup>2</sup>. Reti also demonstrates that a melody which possesses 'melodic' rather than 'harmonic' centrality can be brought to rest on the important note at any point in its duration. To attempt the same with a melody of harmonic tonality would be to "destroy the innermost sense of the whole line"<sup>3</sup> (Reti, 1958, p.16).

\* \* \*

As was briefly noted in Chapter Three feudal society was

of a highly decentralised and localised type. The collapse of the Roman Empire, itself strongly centralised, created a situation favourable for the emergence of small social units whose population, at least in theory, were mutually dependent upon one another:

To seek a protector, or to find satisfaction in being one - these things are common to all ages. But we seldom find them giving rise to new legal institutions save in civilizations where the rest of the social framework is giving way. Such was the case in Gaul after the collapse of the Roman Empire.

Consider, for example, the society of the Merovingian period. Neither the State nor the family any longer provided adequate protection. The village community was barely strong enough to maintain order within its own boundaries; the urban community scarcely existed. Everywhere the weak man felt the need to be sheltered by someone more powerful. The powerful man, in his turn, could not maintain his prestige or his fortune or even ensure his own safety except by securing for himself, by persuasion or coercion, the support of subordinates bound to his service. On the one hand, there was the urgent quest for a protector; on the other, there were usurpations of authority, often by violent means. And as notions of weakness and strength are always relative, in many cases the same man occupied a dual role - as a dependent of a more powerful man and a protector of humbler ones. Thus there began to be built up a vast system of personal relationships whose intersecting threads ran from one level of the social structure to another (Bloch, 1961, pp.147-148).

The creation of a social system which "involved a far-reaching restriction of social intercourse, a circulation of money too sluggish to admit of a salaried officialdom, and a mentality attached to things tangible and local" (Bloch, 1961, p.443), naturally favoured the oral and face-to-face mediation of social relationships. Both medieval society and medieval man became "centres without margins"<sup>4</sup>:

Imagine two men face to face; one wishing to serve, the other willing or anxious to be served. The former puts his hands together and places them, thus joined, between the hands of the other man - a plain symbol of submission



the significance of which was sometimes further emphasised by a kneeling posture. At the same time, the person proffering his hands utters a few words - a very short declaration - by which he acknowledges himself to be the 'man' of the person facing him. Then chief and subordinate kiss each other on the mouth, symbolizing accord and friendship. Such were the gestures . . . which served to cement one of the strongest social bonds known in the feudal era (Bloch, 1961, pp.145-146).

In this fashion one became the 'man of another man' rather than an anonymous cog of a strongly centralised bureaucracy.

\* \* \*

In commenting upon the cross-fertilisation of medieval sacred and secular music, Mellers has drawn a striking analogy between music and society:

Not only had the religious art-music of the Middle Ages and the popular folk music many qualities technical and spiritual, in common; there was a continual interaction between them which is of crucial importance from both a sociological and a musical point of view. There have been many learned arguments as to which came first, which influenced which, that seem to me irrelevant. If the feudal order meant anything (and one knows it nearly always failed to live up to its pretensions) it was an order in which cleric and peasant mutually succoured each other, one provided for the needs of the body, the other for the needs of the soul. They were complementary parts of a social organism, allied in their very differences, and their respective musical manifestations likewise complement one another (1946, p.26).

It is possible to go much further than this, however, for the pentatonic structure underlying much medieval music in itself serves to articulate the ideal feudal structure. The fundamentals of pentatonicism are complementary and mutually

dependent on one another. They are also centres without margins in the sense that the relationships they form are made directly with other fundamentals, something that is simply not the case with tonality. Indeed, insomuch as one note of the pentatonic structure may be stressed more than the others, Bloch's statement that feudal society was "unequal . . . rather than . . . hierarchical" (1961, p.443) is one that could equally well be applied to the structure of pentatonicism as found in medieval music.

The structural articulations of medieval music are not restricted to the 'spatial' sphere alone, however. Both the spiritual rhythm of plainchant<sup>5</sup> and the corporeal rhythm of folk-song<sup>6</sup> conveyed a revelatory sense of becoming rather than an incarnate sense of being<sup>7</sup>. Time was a product of becoming:

To change was to pass from potentiality to actuality. But this transition had nothing about it necessarily temporal. By virtue of the Christian doctrine of omnipotence it could have a temporal quality only if there were some cause which did not allow the immediate transformation by divine action of the potentiality into the act. And this cause which required that time be involved in the change was a certain defect of matter . . . . From this point of view, matter was nothing other than a persistence which, manifesting itself in the substance of a thing, hindered that thing from assuming instantly the fullness of being which its form would confer upon it, a resistance which introduced distance and tardiness, multiplicity and delay, where everything, it seemed, should have happened simultaneously and at once (Poulet, 1956, pp.4-5).

The instaneity of oneness with God stands in stark opposition to the spatialised temporality of industrial man. Both negate the subjective flow: oneness with God implies a complete losing of the self, a solipsistic consciousness, whereas the conceptual

control of spatialised time indicates a consciousness of consciousness together with a sense of history, progress and all the other categories of understanding symptomatic of the industrial world sense<sup>8</sup>. In negating the instantaneity of oneness with God, however, the temporal flow of consciousness reveals time without making it incarnate as 'objective fact'. The conceptual control medieval man has over the universe, therefore, remains slippery: "these men, subjected both externally and internally to so many ungovernable forces, lived in a world in which the passage of time escaped their grasp all the more because they were so ill-equipped to measure it" (Bloch, 1961, p.73). But, as Bloch indicates, the lack of measurement (and measurement is so vital to the time of industrial man) "was but one of the symptoms . . . of a vast indifference to time" (1961, p.74) and so of the fact that medieval man still largely existed within time.

The revelatory nature of becoming is therefore closely related to medieval man's 'lack' of self-contained margins. Medieval man feels much more intimately involved with and effected by events than does industrial man. Both the mutual dependency of the pentatonic fundamentals of medieval music and that music's spiritual and corporeal rhythms articulate this revelatory immediacy. It is hardly surprising, therefore, that from the standpoint of industrial society, the music of medieval man seems to negate the individuality which is a dialectic correlate of that society's world sense<sup>9</sup>. Mellers, for example, is of the opinion that the singer of plainchant "is

not interested in the 'expression' of the individual" but in "the medium through which the voice of God manifests itself" (1946, pp.24-25). Again, in noting certain similarities between plainsong and some secular songs, the same author infers a link between musical structure and the structuring of medieval society and consciousness:

The rhythms are extremely flexible, flowing naturally from the spoken inflection ...; there is a tendency towards fluid pentatonic vocal figurations analagous to the plainsong tropes; there is an habitual avoidance of leading notes and implied full closes, the same insistence on conjunct motion and the absolute and perfect consonances. The impression still tends, that is, to the merging of the personality in something outside itself; for all the local details of the songs, the effect is not that of the incarnation of a 'personality', but of a creative act which is independent of any particular person, made manifest through the human voice (1946, p.25).

## NOTES:

1. Reti in fact uses the phrases 'melodic tonality' and 'harmonic tonality'. The word tonality was omitted in this context because it seemed confusing. 'Tonality' in this chapter refers exclusively to the musical language prevalent in Europe between approximately 1600 and 1900.
2. Again, one must question Reti's use of the words 'melodic' and 'harmonic'. The classification Reti is attempting extends much beyond that which is simply melodic and that which is harmonic. The sense of importance of the keynote in a tonal melody without harmony is not in the slightest bit 'melodic' (according to Reti's categorisation) and there are some harmonies, such as are to be found in impressionistic music and the blues, which work in a decidedly 'melodic' fashion (again according to Reti's categorisation). The specific reservations about the use of words such as 'melodic' and 'harmonic' have been made elsewhere (see above pp.174 -183). For the purpose at hand, however, Reti's classification is sufficient.
3. This method is not the only one by which one note may be given more prominence than another in pentatonically based melody, and it is not to be suggested that it is the one which necessarily gives rise to the inequality of fundamentals as experienced in plainchant. Two other methods may be mentioned. The first is provided by the curvilinear shape of a melody which seems to create (possibly by the desire of the voice to relax the tension created by moving up and away from the first note) the propensity for the melody to return to its starting point. The second, which is related, involves the use of reverse curvilinear shapes together with normal curvilinear shapes so that the melody pivots about a median note.
4. See above p.59.
5. There is insufficient space here to describe the often vitriolic disputes which have surrounded the question of plainchant rhythm. For a survey of the dispute see John Rayburn (1964). For the purposes of this chapter it is adequate to note that all the three main schools of thought agree that plainchant rhythm was 'free', and that only an insignificant minority of scholars consider that it was strictly metred in the manner of tonality. No-one has ever suggested that plainchant had a rhythm founded on bodily movement.
6. As with pentatonicism, spiritual and corporeal rhythm are elements that medieval music has in common with some pre-literate musics. Again, thorough comparative studies would be needed to establish that the rhythms of medieval music

betray a conceptual framework essentially different from those of pre-literate musics. It is interesting to note, however, that medieval man's sense of time does involve a marked degree of distancing and historicity which one would expect to hear articulated in the rhythms of his music - see Georges Poulet (1956, pp.4-5).

7. These two phrases (a 'revelationary sense of becoming' and and 'incarnate sense of being') refer respectively to relationships with the world typical of orally mediated and typographically mediated societies.
8. See above, Chapter Three.
9. See above, Chapter Three.

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CHAPTER ELEVEN

THE DEVELOPMENT OF TONALITY:

A STRUCTURAL APPROACH



Accepting the notions of implicitness and explicitness, and the assertion that all musics articulate social-intellectual structures, the difference between the monody of plainchant and the initial harmony which develops into tonality might not appear as great or as 'fundamental' as one might think<sup>1</sup>. For the parallel fifths and fourths of organum make explicit in this first form of Western harmony the fifths and fourths of the underlying and implicit pentatonic structure of much early medieval music. Such externalisation only represents a transient stage between the pure monody of pentatonicism and the fully-developed harmony of tonality, however, for pentatonicism, in thus becoming harmonically explicit, began to destroy its own implicit qualities. As we have seen, the only inequality existing between the fundamentals of pentatonicism resulted from the stressing of one note through repetition - a stressing which did not serve to break up the mutual dependency (and therefore the ambiguity of relationship) existing between the fundamentals. The creation of the vox principalis and the derived vox organalis, however, destroys this mutual dependency by creating a hierarchy. The vox organalis only exists insomuch as it is a function of and refers back to the previously self-sufficient vox principalis. Although the vox organalis taken on its own (as in the Musica Enchiriadis - see Ex. 2) could well be a self-sufficient line of plainsong, the way in which it is conceived and heard by medieval man negates such a possibility. It is now possible to extend Figure I to include these externalisations (see Fig. 2).

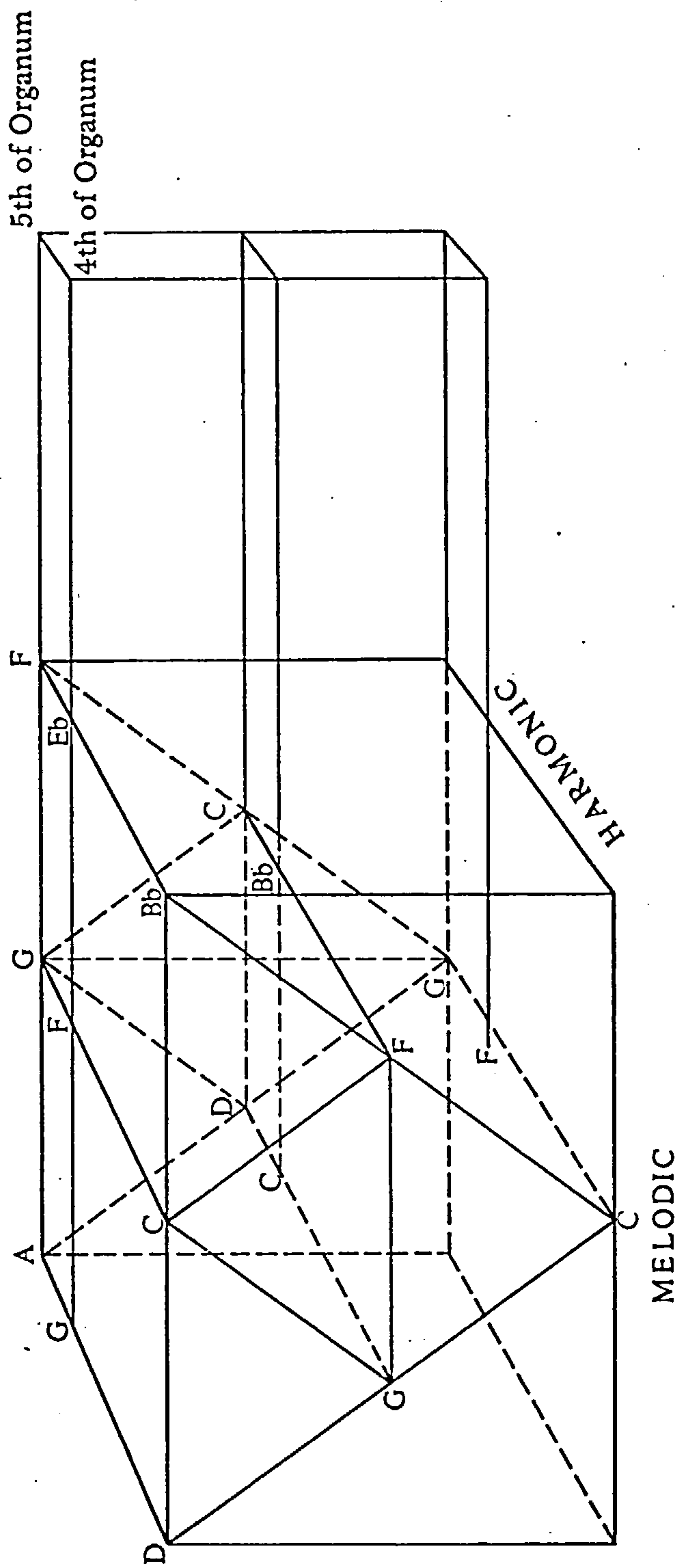
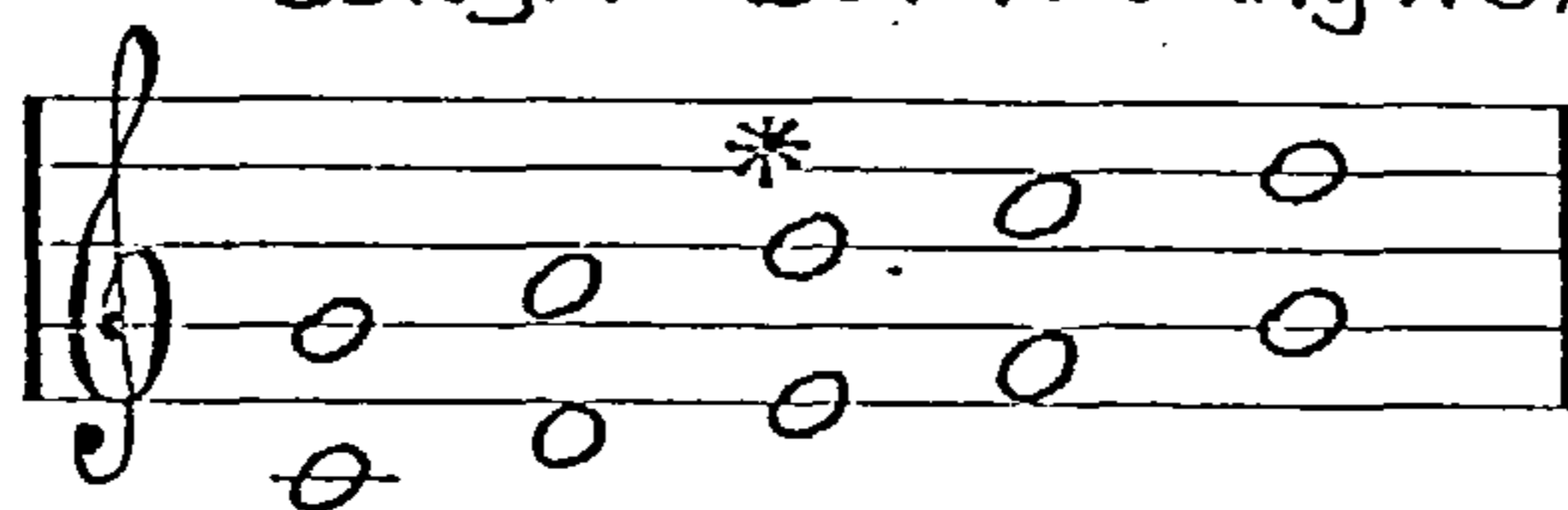


FIGURE 2

Furthermore, organum may give notes which were previously quilismas a different hierarchical function, thus weakening their previous role as passing notes. In Ex. 3, for example, a note which is a passing note within the mode is now heard as a function of a fundamental.

Ex.3

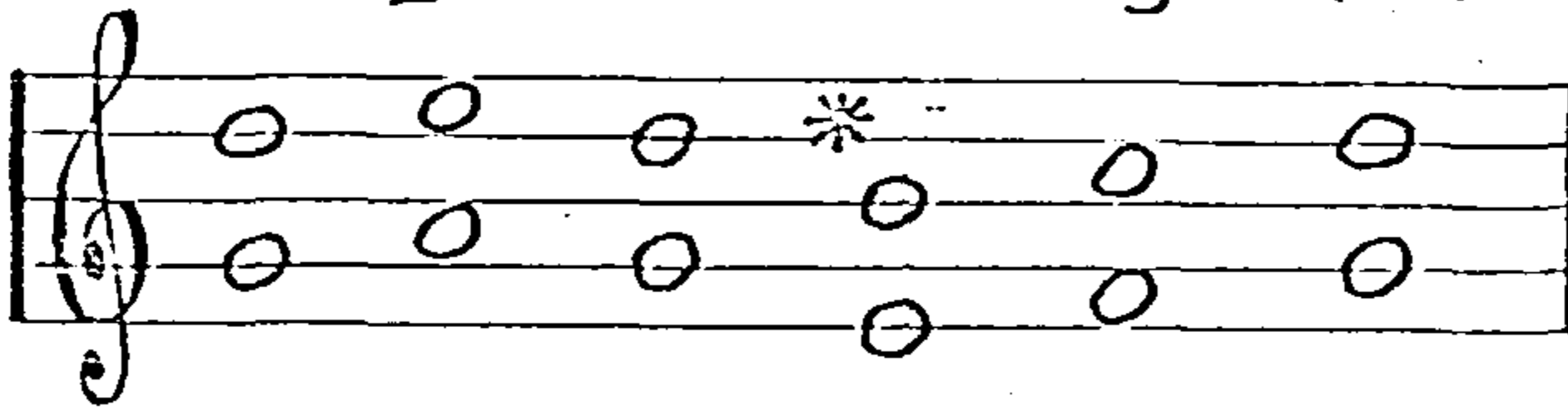
CDEGA B&F PASSING NOTES



The process is more obvious in Ex. 4, where a piece of disjunct motion utilises the note in a fashion that denies any possibility of it being heard as a passing note. Notes which were previously quilismas and, as such were unessential, here become essential parts of the structure of organum<sup>2</sup>.

Ex.4

CDEGA B & F PASSING NOTES



This is demonstrated in Figure 3.

The role of organum in negating the very structure it is externalising can be further explained by considering the increasing importance of musica ficta to the emerging polyphony of the late Middle Ages. It has already been noted that the augmented fourth or diminished fifth, as approximated from the harmonic series, is a very unstable interval that falls roughly halfway both in an octave and between the intervals of the fourth and the fifth. Medieval theorists have labelled it diabolus in musica, therefore, not only because of its instability, but because any musical reference to it would tend to deny the 'natural' function of fourths and fifths in halving the octave, and so ultimately deny the underlying structure of pentatonicism. As a corollary of this denial, there would exist

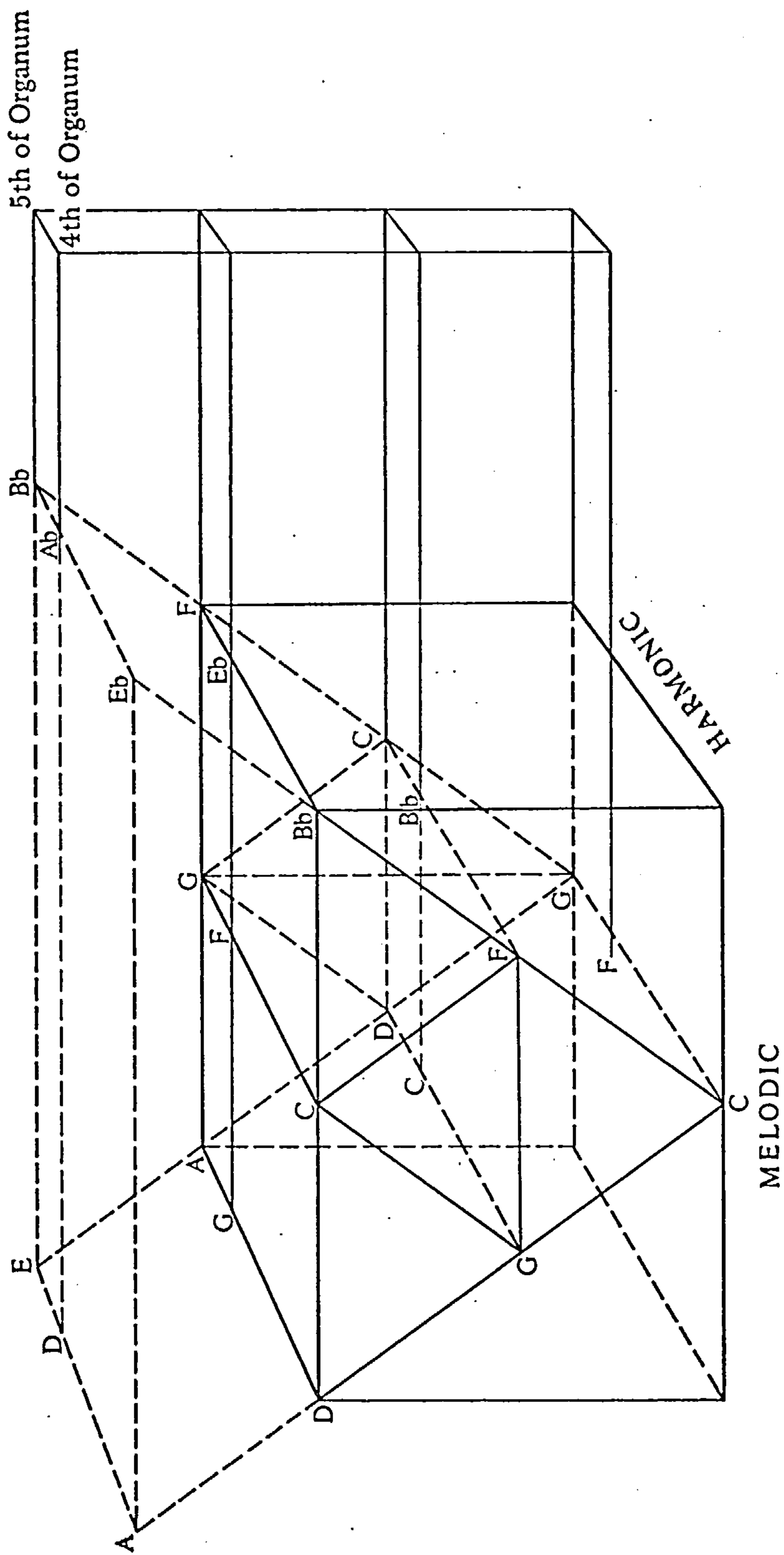


FIGURE 3

a negation of the feudal structure of medieval society. It is furthermore worth noting, however, that the augmented fourth is the only interval that does not naturally result from the pentatonic structure and its passing notes. Fifths, fourths, major and minor thirds and whole tones can all be derived from the pure pentatonic structure, and the semitones occur as a result of quilismas. Augmented fourths can only occur in a pentatonic melody by a leap to or from a passing note, a procedure which negates the very function of a passing note. The fact that augmented fourths are not found in Gregorian chant not only supports the pentatonic theory, therefore, but again shows, from a practical standpoint, how the admission of augmented fourths would undermine a pentatonic structure by giving passing notes an emphasis they do not possess.

The parallelism of organum is therefore constrained to avoid the augmented fourths that would inevitably result (see Example 5) by resorting to musica ficta. Notes which were not previously part of the natural gamut of a mode thus become an essential part of the structure of organum originating in that mode.

Ex. 5

The image shows two musical staves. The left staff is in treble clef and contains a sequence of notes: G4, A4, B4, C5, D5, E5, F5, G5. The right staff is in bass clef and contains a sequence of notes: G3, F3, E3, D3, C3, B2, A2, G2. An augmented fourth interval is indicated between the G5 note on the left staff and the B2 note on the right staff, marked with an asterisk (\*). The letters 'TO' are written between the two staves.

In Fig. 3, for example, three natural gamuts may be derived from the original pentatonic structure (C D F G Bb):

C D E F G A Bb  
 C D Eb F G A Bb  
 C D Eb F G Ab Bb

\* C D E F G Ab Bb \*

The starred shape is inadmissible, since it does not conform to a natural gamut. From the three admissible gamuts, two different gamuts with one musica ficta<sup>3</sup> note may be derived.

C D Eb F G A/<sup>\*</sup>Ab Bb  
 C D E/<sup>\*</sup>Eb F G A Bb

Figure 3 may thus be modified (see Fig. 4). This process, even more than that of making passing notes an essential part of the structure of organum, again serves to seriously weaken the pentatonic structure being externalised.

Organum, however, does not simply externalise the fifths and fourths of the pentatonic structure but also, in free organum, the seconds and major and minor thirds. Since major and minor thirds do not follow each other in free organum, they will be given as alternatives in Figure 5. For the reasons already discussed with reference to parallel organum, this procedure again negates the implicit qualities of the structure being externalised. A strong potential may therefore be said to exist in both parallel and free organum for the articulation of an explicit 'three-dimensional' structure at the expense of the already existing implicit 'two-dimensional' structure.

\* \* \*

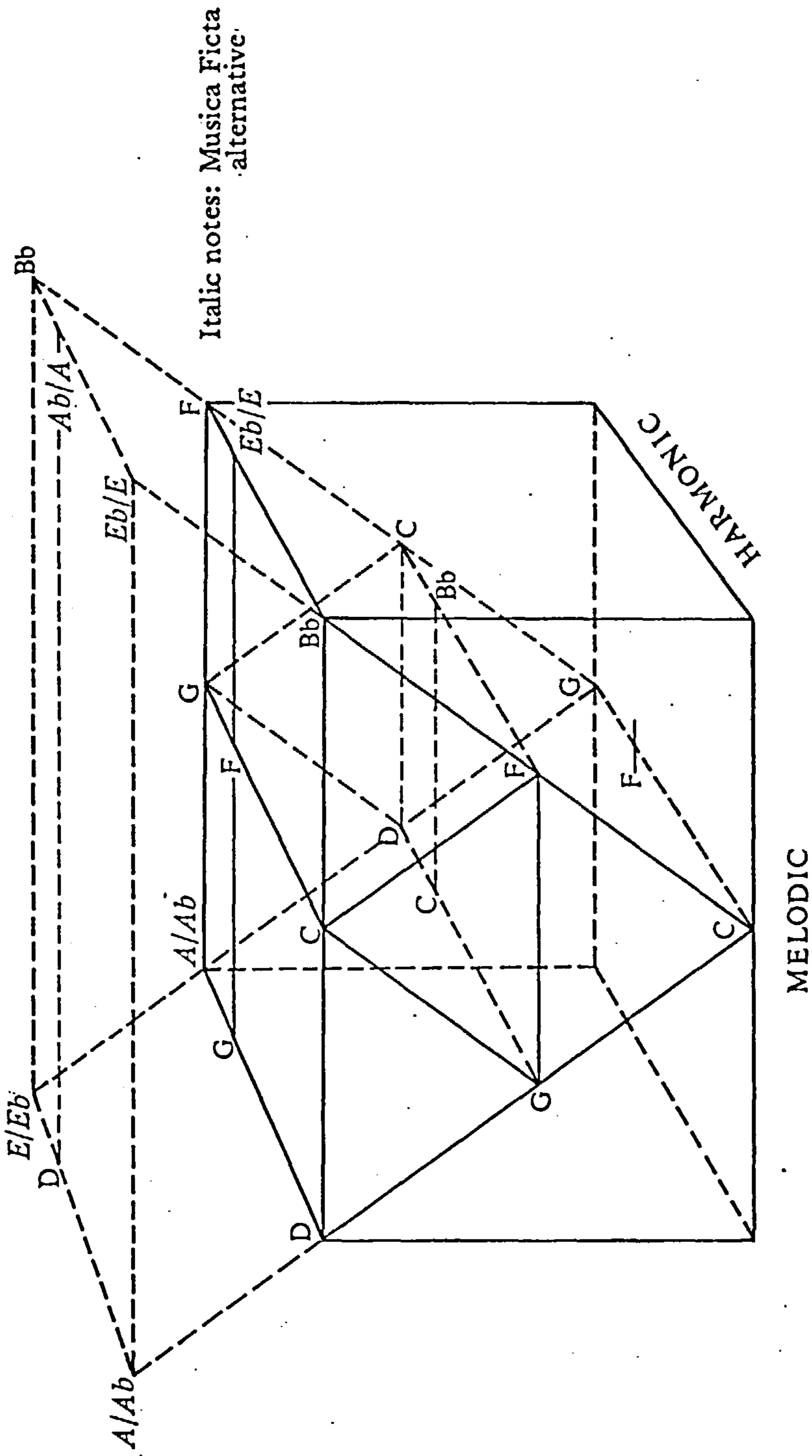


FIGURE 4



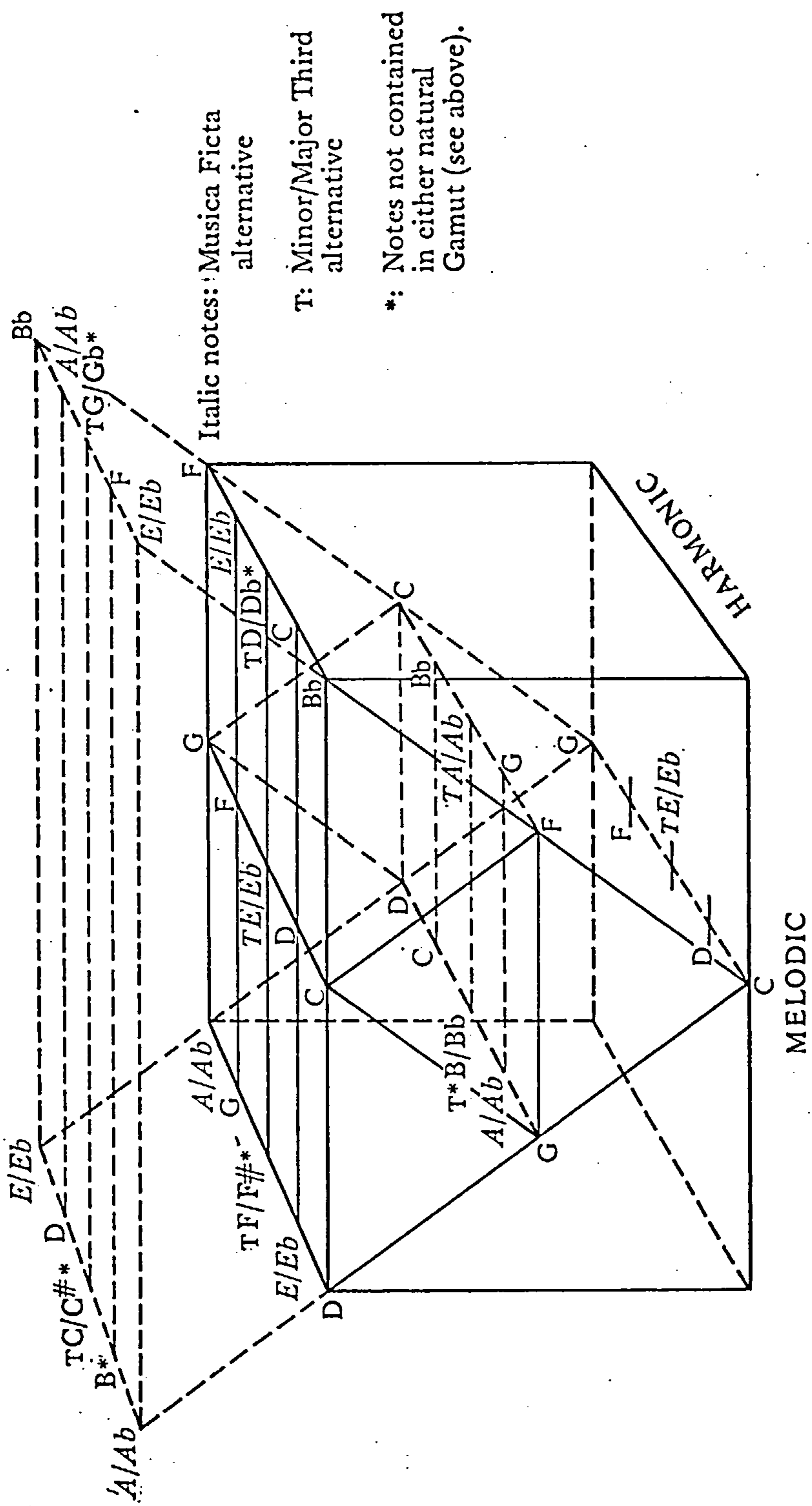


FIGURE 5

Before proceeding any further with this brief analysis, however, it is necessary to examine a little more closely the pre-conditions necessary for the development of tonality together with some of the developmental features related to those pre-conditions. First of all, it is clear that the possibility of externally 'stating' or 'reproducing' elements of music which before were only implicit results from the development of phonetic literacy and its concomitant concepts as outlined in Chapter Three. But, in contrast, it is by no means clear that the inception or creation of polyphony was coincidental with this 'conscious'<sup>4</sup> externalisation. Although Lincoln Bunce Spiess is of the opinion that "there is no scientific evidence extant to prove beyond question that there was a rudimentary polyphonic practice before the organum of the ninth century" (1957, p.15), such practice is a possibility that can hardly be ruled out<sup>5</sup>. The evidence relayed above by Reese to the effect that an untrained congregation may sing 'organum' without apparently intending to would alone seem to suggest that an 'unintended polyphony' was not uncommon in the early Middle Ages.

It might well be the case, therefore, that the process of writing down harmony was partially engendered by the pre-existence of polyphonic forms which, however, were not originally 'conscious' externalisations of the implicit plainchant melodies. It must not only be remembered that without the growing distancing and objectivity of phonetic literacy men might never have been able to recede far enough from the music to notice the implicitly structured and 'accidental' or 'natural' forms of

polyphony (parallelism, heterophony and imitation), but, that without those very forms, literacy might have been used for much longer than was actually the case in encoding monophonic lines, whether implicit or explicit. Indeed, it is a distinct theoretical possibility that the development of an explicit musical structure might never have been harmonically mediated. There exists, in other words, a dialectic relationship between literacy and growing harmonic explicitness in which it is impossible to identify individual cause and effect. In the opinion of Denis Stevens, then, both the perpetuation and development of polyphony are linked with the importance of the book to the Carolingian Renaissance:

The art of writing, of calligraphy, became wedded indissolubly to the art of music. Thus the polyphony of earlier times and distant nations, however well organised into parallel melodies, tune-upon-drones, or thematic imitation, lacked the means to perpetuate itself unequivocally. It was the task of Western nations to transform sounds into symbols (1960, p.211).

It is crucial for an adequate understanding of developing tonality that it is not viewed solely and simply as the result of the harmonic externalisation of a structure formerly implicit in the melodic lines of another culture. Tonality is not just a 'three-dimensional' version of pentatonicism. It must not only be remembered that the phonetically literate concepts (described in Chapter Three) which instigated and facilitated the creation of tonality in themselves changed the very structure of society and consciousness, but that evolving tonality itself represented a creative articulation and encoding of that change. The growth of a musical structure where harmony represents an initial

externalisation of the structure as implicit in melody is therefore part and parcel of a 'fundamental' change in the overall social-intellectual structure. Thus, although it is true that harmony may be regarded as the initial medium for growing explicitness, tonality as it finally evolved displayed a total explicitness which transcends any melodic or harmonic parameters<sup>6</sup>. From this point of view it is incorrect to hear the harmony of developed tonality simply as an externalisation of a structure formerly implicit in melody, or the melody of developed harmony as simply 'containing' structural or 'harmonic' implications that exist only because of the harmony. Any such line of thought ultimately depends upon the assumptional equation of melody with implicitness and harmony with explicitness. The validity of this equation was, of course, brought into question in an earlier chapter<sup>7</sup>.

As a corollary of this discussion, it should be re-emphasised that music does not possess its own internal laws. Tonality was not generated simply from 'within' previous musical forms, but was constructed and created as part of a continually developing social process. Even if music's dialectic relationship with wider social process is accepted, however, it could still be thought that the 'internal' and 'self-sufficient' musical laws which 'caused' tonality paralleled wider social 'causation'. But, as previously argued, social process knows no strict or 'prime causation'. And, since creativity is an integral part of the social process, there can be no ultimate and complete explanation for the particular form that a symbol takes.

Harmonic externalisation cannot therefore be regarded as a link in a causal chain which inexorably leads to the full development of tonality. Rather, it was a symptom of creative and transcendent social change. As already suggested, harmony might well not have been an absolute necessity for the development of an explicit musical language.

\* \* \*

Two further developments were required before the evolving tonality as set out in Fig. 5 could achieve full fruition. Firstly, the third was accepted as a consonance and replaced the fourth as an important structural element. Apart from the fact that the major and minor thirds are, respectively, the next intervals to be generated in the harmonic series after the perfect fourth (see Ex. 1), the pre-conditions favouring the increasing importance of the third may best be elucidated by briefly considering the interplay between practice and theory in the Middle Ages. In an extremely interesting article Richard L. Crocker raises the question of why medieval theorists, given the legacy of the Greek Greater Perfect System, should bother with the construction of smaller theoretical units:

What could be the purpose of articulating the scale into smaller units such as the tetrachord - as Hucbald did and as most other theorists did after him? Why, when early theorists had a complete scale - the Greater Perfect System - did they go through all this business

with scale segments? (1972, p.28).

The probable answer, Crocker states

is . . . that the Frankish musician started with the singing of the chant and worked his way toward theoretical constructions such as the scale, rather than the other way round. He was singer, teacher, theorist in that order. Cantus, not musica disciplina, was his starting point; his curriculum was that of the monastic school of the 7th and 8th centuries, not the liberal arts curriculum of an earlier - or a later - time. The Greater Perfect System itself was not a basic assumption but rather a theoretical abstraction, relatively remote from practical experience (1972, p.29).

"In terms of that experience", Crocker continues, "there was a clear need for a scalar module of manageable size, such as a fourth or fifth" (1972, p.29). In this context it must be made perfectly clear, as Crocker does, that the octave did not provide a suitable scalar module:

Nor was an octave module itself very appropriate; we are so accustomed to thinking of the octave as the basic scalar module that we do not immediately recognize the circumstances under which it is inappropriate. From the Frankish point of view, the octave seemed too large a module . . . . in considering any extended scalar construction, we have to remember that there was no handy mechanical embodiment - no keyboard - for a standard reference . . . . Any tonal structure referred to must be sung and held in the ear. Hence the obvious advantage of using repertory pieces of chant to illustrate, or rather to embody, tonal constructions . . . . This is a specific demonstration of the central importance of chant repertory in the development of medieval theory (1972, p.29).

It appears that the fifth might well have been the most important interval in this interplay between practice and theory. Not only is it the first interval to be generated by the harmonic series after the octave (see Ex. 1) - and therefore the largest consonance to be of any great practical use to the medieval

musician<sup>8</sup> - but, in being the interval of duplication between the disjunct tetrachords around which hexachords were constructed, it was arguably an extremely pervasive common element in medieval theory. Crocker intimates as much in his discussion of the

Musica Enchiriadis scale:

Instead of octave duplication, the scale embodies consistent duplication at the fifth, comparable - but more consistent - to Guido's affinity at the fifth. As Handschin observed, Hermann's instructions, "Take any tetrachord . . . add a tone at either end . . ." apply exactly to the constituent tetrachord of the Musica Enchiriadis scale, the tones added at either end corresponding to the tones of disjunction between successive tetrachords (1972, p.30).

Bearing in mind the overall importance of the fifth, it becomes clear that the preservation of the fourth as a consonance in any developed polyphony having more than two parts would almost inevitably, through inversion at the fifth, produce the unacceptable dissonance of the major second. If medieval theorists could not accept the third as a consonance, there seems little reason why they should have accepted the second. As intervals which occur next in the harmonic series after the fourth, and which come midway between the second and the fourth, the major and minor third could be regarded, therefore, as 'compromises'.

A preference for thirds rather than fourths in the harmonic 'dimension' of Fig. 5 creates a situation highly favourable for the emergence of all the triads of the unified major-minor system. But before this could be achieved, it was necessary for one of the notes in each alternative situation indicated in Fig. 5 to be eliminated in such a way that the

resulting structure only utilized the seven notes of the major scale. This development is indicated in Fig. 6. The scale chosen in Fig. 6 is F major. It should be pointed out, however, that two other scales, Bb major and Eb major, would have been equally possible<sup>9</sup>, and that the particular development shown in Fig. 6 is thus only indicative of a wider and more significant change. For the possibility of deriving three scales from the same structure is symptomatic of the relationship obtaining between the keys of those scales, and so of the homogeneity and 'repeatability'<sup>10</sup> characteristic of the entire major-minor system. One major or minor triad of a particular key has relationships with other major or minor triads that may be precisely duplicated by those other triads if there is an appropriate 'key change'. To put it in practical terms, a piece of tonal music involving modulation may be played in any one of twelve keys.

The homogeneity and repeatability of such inter-relationships are not characteristic of the modal system. In this system each mode has a unique structure which is largely unrelated to the other modal shapes. When the modes were first classified according to their finals, for example, there was no attempt to relate the finals on a common scale: "It is essential . . . to notice . . . that the placement of the several finals on a common scale - so basic a step that we take it for granted - is actually distinct from the classification itself, which presumably came first as a separate step" (Crocker, 1972, p.30).



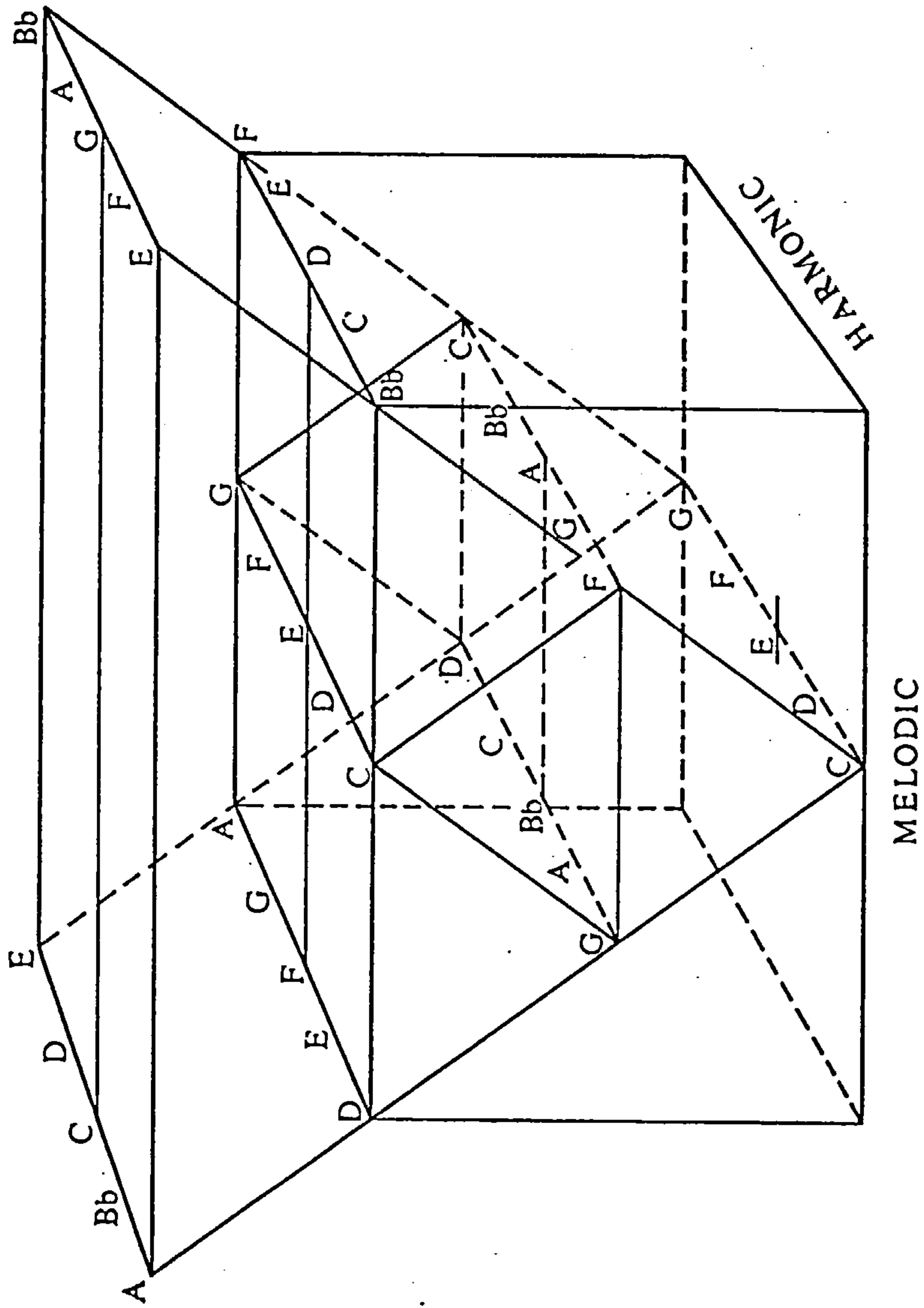


FIGURE 6

As Crocker points out, it is difficult for us, with our background of tonality, to imagine such a state of affairs:

it . . . may require an effort to imagine the situation as it first presented itself to the chant singer: he would have perceived several autonomous groups of chants, each group with its own perceived set of tones and semi-tones, but he would not necessarily have been aware of any common scalar denominator that would relate the groups to each other. Indeed, there may have been no such denominator (1972, p.31).

Although there probably was no common scalar denominator which actually related the different groups of chant, it has, of course, been strongly argued that there existed, in the form of the pentatonic structure, a common generative denominator. In this distinction lies the difference between explicit musical structuring, where the relationships between relata are made perfectly clear in the music itself, and a more implicit structuring, where the music does not obviously display its own underlying structure.

A crucial stage in the development of tonality is therefore achieved which a scalar shape itself provides the module for relating the different shapes<sup>11</sup>. A parallel development took place in medieval theory when the finals of different modes were placed on a common scale adapted and devised for that very purpose. This process does much to explain the importance of the tetrachord<sup>12</sup> to the scale of the Musica Enchiriadis<sup>13</sup> and other medieval theoretical schemes. But it was a process whose implications were only understood with some difficulty, and this difficulty gives a vital insight into the fundamental difference

between the modal and tonal systems:

The underlying moment in this process was . . . to understand the extended pitch realm of the scale (i.e., the Greater Perfect System as adopted by medieval theorists) in terms of the relationships among the finals: - that is, the relationships among any one final and the pitches above and below it and then the relationships among the finals when they themselves were taken to be the pitches above and below each other. This step led outside of and beyond any one final; to put it another way, the ultimate purpose of the tetrachord of the finals was not so much to understand a particular final in terms of a scalar construction as to understand a scalar construction in terms of the network of finals. For it was the scale, not the finals, that needed understanding (Crocker, 1972, p.33). [Second set of emphasis mine] .

The difference between the development as it affected tonality and as it affected medieval theory is that whereas any medieval 'common' scalar denominator was simply a theoretical concept having no direct musical expression, the tonal denominator was of identical shape with the scales being related. As such it had explicit musical expression.

It has already been noted that, in order for the major scale<sup>14</sup> shape to emerge from any of the modal shapes, it was necessary for the alternative notes of plainchant<sup>15</sup> or organum to be eliminated according to a particular pattern (cf. Figs. 5 and 6). It is now apparent that this pattern occurs as a dialectic correlate of the growing explicitness of evolving tonality, an explicitness which requires that the different modal shapes be syncretised into one homogeneous structure with a single unambiguous focal point<sup>16</sup>.

The line of development so far argued in this chapter (see also Figs. 1 - 6) is echoed by Reese in his discussion of

the Notre Dame School. Pentatonic melody and 'tonal' harmony balance each other:

The upper voices, in weaving about the tones of the triad often supplemented them by the second and sixth, thus producing a strong pentatonic effect. But the forcefulness with which the triad makes itself felt, also, and in addition, the increasing appearance of the third shows that the pentatonic and diatonic systems are poised in the balance (1940, p.303).

The third, an interval originally regarded as needing resolution, gradually became a consonance in its own right, and superseded the fourth in its importance as a structural element:

The feeling that thirds need resolution to perfect consonances is illustrated by Anonymus XIII ... who states ... that the major third should be followed by a fifth, and the minor third by a unison .... Practical music in the 13th Century, however, gave greater liberty to the third in particular .... While octaves and fifths predominate in the course of the pieces, the increasing recognition accorded to the third foreshadows the eventual downfall of a harmonic system based on unisons, octaves and fifths, and (originally) fourths - a system, that is, betokening a pentatonic feeling for melody ... - and the approach of a harmonic system based on the triad (Reese, 1940, p.295).

## NOTES:

1. See the discussion above, pp.229 -235, concerning the relationship of implicitness and explicitness to melody and harmony.
2. Since the quilismas can thus become essential both in a harmonic and melodic sense, the melodic part of the diagram is extended up another layer. The relationship between the quilismas in a harmonic and melodic sense is thus indicated - See Fig. 3.
3. The examples and figures use a different set of notes, which serves to emphasise that the discussion is still centred around shapes rather than around notes having a precisely notated perfect pitch. The original pentatonic shape in the example is therefore CDEGA, whereas in the figures it is Bb CDFG.
4. The use of the word 'conscious' in this context has already been briefly discussed (see above, Chapter Nine n. 2). Its use here is meant to indicate that a certain growth in consciousness is being encoded, and not that the process of encoding itself is explicitly carried out or 'conscious'.
5. As we have seen (see above p.231 ), the Venda have a developed harmony, and moreover, a harmony for which Blacking claims a degree of explicitness (see Blacking, 1973, p.85). What is true of the Venda in this respect is probably also true of some other pre-literate tribes (see Nettl, 1956, pp.77-89). Spiess is clearly aware of the existence of pre-literate polyphony, because he refers (1957, p.11) to Schneider's theory that polyphony as we now understand it evolved from such pre-literate polyphony. Spiess does make one comment on Schneider's theory which is important because it once again points up the possibility of white influence (see above Chapter Eight n.15). Although admitting that Schneider's theory is "logical" he says that "there is perhaps room for speculation as regards the alleged 'purity' of the aboriginal tribes from which stem the musical examples of Schneider's hypothetical first stage .... it does seem that during the one thousand years that polyphony has definitely known to be in existence ... some influence, however indirect, may have reached such aboriginal nations and tribes ...."
6. It must be remembered that the harmony of developed tonality is just one aspect of a 'pre-existing' whole. With

evolving tonality, therefore, growing explicitness is as much 'in' the melodic line as it is 'in' the harmony. Although in the case of evolving tonality, there would be no explicitness without harmony, the quality of explicitness is not restricted to the harmony along. What is essentially a useful approach to understanding growing explicitness must not be allowed to distort the actual nature of such explicitness.

7. See above pp.182 -183 .
8. Although the octave was admitted as a consonance by medieval theorists, and although it is important in its relationship to the fifth and fourth, it was not itself an important structural interval in medieval music. Crocker indicates this when he says that "when early theorists spoke of the octave, it was often in terms of its identity of resonance -- 'as when men and boys sing the same note' " (Crocker, 1972, p.29).
9. This may be illustrated as follows:
 

|    |   |   |    |   |   |    |    |   |    |       |
|----|---|---|----|---|---|----|----|---|----|-------|
| Bb | C | D | E  | F | G | A  | Bb | - | F  | major |
| Bb | C | D | Eb | F | G | A  | Bb | - | Bb | major |
| Bb | C | D | Eb | F | G | Ab | Bb | - | Eb | major |
10. Homogeneity and repeatability are key characteristics of the industrial world sense - see above, pp.45 -49 .
11. The shapes are 'different', of course, only in that they have strictly notated perfect pitch. The actual shape is identical in all cases as regards modulation, but not as regards the triads built on each note of the scalar module (cf. below, n. 14).
12. The tetrachord is important because there are four finals, each of which is appropriate to two (one authentic, one plagal) of the eight modes. The number of four is thus linked to the 'origins' of the eight modes as discussed by Werner (see above, Chapter Nine, n. 13). But it is also possible here to indicate a link between Werner's argument and the influence of the Greek Greater Perfect System on the formulation of the modes. For as Crocker indicates, although the classification of the modes is distinct from the placement of the finals of the modes on a common scale, "it is not entirely distinct from the number of finals identified, for this number will depend to some degree upon the type of common scale selected" (1972, p.30). This link again underlines the usefulness of Chailley's scheme in demonstrating how the eight modes could have evolved in

a purely musical sense, whilst at the same time not precluding the generation of plainchant which does not easily fit into any mode.

13. Crocker, (1972, p.33) points out that the scale of the Musica Enchiriadis "was the most extreme exponent" of the development here being described. It is also interesting to note that the emergence of organum and theory (which can be regarded as an externalisation of implicit structure in the same way as organum) occurred at about the same time and in the same area (10th and 11th century France) as the beginning of the breakdown of classic feudalism. This again provides evidence for the argument that music both encodes and creatively articulates socially constructed reality.
14. The minor scale may be said to emerge as a result of the homogeneous nature of tonal structure. If every note of the major scale (the scalar shape which provides the module for relating the 'different' shapes) generated a major triad or scale within the key of that scalar shape, then the structure would immediately lose its characteristics of homogeneity and repeatability. This may easily be observed by reference to Fig. 6.
15. As regards the shape of a strictly classified mode there are no alternative notes. Even if this was universally true in practice (which seems unlikely), then, according to Chailley's theory, there must have been alternative notes before the modes finally 'solidified' into their predominant shapes. The argument here is that as organum developed, these alternative notes again came into play, and became symptomatic of the weakening modal shapes. It is interesting to speculate that musica ficta had less to do with notated accidentals as it did with notes which were 'foreign' to the shape or natural gamut of a mode. Alternative notes would have provided instances of such foreign notes.
16. The essential reification of this secretisation is the scale of equal temperament as embodied in the keyboard.

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CHAPTER TWELVE

TONALITY'S ENCODING OF THE  
INDUSTRIAL WORLD SENSE

## THE MUSICAL ENCODING OF THE INDUSTRIAL WORLD SENSE

With the full development of tonality, the interlocking fundamentals of pentatonicism become separated. . In Fig. 6, for example, it is perfectly clear whether C is heard as a fifth of F, as its own fundamental, as a third of A or a fourth of G, and, more importantly, at what level in the structure those relationships obtain. For tonality creates a hierarchy of fundamentals, all of which, through the various levels of the hierarchy, finally and ultimately relate back to one note. In this fashion the architectonicism of the tonal structure articulates the world sense of industrial man, for it is a structure having one central 'viewpoint' (that of the key-note) that is the focus of a single, unified sound-sense involving a high degree of distancing. It is, in other words, a centre-orientated structure with margins. But it is a further vital facet of tonal architectonicism that each note becomes a centre with margins. The 'more' important structural notes relate to each other insomuch as their precise function is defined by the 'less' important notes belonging to 'higher' architectonic levels, and these 'less' important notes only relate to each other insomuch as their position is defined by their relationships to the 'more' important structural notes.

The 'spatial' aspect of tonality is not, however, the only one to articulate the social-intellectual structure of industrial man. As the simultaneously divergent viewpoints and time-spaces of medieval man were snapped into a single three-

dimensional focus whose necessary adjunct was a spatialised time, so the syncretisation of the different modal shapes into the unified structure of explicit tonality necessitated a precise 'vertical' mensuration which could not help but articulate a spatialised time. The correct 'vertical' coordination of the notes of the different melodic lines in tonality leads, as it were, to the possibility of making a 'spatial' 'three-dimensional' cut along the 'time' axis of any tonal piece of music. The typification of such a cut is the bar-line. It is, moreover, a dialectic correlate of the spatialised time articulated by tonality that industrial man, in becoming increasingly 'objective' and self-conscious, is able to stand back and objectify the passage of time. The revelatory nature of time as articulated by spiritual and corporeal rhythms is thus negated by a unified rhythmic structure which gains its effect from the pull of rhythmic patterns against pulse as contained in the strict metre essential to the three-dimensional cut already mentioned. By bringing the corporeal pulse of music into such continual high relief - and thereby altering and negating its original 'timeless' and hypnotic characteristics - the rhythmic structure of tonality helps to maintain industrial man's intense and constant awareness both of the passage of time, and of his own consciousness.

The vital change in man's orientation towards himself and the environment that occurred during the Renaissance created the fiction, if not the fact, of 'progress'. The classical and cyclical idea of historical degeneration and recovery:

... lost its hold on the imaginations of men as a result of profound changes in the outward conditions of life which occurred in Western Europe from the fourteenth to the nineteenth century. Among these changes were the rise of ordered secular governments, the growth of towns and industry, the geographical discoveries and the extension of commerce which brought Western Europe into direct contact with alien customs and ideas, and above all the rise of an educated middle class whose interests were hampered by a form of society in which both the power and the doctrines of the Christian Church supported the autocracy of kings and the privileges of a landed aristocracy. It was in this time of revolt against ecclesiastical and secular authority that the Christian doctrine of salvation was gradually transformed into the modern idea of progress (Becker, 1969, p.12).

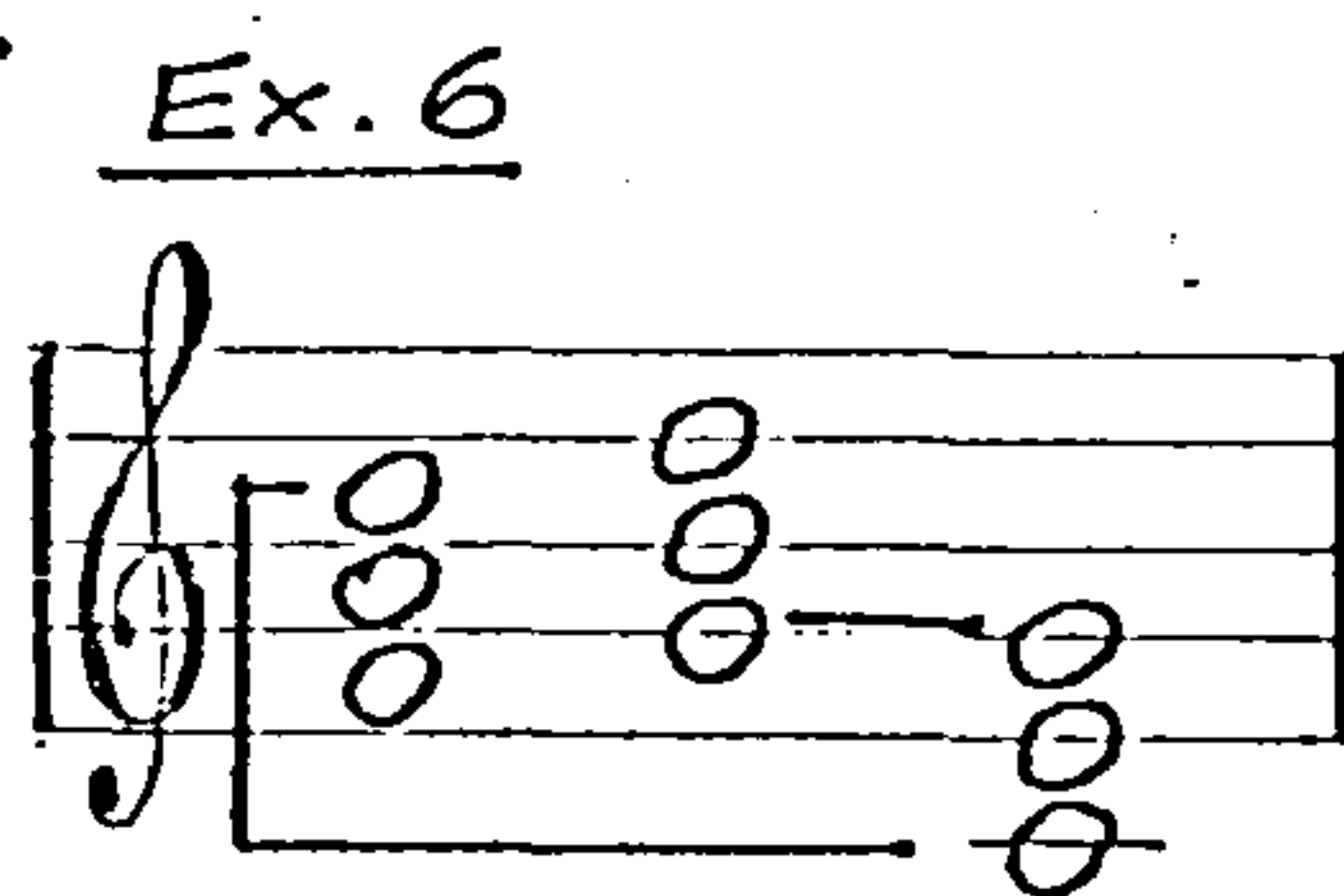
The central point upon which the entire social-intellectual structure of industrial man is focused and from which the majority of power and influence in the structure is derived provides a defined goal towards which all other elements in the structure tend. It was argued in Chapter Three, for example, that the phonetic literacy and typography responsible for the growth of the industrial social-intellectual structure was also heavily instrumental in generating a class dialogue that took place within the framework of political and economic nationalism, and was overwhelmingly concerned with who should wield the centralised power of nationalism. Progress, then, is concerned with impulsive movement towards the centres provided by the structure and its various sub-structures. But the concept is also a product of the temporal aspect of industrial society. The intense awareness of the passage of time that is concomitant with industrial man's increased control of the environment leads him to conceive of manipulating and 'improving' the environment (social as well as physical) in specific stages which can be achieved within certain segments of spatialised time relevant to

his life span. For in being intensely aware of the passage of time and so of his own finite existence, industrial man tends to bring an urgency to his activities which medieval man, living more within a revelatory time, would probably find hard to understand. As we have seen, the synchronisation of events according to the clock which is so prevalent in industrial society would not have taken place in medieval society.

The concept of progress through spatialised time towards culmination at a focal point finds expression in tonality through the spatial and temporal aspects already mentioned. But perhaps the vital characteristic of tonality is its sense of magnetic pull towards the key-note, and it is this sense which provides the quintessential articulation of the concept of progress. Whereas the intrinsic nature of the relationships between the interlocking fundamentals of medieval music is partially responsible for its tendency towards temporal simultaneity, the sense of magnetic pull in tonality is achieved by utilising the hierarchy of fundamentals in such a way that the fundamental of each chord - as used in relation to the other notes of that chord - plays an explicit and retrospectively<sup>1</sup> pre-determined part in the passage towards a final and irrevocable statement. Tonal music is, above all, the music of explicitly sequential cause and effect - a cause and effect, that is, which depends, in the fashion of materialism, upon the reduction of a phenomenon undergoing explanation into 'indivisible' and discrete, but contiguous constituents that are then viewed as affecting one another in a mono-causal and linear manner. The analysis of

tonal music, for example, often concerns itself with 'showing' how the final satisfying effect of stating the tonic chord is 'due' to previously created harmonic tension. It is probably no accident, in this respect, that completed and satisfying harmonic passages are frequently referred to as 'harmonic progressions'.

The sense of direction and resolution produced in tonal music is symbolised almost totally by one chord - the dominant seventh. The importance of this chord can be accounted for in two stages. Firstly, it remains true that the three most important notes in the structure of tonality, and the ones which ultimately define the feeling for any particular key-note, are the key-note, the fourth and the fifth. If movement between these fundamentals and the triads which are built upon them occurs, notes I and V of the major scale are going to occur more often and so strike the ear as most important (see Ex. 6). This



phenomenon coincides with the fact that the perfect fifth is, apart from the octave, the most basic and therefore the strongest interval in the harmonic series. As the two most important notes, and as an expression of an accoustical fact, these two

notes, and, in consequence, the chords built upon them, are going to be heard as the most important factors in the establishing of a particular key.

Secondly, the next harmonic to produce a new note after the fifth harmonic is the seventh harmonic. This seventh harmonic produces the interval of a minor seventh above the fundamental, and so the chords of the dominant seventh. If this harmonic is added to the basic triads of the three fundamentals (I, IV and V), it becomes apparent that the one based on V is the only one to be included within the notes of the major scale derived from Fig. 6 (see Ex. 7). The importance of the V - I movement just described is therefore reinforced by the legitimacy of this seventh chord, which contains the unstable tritone (formed by the fifth and seventh harmonics).

Ex. 7

I      IV      V

If the seventh chord on the dominant is sounded, and the first degree of the scale is sounded, then the unstable tritone is going to be attracted to the harmonics produced by this latter note (e.g., in C: F - E, and B - C. The fifth degree of the dominant in this movement is strictly speaking redundant)<sup>2</sup>.

As well as reinforcing the V - I movement central for the establishing of a particular key, the dominant seventh further emphasises the magnetic pull of tonality by being extremely important for the modulation without which any sense of progression in an extended piece would be lacking. The role played in modulation by the dominant seventh is related to the characteristics of the higher partials in the harmonic series<sup>3</sup> - partials which, until the development of tonality, were not relevant as structural elements. Taking C as the fundamental and key-note, B flat and F sharp are stronger than B natural and F natural<sup>4</sup>. Thus when modulation is imminent, the introduction of these notes will not strike the ear as too unnatural. This is particularly true of the B flat, the seventh harmonic, which is audible to the ear.

It becomes apparent that the introduction of the B flat is the most natural manner of modulating. B flat is a relatively strong note in the harmonic series; it can be immediately inserted on top of the tonic chord to form a new dominant seventh; and it is slightly flat, thereby increasing its propensity to resolve to A. F sharp, on the other hand, is higher in the harmonic series than the B flat, and so relatively weaker. It is also flat<sup>5</sup>, being almost half-way between F natural and F sharp, thereby weakening its tendency to move upwards to G. Finally, although its relative importance over F in the harmonic series allows it to be fairly easily introduced at a point when the overall feeling of tonality is C, it cannot be directly introduced with C as the fundamental. A new dominant



chord, based on D as the secondary fundamental, has to be introduced<sup>6</sup>. In this fashion the use of the dominant seventh emerges as the quintessential method of tonal modulation, a state of affairs which is underlined by the immediate ease of modulating flatward.

The inherent instability of the augmented fourth, as underlined by the properties of the harmonic series, is in practice at the heart of a great deal of tonal movement and progression. Put another way, the tonal key system can be seen as the result of a conflict between man's attempt to organise rationally (through the tempered scale) the properties of the harmonic series, and the properties themselves. This conflict again serves to illustrate that no music can be regarded as a closed system having internally sufficient laws. Both pentatonicism and tonality are grounded in the relationships of the harmonic series, but both structures are extended and directed in different ways as dialectic correlates of the ongoing social-intellectual structure of the time.

#### SOME QUESTIONS ANSWERED

It now becomes possible to understand why the original pentatonic structure (see Fig. 1) was limited to three 'levels' of notes and two generative intervals<sup>7</sup>. In view of the creation of the structure represented in Fig. 6, it is apparent that the

addition - in the structure as represented in Fig. 1 - of thirds to the original fourth and fifth (F and G), in probably encouraging a similar process with the 'fundamental' (C), would have produced a structure involving a higher degree of distancing than was appropriate to the world sense of early medieval society. Furthermore, the addition of another level of fundamentals would have produced seven notes of relatively equal standing. In this situation the augmented fourth and semitone might well have been given more prominence than was the case<sup>8</sup>. Extension of the structure along the lines suggested therefore, would have produced a totally different structure having more in common with tonality than pentatonicism. The medieval world sense which pentatonicism at the same time mirrored and articulated would have been negated. Extension of the structure, in other words, could only occur as part of the continually developing social construction of knowledge and reality.

#### SOME COMPARATIVE REMARKS ON FORM

Finally, in discussing the musical encoding and articulation of social meaning, some comparative remarks may be made concerning 'form' in pre-literate musics and tonality. The differences in the formal aspects of the two classes of music

reflect the difference between oral man's and typographical man's orientation with regard to time and memory, and are therefore respectively indicative of implicitly and explicitly structured music. In pre-literate music any "unifying factors" of form are "intrinsic" (Nettl, 1956, p.76) rather than extrinsic and externally imposed. Firstly, the most common melodic factor is that of the repetition and variation of short motifs. Secondly, we are told that "most primitive polyphonic music employs identical or similar materials in each part" (Nettl, 1956, p.80). Formal effect, therefore, seems to depend upon the immediately adjacent existence in the memory of the listener of material closely related to that which he is actually hearing. In this sense, the music is in a constant state of re-creation within time.

Form in Western music, however, depends very much upon comparison and long-term memory in order that the relevance of its constituent parts may take full effect. The 'rationally' and visually<sup>9</sup> derived devices of polyphony (such as inversion, augmentation and diminution) lose much relevance if the listener does not consciously relate them to the initially stated subject. Furthermore, the whole principle of sonata form depends upon the relationship of one section to its antecedent. Development is meaningless without exposition, and recapitulation is meaningless without development. And if the recapitulation differs from the exposition, then the recapitulation cannot be said to have realised its full effect

without comparison to the exposition in the light of the development. In other words theme or themes are 'discussed' or externally manipulated, and discussion involves the separation of entities from their natural occurrence in time. In order to 'understand' tonal music, industrial man must stand outside of time and music.

## NOTES:

1. It is important to realise that such 'completeness' can only be realised when the work is viewed as a whole. While the piece is being composed and while it is being heard (at least for the first time), there are, at any one point, many alternative directions that the piece can take, although the number of such alternatives decreases as the piece progresses. Only when a piece is completed, therefore, can its 'inner logic' become apparent. One is not dealing with reversible time, therefore, even though reversible time is the logical and ultimate conclusion of the spatialised time articulated by tonal music, and is also a necessary correlate of the deterministic and reductionist world sense. Any reader who is further interested in the contradictions inherent in this description should refer to Capek (1961), especially pp.121-133, where the problem of reversible time is fully discussed.
2. In a German sixth, for example, which functions in much the same way as a dominant seventh - except that a different type of resolution is produced by positing a different fundamental - the fifth can be changed to produce a French sixth, or omitted altogether, to form an Italian sixth.
3. The following argument owes much to Deryck Cooke's analysis of the relationship of the harmonic series to tonal syntax (Cooke, 1959, pp.41-45). However, it should be pointed out that the conclusions drawn in these pages are only relevant once the separation of fundamentals has occurred. The crucial role played by fundamentals in the development of tonality is not mentioned by Cooke, his argument resting almost exclusively on the nature of the higher partials. Indeed, his argument is essentially a melodic one, which seems strange when the explicitness of tonality involves a highly developed harmony. It must be re-emphasised, therefore, that neither harmony nor melody in tonality can be legitimately separated from each other or regarded as logically prior to one another. Melody and harmony in tonality are but different aspects of one underlying structure that both encodes and articulates the industrial world sense.
4. This is so because both notes occur earlier in the harmonic series than their counterparts and so are more likely to be audible to the ear.
5. It must be emphasised that the B flat and F sharp only sound out of tune as a result of man's adaptation of the natural

intervals found in the harmonic series to form the tempered scale.

6. It is interesting to note, however, that both C and F sharp figure in a dominant seventh based on D.
7. See the questions posed above on pp.244-246.
8. The augmented fourth was, of course, given no prominence at all. It is also relevant to note that the semitone in many circumstances was actively avoided. In discussing anti-phonal psalmody, for example, Reese (1940, p.176), tells us that: "The point of division between the two parts of the verse is known as the caesura. In settings of long texts the tenor of the first half of the verse may be interrupted by a downward inflexion called the flexa, which is also a type of cadence. If the tenor is sub-tonal (that is, if the scale degree immediately below it is a whole tone away) the inflexion descends a whole tone; if it is sub-semitonal ... the inflexion descends a minor third". Reese takes this to be "an additional bit of evidence for the pentatonic nature of at least some of the Chant".
9. The processes of turning something upside down, or of elongating or compressing it are essentially 'spatial' rather than 'temporal', and therefore lend themselves more easily to visual rather than aural comprehension. The difficulty of actually hearing and identifying such devices as developed and used by the serialists is commonly accepted.

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CHAPTER THIRTEEN

CONCLUSION:

WRITING ABOUT MUSIC - 2



The attempt to indicate the social structuring that is inherent in particular musical languages and groups of languages has led to an approach to writing about music that transcends the categories of form and content. For, by means of comparing musical analysis with the world senses of the relevant societies it has been unnecessary to translate the musical experience into strictly verbal and substantive meanings. Since music is its own meaning there is, of course, no need to write about it. But it would be flying in the face of reality to ignore the fact that, because man's most 'useful' and prevalent symbology is language, he will continue to legitimate the vast majority of his experiences, including music, through language. The academic who writes about music is merely indulging in an extension of this process<sup>1</sup>. Writing about music, then, is a legitimate activity inasmuch as the 'meaning' of music is elucidated by reference to the social and mental structuring which is 'external' to the music, but which the music nevertheless transcendently articulates from 'within' itself. In Part II, therefore, the attempt has been to use words as indicators or probes of an articulated meaning that essentially lies 'beyond' not only the words used, but 'beyond' their referential significance. The intention has been to bring to life the dynamic relationships revealed to us through the material relata (and, derivatively, the relata of reified concepts) ultimately necessary for referential language, rather than to distort the musical experience into the reified confines of referential objects and concepts.

The limitations and implications of such an intention must be made fully explicit, however. Insofar as it remains necessary, at the present time, to verbalise about music, a 'structural' approach as modified through the implicit-explicit paradigm would seem the most appropriate. But since the communication of this approach is as much rooted in the written word as more conventional approaches to writing about music, it should be realised that it cannot reproduce music's 'emotion' or immediate power. It would appear, then, that the sole contribution words can make to the musical experience lies in the realms of legitimation and criticism, a criticism, moreover that must ultimately be grounded in the individual's social situation.

As conceived in these chapters, therefore, writing about music is a maieutic process. It seeks to elucidate articulated meaning hitherto vague in the listener's consciousness, and so to heighten the awareness of self in relation to society. Society, as argued in Chapter Five, can only be regarded as being immanent 'in' the specific articulations of symbols, and, since these symbols originate from and are only socially efficacious 'within' individual minds, as being immanent 'in' individual consciousnesses. Given the culture-specific articulations and encodings of different musics, writing about music can never be an exercise in objective aesthetics. No one person or group of people is in a position to centrally define what good music is, what it should 'mean', and what the sophisticated and informed person should listen to. There never can be a simple one-way transfer of verbally pre-packaged

'artistic' or 'cultural' content. Writing about music is quite literally an extension<sup>2</sup> of the musical experience, and inasmuch as literacy aids recession from everyday reality, and so the process of being self-reflexive, writing about music becomes an extended exercise in looking at self and society through the medium of music. It is a means by which each person, writer or reader, can critically examine the structuring of his social and mental existence. What we like and what we do cannot be artificially divorced from the everyday life that constitutes such structuring, and no two structurings, either social or mental, and despite whatever underlying similarities may exist, can ever be identical.

It should now be more than apparent that the traditional ways of 'looking at' and writing about music discussed before deny the critically self-reflexive process that such writing could be, firstly by discussing a centralised and hierarchical music in centralised and authoritative terms, and secondly by developing a tendency to view other musics ethnocentrically. By not examining the assumptions of his own position the musicologist can only appreciate his own 'point of view', his own deep-seated preferences and phobias. In this respect he is in the identical position to the sociologist who, in examining a society, whether his own or another, does not examine the implicit assumptions of his own social position.

There is, however, a limit to the degree that one can uncover one's own assumptions. Not only is the conceptual 'level' involved in self-reflexively receding from everyday

reality circumscribed by the media available to aid such a process, but, within the conceptual parameters so circumscribed, there is a practical limit to the number of times one can examine one's own position. For every time one set of assumptions is uncovered, another is created as part of the meta-situation necessary for the initial examination. It is necessary, in other words, to have an assumptional framework in order to examine an assumptional framework. But continued pre-occupation with this infinitely regressive process precludes any real participation in the everyday world, and is liable to have one labelled as 'insane' by the people of one's own society<sup>3</sup>. As an antidote to central authoritarian objectivity, unremitting self-examination generates its own kind of useless isolationism. For although the observer continually interacts with what he is observing<sup>4</sup>, there comes a point when he must leave behind the infinite adjustments of his own position and contribute to his own society.

Detachment-in-involvement thus seems to be the only realistic position to be adopted by any 'thinking' (i.e. self-reflexive) person. One makes a contribution, not from the proverbial ivory tower of academia, but because one believes it to be relevant to one's situation and society. Again, it must be emphasised that activities carried out in recession from everyday reality (such as the academic) cannot be totally divorced from everyday reality. But this approach must constantly acknowledge its necessary limitations. Since the

social-intellectual structure of any society is constantly changing, and since what any person says is -in some measure - part of the articulation of that structure, that person must accept that anything he says, on whatever time-scale, is necessarily ephemeral. The very act of constructively saying anything automatically makes the writer or 'thinker' - to a certain extent - a prisoner of his own position.

## NOTES:

1. The stance adopted here throws some light on the position of those people who maintain that analysis and writing about music can never be a legitimate or useful process. This position is based on the opinion that analysis and writing about music can never replace the musical experience, which is perfectly true. However, it does not follow from this opinion that analysis or writing about music is useless, because, although these activities cannot replace the musical experience, they can be an extremely useful aid to critical thought, as Part II has sought to demonstrate. What people who hold to the above position are in fact doing is denying a critical and self-reflexive approach to music. It is thus difficult to see how anyone in this position could be conscious of music's potentially creative role with regard to social and intellectual structuring. Strictly speaking, these people can only relate to music as a purely sensuous social ornament. This last conclusion is only true in a strict sense, however, because there are very few people who do not externalise their responses to pieces of music. The person who maintains that analysis and writing about music are not useful processes is therefore really contesting the degree to which he should be critical and self-reflexive. There is no difference in kind between the initial verbalised reaction to a piece of music, and a detailed and considered exposé of that response which in effect elucidates many of the implications behind it. But, in elucidating all the implications behind his initial response, a person is much more likely to question its adequacy, rather than solely passing judgement on the music, which is frequently what initial responses are exclusively concerned with.
2. An extension, that is, in the McLuhanesque sense.
3. This is true of societies where reality is not recognised for the relative construct that it 'really' is. There is no 'ultimate' reality, merely different realities constructed by different societies. Where reality is considered as an absolute, another's differing reality appears as dangerous unreality, classifiable as 'insanity'. R. D. Laing indicates this process, at the same time illustrating the genuinely relative nature of differing realities through a demonstration of the relativity of insanity: "When inside and outside have been flipped so that inside-outside for A is outside-inside for B and both think 'absolutely', then we have spiralled into the most extreme interexperiential disjunction in our culture - psychiatrists, sane: patients, psychotic. The psychiatrist in this case has no doubt

about the diagnosis. The patient is psychotic and without insight. The patient thinks the psychiatrist is psychotic and without insight. The patient is psychotic and without insight because he thinks that psychiatrists are dangerous lunatics who ought to be locked up for their own safety, and if other people are too much under the spell of the thought-police to see that, he is going to do something about it" (1971,p.43). If one thinks in terms of sanity and insanity, then it is just as valid to think of someone who has greatly indulged in the process of infinite regress as a sane person looking in on an insane world as the other way round.

4. This statement is a necessary adjunct (in the social sphere) of the sociological stance adopted throughout these chapters. It is readily acknowledged, however, that the material sphere of activity in the universe is not appreciably affected by human observation, notwithstanding the dialectic interaction between object and observer.

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A P P E N D I C E S

APPENDIX I

ON EPISTEMOLOGICAL RELATIVITY

## A

In the Introduction to the thesis it will be remembered that reference was made to the way in which two seminal books (The Structure of Scientific Revolutions by Thomas S. Kuhn, and The Social Construction of Reality by Peter L. Berger and Thomas Luckmann) gave an insight into how to go about solving what seemed to be a fundamental problem in musicology. This Appendix will now describe the nature of that insight more fully, as well as considering one or two methodological difficulties that arise from it. As a corollary, it also becomes possible to give a more extended theoretical coverage of the opposing notions of 'absoluteness' (or 'objectivity') and 'relativity' which underpin so much of the discussion in the earlier parts of the thesis.

Certain parts of this and the following Appendix use passages from the main body of the thesis. This procedure has been adopted for two reasons: first, it serves to preserve the flow of argument within the Appendices; secondly, it gives those passages a greater depth of significance than it was possible to provide within the main body of the thesis.

## B

What Kuhn's book sets out to establish is that the traditional understanding of scientific progress does not square

with "the historical record of the research activity itself" (1962, p.1). According to Kuhn, the usual image of scientific progress is derived from textbooks, whose function is to provide a clear and concise account of scientific knowledge as it presently stands. Because such presentations are essentially unhistoric, the following image of science arises:

science has reached its present state by a series of individual discoveries and inventions that, when gathered together, constitute the modern body of technical knowledge. From the beginning of the scientific enterprise a textbook presentation implies, scientists have striven for the particular objectives that are embodied in today's paradigms. One by one, in a process often compared to the addition of bricks to a building, scientists have added another fact, concept, law, or theory to the body of information supplied in the contemporary science text (1962, p.140).

The task of the historian of science is thus twofold:

on the one hand, he must determine by what man and at what point in time each contemporary scientific fact, law, and theory was discovered or invented. On the other, he must describe and explain the congeries of error, myth, and superstition that have inhibited the more rapid accumulation of the constituents of the modern science text (1962, p.2).

But this traditional understanding of scientific progress, in which knowledge accrues teleologically through the adoption of new theories and the rejection of erroneous and idiosyncratic ideas, does not agree with the facts as some historians of science find them:

. . . these . . . historians confront growing difficulties in distinguishing the "scientific" components of past observation and belief from what their predecessors had readily labelled "error" and "superstition". The more carefully they study, say, Aristotelian dynamics, phlogistic chemistry, or caloric thermodynamics, the more

certain they feel that those current views of nature were, as a whole, neither less scientific nor more the product of human idiosyncracies than those current today. If those out-of-date beliefs are to be called myths, then myths can be produced by the same sort of methods and held for the same sort of reasons that now lead to scientific knowledge. If, on the other hand, they are to be called science, then science has included bodies of belief quite incompatible with the ones we hold today. Given these alternatives, the historian must choose the latter. Out-of-date theories are not in principle unscientific because they have been discarded. That choice, however, makes it difficult to see scientific development as a process of accretion (1962, pp.2-3).

The implication that science progresses by dispensing with one internally consistent view of nature and then adopting another, equally consistent but mutually incompatible view, is undoubtedly radical and poses a number of difficult questions. These difficulties are discussed at later stages in the Appendix. Of more immediate interest, however, is the theory developed by Kuhn to cope with this notion of scientific endeavour.

Basic to Kuhn's theory is the concept of a paradigm. In general terms a paradigm may be thought of as a model or pattern through which a body of knowledge can be understood and manipulated. For Kuhn, paradigms are located in significant scientific achievements demonstrating two characteristics: firstly, the achievements must be "sufficiently unprecedented to attract an enduring group of adherents away from competing modes of scientific activity" (1962, p.10); second, they must be "sufficiently open-ended to leave all sorts of problems for the redefined group of practitioners to solve" (1962, p.10). Kuhn then goes on to argue that the vast majority of scientific research, which he terms 'normal science', is concerned with

solving puzzles set up by the particular paradigm in question. That is, normal science is concerned with establishing satisfactory connections between a paradigm's theoretical predictions and observed nature. "One of the reasons", therefore, "why normal science seems to progress so rapidly is that its practitioners concentrate on problems that only their own lack of ingenuity should keep them from solving" (1962, p.37). It is this type of activity which contributes to the traditional image of scientific research as a straightforward accretive process:

Normal science, the puzzle-solving activity . . . is a highly cumulative enterprise, eminently successful in its aims, the steady extension of the scope and precision of scientific knowledge. In all these respects it fits with great precision the most usual image of scientific work (1962, p.52).

The reason that historians of science question this image is that every so often there appears to be a major re-orientation in an area of scientific work which itself is produced by normal scientific enquiry:

. . . one standard product of the scientific enterprise is missing. Normal science does not aim at novelties of theory and when successful, finds none. New and unprecedented phenomena are, however, repeatedly uncovered by scientific research, and radical new theories have again and again been invented by scientists. History even suggests that the scientific enterprise has developed a uniquely powerful technique for producing surprises of this sort. If this characteristic of science is to be reconciled with what has already been said, then research under a paradigm must be a particularly effective way of inducing paradigm change (1962, p.52).

Kuhn's explanation of this apparent paradox is that paradigms, for one reason or another, frequently produce anomalies. Observed nature, in other words, does not square with

paradigmatic prediction. Quite often, these anomalies are satisfactorily resolved in terms of the prevalent paradigm. Previous reasoning may have been faulty<sup>1</sup>, or a piece of apparatus may not have done the job it was supposed to. Every now and then, however, an anomaly will prove extremely obdurate, and will create a crisis within the relevant scientific community. As a result, 'extraordinary' scientific work will be carried out which departs more and more from the parameters erected by the now suspect paradigm. Eventually, an alternate paradigm will be put forward which solves the anomaly and a scientific revolution will have been achieved. The revolution with which most people are to some extent familiar is that instigated by Einstein's two theories of relativity and the work in quantum mechanics which followed shortly thereafter<sup>2</sup>.

Further insight into the notion of a scientific revolution may be obtained by seeing in part how this notion transcends the traditional concept of teleological scientific advance. It has already been noted how science textbooks necessarily and inevitably present their material in terms of current paradigms. Kuhn expands on this theme:

For reasons that are both obvious and highly functional, science textbooks . . . refer only to that part of the work of past scientists that can easily be viewed as contributions to the statement and solution of the texts' paradigm problems. Partly by selection and partly by distortion the scientists of earlier ages are implicitly represented as having worked upon the same set of fixed problems and in accordance with the same set of fixed canons that the most recent revolution in scientific theory and method has made seem scientific (1962, p.138).

That this traditional view is unhistoric is illustrated through Newton's assimilation of Galileo's kinematic theorem:

. . . Newton wrote that Galileo had discovered that the constant force of gravity produces a motion proportional to the square of the time. In fact, Galileo's kinematic theorem does take that form when embedded in the matrix of Newton's own dynamical concepts. But Galileo said nothing of the sort. His discussion of falling bodies rarely alludes to forces, much less to a uniform gravitational force that causes bodies to fall. By crediting to Galileo the answer to a question that Galileo's paradigms did not permit to be asked, Newton's account hides the effect of a small but revolutionary reformulation in the questions that scientists asked about motion as well as in the answers they felt able to accept (1962, pp.139-140).

- This example points to another essential feature of scientific revolutions. For a revolution does not, as may sometimes be thought, involve the rejection of all previous knowledge as incorrect. Rather, it involves a shift of emphasis and outlook which not only provides for the resolution of an anomaly but at the same time allows for the preservation of a considerable amount of previous work, albeit in a slightly different form. Indeed, it is extremely unlikely that a scientific community would accept a new paradigm unless it were capable of satisfactorily transcending the majority of extant knowledge. A new paradigm therefore needs to meet two conditions rather than just one:

. . . scientists will be reluctant to embrace [a new paradigm] unless convinced that two all-important conditions are being met. First, the new candidate must seem to resolve some outstanding and generally recognized problem that can be met in no other way. Second, the new paradigm must promise to preserve a relatively large part of the concrete problem-solving ability that has accrued to science through its predecessors. Novelty for its own sake is not a desideratum in the sciences . . . though paradigms seldom or never possess all the capabilities of their predecessors, they usually preserve a great deal of the most concrete parts of past achievements . . . (1962, p.169).



But as intimated, the shift of emphasis and outlook engendered by a paradigm change also results in certain questions and problems no longer being regarded as legitimate topics for scientific enquiry. As Kuhn has remarked, "there are losses as well as gains in scientific revolutions and scientists tend to be particularly blind to the former" (1962, p.167). Newton's understanding of the universe, for example, facilitated a control and manipulation of the environment that had hitherto been unimaginable. Yet at the same time it resulted in the loss to the scientific community for nearly two hundred years of any notion of spatial or motional relativity. Leibniz's concept of relativity was, of course, quite different from that of Einstein<sup>3</sup>. The point, however, is that for two hundred years the question of relativity was inadmissible as a topic for scientific discourse because it would have to have been predicated on an 'incorrect' understanding of the universe. It could not therefore provide a proper basis for problem formulation and puzzle solving.

One other example may be drawn from Newton's work:

. . . though much of Newton's work was directed to problems and embodied standards derived from the mechanico-copular world view, the effect of the paradigm that resulted from his work was a further and partially destructive change in the problems and standards legitimate for science. Gravity, interpreted as innate attraction between every pair of particles of matter, was an occult quality in the same sense as the scholastic's "tendency to fall" had been. Therefore, while the standard of copularism remained in effect, the search for a mechanical explanation of gravity was one of the most challenging problems for those who accepted the Principia as paradigm. Newton devoted much attention to it, and so did many of his eighteenth century successors. The only apparent option was to reject Newton's theory for its failure to explain gravity, and that alternative too, was widely adopted. Yet neither of these views triumphed. Unable either to practice science without the Principia

or to make that work conform to the corpuscular standards of the seventeenth century, scientists gradually accepted the view that gravity was indeed innate. By the mid-eighteenth century that interpretation had been almost universally accepted, and the result was a genuine reversion . . . to a scholastic standard (1962, p.105).

Not until Einstein's general theory did the importance of this problem once again become fully clear.

It is thus not difficult to see how the process of scientific revolution for which Kuhn is arguing could have given rise to the idea of teleological advance which has such a strong hold today. For when one internally consistent paradigm succeeds another equally consistent but mutually incompatible paradigm, two things happen: those parts of the previous paradigm not mutually incompatible with the present one are preserved in a slightly different form and those parts which are incompatible are rejected as legitimate topics for scientific enquiry. The revolution, in other words, is subsequently hidden from view.

But this 'compatibility' between the process of revolution and the usual image of teleological progress is only partial and does not reveal the full extent of the relationship. For if one accepts Kuhn's theory of scientific revolutions, then two assumptions fundamental to the teleological view come into question. Either one adheres to the view that all paradigms are 'mythical' or potentially erroneous - that the present paradigm, in other words, is no less likely to be fallacious than its predecessors - thereby questioning the idea "that the scientific community knows what the world is like" (1962, p.5). Or one agrees that all paradigms are equally scientific, thereby undermining the notion that external reality is absolute<sup>4</sup>. Not

only does it become extremely doubtful whether it is any longer legitimate to think in terms of the 'objective observation of absolute external reality', therefore, but it also becomes uncertain as to whether the notion of 'progress' fundamental to the teleological view of science can retain any validity under these conditions: "we may", says Kuhn, "have to relinquish the notion, explicit or implicit, that changes of paradigm carry scientists and those who learn from them closer and closer to the truth" (1962, p.170). It is at this point that the logical status traditionally assigned scientific knowledge comes seriously into doubt. The discussion of this status is continued in section D of this Appendix.

It is because Kuhn's theories question the very bedrock of normal scientific endeavour that his work has become as controversial as it has. And this controversy has been aided by the admittedly stereotypic nature of the theories<sup>5</sup>. Scientific revolutions vary in scale and consequence, may take a great deal of time to accomplish, and frequently meet with quite natural opposition. Furthermore, new paradigms are more often than not arrived at gradually as the result of work carried out by more than one person. Not always do they emerge on the scientific scene with quite the far-reaching consequence of Einstein's theories of relativity, for example. Because each revolution is likely to display some characteristics unique to itself, there is clearly room for a questioning of Kuhn's theories on empirical as well as theoretical grounds. Discussion will doubtless continue for some time to come, both within the scientific

community and among interested academics in general, and there will be many who will wish to disagree with Kuhn's basic tenets. But those who do disagree with Kuhn's underlying hypothesis might paradoxically be providing a working example of it in a wider sense. In Kuhn's terminology, they will be stressing the validity of a paradigm which has become problematic for historians of science, whilst at the same time denying the validity of another that goes a long way towards solving those problems. This paradox suggests that Kuhn's ideas might well have application outside the strict confines of science, and might well be highly insightful in understanding the way in which knowledge in all its aspects 'progresses'. At the very least they present a useful and readily comprehensible framework in terms of which the aims of this thesis can best be understood.

### C

It was suggested in the Introduction to the thesis that a major change in outlook might be required if the problem of significance in music (together with the related problem of the significance of musical analysis) was to be solved. To borrow a colourful metaphor from Kuhn, it seemed that "an occasion for retooling [had] arrived" (1962, p.76). This thesis has sought to justify that intuition by showing that the 'prevalent musicological paradigm' is inherently anomalous, and by putting

forward another paradigm which solves the anomalies while at the same time satisfactorily transcending previous work.

On the surface, the analogy of approach drawn from Kuhn would seem to be straightforward. That it is not is due to the distinction traditionally made between science and the arts, that is, the distinction between those subjects which concern themselves with what most people take to be an absolute external reality independent of man, and those whose focus of attention is the activities of man himself. One writer, C. P. Snow, who has professional experience in both camps<sup>6</sup>, is left in little doubt of the depth and pervasiveness of this distinction in the academic life of both this country and the Western world in general:

There have been plenty of days when I have spent the working hours with scientists and then gone off at night with some literary colleagues. I mean that literally. I have had, of course, intimate friends among both scientists and writers. It was through living among these groups and much more, I think, through moving regularly from one to the other and back again that I got occupied with the problem of what, long before I put it on paper, I christened to myself as the 'two cultures'. For constantly I felt I was moving among two groups - comparable in intelligence, identical in race, not grossly different in social origin, earning about the same incomes, who had almost ceased to communicate at all, who in intellectual, moral and psychological climate had so little in common that instead of going from Burlington House or South Kensington to Chelsea, one might have crossed an ocean (1960, p.2).

This division of academic activity into 'the sciences' and 'the humanities' is admittedly crude. Not only is the dividing line difficult to draw with any satisfaction, but there are those within each category with significantly different outlooks. The room for misunderstanding between engineers and pure scientists

is considerable, and there are some sociologists who would disagree fundamentally with many literary or art critics. Yet despite this crudity C. P. Snow still thinks that the distinction retains a high degree of validity:

I have thought a long time about going in for further refinements, but in the end I have decided against. I was searching for something a little more than a dashing metaphor, a good deal less than a cultural map: and for those purposes the two cultures is about right, and subtilising any more would bring more disadvantages than it's worth (1960, p.9).

The distinguishing feature of any scientific work is that the community responsible for it will only accept one paradigm as a valid basis for problem formulation and puzzle solving. Reasons for this are clear enough. Because it is assumed that there is only one reality under examination, and because it is being assumed that man can objectively observe it<sup>7</sup>, it follows that there can only be one legitimate explanation for the operations of that reality. Further, this explanation can usually be tested by attempting to match theoretical predictions against observed behaviour. That is not to say, however, that two or more theories or paradigms have not at some time or other co-existed in various fields of scientific enquiry. But such an occurrence is usually symptomatic either of a 'pre-paradigm state' (that is the state preceding the first general acceptance of a paradigm) or of a 'revolutionary situation'. Because they implicitly question assumptions fundamental to any scientific work these occurrences are regarded by scientists as highly undesirable, and as representative of problems which should be solved as quickly as possible.

The situation in the arts and humanities is rather different however. This difference owes itself to the greater difficulty inherent in attempting objective descriptions and explanations in these subjects. Indeed, there are a minority of academics in the humanities who would claim that to invoke an objective approach is actually to distort the phenomena under examination. Some sociologists, for example, would not only maintain that the interaction between observer and observed is significant enough to completely negate any claim made for objective observation, but that objectivity is itself a culture-specific concept whose uncritical application is liable to compromise any consideration of another group or society<sup>8</sup>. Again some critics of the arts might argue that the aesthetic experience involves such an intense relationship between the art object and the individual that any statement made about it can have no absolute or universal validity. Every person's response is liable to be different, and so each experience may differ in one or another important aspect. All that can be claimed is that the critic's response is so insightful as to be instructive or of interest for others exposed to the same art object. In neither example, it should be noted, is it being suggested that research be pursued along irrational or illogical lines. It is merely being acknowledged that some phenomena do not lend themselves to objective observation.

By contrast, a majority of academics in the humanities would seem to accept that objectivity is necessary as an ideal even if the ideal is impossible to attain in practice. The

study of human activity involves the understanding and manipulation of a welter of complexly interwoven variables whose separation is not always legitimate or possible. Most experimental science, on the other hand, depends precisely on the successful isolation of variables, and the observation of the way those variables interact. For this reason most people working in the humanities would probably acknowledge that the selection of some facts or variables as important and of others as insignificant can easily involve implicit value judgments capable of affecting the nature of any conclusions drawn. These conclusions can seldom be tested by attempting to match predictions against observed behaviour simply because human behaviour is often notoriously unpredictable<sup>9</sup>.

It is because prediction and completely objective observation are impossible that competing theories or paradigms frequently co-exist in the humanities. For this reason the emphasis on authoritative textbook knowledge is less and the awareness of the historical nature of the subject matter greater:

In music, the graphic arts, and literature, the practitioner gains his education by exposure to the works of other artists, principally earlier artists. Textbooks, except compendia or handbooks to original creations, have only a secondary role. In history, philosophy and the social sciences, textbook literature has a greater significance. But even in these fields the elementary college course employs parallel readings in original sources, some of them the "classics" of the field, others the contemporary research reports that practitioners write for each other. As a result, the student in any one of these disciplines is constantly made aware of the immense variety of problems that the members of his future group have, in the course of time, attempted to solve. Even more important, he has constantly before him a number of competing and in-



commensurable solutions to these problems, solutions that he must ultimately evaluate for himself (Kuhn, 1962, p.165).

The co-existence of competing theories has a reverse side in that it militates against an anomaly being universally accepted as such. "Anomaly", states Kuhn, "appears only against the background provided by the paradigm. The more precise and far-reaching the paradigm is, the more sensitive indication it provides of anomaly and hence of an occasion for paradigm change" (1962, p.65). It is not difficult to see why this should be so. If a paradigm has universal acceptance and produces an anomaly, there can only be two logical alternatives. Either the anomaly can be solved in terms of the paradigm or it can't. And the more fruitful that paradigm has been in terms of accomplished work, the less the chance that an obdurate or long-standing anomaly will succumb to a traditional solution. If, on the other hand, an anomaly is produced by one of several competing theories, then there are three logical alternatives. Either the anomaly can be solved in terms of the theory producing it, it can be solved by one of the other theories, or it cannot be solved in terms of any of the theories. But it is an essential feature of such a situation that no one alternative will gain universal acceptance. The proponent of any one theory is therefore more likely to view his theory as unproblematic while at the same time insisting that all others are anomalous. Indeed, the least he can maintain without actually abandoning his own position is that whereas all theories, including his own, appear anomalous, he believes that all anomalies will eventually

be solved in terms of his own theory.

One other important difference results from the traditional distinction between science and the arts. As we have seen, the co-existence of competing theories or paradigms in any area of science is a cause for grave concern. However, although people who work in the humanities formulate and adhere to different theories, they seldom claim universal status for those theories. Although, in other words, they might try to persuade others to change their opinions, they will be only too well aware that more than one interpretation of the facts is perfectly possible. The existence of competing theories in the humanities is thus less likely to be seen as a matter for grave concern, and more as an inevitable result of the nature of the subject.

The process of identifying a single paradigm in any area of the humanities, of establishing that the paradigm is anomalous, and then of convincing the practitioners in that area that the situation is one which cries out for immediate attention - this process not only seems fraught with difficulties but could quite easily prove to be impossible. Musicology is no exception in this regard. There are probably about as many different approaches to analysing and writing about music as there are musicologists. William S. Newman (1972) and Wilfrid Mellers (1962) are undoubtedly discussing the same topic when they take as their subject matter the sonata in the classical era. Yet few people would maintain that their approaches, though compatible, have much in common. Further, when two authors do

maintain diametrically opposite approaches, they only seem to acknowledge the problematic or anomalous nature of their opponent's theory. This phenomenon may be illustrated by reference to the different attitudes adopted by Robert Lyle and Deryck Cooke in discussing the music of Delius.

Robert Lyle commences his discussion by commenting on a problem inherent in music criticism:

The scope of music has been, and doubtless always will be, much debated. The problem arises as soon as musical criticism ventures to discuss the philosophical implications of a musical style or idiom. It must be faced, for analysis itself can only clarify; it cannot explain, nor can it relate its particular and highly specialized findings to the wider context of man's constant preoccupation with truth and beauty (1948, p.158).

Lyle goes further than this, however:

In addition, much music, especially "romantic" music, can be understood only in relation to extra-musical ideas. This will seem obvious enough when we remember that the neglect of a purely musical logic does not by any means prevent a work of music from being consistent, convincing and appealing (1948, p.158).

Analysis is thus of little use for Lyle in understanding the unity or formal completeness that is unquestionably present in many of Delius's works:

Delius . . . makes an intensely subjective appeal to his admirers, who, if pressed, can never satisfactorily explain why his music so attracts them as long as they talk in musical terms: sometimes even, they are driven back upon such vague generalities as "the whole philosophy of the thing". Indeed, no analysis of his distinctive harmony can explain its poignancy, nor examination of his methods of construction account for the impression of balance and unity which his works so often leave (1958, p.158).

Cooke, on the other hand, is incensed by the notion that musical form is lacking in the works of Delius. While acknowledging that Delius was "of all composers the most purely

concerned with extra-musical expression", he stresses that even ". . . composers who are most concerned with extra-musical expression are also preoccupied with form" (1962, p.393). The problem as Cooke sees it is ". . . that Delius's formal methods are terra incognita" (1962, p.460). Consequently, "all wholesale journalistic condemnation of his music on structural grounds is so much idle opinion, based on ignorance of the true facts" (1962, p.460). Cooke then attempts to substantiate his point of view through a thematic analysis of the Violin Concerto. It is his belief that the analysis conclusively demonstrates the "entirely unrhapsodic, vigorously organic mastery" (1962, p.465) of the piece.

These views are diametrically opposed in that while Lyle maintains that the unity of a Delius work cannot be due to any musical logic, Cooke claims to have demonstrated that same logic through analysis. The problem, and the point for the present discussion, is that neither protagonist need acknowledge either that his opponent's view is of significance, or consequently, that his own theory may be problematic. Cooke would undoubtedly argue that his analysis leaves Lyle without a foot to stand on. Lyle, on the other hand, could claim that while some analysis of Delius's style is possible, such analysis does little but superficially reflect the way an extra-musical formal completeness expresses itself through music. The mere presence of thematic transformations, in other words, is not necessarily evidence of a musical logic, and does not therefore necessarily aid the elucidation of musical significance. Within the purview of

traditional approaches to musicology, this question ultimately turns on whether Cooke's analysis demonstrates a musical logic. Unfortunately, any decision made is rather more likely to rest on implicit assumptions about the nature of music in general and Delius's music in particular, than it is on any 'objective' or 'dispassionate' thought about the adequacy of the individual analysis.<sup>10</sup>

Finally, although the issues raised in the previous paragraphs could be seen as central to any research on the music of Delius, they are issues which have been studiously avoided by Delius scholars. By failing to overtly acknowledge that the problems inherent in these issues might represent a considerable hurdle to research these scholars seem to be agreeing (through omission) that such competing points of view are an inevitable aspect of any musicological activity, and thus not a matter for grave concern. The problems highlighted by the competing theories are in other words as inevitable as the theories themselves, and therefore unlikely to be solved in a generally acceptable fashion. And it is probably because theoretical work in musicology as a whole is unlikely to gain universal acceptance that the majority of scholars concern themselves with those more substantive or 'factual' areas where the potential for disagreement is less. Leonard B. Meyer certainly seems to be in agreement with this assessment when he says that "disheartened and perhaps dismayed by the speculative uncertainties of theory, criticism and, one should add, history as distinct from chronicle, too many

humanists, particularly those in music, have tended to follow the well-worn path of safe scholarship" (1973, p.25).

#### D

In view of the distinction made in the previous section, it must now be asked whether Kuhn's theory in fact provides a suitable framework against which to conceive a re-evaluation of traditional approaches in musicology. Can a model derived from the manipulation of scientific knowledge adequately serve as the basis for an examination of the control and manipulation of musicological knowledge? Certain considerations would seem to suggest that Kuhn's ideas retain some validity outside the strict confines of science.

The distinction drawn in the preceding section was based on a qualitative difference in the phenomena being observed. On the one hand, the sciences were taken to be concerned with an independent and absolute external reality capable of being objectively observed. The humanities, on the other hand, were taken to be concerned with the activities of man. In this case objective observation was acknowledged to be rather more difficult. But this distinction does not constitute a just criterion for judging the general applicability of Kuhn's ideas. For those ideas are not focussed on the phenomena under examination (in this case, those of external reality), but on the manipulation and

control of the knowledge derived from that examination. And although there is little doubt that the inherent qualities of phenomena do affect modes of cognitive control and manipulation, this inter-relationship does not preclude the possibility that, at a deeper level, all knowledge owes its existence and maintenance to one and the same process. Although Kuhn's theory may require some extension to become clearly applicable to the understanding of cognitive processes in general, therefore, there is no reason to think that such extension cannot be legitimately made.

Kuhn himself gives an indication as to the direction the extension should take. Because the concept of scientific revolutions implicitly undermines the notions of an absolute external reality and of objective observation, Kuhn is led to consider whether the control and manipulation of scientific knowledge proceeds according to purely objective and scientific principles, or whether these principles are rather more subjective than is frequently thought.

There are two types of situation in which theoretical uncertainty can prevail in any particular scientific field. The first of these is the pre-paradigm state. It is evident that a pre-paradigm state cannot be resolved by appeal to any scientific principle. If it could, the state would not exist. In these cases it is hardly surprising that adherence to a particular theory is based on subjective or metaphysical grounds. Kuhn gives an indication of this in discussing the different theories for the nature of light that existed in the period preceding Newton's

work:

One group took light to be particles emanating from material bodies; for another it was a modification of the medium that intervened between the body and the eye; still another explained light in terms of an interaction of the medium with an emanation from the eye; and there were other combinations and modifications beside. Each of the corresponding schools derived strength from its relation to some particular metaphysic, and each emphasized, as paradigmatic observations, the particular cluster of optical phenomena that its own theory could do most to explain (1962, pp.12-13).

In the case of paradigms competing for supremacy during a scientific revolution, on the other hand, the basis for adherence seems vastly more satisfactory. If the new paradigm solves an outstanding anomaly while at the same time transcending the vast majority of previous work, then it must be given preference over its predecessor. But scientific revolutions seldom occur in anything like such a decisive fashion:

When a new candidate for paradigm is first proposed, it has seldom solved more than a few of the problems that confront it, and most of the solutions are far from perfect. Until Kepler the Copernican theory scarcely improved upon the predictions of planetary position made by Ptolemy. When Lavoisier saw oxygen as "the air itself entire", his new theory could cope not at all with the problems presented by the proliferation of new gases, a point that Priestly made with great success in his counter-attack (1962, p.156).

Scientists caught up in a revolution frequently have recourse to a criterion other than the problem solving ability of either paradigm, therefore:

. . . paradigm debates are not really about relative problem solving ability, though for good reasons they are usually couched in those terms. Instead the issue is which paradigm should in the future guide research on problems many of which neither competitor can yet claim to resolve completely. A decision between alternate ways of practising science is called for, and in the circumstances that decision must be based less on past



achievement than on future promise. The man who embraces a new paradigm at an early stage must often do so in defiance of the evidence provided by problem-solving. He must, that is, have faith that the new paradigm will succeed with the many large problems that confront it, knowing only that the older paradigm has failed with a few. A decision of that kind can only be made on faith (1962, pp.157-158).

This sense of faith is as often as not based on "arguments, rarely made entirely explicit, that appeal to the individual's sense of the appropriate or the aesthetic - the new theory is said to be 'neater' 'more suitable', or 'simpler' than the old" (1962, p.155).

But the central question must now arise as to whether recourse to aesthetic criteria is simply due to "the circumstances" or whether in themselves the criteria constitute the real deep-seated reason for paradigm choice. Because this topic strikes at the very heart of basic scientific assumptions it is necessarily contentious and difficult to discuss. Certain conclusions may however be drawn without immediately examining the validity of those assumptions. Firstly, it must be accepted that during the crisis stage of a scientific revolution no recourse can be had to scientific principles. If principles existed which were capable of resolving the crisis, then there would clearly be no crisis to resolve. Second, there can be little doubt that the clarification of a crisis state and the shift of scientific opinion to one or other paradigm is influenced by the problem solving ability of the competing paradigms. The difficulty arises, however, when the scientific community seeks to invest the successful paradigm with a fully objective status. For as we have seen, such a move necessitates distorting the

historical situation of previous transcended work, as well as suppressing certain problems as legitimate areas for scientific enquiry. The only problems which can be legitimately considered are those defined by the contemporary paradigm, and since that paradigm will inevitably solve the vast majority of those problems it will obviously be seen to be highly successful. It is this circularity or positive-feedback which results in a contemporary paradigm being assigned an absolute rational priority according to the assumption that scientists can objectively observe an absolute reality.

Now although crisis situations do clarify with the passage of time, it seems doubtful whether this clarification involves any qualitative change in the logical status of the winning paradigm. There may still be problems which cannot be solved in terms of the paradigm (the problem of gravitation vis-à-vis Newton's Principia springs to mind), and there may still exist other theories or paradigms which are equally compatible with observed nature, and which might prove instructive in solving problems repressed under the successful paradigm (late seventeenth century notions of relativity provide good examples). It is these possibilities which allow the adherents of old paradigms to remain sure in their faith until they die:

In the past [such occurrences] have most often been taken to indicate that scientists, being only human, cannot always admit their errors, even when confronted with strict proof. I would argue, rather, that in these matters neither proof nor error is at issue. The transfer of allegiance from paradigm to paradigm is a conversion experience that cannot be forced. Lifelong resistance, particularly from those whose productive careers have committed them to an older tradition of

normal science is not a violation of scientific standards but an index to the nature of scientific research itself (1962, p.151).

The point, therefore, is not that relative problem solving ability does not affect the outcome of a scientific crisis (although it should be remembered that as a crisis resolves, all problems will gradually come to be defined in terms of the winning paradigm, thereby creating a positive feedback situation), but that such ability can never constitute an absolute scientific principle in terms of which one paradigm may be assigned a higher rational priority than any other. Further, if this now putative principle does not rest on the notion of relative problem solving ability - on the notion, in other words, that one theory works better than all its competitors - then it is extremely difficult to see how any such principle can exist at all. Since each successive paradigm traditionally incorporates within itself the idea that it, and only it can facilitate the objective observation of external reality, and since the possibility of validating that idea in practical terms has been negated, it must be concluded that neither this idea, nor any idea derived from it, can be used to establish the ultimate validity of any one paradigm.

It follows from what has just been said that the criteria according to which the success of any paradigm is judged will be incorporated in the very assumptions of that paradigm. Consequently, "each paradigm will be shown to satisfy more or less the criteria it dictates for itself and to fall short of those dictated by its opponents" (1962, pp.109-110). For this

reason not only is "the competition between paradigms . . . not the sort of battle that can be resolved by proofs" (1962, p.148), but it is a battle in which there will always be a certain lack of common ground. Protagonists will always, to some extent or other, talk at cross-purposes. Kuhn provides an example of this phenomenon:

The laymen who scoffed at Einstein's general theory of relativity because space could not be "curved" - it was not that sort of thing - were not simply wrong or mistaken. Nor were the mathematicians, physicists and philosophers who tried to develop a Euclidean version of Einstein's theory. What had previously been meant by space was necessarily flat, homogeneous, isotropic, and unaffected by the presence of matter. If it had not been, Newtonian physics would not have worked. To make the transition to Einstein's universe, the whole conceptual web whose strands are space, time, matter, force, and so on, had to be shifted and laid down again on nature whole. Only men who had together undergone or failed to undergo that transformation would be able to discover precisely what they agreed or disagreed about. Communication across the revolutionary divide is inevitably partial (1962, p.149).

### E

It now becomes possible to draw some conclusions regarding the logical status of scientific knowledge. In view of the arguments presented in the previous section, there exists a very strong case for asserting that no scientific theory can be unequivocally established as 'objective' in the accepted sense of the word, and that the criteria according to which a theory becomes pre-eminent are not to be found within the confines of scientific activity as that activity is usually interpreted. It

is necessary to abandon the idea that there is an absolute and definitively cognisable truth towards which scientists have been single-mindedly striving since the dawn of civilisation. Science is not a process whereby the scientist feels his way through a maze of "error, myth and superstition" until he discovers what has seemingly always been there for the understanding.

But what does this assertion tell us in a positive sense about the logical status of scientific knowledge? In the first place, the notion of faith or aesthetic sense would seem to remain crucial in the process of deciding between competing paradigms, and therefore in the process of ascribing any one paradigm a high rational priority. Furthermore, this notion involves questions of value, and it is these values which constitute the extra-scientific criteria mentioned above:

. . . since no paradigm ever solves all the problems it defines and since no two paradigms leave all the same problems unsolved, paradigm debates always involve the question: which problems is it more significant to have solved? . . . that question of values can be answered only in terms of criteria that lie outside of normal science altogether, and it is that recourse to external criteria that makes paradigm debates revolutionary (1962, p.110).

Yet reliance on the value judgments of people does not mean that the scientific enterprise is inherently capricious, nor that there is a return to the 'distortive subjectivity' which a scientist seemingly divests at the moment of 'objective discovery'.

Within any particular set of paradigmatic assumptions good normal science will still be thoroughly rational and logical. Not

only does successful scientific work have to meet the highest of critical standards, but in the vast majority of cases the results of this work must be capable of being reproduced at will. It therefore becomes necessary to agree with Kuhn that, in this difficult area, "something even more fundamental than . . . values . . . is also at stake" (1962, p.110).

Any real insight into the logical status of scientific knowledge depends on an understanding of what happens within the mind of a scientist when he is converted from one paradigm to its successor. Kuhn argues that when a paradigm change occurs there is quite literally a change of world view within the relevant scientific community:

. . . when paradigms change, the world itself changes with them. Led by a new paradigm, scientists adopt new instruments and look in new places. Even more important, during revolutions scientists see new and different things when looking with familiar instruments in places they have looked before. It is rather as if the professional community had been suddenly transported to another planet where familiar objects are seen in a different light and joined by unfamiliar ones as well (1962, p.111).

It is at this point that the disjunction between the traditional view of science and the one which is now emerging becomes fully clear. For the traditional view depends on and at the same time supports one of the basic epistemological assumptions of Western man, namely, that external reality presents every person with the same fixed and neutral data. Good science then depends on the correct interpretation of the fixed and neutral sensory experience that results. But in the face of arguments presented in this Appendix, this assumption is no longer tenable. For if

it is assumed that the laws and norms of nature are not entirely capricious (and there is an overwhelming weight of practical evidence to back up this assumption), then it is man's ability to objectively perceive nature that comes into question. For example, Newtonian physics remains perfectly workable for localised spheres of activity involving relatively low velocities, and on this basis may be 'adequately integrated' into Einstein's universe. Yet an adequate understanding of that universe requires that "the whole conceptual web whose strands are space, time, matter, force and so on [be] shifted and laid down again on nature whole". While Newtonian physics remain 'perfectly valid', in other words, Newton's perception of the universe is completely incompatible with that derived from Einstein's work. It is with this apparent conundrum that Kuhn's discussion of scientific revolutions ends:

But is every sensory experience fixed and neutral? Are theories simply man-made interpretations of given data? The epistemological viewpoint that has most often guided Western philosophy for three centuries dictates an immediate and unequivocal, Yes! In the absence of a developed alternative, I find it impossible to relinquish that viewpoint. Yet it no longer functions effectively, and . . . attempts to make it do so . . . now seem to me hopeless (1962, p.126).

The key to the solution of this conundrum and to the successful extension of Kuhn's theory would thus seem to lie in an examination of the nature of perception.

When we perceive something, the natural assumption is that what we perceive exists 'out there' and 'beyond us' in external reality. As we have seen, this is the fundamental

assumption of the teleological view of science: there is a one-way transference of information from a discrete and delimited external reality to the equally discrete and delimited mind of the clear-sighted scientist whereby nature is thought of as 'giving up her secrets'. But a moment's reflection leads to the conclusion that our perceptions are as much 'in us' as they depend on phenomena 'out there'. - Every person's perception belongs uniquely to them if for no other reason than that they cannot exist outside themselves in coexistential unity with the reality they perceive. Not only can we never definitively know that external reality possesses the characteristics which comprise our perception of it, but we can never definitively know that it actually exists at all. This is not to imply, however, that reality is a total figment of one's imagination, and that there is no data of actuality coming from without which may be conceived of as corresponding to or paralleling one's conception of reality. As we can never definitively know that external reality actually exists, so equally we can never definitively know that it does not exist. Although our perception of reality 'belongs' uniquely to us, therefore, it is not a perception that may be legitimately separated from the data of actuality coming from without which is responsible for the instigation of the perception. In our perception of a phenomenon, there exists a relationship between us and the phenomenon that has as much to do with the phenomenon as it does with us. The argument, then, is that there is a continual and dialectic



information flow between us and a phenomenon of which our mental 'image' and the phenomenon's 'material' attributes are only aspects.

Although it applies to a different situation ('purposeful action' rather than 'rational deduction'), Gregory Bateson gives an example of such an information flow which provides a useful model for subsequent discussion. In giving the example, Bateson draws a careful distinction between relationships occurring solely in the material (mechanico-corpuseular) sphere of the universe and relationships which involve people. The latter are dialectic; the former are not:

Consider a man felling a tree with an axe. Each stroke of the axe is modified or corrected according to the shape of the cut face of the tree left by the previous stroke. This self-corrective (i.e. mental) process is brought about by a total system, tree-eyes-brain-muscle-axe-stroke-tree; and it is this total system that has the characteristics of immanent mind.

More correctly, we should spell the matter out as: (difference in tree) - (difference in retina) - (difference in brain) - (difference in muscles) - (difference in movement of axe) - (difference in tree) etc. What is transmitted around the circuit is transforms of differences. And . . . a difference which makes a difference is an idea or unit of information.

But this is not how the average Occidental sees the event sequence of tree felling. He says 'I cut down the tree' and he even believes that there is a delimited agent, the 'self', which performed a delimited 'purposive' action upon a delimited object.

It would be all very well to say that 'Billiard ball A hit Billiard ball B and sent it into the pocket'; and it would perhaps be all right (if we could do it) to give a complete hard-science account of the events all around the circuit containing the man and the tree. But popular parlance includes mind in its utterance by invoking the personal pronoun and then achieves a mixture of mentalism and physicalism by restricting mind within the man and reifying the tree. Finally, the mind itself

becomes reified by the notion that since the 'self' acted upon the tree, the 'self' must also be a 'thing'. The parallelism of syntax between 'I hit the billiard ball' and 'the ball hit another ball' is totally misleading (1973, pp.288-289).

The situation in the experimental sciences is highly analogous. When a scientist wishes to understand a phenomenon for which there is as yet no satisfactory explanation, he will put forward a working hypothesis based on general scientific principles and successfully concluded work in adjacent areas<sup>11</sup>. Unless he is extremely lucky, the results of the experiments conducted on the basis of this hypothesis will not be those predicted. To put it in Bateson's terms, there is a difference between hypothesized prediction and observed behaviour which in turn results in a modification (difference) of the hypothesis. The cybernetic circuit is complete. Yet this is not usually how the scientific process is seen. Because he deals more than most people with a mechanico-corpuseular world susceptible to reductionist analysis, the temptation for the scientist to restrict mind within the physical confines of the body are enormous. Once this delimitation has been achieved, of course, there is no other possibility than that the external world too becomes delimited and reified. And this latter separation is one that is made all the more easy through the knowledge that the laws and norms of the 'natural world' are unaffected by human volition. The scientist, in other words, tends to think that the experimental process is concerned with the discovery on his part of what is actually 'out there' in external reality.

In order to understand what we might imagine as 'really' happening, it is necessary to remember that we can never definitively know that external reality possesses the characteristics which comprise our perception of it. A theory can never be the same thing as the phenomena it seeks to explain. Discovery - the process whereby a previously unknown fact is uncovered, disclosed, divulged or revealed - is precisely what does not happen, therefore. For that fact does not have prior existence in external reality. It only comes into existence as part of a working hypothesis or a theory which is subsequently tested and then ascribed the status of a fact by scientists. To put it another way, the scientist produces a thought pattern whose characteristics sufficiently parallel those of the phenomena he is examining to effectively terminate the transmission of difference transforms. This termination constitutes the moment of 'discovery'.

But where do these thought patterns originate if they are not, as it were, 'incipiently' supplied by external reality? In the first place it must be emphasised that no scientist approaches a problem in a pristine state of mind. He brings to the analytic situation a body of knowledge and a set of attitudes and preconceptions which are in existence prior to the situation. Secondly, it must be remembered that there is a continual and dialectic information flow between the scientist and the phenomena he is seeking to explain. When, therefore, a scientist enters the analytic situation there occurs an instantaneous, intense and indissoluble relationship between

perception and phenomena whose total and immanent characteristics circumscribe the further exploration of those phenomena. Such is the nature of scientific paradigms.

In the majority of cases an adequate theory can be constructed for the phenomena under observation within the set of characteristics so circumscribed, and paradigmatic assumptions do not come into question.—That does not mean, however, that the theory is in any way definitive. Because of the inevitable distancing between theory and phenomena, and because theory owes a great deal to preconception, it is entirely possible for more than one 'scientifically adequate' theory to have existed at different times for the same sphere of activity within the universe.

The most telling example of such an occurrence is provided through the work of Newton and Einstein. Because Newtonian physics remains completely workable, and because it is a basic assumption of science that there can only be one correct theory for any sphere of activity within the universe, many scientists<sup>12</sup> are of the view that Newton's work is completely compatible with that of Einstein:

Relativistic dynamics cannot have shown Newtonian dynamics to be wrong, for Newtonian dynamics is still used with great success by most engineers and, in selected applications, by many physicists. Furthermore, the propriety of this use of the older theory can be proved from the very theory that has, in other applications, replaced it. Einstein's theory can be used to show that predictions from Newton's equations will be as good as our measuring instruments in all applications that satisfy a small number of restrictive conditions (Kuhn, 1962, p.99).

Newtonian theory forms a special case of Einsteinian, in other

words, and "since no theory can possibly conflict with one of its special cases" (1962, p.99), the Newtonian must be taken as 'correct'. Such a view provides a very good example of the small but vital distortion necessary with any scientific revolution. For not only is Newton's preconception of the universe (world view) totally incompatible with that of Einstein, but this incommensurability is mathematically, even if not, practicably, demonstrable. The only situation where Newtonian dynamics do form a special case of Einsteinian, and where there is consequently a mathematical identity, is when all the bodies under consideration are stationary with regard to one another. To put the relationship between Newtonian and Einsteinian dynamics in a different light, the inability of scientific instruments to measure infinitesimally small distances does not provide a philosophically sound basis on which to deny the occurrence of a scientific revolution.

The fact that many scientists feel it necessary to ascribe Newtonian physics 'true scientific status' highlights the possibility that exists for totally different paradigmatic assumptions to give rise to different theories of comparable adequacy. By contrast, the assertion that Newtonian theory is strictly speaking inadequate in terms of Einsteinian (which itself may well be shown as inadequate in terms of some future theory), highlights the necessity of recognising the inevitable distance that always exists between theory and phenomena.

In order to understand the full logical status of scientific knowledge, however, it is necessary to consider the

minority of cases where the circumscribing characteristics of the dialectic analytical situation do not allow for the construction of an adequate theory, where the transmission of difference transforms do not cease, and where paradigmatic assumptions are ultimately brought into question. It is in these situations, it will be remembered, that scientists are driven to utilise criteria which are not 'scientific' in the sense in which that word is usually intended. Since all science is carried out within the parameters of specific paradigms, and since all paradigms are ultimately located in these 'non-scientific' criteria it would seem that all science is grounded in these 'non-scientific' modes of thought. Identification of the processes ultimately responsible for the generation of these modes of thought will therefore establish the ultimate location and source of all scientific knowledge.

### F

The assertion that all science is ultimately grounded in 'non-scientific' modes of thought highlights the fact that scientists do not live completely in a world of their own. They are in everyday contact with society as a whole, and in order that they may maintain meaningful relationships with people in general, it is necessary that they have a symbology in common with those people<sup>13</sup>.

That scientists are members of society who use symbols of all kinds in common with the other members of that society is

not in itself remarkable. But certain rather more important considerations follow. For societies can only arise and continue to exist through communication, that is, through the creation and exchange of symbols. Symbols are not self-contained phenomena. They are not God-given but created by people to cope with the many varied situations in which they find themselves. The meaning of symbols and sets of symbols are originally derived from specific and real social situations. But there is another side to the coin. Once a symbol or set of symbols has been created in response to a new situation, these symbols in retrospect, colour that situation. When people look back at a series of events they do so by means of and through the symbols created to define it. Furthermore, the new symbols may be used in other situations. Since the symbols are not specifically created for these other situations, they bring to them meanings which although not necessarily 'irrelevant' or 'wrong', are obviously coloured by previous usage. The reverse, of course, is equally true, for new situations modify the meanings of the already existing symbols used to denote such situations. In other words, situations and symbols have a dialectic relationship crucial to the dynamics of the social process.

This relationship is most easily understood with regard to words, which constitute man's most important symbolic mode. Not only do the meanings which arise in social situations give rise to words and continually modify the meanings of pre-existing words, but words and complete languages bring pre-conceived meanings to bear on our everyday sense of the world. Indeed, any new

situation and/or symbol is mediated to an extent by pre-existing adjacent meanings. The world we live in has meaning for us only because we symbolically mediate the events that take place in it with other people, and we do this primarily with words. Reality - often conceived as an absolute fact which cannot be changed by people, but only misconstrued - is thus constructed by people through the mutual agreement by words and other symbols on experiences undergone by individual people:

"World view" is an elusive term, but when we speak of someone's world view in any sense, we do not mean simply the world impressing itself upon his passive receptors, sensory or intellectual. A person does not receive a world view, but rather takes or adopts one. A world view is not a datum, a donné, but something the individual himself, and the culture he shares partly constructs; it is a person's way of organising from within himself the data of actuality coming from without and within (Ong, 1969, p.634).

For the purpose of clear understanding a theoretical distinction may be drawn between environment and everyday reality: environment is the unqualified situation (reality as we might imagine it to be as absolute fact) in which a person finds himself; everyday reality is the result of that person's interaction with the environment and the interaction of this subjectivity with other subjects. In practice, the distinction is invalid for two related reasons: first, no person finds himself without society and therefore pre-existing cultural support; secondly, subjectivities and ensuing inter-subjectivities become legitimated or integrated into a world sense through which the environment is mediated to people. Human society is quintessentially symbolic. That is to say, world senses and the legitimating structures that integrate inter-subjectivities into



world senses - the meanings of society - are created and maintained in and through people's collective externalisations. Every perception made and every symbol externalised is done so as a contribution to and in the context of the symbolically mediated and, since new situations are constantly arising, dialectically ongoing field of meaning peculiar to any group or society.

Any field of meaning is predicated upon assumptions which evolve as a result of the inter-subjective legitimations of perceptions, events and situations that articulate the field of meaning. These assumptions may be thought of as the unexamined paradigmatic framework or structure upon which all sensory or intellectual interaction is unconsciously grounded. The realisation of the existence of such assumptions does not negate the dialectic concept of society (one might conclude that it encouraged people to perceive the nature of all perceptions, thoughts and externalisations as mechanically determined). Assumptions serve, on the contrary, to mediate, process and in some cases repress socially efficacious information in one way rather than in any other. Society is not a one-level, linear cause and effect sequence, but a mosaic of simultaneously interacting and complementary fields of action and influence. It must further be emphasised that assumptions are implicitly agreed upon inter-subjectively and as such are themselves, at times of great stress and rapid or fundamental change, subject to the ongoing dialectic processes of society.

World senses, then, must not be thought of as deterministic monoliths. They may most usefully be conceived as totally fluid processes containing a myriad 'levels' which permit the categories of understanding specific to assumptive frameworks to act back on each other in countless different ways<sup>14</sup>. Beyond this it is necessary to realise that the concept of 'levels' is only a convenience, for 'fundamental' categories of understanding may only be elucidated through examination of the concrete articulations specific to any world sense. Finally, it should be noted that change in society would be utterly impossible without an element of genuine creativity which finds potential expression through the thought processes of every individual person<sup>15</sup>.

But despite the total fluidity and inherent creativity of the social process, it should still be remembered that the power of world senses to mould our ways of thinking is immense. The ability of any individual to escape the predominant modes of thought in his society is, depending on different variables<sup>16</sup>, severely circumscribed. In understanding the logical status of scientific knowledge, therefore, the crucial question is this: even given the division of labour in modern society upon which professional groups are predicated, how possible is it for scientists to escape the fields of meaning relevant to modern industrial society and the assumptions upon which they are grounded? In constituting various professional groups there can be little doubt that scientists have their own structured field

of meaning and action which each person in that group helps to articulate through his own inter-subjectively constructed role-specific field of meaning. But such a professional group does not exist incommunicado from the rest of society. Since society continues to exist in and through the symbols of communication, we may assert that as a member of a group helps to articulate the larger field of meaning of the group, so the group, in and through its collective activities, helps to articulate the larger field of meaning in society as a whole. Given the dialectic nature of the social process, the fields of meaning and structures efficacious for the individual, the professional group and society integrate and inter-relate in an overwhelmingly unified and complementary manner<sup>17</sup>. When a scientist acts 'scientifically' he not only articulates the structure of role-specific knowledge, but also a legitimating structure relevant for the accrued knowledge of the entire society. Conversely, the pre-existing but dialectically articulated legitimating structure of 'social' knowledge influences to a large extent the dialectically ongoing processes of professional groups and role-specific knowledge<sup>18</sup>.

A further observation may be made on the relatedness of scientists and other professionals to society as a whole. The separateness of such groups and their role-specific knowledge from the 'mainstream' of society is genuine and may usefully be viewed as such in certain contexts precisely because it is predicated upon the high division of labour prevalent in

modern industrial society. But in turn it must be recognised that the division of labour as a method of social and economic organisation is itself grounded upon the legitimating structure and assumptions of that society. The effect of those assumptions as manifest in the division of labour has been the mystification of role-specific knowledge for group protection and hence a one-sided emphasis on the 'uniqueness' or 'separation' of that knowledge at the expense of a recognition of the more unified processes of society<sup>19</sup>. Paradoxically, the scientists' attitude that scientific knowledge can only be created and maintained with reference to nothing but 'purely scientific principles' is an aspect of the irrevocable fashion in which a scientist is a prisoner of his own social situation. In order to understand this attitude in its fullest context, therefore, it has been found necessary to bring to the fore one of the most important facets of the entire modern industrial society. This procedure in itself supports the theme of the argument.

It is now possible to enlarge upon the central assertion of the previous section, namely, that an adequate scientific theory arises when a scientist produces a thought pattern whose characteristics sufficiently parallel those of the phenomena under examination. For if it is accepted from the arguments presented in this section that scientific knowledge both reflects and at the same time contributes to the wider social reality of which it forms an aspect, then it can be understood that adequate scientific theory will only arise when it forms part of a wider

social reality or world sense whose characteristics potentially or nearly parallel those of the phenomena under examination.

In Chapter Three, for example, it was demonstrated (inter alia) how the Newtonian-Laplacian concept of the universe arose as an aspect of the wider world sense of post-Renaissance industrial society.

The logical status of scientific knowledge is not therefore to be located in a spurious objectivity or absoluteness. It is to be located rather in science's contribution to the articulation of a socially all-pervasive world sense, a contribution, it should be re-emphasized, that is not at all incompatible with the high degree of adequacy demanded of scientific knowledge.

#### G

It would seem to follow from the discussion in the previous section that all knowledge is embedded in the wider social reality of which it forms a dialectic facet. That is, if scientific knowledge is taken to be grounded in a wider social reality, then it appears inescapable that all forms of knowledge which go to make up the 'background' of that reality must at the same time and in the same way form dialectic aspects of it.

This line of thought may be reinforced from another

direction. It will be remembered that the usual view of science, whereby scientific statements are taken to be absolute and neutral, depends on the assumption that man can objectively observe external reality. It is this objective observation which frees science from the distortive influence of personal preconception. The humanities, on the other hand, can never make absolute and neutral statements because their subject matter does not permit objective observation. It is the impossibility of objective observation which allows personal preconception to creep into 'objectivised' statements. Now if it is accepted that scientific knowledge ultimately depends upon socially constructed value judgments, then it becomes very difficult to see how the same conclusion cannot be accepted for the humanities, bearing in mind that value judgments are already acknowledged to be an integral aspect of any work in this area.

Musicology is no exception in this regard. But does the assertion that musicology is an aspect of socially constructed reality reveal anything that was previously unknown? Was it necessary to go to all the trouble of demonstrating that scientific knowledge is socially constructed in order to establish something that humanists have accepted for a long time, namely, that the characteristics of any particular piece of knowledge are deeply and inevitably affected by the outlook of the people responsible for its inception and propagation? The advantage of considering the logical status of scientific knowledge, it will be remembered, was that it inevitably led to the questioning of

objectivity per se, and consequently forced the focus of attention towards the human values that at the deepest level underpin all knowledge. But had the appendix started with a consideration, say, of the logical status of musicology or of one of the other humanities, it would have been very difficult to convincingly lead the discussion beyond the usual conclusion that the proliferation of competing theories in these subjects derives from the nature of the subjects themselves. The shift of focus that Kuhn's theory ultimately forces essentially substantiates an assertion made at the beginning of section D, that is, that although the inherent qualities of phenomena do affect modes of cognitive control and manipulation, this inter-relationship does not preclude the possibility that, at a deeper level, all knowledge owes its existence and maintenance to one and the same process<sup>20</sup>.

Concentration on the logical status of scientific knowledge has in other words led to the conclusion that the present state of any discipline vis-à-vis the universal acceptance of a paradigm or the disputation of competing theories has at least as much to do with the distinguishing characteristics of the underlying world sense as it does with the 'inherent characteristics' of the subject matter. If there is a high degree of congruity - although not necessarily absolute equivalence - between the 'inherent characteristics' of the phenomena under consideration and those of the social reality underpinning the explanatory theory, then a universally acceptable paradigm is likely to emerge. If, on the other

hand, there is a relatively low degree of congruity, then varying opinions are likely to emerge as to the manner in which a particular set of phenomena should be explained<sup>21</sup>. Instead of there being a single paradigm which produces a number of peripheral anomalies, there is much more likely to be a single and irreducible problem which pervades a number of different and possibly incompatible theories. It is this second relationship between world sense and phenomena which solves the difficulty indicated in section C, for as the first Part of this thesis was at pains to indicate, there would seem to be a single and irreducible musicological 'problem' (that of the 'meaning' or significance of music) which pervades a number of different and frequently incompatible approaches to the subject (for example the purely analytical and the purely 'psychological' or 'aesthetic'). Because this second type of relationship is appropriate to musicology (and the discussions in the first seven chapters of this thesis would appear to indicate irrevocably that the industrial world sense is totally unsuited for an understanding of musical process), there is no need to establish that the discipline possesses a single paradigm. Kuhn's ideas still remain appropriate and instructive.

#### H

Having indicated the basic terms in which the thesis was



conceived, it is now possible to go on and consider, from a theoretical perspective, some fundamental methodological questions. First among these is the necessity of examining a world sense in order to demonstrate the inadequacy of a theory grounded on it. For even granting that the adequacy or otherwise of a theory ultimately rests on the degree of congruity between the characteristics of world sense and phenomena, that adequacy can only ultimately be assessed through some sort of 're-examination' of the phenomena in question. And since the theory will in some way undoubtedly evidence the characteristics of the world sense on which it is grounded, could it not be concluded that a 're-examination' of phenomena and theory alike would be just as effective in assessing the theory's adequacy as an elucidation of the underlying world sense on which the theory is grounded? That this is not the case can be illustrated by comparing two stereotypic situations. Both situations are based on a scheme possessing three elements: the phenomena under examination, the theory which seeks to explain them and the world sense or wider social reality in which the theory is grounded. It is assumed in both situations that the theory furnishes an inadequate explanation of the phenomena.

In the first situation the theory is 'derived' from the phenomena in ignorance of the world sense responsible for its generation. The only way in which the discrepancy between the characteristics of phenomena and theory can be highlighted in

this situation is through a 'phenomenological' analysis of the phenomena, that is, an analysis which does not presuppose any a priori categories of understanding:

First, and above all, an explanation must do justice to the thing that is to be explained . . . . The question is not "At what view of the phenomenon must we arrive in order to explain it in accordance with one or another philosophy?" but precisely the reverse: "What philosophy is requisite if we are to live up to the subject, to be on-a-level-with-it?"---The question is not how the phenomenon must be turned, twisted, narrowed, crippled so as to be explicable, at all costs, upon principles that we have once and for all resolved not to go beyond. The question is: "To what point must we enlarge our thought so that it shall be in proportion to the phenomenon . . . ."22

The advantage of this procedure is that, in theory, it does not favour any one approach to understanding a particular set of phenomena. However, since no person finds themselves without society and the consequent assumptions on which the life of that society is founded, such supposed neutrality is completely spurious. If, therefore, a person who is largely unconscious of his own world sense intuitively suspects that a particular theory is inadequate, and consequently seeks to indulge in a 'phenomenological' analysis, then the analysis itself will inevitably and ultimately be grounded in the same categories of understanding that were responsible for the original inadequacy. The adequacy of a theory cannot, it would seem, be assessed in any real sense.

Two qualifications need to be made to this line of thought, however. First of all, because world senses are not deterministic monoliths, it is quite possible for a person to partially transcend the inadequacy of a theory by intuitively

allowing 'basic' categories of understanding to act back on each other at a number of different levels. But although this procedure permits a considerable degree of distancing from the central core of socially constructed reality, it can never facilitate a fundamental break with that reality nor, consequently, a true transcendence of the inadequate categories of understanding. Secondly, the fact that a person is unconscious of the existence of the world sense in which traditional theories are grounded does not necessarily mean that the person is ipso facto incapable of transcending that world sense. It should be remembered that world senses only exist through the specific articulations of individual people and that they can be changed through those same articulations. However, the imposing massivity of everyday reality makes such intuitive or unconscious changes extremely difficult to accomplish.

The advantages accruing from the second situation only emerge with an understanding of the principles involved when a person becomes conscious of their underlying world sense. Because world senses are only articulated through the externalisations of individual people, and because the adequate examination of any world sense inescapably involves an elucidation of its assumptions, any person who attempts to recede from the world sense which envelops them will necessarily engage in an examination of the assumptions underlying their own mental structuring. But on what is that examination predicated? We have already seen that it is impossible for

anyone to approach an analytic situation in a pristine state of mind, yet to predicate an examination of one's underlying assumptions on those very same assumptions is clearly to compromise the efficacy of the examination.

This difficulty highlights the importance of creativity to the social process. For every time one set of assumptions is uncovered, another is implicitly created as part of the meta-situation necessary for the initial examination. It is necessary, in other words, to have an assumptional framework in order to examine an assumptional framework. The process of exposing the assumptions of one's own society therefore involves a high degree of 'separation' or 'distancing' both from oneself and one's society. Now the separation or distancing can never become total. Not only are people unable to step completely outside themselves in order to examine the characteristics of the 'old self' but if they wish to communicate and remain sane in the eyes of their own society, then they must stay to a certain extent within the field of meaning of that society. This problem was touched on at several points in the thesis when discussion required it. A final statement regarding it was also made in the concluding chapter. All that needs to be acknowledged in the present context, however, is that when a person becomes largely conscious of their own world sense they implicitly create another, transcendent<sup>23</sup> world sense in the process.

It can now be understood that once a person is largely conscious of the world sense responsible for the generation of a

particular theory, the self-reinforcing circle of perception and phenomena specific to that theory becomes potentially loosened. And if, as is the case in the second of these stereotypic situations, the theory in question furnishes an inadequate explanation of the phenomena under examination, then the new frame of reference provided by the implied and transcendent world-sense will most likely highlight that inadequacy. Consciousness of the world sense underlying theory thus provides the 'enlargement of thought' demanded by von Schelling. An understanding of its potential role also explains why proper knowledge of the logical status of musicological theories is a necessary prerequisite for a full discussion of their adequacy.

But this does not mean that the approach being recommended here will lead to perfect and incontrovertible assessments of different theories. For another difficulty presents itself at this stage. Despite the advantages accruing from this second situation, it still remains the case that theories can only be shown to be inadequate through a 'phenomenological' analysis of the phenomena they seek to explain. Now although the new world sense would seem to militate against a repeat of the difficulty noted in connection with the first situation (where the 'phenomenological' analysis was inevitably and ultimately grounded in the same categories of understanding responsible for the initial inadequacy), there is absolutely no guarantee that the new world sense would not bias the analysis in favour of itself. If, on the one hand,

the 'phenomenological' analysis in this second situation demonstrates no great inadequacy on the part of the theory under examination, then it would seem reasonable to assume that this theory possesses a high, although not necessarily absolute degree of adequacy. But, on the other, if the theory appears to be substantially inadequate, it still remains possible that the new world sense has generated a 'phenomenological' analysis - now to achieve the status of new theory - which itself may be imagined as being inadequate. This second-order difficulty is inevitable if for no other reason than that "the competition between paradigms is not the sort of battle that can be resolved by proofs".

Although there are sometimes practical ways of minimising the effect of this second-order difficulty<sup>24</sup>, there is only one set of circumstances in which it does not arise. This set of circumstances is of considerable importance to the discussion of Langer's and Meyer's theories on music which took place in the main body of the thesis. It was mentioned earlier in this section that because world senses are not deterministic monoliths it is quite possible for a person to partially transcend the inadequacy of a theory by intuitively allowing 'basic' categories of understanding to act back on each other at a number of different levels. In a situation where the characteristics of world sense and phenomena are incompatible, therefore, there exists the potential for the characteristics specific to the instantaneous and indissoluble perception-phenomena relationship

to distort the underlying world sense characteristics in such a way that the validity of the theory becomes severely compromised in terms of that underlying world sense. The continual and dialectic information flow between observer and phenomena has in other words allowed the characteristics of the phenomena to twist and cripple those of the observer. The theory remains inadequate for the phenomena because it is ultimately grounded in an inappropriate world sense. But because that grounding is inconsistent the theory retains little meaning in terms of the world sense. In this kind of situation there is no absolute necessity for a 'phenomenological' analysis. All that is needed is a substantial awareness of the world sense underlying theory<sup>25</sup>.

## J

The presence of the second-order difficulty described in the previous section underlines the absence of any ultimate or absolute standard against which the adequacy of the theory put forward in this thesis can be judged. The adequacy of different theories can only be relative, and this relativity is ultimately grounded in the specific world senses of different groups and societies. As Kuhn once again so succinctly puts it: "as in political revolutions, so in paradigm choice - there is no standard higher than the assent of the relevant community" (1962,

p.94).

It is equally the case, therefore, that the theories which come under criticism in this thesis cannot be 'proved' to be 'wrong'. This thesis is much more an exercise in transcendence whereby some features of previous theories are preserved and incorporated into the new theory, and other features discarded as anomalous. Again, there is no intention to imply that vast tracts of musicological research are 'wrong'. Such a suggestion would be ludicrous. The intention is rather to rearrange the methodological footing for musicological enquiry in such a way that it will be possible to gain a greater insight into the music under examination while at the same time attaining a more 'truly phenomenological' sense of music as music.

Within the context of the arguments presented in this Appendix, the approach and methods adopted in the thesis probably seem reasonable enough. There does, however, exist a meta-situation which is both a necessary adjunct of the position adopted in this Appendix and of crucial relevance to the general acceptability of this thesis. This meta-situation was briefly indicated at the end of section B when it was noted that those people who disagree with Kuhn's underlying hypothesis might well be providing a working example of it in a wider sense. They would, in other words, be stressing the validity of a paradigm which has become problematic for historians of science, while at the same time denying the validity of another that goes a long



way towards solving those problems. But this assertion distorts those people's position, involving as it does a belief in man's ability to objectively observe external reality. For their denial necessarily incorporates a further denial of the very concept of a paradigm. Their view of science is not one of a number which, according to one's world sense, possess varying degrees of adequacy. It is one which in their eyes has absolute validity and which therefore guarantees the fallaciousness of all others.

This meta-situation is paralleled in musicology. As indicated in Chapter Four, there exists the assumption among many musicologists that there is some form of abstract and objective aesthetic in terms of which the value and 'greatness' of music may be judged. There need not, of course, be universal agreement as to the nature of that aesthetic. The 'highly subjective' nature of music is usually taken to preclude such agreement. The point, however, is that belief in some form of objective aesthetic not only negates the idea that there may be other, relatively adequate paradigms for explaining musical significance, but thereby denies the idea of a paradigm at all.

The difficulty which results from the existence of this meta-situation may be summarised in the following general fashion. On the one hand people who believe in the ultimately objective status of knowledge can hardly be expected to admit that this view in itself constitutes a paradigm possessing a relative degree of adequacy among others. On the other, people

who believe that the adequacy of knowledge can only be relative and not absolute would be inconsistent if they claimed an objective status for that belief. It has already been admitted, for example, that although the approach put forward in this Appendix for assessing different theories may be claimed to be more adequate than the traditional, it can never be judged as ~~perfect or absolute in terms of the findings to which it gives~~ rise. Belief in paradigms of relative adequacy itself constitutes a paradigm of only relative adequacy.

It is apparent from this discussion that the common ground between the traditionalist and the relativist is minimal in the extreme. And it is precisely because communication across this revolutionary divide is virtually non-existent that there seems little point in discussing the matter any further, except, perhaps, to note that since neither the traditionalist in science or musicology would admit the validity of such a divide, they would not agree with the statement just made. For them, discussion is all too possible and in their eyes would result in the conclusive negation of all that has so far been argued in this Appendix. Against this type of attack the relativist has no defence that would be deemed satisfactory. For while it is an integral aspect of his position that he cannot appeal to a higher authority to validate his overall approach, the traditionalist is perfectly at liberty to make exactly this sort of appeal and, if pushed, will frequently do so<sup>26</sup>.

NOTES:

1. Kuhn (1962, p.81) provides an example of such an occurrence: ". . . during the sixty years after Newton's original computation, the predicted motion of the moon's perigee remained only half of that observed. As Europe's best mathematical physicists continued to wrestle unsuccessfully with the well-known discrepancy, there were occasional proposals for a modification of Newton's universe square law. But no one took the proposals very seriously, and in practice this patience with a major anomaly proved justified. Clairaut in 1750 was able to show that only the mathematics of the application had been wrong and that Newtonian theory could stand as before".
2. For a full discussion of the implications of this work see Capek (1961).
3. Capek (1961, pp.263-264), for example, states: "But this emphasis [on the part of late seventeenth century natural philosophers] on the relativity of the frame of reference hardly goes to the root of the matter; otherwise it would be correct to claim that Einstein was fully anticipated by Descartes, Leibniz, and Huygens, who all insisted on the relativity of motion. Yet, in spite of their occasional prophetic insight, it would be naive to look for even a remote foreshadowing of the relative fusion of space and matter in their thought. In their corpuscular-kinetic view of the universe they were not different from Gassendi and Newton."
4. An external reality which is 'absolute' is taken to be one whose laws and norms are essentially unchanging and operate independently of human volition.
5. See Kuhn (1962, pp.viii-ix).
6. Besides being a noted novelist, C. P. Snow spent some time at Cambridge as an experimental scientist.
7. It should be remembered, of course, that this section is based on the view that Kuhn has of the traditional approach to scientific work. This approach involves the assumption that man can objectively observe external reality. There might seem to be a confusion here because the previous section, which is based on Kuhn's work, brought that notion into question and thus implicitly blurred the traditional distinction drawn between science and the arts. This

confusion may be cleared up by noting that there are three possible views of scientific work: (i) the traditional view of how the traditional approach to science works; (ii) the view that someone like Kuhn may have of the way that the traditional approach 'actually' works; (iii) a new view or approach that may emerge as a result of Kuhn's work. It is only (iii) which causes a reconsideration of the traditional distinction between science and the arts, a reconsideration which begins in section D of this Appendix. This section, however, only concerns itself with (ii), and since this view incorporates (i) within itself, the traditional distinction can for the moment remain intact.

8. The culture-specific nature of the concept of 'objectivity' is demonstrated in Chapters Two and Three. Subsequent discussions in this Appendix (see sections E - J) argue strongly against the use of 'objectivity' as an intellectual tool in any situation.
9. The necessarily creative and therefore spontaneous nature of human existence is noted in section E of this Appendix. It has, of course, been discussed at more length in Chapters Five and Seven.
10. At the beginning of this section reference was made to a 'prevalent musicological paradigm'. In view of subsequent discussion, it must be seriously questioned whether such a concept actually exists. This potential difficulty is resolved at the end of section G.
11. The scientific process is, of course, a lot more varied and complex than implied here. However, this simple model suffices, as all scientific work involves some sort of 'gap' between paradigm and nature. That is why the work is done.
12. Kuhn (1962, p.98) notes that the assertion that the dynamics of Newton and Einstein are fundamentally incompatible, "today . . . remains a minority view".
13. The following four paragraphs also occur in Chapter One.
14. An example of the way in which the categories of understanding specific to assumptive frameworks can act back on each other is given in Chapter Three. See above, pp.49 -54.
15. cf. the discussion of creativity in Chapters Five and Seven.
16. The most important of these variables are the media of communication at the individual's disposal (see above pp.56 - 64), and consequently in modern society, the individual's location in the overall social stratification. Transcendence

(rather than destruction) of a world sense is easier for highly educated and articulate people than it is for those who attach less importance to such attributes (see Bernstein, 1973).

17. This assertion is not meant to imply a consensual or conservative approach to social theory. It is apparent that the high degree both of social stratification and of the division of labour prevalent in modern industrial society, together with the stress on individualism, provide excellent spawning grounds for social dissension and conflict. However, as Chapter Three seeks to argue, all the characteristics of modern industrial society which facilitate and encourage strife are themselves grounded in the world sense of industrial society.
18. The theoretical basis for this view of the inter-relationship of individual, professional groups, and society as a whole is provided by Berger and Luckmann: "It is important to bear in mind that most modern societies are pluralistic. This means that they have a shared core universe taken for granted as such, and different partial universes co-existing in a state of mutual accommodation. The latter probably have some ideological functions, but outright conflict between ideologies has been replaced by varying degrees of tolerance or even cooperation" (1971, p.142).
19. This process is discussed and illustrated in Berger and Luckmann (1971, pp.102-106). The authors' example of the medical profession (p.105) is particularly pertinent in this respect.
20. The exact relationship that occurs between the inherent qualities of phenomena (and here I am thinking very much in terms of the science/humanities split of section C) and the deeper social process in the construction and maintenance of knowledge is not one which seems to have been greatly explored. There is little doubt, however, that the inherent qualities do play a significant role in theory construction and manipulation, but within the world sense/phenomena relationship as set out in the following paragraph of the text. For example, the scientist will nearly always be able to use an observable anomaly in external reality as a lever through which to present his new theory or paradigm. For one reason or another, establishing the existence of an anomaly in the humanities still remains a much more difficult exercise. These reasons are usually traceable to the fact

that the phenomena examined by the humanist are not independent of human thought and volition. The point to be emphasised, however, is that the existence or otherwise of a universally accepted paradigm in any discipline or area of a discipline is in no way absolutely dependent on the inherent qualities of the phenomena under examination.

21. It should be noted that the line of argument in this paragraph stresses one dialectic moment of the social process at the expense of others. It does not mean to imply, however, that world senses are some kind of 'given' or datum. They are created through the actions of individual people, and ~~scientific theory can contribute to this creative~~ process just as much as any other activity.
22. Friedrich von Schelling, Philosophie der Mythologie (Stuttgart and Ausburg 1856-1861), quoted in Zuckerkandl (1956).
23. The use of the word 'transcendent' in this context is not meant to imply that the second (transcending) world sense contains within itself the entirety of the first (transcended) world sense. When one world sense is impliedly created and transcends another, the process is closely akin to that of a paradigm change. The majority of the original, transcended world sense continues to exist within the rather different framework provided by the second, transcending world sense, but certain aspects of it will be repressed from consciousness. Further, the second, transcending world sense will possess a number of characteristics not evident with its predecessor. For example, the world sense underlying this thesis preserves the majority of the preceding industrial world sense, albeit in a rather different form. Yet it attempts to dispense with concepts such as 'objectivity', while asserting that there are elements of external reality (for example social relationships) which do not have physical embodiment.
24. For example, the analysis of the 'phenomenal' time-space sense of music which was set out in Chapter Seven was probably not biased in favour of the world sense underlying it, because the analysis resulted from an examination of tonality, a musical language which, at the culture-specific level, displays a radically different world sense and concomitant time-space sense.
25. It should be remembered that a new, implied world sense which facilitates awareness of a previously held world sense is itself transcendent of this 'old' world sense (see note 23 above for a definition of the word 'transcendent'). Because

of this a theory which is inconsistently expressed in terms of the original (transcended) world sense is unlikely to become logically consistent in terms of the new (transcending) world sense. A change of world sense does not imply a logical inconsistency within the old, transcended world sense, but rather the adoption of a new set of assumptions within and in terms of which the presence or otherwise of logical consistency may be ascertained. There can be no question of a logical inconsistency obtaining between different world-senses, only a mutual incompatibility. It seems extremely unlikely, therefore, that a logically inconsistent theory can be rescued by any world sense. It is thus not necessary to engage in a 'phenomenological' analysis of the phenomena to which such theory is applied.

26. Meyer gives a very good example of the way a traditionalist can be so pushed in his essay, "Value and Greatness in Music". This essay essentially argues for an objective aesthetic rooted in gratification delay. The aesthetic works very well for Meyer when comparing pop music with Beethoven's Ninth Symphony, but becomes rather more problematic when comparing that symphony with Debussy's Afternoon of a Faun. At this point Meyer feels constrained to deal with the argument (essentially a relativistic one) that each work is good in its own way. The only way he can do this is by positing some form of authority which is higher than the different criteria embodied in the respective works of Beethoven and Debussy, for only when this higher authority is so posited does the question of absolute value itself become problematic: "At this point some of our social scientist friends, whose blood pressure has been steadily mounting, will throw up their hands in relativistic horror and cry: 'You can't do this! You can't compare baked Alaska with roast beef. Each work is good of its kind and there's the end of it.' Now granting both that we can enjoy a particular work for a variety of reasons and also that the enjoyment of one kind of music does not preclude the enjoyment of others - that we can enjoy both Debussy and Beethoven - this does not mean that they are equally good. Nor does it mean that all modes of musical enjoyment are equally valuable. In fact, when you come right down to it, the statement that 'each is good of its own kind' is an evasion of the problem, not a solution of it. And so we are still driven to ask: are all kinds equally good?" (Meyer, 1967, pp.34-35). This argument by Meyer demonstrates exactly how wide the assumptive divide between the absolutist and the relativist really is.

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APPENDIX II

THE IMPORTANCE OF MEDIA

## A

The purpose of this Appendix is to expand on the second of the propositions put forward in Chapter One, namely, that the media people use in any particular society to communicate between themselves play a pervasive role in the structuring of that society's world sense, and so in the creation of the assumptions on which the processes of that society are grounded. The following two sections of the Appendix put forward a theoretical argument aimed at substantiating this position. The final section then gives an historical perspective to the ideal-typical discussions of Chapters Two and Three, discussions, that is, which focus exclusively on oral-aural cultures at one extreme and phonetically highly literate cultures at the other.

## B

This section begins by reiterating a point made in the previous Appendix, namely, that there is a continual and dialectic information flow between us and a phenomenon of which our mental 'image' and the phenomenon's 'material' attributes are only aspects. As a corollary of this assertion it was further argued that when any person enters into an analytic situation there occurs an instantaneous, intense and in-

dissoluble relationship between perception and phenomena whose total and immanent characteristics circumscribe the further exploration of those phenomena. A case was then made for the deep and pervasive way in which pre-existing and underlying world senses to a very great extent influence our understanding of phenomena.

~~-----The concerns in this Appendix are rather different,~~  
however. The focus is no longer the relationship between a phenomenon and a pre-existing world sense, but the dialectic moment internal to the construction of world senses which most influences their specific configurations. It was of course stressed in Chapter One that to consider the dialectic moments of the social process as if they were separate and sequential moments in a causal-temporal chain is to distort the essentially symbolic nature of that social process. That was why, for example, it was considered invalid to draw even a theoretical distinction between the environment and everyday reality<sup>1</sup>. However, if the intention is to identify (and therefore mentally isolate) one dialectic moment among others, then there is no other option but to commit the distortion just mentioned and create an heuristic situation in which a group of people are imagined as engaging the world in a pristine state of mind. Because this situation allows us to 'reconstruct' in our imagination the steps by which world senses are constructed, it facilitates the diachronic and separate display of moments which are in reality synchronically dialectic. The situation thus

contains only the four elements which are necessary pre-requisites for the construction of world senses: people, their individual creativity, their ability to externalise symbols, and the world they engage.

The 'lack' of a pre-existing world sense does not, however, negate the continual and dialectic information flow ~~between an observer and what he is observing.~~ Given this heuristic situation (and the consequent 'lack' of a pre-existing world sense) it must therefore be immediately conceded that the role played by the inherent characteristics of a phenomena in the instantaneous and indissoluble perception-phenomena relationship will be very considerable indeed. But this does not mean that the characteristics will determine people's perception of them. Not only will every person's reaction to the phenomena be creative rather than passive, but this individual creativity will result in an inter-subjective response unlikely to be precisely duplicated by any other group faced with the identical set of phenomena. Nevertheless, in order to understand why the inter-subjective response in this heuristic situation assumes certain deep-seated characteristics rather than any others, it clearly becomes necessary to focus on the role played by external reality in the construction of world senses.

This focusing may be best achieved by considering the different kind of mediation that exists between animals and the environment, and man and the environment. Both the physical characteristics and behaviour patterns of a particular species

are selected and influenced in accordance with the species' environment<sup>2</sup>, and this environment may be said to be constituted by the media in which the species lives (air, water, land, mud, trees and so forth). Man is no exception in this regard, but, in his relationship to the environment, he differs from other animals in two important aspects. Firstly, in order to favour his chances of survival, man can modify his environment in any particular situation to a far greater extent than other species can. This gives man's dependency on the environment a greater flexibility:

Man occupies a peculiar position in the animal kingdom. Unlike the other higher mammals he has no species-specific environment, no environment firmly structured by his own instinctual organizations. There is no man-world in the sense that one may talk of a dog-world or a horse-world. Despite an area of individual learning and accumulation, the individual dog or the individual horse has a largely fixed relationship to its environment, which it shares with all other members of its respective species. One obvious implication is that dogs and horses, as compared with man, are much more restricted to a specific geographical distribution. The specificity of these animals' environment, however, is much more than a geographical delimitation. It refers to the biologically fixed character of their relationship to the environment even if geographical variation is introduced. In this sense, all non-human animals, as species and as individuals, live in closed worlds whose structures are predetermined by the biological equipment of the several animal species (Berger and Luckmann, 1971, p.65).

Second, human means of communication, even simply in terms of the spoken word, are very highly developed in comparison to animal means of communication. Whereas verbal language is primarily concerned with denoting specific and delimited things and events, it would seem "that the discourse of non-verbal

communication is precisely concerned with matters of relationship - love, hate, respect, fear, dependency, etc. - between self and vis-a-vis or between self and environment . . . ." (Bateson, 1973, p.388). Bateson gives an example of such non-verbal communication:

When your cat is trying to tell you to give her food, how does she do it? She has no word for food or for milk. What she does is to make movements and sounds that are characteristically those that a kitten makes to a mother cat. If we were to translate the cat's messages into words, it would not be correct to say that she is crying 'Milk'. Rather, she is saying something like 'Mama!' Or perhaps still more correctly, we should say that she is asserting 'Dependency! Dependency!' The cat talks in terms of patterns and contingencies of relationship, and from this talk it is up to you to take a deductive step, which marks the difference between pre-verbal mammalian communications and . . . the languages of men (1973, pp.336-337).

For Bateson, then, "what was extraordinary - the great new thing - in the evolution of human language, was not the discovery of abstraction and generalization, but the discovery of how to be specific about something other than relationship" (1973, p.337). [ My emphasis ] . There was, in other words, a shift from a mediation of relationships, which is immediate and does not involve reflexive consciousness, to a re-cognition of things which, at varying times in man's history, has involved differing degrees of conscious realization. Whereas we may assume that animals simply experience, it may be argued that, to some extent or other, most men experience that they experience.

The discovery indicated by Bateson has one very important consequence. Since every person and every animal is to some extent in dialectic relationship with the environment, it becomes clear

that any ongoing relationship exclusively denoted as such by a person or animal will in fact contain that animal or person as an integral part of itself. Non-verbal communication is thus tied very much to the present. On the other hand, language which is specific about things and events emphasises the mutual 'delimitation' of the very things and events that are co-existent with any particular ongoing relationship. And as the 'tree felling' example of the previous Appendix so vividly illustrated, one of those co-existent 'things' is the observer. The ability of human language to divorce specific things and events from the contextuality of their ongoing relationships with other things and events thus enables people to transcend the 'here and now':

Language has its origins in the face-to-face situation, but can be readily detached from it. This is not only because I can shout in the dark or across a distance, speak on the telephone or via the radio or convey linguistic signification by means of writing (the latter constituting, as it were, a sign system of the second degree). The detachment of language lies much more basically in its capacity to communicate meanings that are not direct expressions of subjectivity 'here and now'. It shares this capacity with other sign systems, but its immense variety and complexity make it much more readily detachable from the face-to-face situation than any other (for example, a system of gesticulations). I can speak about innumerable matters that are not present at all in the face-to-face situation, including matters I have never or never will experience directly. In this way, language is capable of becoming the objective repository of vast accumulations of meaning and experience, which it can then preserve in time and transmit to following generations (Berger and Luckmann, 1971, p.52).

There can be little doubt that these two characteristics of man's unique relationship with his environment are closely inter-related, for man's ability to linguistically transcend the 'here

and now' strikingly parallels his ability to transcend the biological or environmental 'here and now'. But this parallel is merely symptomatic of a more concrete connection, -namely, that without the linguistic capability of referring to the specific things and events co-existent with his relationship to the world, and so of storing the meaning and experience resulting from such relationships, man would not have been in possession of the conceptual apparatus necessary to facilitate a 'loosening' of his ties with the environment.

It becomes evident from this line of thought that man's ability to 'prise himself away' from the physical or biological environment is contingent on his ability to substitute for the immediacy of that environment another of his own creation. If, therefore, one accepts that man lives largely within an environment of his own making, and that he is in dialectic relation with the information he receives, then it follows that man is in dialectic relation with information largely externalised by himself:

. . . it is important to emphasize that the relationship between man, the producer, and the social world, his product, is and remains a dialectical one. That is, man (not, of course, in isolation, but in his collectivities) and his social world interact with each other. The product acts back upon the producer. Externalization and objectivation are moments in a continuing dialectical process. The third moment in this process . . . is internalization (by which the objectivated social world is retrojected into consciousness in the course of socialization). . . . It is already possible . . . to see the fundamental relationship of these three dialectical moments in social reality. Each of them corresponds to an essential characterization of the social world. Society is a human product. Society is an



objective reality. Man is a social product (Berger and Luckmann, 1971, pp.78-79).

The assumption of anheuristic situation in which a group of people were imagined as engaging a previously unmediated world in a pristine state of mind has once again led to the conclusion that human society is essentially symbolic. For when those people engage the world, they will immediately discuss their reactions among themselves, and so create a symbolic filter which they may contemplate and internalize, but whose containment they will never be able to escape.

C.

Because, in his mediation of the environment, man interposes a medium of his own making, and because he cannot experience the world apart from this symbolic medium, it must be concluded that man's symbolic output constitutes the dialectic moment which most influences the particular configuration adopted by a world sense. It is, however, possible to be more precise than this, for as previously acknowledged, it is words which constitute man's most important symbolic mode.

Now in terms of our everyday understanding of the world, there are two aspects to linguistic exchange. These are the content to which words refer and the form in which the words are conveyed. Given our everyday understanding of the world, it is

certainly more self-evident that the form a particular reality takes depends to some extent on the way that a society's symbols categorise and denote what we might imagine to be a previously undifferentiated world. Many people have had the experience of trying to understand, even in closely related European languages, words for which there are no direct equivalents in English. A true understanding of these words involves a change of world sense, however slight. What is being suggested here, on the other hand, is rather different. That is, that the way people communicate in constructing their reality (whether the face-to-face oral-aural situation of spoken discourse, the visuality of handwriting and printing, or the aural-visual immediacy of electronic forms of communication) also affects their outlook on the world. It is not so much what is conveyed that is important in this respect but how it is conveyed. Although this idea may at first seem strange and its implications difficult to grasp, there would seem to be little doubt as to its validity. For if it is accepted that man is in dialectic relation with the information he receives, and if it is further accepted that this information is inescapably filtered through his symbolic output, then it would seem to follow that the inherent qualities of the conveyancing medium - whether the aural-aurality of spoken discourse or the visuality of typography - will to a certain extent influence man's understanding of external reality.

It seems likely, however, that the influence exerted by media of communication on the structure of world senses is far more extensive than that exerted by language categories. This

assertion may be theoretically justified by reference to two lines of argument. The first requires a return to the heuristic situation outlined above. Because the individuals who initially engage the world have no pre-existing linguistic categories of understanding nor, consequently, any pre-existing medium of communication, it would seem reasonable to suppose that the linguistic categories which are mutually created to describe and mediate the world will be influenced to a very high degree by the inherent characteristics of the observed phenomena. This was a point discussed in the previous section. Now although it seems more than possible that verbalisation arose from a particular constellation of biological and environmental conditions (that, in other words, the advent of verbalisation was dialectically related to the external world), it would seem that there is no necessary direct influence between the inherent characteristics of this oral-aural communication, and the inherent characteristics of the conditions which prompted it<sup>3</sup>. For example, it might well have been the case that verbalisation became extremely useful to man the hunter because he could communicate in dense forest. The need to communicate locations in visual space thus paradoxically could have given rise to an oral-aural medium. In terms of the heuristic situation, it might therefore be concluded that media of communication are more distanced from the environment, and so more inexorably 'tied' to man than any other aspect of the symbolic filter which both surrounds him in his perception of reality and at the same time forms an integral aspect of that reality. To put it

simplistically, in contributing to the dialectic creation of the symbolic filter it is the external environment which supplies the phenomena and man who supplies the medium.

Dispensing with the heuristic situation does not in itself weaken this line of argument, for although the pre-existing 'content-categories' of a group or society are liable to condition the way the members of that group or society relate to any new phenomena, it may still be argued that the influence exerted by external reality on our perception stops short at the filter presented by our own ability to verbalise. This point is relatively easy to establish, because the inherent characteristics of the spoken word can be taken to be independent of the inherent characteristics of any phenomena to which it then refers.

Difficulties arise, however, in attempting to establish that the media which are extensions of the spoken word are likewise more 'tied' to man than any other aspect of his symbolic filter, for the creation of these media was not engendered by a particular constellation of biological and (physical) environmental events, but by the particular configuration of world senses significantly distanced from the biological pre-requisites of their development<sup>4</sup>. The considerations fundamental to the emergence of these media were, in other words, an integral part of a symbolic output which becomes objectivated and retrojected into consciousness. The 'primacy' of media once again comes into question.

An insight into this problem may be gained by considering

the precise way in which man can be conscious of his symbolic filter, for although the symbolic output of a group or society does become objectivated and retrojected into the collective consciousness of that group or society, there is a limit to the extent to which the group or society can in fact be conscious of that output. If it is accepted that man cannot go 'beyond' his own symbolic filter in contemplating and internalizing the world, then it must follow that he cannot go 'beyond' that filter in contemplating that part of the world which is constituted by that very same filter. This is to say no more than that man cannot exist outside himself in coexistential unity with the reality he perceives.

This point may be put in a different way. It has already been stated in this Appendix that when any person enters an analytic situation there occurs an instantaneous, intense and indissoluble relationship between perception and phenomena whose total and immanent characteristics circumscribe the further exploration of those phenomena. To transfer this argument to the present situation, it can be asserted that when a person observes part of their own symbolic output, there arises an intensely dialectic relationship between the inherent characteristics of that output and the fundamental categories of understanding specific to the underlying world sense which that person inevitably brings to the observation<sup>5</sup>. It is the characteristics of this relationship which the person will be conscious of, rather than the underlying world sense, which is a phenomenon that tends to be very much 'lived within'. But

because world senses can only be maintained in and through symbolic utterance, it may equally well be said that there are those aspects of symbolic output of which people tend to be largely unconscious.

Now if it remains true that the media which are extensions of the spoken word are more inexorably 'tied' to man than other aspects of his symbolic filter, then one would expect that the considerations which influence the emergence of these media would be located in those aspects of the symbolic filter of which people are least conscious. This would certainly seem to be true of the two media whose conditions of emergence we know most about. Moveable type printing could only emerge because of the concepts of lineal segmented sequentiality and arrested time that were becoming increasingly prevalent towards the end of the Middle Ages. Again, electronic forms of communication could only come into being because of the concepts of homogeneity and repeatability that underlay the tremendous scientific advances of the modern world. Both sets of concepts were at the time of their greatest influence very much taken for granted, and were thus not subjects to be explicitly considered for their own inherent values<sup>6</sup>. The proposition that media are more inexorably 'tied' to man than any other aspect of his symbolic filter would therefore seem to remain valid in the case of these 'second-order' media because the characteristics facilitating their creation are located in those aspects of the symbolic filter from which man has the greatest difficulty in distancing himself.

The second line of argument is easier to establish. It may most usefully be approached by acknowledging that the influence media bring to bear on the structuring of psyche and civilisation tends to cut across the confines imposed by the existence of any role-specific bodies of knowledge in a particular society<sup>7</sup>. The degree to which such bodies of knowledge are developed varies greatly and is in fact ultimately circumscribed by the medium of communication which predominates in any society<sup>8</sup>. In pre-literate societies, for example, the division of labour upon which role-specific knowledge is predicated<sup>9</sup> tends to occur largely along lines of age and sex, and may thus be said to be relatively undeveloped<sup>10</sup>. Consequently, the amount of distancing and separation that may occur in pre-literate societies between different bodies of role-specific knowledge and the universally shared knowledge appropriate to everyday reality is minimal. Further there is little potential for the growth of competing definitions of reality based on discrepant and mutually inaccessible bodies of knowledge<sup>11</sup>. Industrial society, on the other hand, is characterized by an extremely high division of labour which has much more to do with the creation, maintenance and exploitation of an economic surplus than it does with the rather more straightforward matter of biological survival<sup>12</sup>. Thus, although there exists a sizeable body of knowledge which may be thought of as common to the everyday reality of the vast majority of the population, role-specific bodies of knowledge in industrial

society tend to be hermetically conceived and articulated, to have the minimal of relationships with each other and the central core of knowledge appropriate to everyday reality<sup>13</sup>, and to encourage the existence of competing definitions of reality.

Yet despite these differing degrees of development all role-specific bodies of knowledge must by their very nature remain to some extent peripheral to each other and the core knowledge of everyday reality. Consequently, the influence the content or subject matter of these bodies of knowledge might have outside their specialised realm of application is, to a certain extent, restricted. This is a trend more noticeable in industrial society than in pre-literate society. Now it is true to say that in many societies there is little or no significant correlation between the different messages of role-specific knowledge and the media used to encode those messages<sup>14</sup>. Almost by definition pre-literate societies are those in which all knowledge is mediated aurally and, as Chapter Three seeks to elucidate, the high division of labour typical of industrial society could not have occurred without the ability of that society to encode and store its knowledge in print. This being the case, it becomes apparent that the role played by media in structuring a society's sense of the world is more pervasive than that played by individual bodies of knowledge. Not only does the role played by media match the universality characteristic of the knowledge appropriate to everyday life, but, in reaching beyond the boundaries of that knowledge to encompass bodies of role-specific knowledge, it transcends the realms of



application specific to those various delimited bodies of knowledge.

The assertion that media are more pervasive than any body of knowledge in their influencing of the particular configurations specific to different world senses in itself supports the theme of this section of the Appendix. This second line of argument may however be extended by noting that the different spheres of activity in the social and 'natural' world to which role-specific bodies of knowledge refer frequently have different and mutually incompatible characteristics (this is a claim which has been substantiated by previous discussions in this thesis). Now even if it could be demonstrated that different media of communication are influenced in their emergence by the particular characteristics of certain observed phenomena, then it would immediately have to be conceded that the inherent characteristics of those media would not necessarily have a high degree of congruity with the quite possibly different characteristics of other phenomena which are subsequently mediated through these same media. Once again media seem to have attained a certain degree of 'independence' from the phenomena with which man is in such intense dialectic relationship.

Any theoretical discussion of the role played by media in the structuring of world senses is bound to be difficult precisely because of the intense dialectic relationship obtaining between the different aspects of man's symbolic filter, and because of the intensely dialectic nature of the relationship

between man and 'phenomena' which gives rise to that filter. Nevertheless, the weight of argument put forward in this section would seem to suggest that--because the inherent characteristics of observed phenomena and resultant content-categories have to be filtered through the 'independent' and all-pervasive characteristics of the predominant medium in a society - the influence exerted-by-media-on-the-structure-of-world-senses-is far more extensive than that exerted by the linguistic content-categories themselves. All the content-categories of a particular society will in other words tend to reveal a common typology not evidenced elsewhere.

#### D

This final section of the Appendix seeks to impart a more general historical perspective to the ideal-typical discussions of Chapter Two and the first section of Chapter Three, and so to highlight the fact that there are few, if any, societies which can be said to be either entirely oral-aural or entirely phonetically literate in their outlook on the world. However, it is precisely this lack of purely oral-aural and purely phonetically literate societies which makes the ideal-typical categories evolved in these two chapters so valuable in approaching the hybrid situations that actually exist.

It seems reasonable to assume that, in the mists of the past, communication in all societies took place in face-to-face

situations. But because of the enormous spread in the past 2,000 years both of literacy itself and the effects that literacy has had on perception, intellection and social organisations, the number of genuinely pre-literate societies that anthropologists have been able to study is not as great as one might perhaps imagine. As Jack Goody has noted, however, ~~encroaching literacy is not an aspect of 'traditional' societies~~ to which anthropologists have always paid much attention:

Sociologists . . . have generally taken their field of study to be advanced literate societies, while social anthropologists have mainly concentrated upon 'simple' structures, the 'elementary forms' of religion or kinship, 'pre-monetary economics', 'primitive', 'exotic', 'unsophisticated', 'practical' or preliterate societies. But, at least during the past 2,000 years, the vast majority of the people in the world (most of Eurasia and much of Africa) have lived in neither kind of situation, but in cultures which were influenced in some degree by the circulation of the written word, by the presence of groups or individuals who could read and write. They lived on the margins of literacy, though this is a fact that many observers have tended to ignore (1968, pp.4-5).

Similarly, there are societies (such as China and India) which possess an indigenous literacy, but in which, because of the very nature of that literacy<sup>15</sup>, there remain vast numbers of illiterate people. But again, one cannot discount the influence of this highly restricted literacy when examining the world sense of those illiterate people. As David Riesman (1970, p.109) has observed: "there are important differences . . . between the preliterate tribe that depends entirely on an oral tradition, and the peasant culture where illiterate folk dwell within the moral and intellectual ambit of a tradition of written literature . . ."

As well as those societies where the world senses and

social organisation of the illiterate majority are significantly modified through contact with a literate tradition, there also exist those societies where literacy has had more far reaching consequences, but where the characteristics of the oral tradition have by no means been entirely eradicated. Phonetically literate societies which are largely dependent on chirography (Ancient Greece, Rome and medieval Europe) provide classic examples of such societies. These cultures, as Ong has indicated, "remained committed to the spoken word to a degree which appears to our more visually organized sensibilities somewhat incredible or even perverse" (1967, p.55). In the medieval world, for example, "those who could read or write were the few, and it is likely that most of them did not read or write with our methods or with our facility" (Chaytor, 1970, p.117). The medieval reader "was in the stage of our muttering childhood learner; each word was for him a separate entity, and at times a problem, which he whispered to himself when he found the solution" (Chaytor, 1970, p.122). The highest reality, therefore, was still to be found in auditory experience:

He [the medieval reader] was confronted not by the beautiful products of a university press, but by a manuscript often crabbed in script and full of contractions, and his instinctive question, when deciphering a text, was not whether he had seen, but whether he had heard, this or that word before; he brought not a visual but an auditory memory to his task (Chaytor, 1970, p.123).

The importance of residuary oral traits is underlined by Ong (1967, p.21) when he points out that "in the Carolingian Middle Ages much law was not what was written, but what the ruler said orally, the written documents being rather commentaries on the

law . . . " A further striking example of this importance is the fact that silent reading was unusual enough to elicit comment:

In his Confessions (vi, 3), Augustine makes special note of the fact that when he once dropped in on Ambrose, Bishop of Milan, he found Ambrose reading to himself without making any sound. Augustine's note shows that silent private reading was not entirely unknown, but it also shows that it was singular and deserving of comment (Ong, 1967, p.58).

Finally, not only were the formulae and themes symptomatic of an orally mediated reality<sup>16</sup> "part of formal education through the Middle Ages" (Ong, 1967, p.28), but they were also common in the work of Greek and Roman writers. The second part of Albert B. Lord's The Singer of Tales, for example, is set aside to demonstrating the essentially formulaic and thematic nature of the Iliad and the Odyssey<sup>17</sup>. Furthermore, Cicero's ability as an orator lay precisely in his capacity to remember and successfully manipulate a large number of these formulae:

In working up orations Cicero used writing, but only to a limited degree. Like other orators of antiquity generally, he carried in his mind a vast stock of commonplaces, in the sense of purple patches or set themes such as treachery, loyalty, honesty of character, decadence. O tempora! O mores! - this piece which Cicero put down in the Catilinarian orations he must have used elsewhere any number of times. It was his "things-are-going-to-pot" topos or "bit" (Ong, 1967, pp.56-57).

As well as remembering that there are relatively few 'traditional' societies which have remained untouched by literacy up until the present time, it must also be understood, therefore, that 'full' literacy did not occur until at least the sixteenth or seventeenth centuries<sup>18</sup>. Even then, it has to be acknowledged that there always has been<sup>19</sup>, and still is<sup>20</sup>, a significant

minority of people in modern industrial society who remain illiterate, and whose world sense has something in common with that of genuinely pre-literate people<sup>21</sup>. Given these facts, the clear ideal-typical distinction made in Chapters Two and Three takes on a broader significance. For the categories of this distinction provide a very useful means of understanding some aspects of the very considerable number of societies which display both oral and literate characteristics. This aspect of the distinction's usefulness was of relevance in the discussion of the musical coding of the structure of classic feudalism which took place in Chapters Nine and Ten<sup>22</sup>.

It is also of relevance in understanding the characteristics of world senses in those societies whose literacy is not phonetic. Whilst one would be unlikely to find a conscious distinction between form and content in Chinese and Indian societies, one does find, as Kathleen Gough has indicated (1968, pp.74-79), a sense of lineal time coexisting with a sense of cyclical time, an emerging distinction (to different degrees in either 'country') between myth and history, and a search for objective truth that, however, by no means replaces the reverence for traditional knowledge.

While the categories of the ideal-typical distinction are clearly of use in approaching oral/literate 'hybrid' societies (and these must be considered to form a substantial majority), it is equally clear that detailed knowledge of the varying extent of these different media in such societies, and the way in which

they interact to give rise to different and sometimes incompatible categories of understanding, is lacking. Kathleen Gough (1968, p.72), for example, is forced to come to the following conclusions regarding Indian and Chinese cultures:

Lacking adequate evidence . . . I am obliged to class the high cultures of India and China along with that of Greece on grounds of qualitative criteria such as the existence of universities, libraries, public inscriptions and village schools. . . . More precise research may, however, reveal quantitative differences in literacy which are in fact crucial for some of the cultural differences . . . discussed.

It is more than possible that, given such evidence, the ideal-typical categories developed in Chapters Two and Three would need to be refined. At the moment, however, such refinement, if needed, could not be carried out. As Goody (1968, p.19) has pointed out, "the figures are lacking and the data too limited to set up a more sensitive scale."

NOTES:

1. See above, p. 8 .
2. This statement emphasises one aspect of a dialectic situation, for it is equally true that the physical characteristics and behaviour patterns of various species influence the configuration of the environment. The ecosystem, in other words, displays dialectic qualities (see, for example, Bateson, 1973; especially pp.445-481).
3. It is an integral aspect of the argument in this and the succeeding paragraph that man's ability to verbalise ultimately rests on certain of his characteristics as a biological organism. However, it must at the same time be acknowledged that the impetus for this ability to develop probably rests on the sort of environmental pressure described in the text. Yet it is because biological considerations are fundamental to verbalisation that the inherent characteristics of this medium of communication need not be influenced by those of external events.
4. It seems unlikely in the extreme that the invention of writing or printing, for example, resulted from some change in the 'biological' or 'physical' world. The conditions favourable for their creation must therefore have been located in man's own symbolic output.
5. Because world senses can only be created and maintained through man's symbolic output, this statement might seem to be highly tautologous. Would not the categories of analysis specific to 'world sense' and 'symbolic output' be identical, for example? It should be remembered, however, that world senses are not deterministic monoliths, but possess many 'levels' capable of interacting with one another.
6. It is interesting to note that these concepts are still very much taken for granted. Few people can conceive of 'time' as anything other than a lineal, sequential and spatialised phenomenon. Again, many people would have great difficulty imagining a universe in which different spheres of activities operated according to mutually incompatible laws and norms, and in which there were appreciable degrees of spontaneous creativity. It was because of a deeply ingrained belief in a single unified (homogeneous) space and a spatialised time, for example, that laymen found Einstein's theories of relativity difficult to accept.



7. This remains true even when literacy is directly associated with a particular role-specific body of knowledge or a group of role-specific bodies of knowledge. Ideogrammic literacy, for example, encodes only the knowledge which is acceptable to the scribal elite. This situation exists because ideograms encode ideas directly and not the sounds through which the ideas appropriate to the oral discourse of any group might be expressed. In facilitating the existence of an autocratic elite, however, ideogrammic literacy may be said to have influenced the structuring of civilization and psyche in a quite pervasive manner.

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8. This point is discussed more fully in Chapter Three (see above, pp. 56 - 59).
9. Berger and Luckmann (1971, p.158) indicate the connection between the division of labour and role-specific knowledge in discussing secondary socialization: "Secondary socialization is the internalization of institutional or institution-based 'sub-worlds'. Its extent and character are therefore determined by the complexity of the division of labour and the concomitant social distribution of knowledge. Of course, generally relevant knowledge, too, may be socially distributed - for example, in the form of class-based 'versions' - but what we have in mind here is the social distribution of 'special knowledge' - knowledge that arises as a result of the division of labour and whose carriers are institutionally defined. Forgetting for a moment its other dimensions, we may say that secondary socialization is the acquisition of role-specific knowledge, the roles being directly or indirectly rooted in the division of labour."
10. Evans-Pritchard, for example (1951, p.8), would define primitive societies in terms of the comparative 'simplicity' of their social organization: "It suffices to say . . . that when anthropologists use [the term 'primitive society'] they do so in reference to those societies which are small in scale with regard to numbers, territory, and range of social contacts, and which have by comparison with more advanced societies a simple technology and economy and little specialization of social function".
11. Berger and Luckmann (1971, pp.183-184) draw this stereotype in discussing degrees of socialization: "Maximal success in socialization is likely to occur in societies with very simple division of labour and minimal distribution of knowledge. Socialization under such conditions produces identities that are socially pre-defined and profiled to a

high degree. Since every individual is confronted with essentially the same institutional programme for his life in the society, the total force of the institutional order is brought to bear with more or less equal weight on each individual, producing a compelling massivity for the objective reality to be internalized". This discussion is reminiscent of Durkheim's description of 'repressive law' in primitive societies. See in particular Emile Durkheim (1964, pp.138-146).

12. The classic formulation of this development is to be found in Durkheim's The Division of Labour in Society: "Nowadays the ~~[division of labour]~~ has developed so generally it is obvious to all. We need have no further illusions about the tendencies of modern industry; it advances steadily towards powerful machines, towards great concentrations of forces and capital, and consequently to the extreme division of labour. Occupations are infinitely separated and specialized, not only inside the factories, but each product is itself a speciality dependent upon others . . . . But the division of labour is not peculiar to the economic world; we can observe its growing influence in the most varied fields of society. The political, administrative, and judicial functions are growing more and more specialized. It is the same with the aesthetic and scientific functions. It is long since philosophy reigned as the science unique; it has been broken into a multitude of special disciplines each of which has its object, method and thought" (Durkheim, 1964, pp.39-40).
13. "As more complex forms of knowledge emerge and an economic surplus is built up, experts devote themselves full-time to the subjects of their expertise, which, with the development of conceptual machineries, may become increasingly removed from the pragmatic necessities of everyday life" (Berger and Luckmann, 1971, pp.134-135).
14. This is not true of ideogrammic cultures. See note 7 above.
15. See above, pp.56 -57.
16. The relationships between commonplaces and oral 'literature' are set out in Lord (1964, pp.30-98).
17. See Lord (1964, pp.141-197).
18. This would seem to be a reasonable assertion to make, notwithstanding the lack of historical studies on literacy. Discussing this difficulty, R. S. Schofield (1968, p.312) has said: "Despite its relevance to many kinds of historical studies, literacy does not feature very often in historical

discussion, and when it does appear a certain vagueness surrounds its meaning. This vagueness is in part forced upon historians by the facts of history. Historically the situation has been complicated by the fact that although England has long been neither a wholly literate nor a wholly illiterate society, at least from the sixteenth century literacy was no longer confined to a caste educated in a foreign tongue, as is the case in several of the developing countries today, and the existence of a vernacular literature made the whole population potentially members of the literate culture merely for the price of learning to read".

19. The ease with which the assumption of complete literacy with regard to the modern Western world can be made is indicated with specific reference to England by R. S. Schofield: "It is perhaps too easy to an historian to assume that England since the Middle Ages has been a literate society, without pausing to enquire whether there has not also been a second culture, an oral culture, substantially unknown to history, because history is derived from written records, and written records are produced by literate man". (Schofield, 1968, p.311).
20. The exact extent of illiteracy in present day society is as difficult to determine as that in times gone by. The most recent statement is that to be found in the recently published report of the Committee of Inquiry on the teaching of English in schools in England and Wales under the chairmanship of Sir Alan Bullock: "Various figures have been suggested for the probable total of [illiterate] people in England and Wales. We referred earlier to the figure of a million as one estimate, but some people have put it at twice that number, or even higher. It is, of course, impossible to be certain. In 'The Trend of Reading Standards' 3.18 per cent of the 15 year olds in England were found to be semi-literate by the definition given in the 1950 Ministry of Education pamphlet. This defined a semi-literate as a person whose reading age was 7.0 years or more but less than 9.0 on the Watts-Vernon test. An illiterate was given as one with a reading age of less than 7.0. The percentage of 3.18 per cent represents nearly 15,000 young people on the basis of the known number of 15 year olds in school in 1970" (Bullock, 1975, p.12).
21. Robert Roberts, for instance, discussing the outlook of illiterates in prison, states that "many illiterates, although they may have travelled a good deal, seem to possess little idea of distance or direction" (1968, p.53). Again, any developed sense of history appears to be lacking. We are told that "simple facts about history and archaeology

rouse only tepid interest " (1968, p.54), and that "major events of the past appear to have little significance." It seems more than likely that past events which are significant for these prisoners are relived in the present, an opinion which is reinforced by anecdotes recounted in Robert's book.

More speculatively, it would be interesting to explore the relationship between illiteracy, semi-literacy or reduced-literacy among young people and the kind of behaviour which has made headlines in recent years. The first example which springs to mind is the destructive behaviour at football matches, which seem to be symptomatic of a group of people who are unable to cope with their situation in life in a literate or 'rational' fashion, and feel it necessary to act them out. Such 'tribal' behaviour is very reminiscent of Ong's description of rioting Congolese armies (see above, p.67). Also, it seems pertinent to draw on Mellers' insight that pop music has ritualistic aspects. Acknowledging that "the pop world is too complex to permit of definitive answers", he continues: "that there are parallels with . . . 'music of necessity' [music in pre-literate and 'traditional' societies] . . . would seem, none the less, to be inescapable fact . . . . pop has . . . reawakened our ritual sense" (Mellers, 1971, pp.1453-1454). The more notorious behaviour at some pop concerts would seem to be a manifestation of such 'reawakening'. It must be acknowledged, however, that electronic media probably also have quite an influence both in bringing about such behaviour patterns (cf. McLuhan, 1964), and possibly in favouring illiteracy (cf. the discussion on the relationship between illiteracy and television in Bullock, 1975, pp.12-15).

32. It is also of relevance in understanding, from a musical/analytic viewpoint, the differing social realities articulated by 'classical' music and certain types of 'pop' music in present day society. For as well as containing a minority of non-literates, modern industrial society also contains within itself a substantial group of people who, although not illiterate, are certainly not literate in quite the same sense as, for example, university intellectuals. Such people tend to relate to the world much more in terms of the 'oral-aural' commonplaces or formulae of homespun (or Media-spun) wisdom. This wisdom is then given an overlay of literate mediation.

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APPENDIX III

MEYER'S EXPLAINING MUSIC

Explaining Music is Leonard B. Meyer's latest offering in his self-admittedly personal quest for a productive and rewarding analytical/critical method. The author's purpose in developing such a method is, in the words of the publicity blurb, "to discover the secret of the singular -- to explain how the patterns peculiar to a composition are comprehended by, and affect the listener". -- However, because "idiosyncratic relationships can be explained only in terms of general principles", and "because such principles, as formulated in existing music theory, often are inadequate for Mr. Meyer's purposes, he proposes new explanatory hypotheses from time to time". Consequently, the book is "theoretical as well as critical".

Explaining Music is divided into two parts which do not, however, correspond to the theoretical-critical distinction just mentioned. In the first, which is based on the Ernest Bloch lectures given at the University of California at Berkeley in 1971, Meyer principally considers what are probably the two most important inter-related constituents of tonality: conformant relationships (that is, relationships in which "one . . . identifiable, discrete musical event is related to another such event by similarity") and the hierarchic structures of which these relationships are such essential building blocks. In the second part, originally conceived as an independent book, the author considers an aspect of tonality clearly inherent in its hierarchic structure: namely, the way in which the important 'events' of a piece carry implications which are variously realised throughout

its duration. Meyer elucidates this process by reference to different types of melodic structure. Finally, the two halves of the book are drawn together by a brief but perceptive discussion of the first 21 bars of Beethoven's Les Adieux Piano Sonata.

To put it in a nutshell, the criticism in this book is first-rate, but the theories — or, more correctly, the theoretical implications — are rather more questionable. On the one hand, Meyer is so steeped in the tonal tradition from which the individual analytical examples are taken, that his personal observations and insights will undoubtedly prove extremely valuable for other people wishing to examine pieces in that tradition. On the other hand, his inability to go beyond a certain restricted viewpoint has both unduly circumscribed the effectiveness of his explorations, and permitted the continuation of unquestioned and possibly unfounded assumptions about the function of music.

That his quest for a critical method has been partially circumscribed is admitted by Meyer in a somewhat roundabout way. Right at the beginning of the book (p. ix) he states that: "As I intend the term, criticism seeks to explain how the structure and process of a particular composition are related to the component listener's comprehension of it." The nature of this comprehension is expounded on towards the end of the book (p.242): "A competent listener perceives and responds to music with his total being . . . Through such empathetic identification, music is quite literally felt, and it can be felt without the mediation



of extramusical concepts or images. Such kinesthetic sensing of the ethos or character of a musical event is what the term ethetic refers to." It is precisely this ethetic relationship, which stands at the heart of musical apprehension, that is problematic for Meyer: "Ethetic relationships are unquestionably important . . . [but] are hard to analyse with rigor and precision . . . [There is an]—absence of an adequate theory of ethetic change and transformation" (pp.245-246). Again: ". . . the analysis must end here . . . [because] the rigorous analysis of ethetic relationships is beyond my knowledge and skill" (p.267).

The remedy, it would seem, is in Meyer's own hands. In his opening chapter, 'On the Nature and Limits of Critical Analysis', the author draws a basic distinction between critical analysis and style analysis. Whereas critical analysis is concerned with the singular and idiosyncratic, style analysis "is concerned with discovering and describing those attributes of a composition which are common to a group of works" (p.7). Theory, moreover, "endeavours . . . to discover the principles governing the formation of the typical procedures and schemata described in style analysis" (pp.7-8). To complete the relationship: "Critical analysis uses the laws formulated by music theory . . . in order to explain how and why the particular events within a specific composition are related to one another" (p.9).

It could be assumed from this last statement that the principles and laws of music theory would be of crucial importance

to the development of a critical method. But apparently this is not so. In being required to explain why the melodies of Palestrina, for example, display a certain structural feature, Meyer suggests (p.8) one answer "with a general law of some sort". This law might be "the Gestalt law of completeness, which asserts that the human mind, searching for stable shapes, wants patterns to be as complete as possible". Beyond this, however, Meyer does not think it necessary to go. There is thus no need to enquire why the mind searches for stable shapes: ". . . I doubt that the explanation of musical practice needs to be pushed back this far. As a rule we are, I think, satisfied with the least inclusive law which will account for the events described."

But satisfaction is surely the thing Meyer does not attain. In one breath he tells us that "the rigorous analysis of ethetic relationships is beyond my knowledge and skill", and in another he strongly implies that the psychological processes - which he clearly sees as important to those ethetic relationships - do not themselves require that same 'rigorous analysis'.

It is possible to trace this conundrum to the central difficulty in understanding the functioning of music. Unlike words and pictures, the significance of music cannot, as Meyer has already said, be approached through "the mediation of extra-musical concepts or images". If, indeed, music can be said to have 'meaning', then it is undoubtedly to be located within the

internal structuring of the particular composition in question. And since music both originates and is efficacious within the minds of men, it can be assumed: a) that there must be a conformance between musical structures and the structure of the human mind, and consequently b) that this structure can be ultimately revealed through the analysis of any musical idiom. Both these assumptions are implicit in Meyer's thought: "In music, psychological constants such as the principles of pattern organisation, the syntax of particular styles, and typical schemata . . . constitute the rules of the game . . . For any given musical repertory, the 'rules' determine the kinds of pattern that can be employed in a composition" (p.14). It follows, then, that music can be satisfactorily explained in terms of itself, and it is symptomatic that, in supporting his idea of the 'least inclusive law', Meyer incorporates Mario Bunge's view that "every system and every event can be accounted for . . . primarily in terms of its own levels and adjoining levels".<sup>1</sup>

Since, on the surface, there would seem to be nothing inherently fallacious in this line of argument, Meyer looks elsewhere for the cause of his difficulties with ethetic relationships. He apparently concludes that the cause is to be found in the impossibility of distinguishing between psychological constants and the conventions of a particular music idiom: "In theory, it is possible to distinguish between archetypal patterns and schemata. The former would be those patterns which arise as the result of physiological and psychological constants presumed innate in human behaviour. The latter would be those norms which

were the result of learning. But the distinction breaks down in practice. For most traditionally established norms have some basis in innate constants, and, on the other hand, patterns derived from innate constants become parts of tradition."

"This being the case", concludes Meyer, "the terms will be used more or less interchangeably." (p.214).

~~It is not to be disputed that psychological or physiological~~ constants are incorporated in all forms of musical expression. But since, on Meyer's own admission, the constants are assimilated in, and become indistinguishable from the norms of specific musical idioms, would it not be more fruitful to seek for the basis of ethetic relationships in these different and identifiable norms? Here, however, the difficulty of musical 'meaning' again comes into play, because if it is assumed that musical significance is to be located in the structuring of particular norms, then it is not a very big step to further assume that this structuring is rooted in the extra-musical 'beliefs' and 'ideas' of the appropriate culture.

Although this difficulty cannot be discussed here, it is far from insoluble. Moreover, in situating different musical 'meanings' in the particular cultural milieu of their creation, the solution not only solves Meyer's problem - by providing an explicit basis for understanding ethetic relationships - but puts the significance of his book in a clear perspective. For the book does not 'explain music'. It simply elucidates - with, it should be reiterated, considerable perception and

lucidity - the fact but not the function of tonality. It accounts for the 'what' but not the 'why'. And since it is the norms, rather than the culture-specific significance of tonality that Meyer has so clearly set out, absolutely no conclusions can be inferred about any other kind of music.

NOTE:

1. Mario Bunge, 'The Metaphysics, Epistemology and Methodology of Levels', in Whyte, Wilson and Wilson, (eds.), Hierarchic Structures (New York: Elsevier, 1969), p.24.

APPENDIX IV

ADORNO'S PHILOSOPHY OF MODERN MUSIC

Adorno's book consists principally of two essays, one on Schoenberg, written in 1941, and one on Stravinsky, written in 1948. After completing the Stravinsky essay the author wrote an Introduction designed to relate the two halves of the book.

Adorno's approach to his subject-matter is founded in the belief that the cognitive elements of music rest in the historical processes and tendencies articulated in and through the music. Modern music, as an incarnation of the ongoing contemporary social process, thus incorporates the dialectic of the bourgeois domination that is, and the society without domination that might be. Not only is this dialectic present in the antinomies of individual works, but also in the different compositional attitudes of various composers. For Adorno, then, the works of Schoenberg and Stravinsky become representative of two opposing mainstreams of composition prevalent in the Western world during the first half of this century. In Adorno's opinion ". . . only in such extremes can the essence of music be defined; they alone permit the perception of its content of truth . . . It is for this reason and not in the illusion of grand personality that only these two composers . . . are to be discussed. For if the total product of new music . . . were to be scrutinized in its entirety . . . these same extremes would again be encountered" (pp.3-4). The one stream - that of Stravinsky - represents reactionary and regressive tendencies, both in its attachment to 'archaic' sounds and forms, and in its avoidance of the inherent contradiction of its position. The



other, however, in its conscious attempt to relentlessly pursue its antimonies to their ultimate conclusion, represents the forces of progress.

Adorno's book is, by any standards, difficult. This difficulty lies not only in the intensity and convolution of thought which brings together the apparently disparate realms of sociology and music, but in a style which is uniformly characterised by tortuous syntax and esoteric language. Although the translators have clearly struggled manfully with the original German, there can be little doubt that its complexity - which the translators acknowledge "makes translation seem impossible" has resulted in a prose strained far beyond the limits of readable English. Indeed, for any reader industrious enough to send off a few contributions to Pseud's Corner, this book could literally be a good investment.

Upon a first reading it might appear strange that a book which is so obviously polemic, and the implicit purpose of which might thus be deduced as rational persuasion, should indulge in such an obscure and mystifying style. Such a style, however, is not an entirely unnatural adjunct of Adorno's attitude towards the world and his material as that attitude is conveyed by the book. For despite Adorno's radical stance against the domination of industrial bourgeois society, he adopts an intellectual pose which is part and parcel of that same society. Domination in industrial society depends upon the centralised and

authoritarian co-ordination of its members' activities by a privileged elite, a process which in turn is ultimately dependent upon the centralised dissemination of information. Given the high degree of the division of labour upon which industrial society is predicated, the creation of such information falls to a large degree within the province of the academic. There always exists, therefore, the potential for those who create information in our society to have, albeit unconsciously, a vested interest in the prevalent structure of that society. Certified as experts by society at large, there can exist the tendency for some academics to give the impression that their pronouncements have an authoritative weight which is beyond question.

This attitude is patently true of Adorno in the opening pages of his book. The author clearly considers himself to be in a position to determine the relative worth of all 20th century musics and cultural attitudes: "Because the monopolistic means of distributing music stood entirely at the disposal of artistic trash and compromised cultural values, and catered to the socially determined predisposition of the listener, radical music was forced into complete isolation during the final stages of industrialism. For those composers who wanted to survive, such isolation becomes a moral-social pretense for a false peace. This has given rise to a type of musical composition . . . which has adjusted to mass culture by means of calculated feeble-mindedness" (p.6). Although only Hindemith, Shostakovitch and

Britten are named, one gains the distinct impression that, outside the twelve note school and Stravinsky (who is dealt with separately), there are few composers who do not fall under this rubric. Adorno is equally dogmatic with regard to popular music: ". . . the perceptive faculty has been so dulled by the omnipresent hit tune that the concentration necessary for responsible listening has become impossible" (p.10). By taking such an attitude, Adorno eschews any phenomenological approach to his subject that would acknowledge the different, but equally authentic and genuine world senses articulated by different types and schools of composition. Rather than allowing various musical types to, as it were, present their own 'sociological' evidence, Adorno externally imposes upon them a view which is firmly rooted in his position as a member of an authoritarian and hierarchical academic tradition.

The one essential criticism that must thus be made against Adorno is that he does not examine the implications of his own position. Like many sociologists, he falls into the trap of criticising an aspect of his society, in this case music, in terms of the assumptional framework upon which that society is grounded. In this way the status quo not only of the society, but of the author's position in it, is paradoxically reinforced. Where Adorno could be elucidating both the implications of his own position, and those of the music he is examining, he is entrenching his academic role through mystification of his subject-matter - a process for which elaborate verbosity is

undeniably helpful. . . And whereas he could be acknowledging his culture-specific orientation to the world, and thereby opening up the possibility of realising the value of contradictory world senses, he implicitly assumes that people in general, and himself in particular, can objectively stand outside both themselves and the society being examined. This assumption does nothing but underline the way in which Adorno's outlook is unconsciously bound to industrial bourgeois society.

In view of Adorno's ambivalent relationship to bourgeois society, it is not surprising to find that he thinks of the Schoenberg school as representing the forces of progress (another industrial concept), since twelve note technique attempts to negate tonality (which encodes and articulates the industrial world sense) by an extension of trends already inherent in tonality. The interdependent but functionally separated fundamentals of tonality become completely isolated (alienated) and reintegrated to form a musical language where no one fundamental dominates another. Expressionism, in over-emphasising the isolated subjectivity of bourgeois society, forms the transition between late tonality and twelve note technique: "If the drive towards well-integrated construction is to be called objectivity, then objectivity is not simply a counter-movement to Expressionism. It is the other side of the Expressionistic coin. Expressionistic music had interpreted so literally the principle of expression contained in traditionally Romantic music that it assumed the character of a case-study. In

so doing, a sudden change takes place. Music, as a case-study in expression is no longer 'expressive' " (p.49).

Schoenberg's music attains its 'authenticity' through recognition of this change: "The subject of modern music, upon which the music itself presents a case-study, is the emancipated, isolated, concrete subject of the late bourgeois phase. This concrete subjectivity and the material which is radically and thoroughly formulated by it furnishes Schoenberg with the canon of aesthetic objectivism. The depth of his work is thereby discernible" (p.57). Parallel with Adorno's 'objectivity', Schoenberg's twelve note music seeks to objectively contain its own subjectivity and so stand outside itself. The pervasiveness of the Freudian outlook in both men's work thereby becomes apparent.

In a similar manner the temporal aspects of tonality become over-extended in the twelve note technique. Tonality, through the vertical co-ordination of horizontal lines originating with mensuration, essentially spatialises the temporal flow of those previously more independent lines. Twelve note technique, in its dislocation of centrally dominated fundamentals, and its retrograde rows (these rows, it can be argued, serve to encode and articulate a reversible time - and reversible time is the logical extension and conclusion of a spatialised time) serves to totally extinguish any sense of temporal flow: "The continuum of subjective time-experience is no longer entrusted with the power of collecting musical events,

functioning as a unity, and thereby imparting meaning to them

. . . Once again music subdues time, but no longer by substituting music in its perfection for time, but by negating time through the inhibition of all musical moments by means of an omnipresent construction" (p.60). In objectively stepping outside its constitutive subjectivity twelve note music potentially destroys the temporal flow of consciousness.

If it is Adorno's natural affinity with the Schoenberg school (he studied with Berg) that makes his discussion of it so largely perceptive, then it is his blind allegiance to the Schoenbergian aesthetic that renders his discussion of Stravinsky so suspect. Adorno's fundamental criticism of Stravinsky is that his music, in its denial of tonality, nonetheless articulates the domination of bourgeois society. The integrity of the individual subjectivity is threatened: "In Stravinsky's case, subjectivity assumes the character of sacrifice, but - and this is where he sneers at the tradition of humanistic art - the music does not identify with the victim, but rather with the destructive element. Through the liquidation of the victim it rids itself of all intentions - that is, of its own subjectivity" (p.143). The new collectivity thus favours the industrial forces of suppression: "Authenticity (in Stravinsky's music) is gained surreptitiously through the denial of the subjective pole. The collective standpoint is suddenly seized as though by attack; this results in the renunciation of comfortable conformity with individualistic society. But at the very point where this is achieved, a secondary, and, to be sure,

highly uncomfortable conformity results; the conformity of a blind and integral society - a society, as it were, of eunuchs and headless men" (p.159). This, for Adorno, is the essential contradiction inherent in Stravinsky's music, a contradiction which impairs musical meaning. Stravinsky "is drawn in that direction where music - in its retarded stage, far behind the fully developed bourgeois subject - functions as an element lacking intention, arousing only bodily animation instead of offering meaning. He is so attracted to that sphere in which meaning has become so ritualized, that it cannot be experienced as the specific meaning of the musical act" (p.140).

It is from this position that Adorno criticises aspects of Stravinsky's musical language. A lack of thematic material compromises completeness of form: "His music is devoid of recollection and consequently lacking in any time continuum of permanence. Its course lies in reflexes . . . This lack of thematic material, a lack of which actually excludes the breadth of form, the continuity of the process - indeed, it excludes 'life' itself from the music" (p.164). Again we are amazingly told that "Stravinsky's music remains a peripheral phenomenon . . . because it avoids the dialectical confrontation with the musical progress of time" (p.187); "such suspension of musical time consciousness corresponds to the total consciousness of a bourgeoisie which . . . denies the time process itself, and finds its utopia in the withdrawal of time into space" (p.190).

Adorno is unable even to consider that Stravinsky is articulating in his music a world sense which he, the author,

has not comprehended. He is unable to conceive that, for Stravinsky, the conscious variation of explicitly stated themes (a process which, for the listener, requires a long memory span, and so the ability to stand outside the temporal flow of his consciousness) and the consciously 'rational' ordering of temporality were unnecessary devices for what he sought to achieve. Only someone whose world sense was so firmly rooted in the spatialised time of post-Renaissance thought could so paradoxically conceive of Stravinsky's music as 'timeless' and so possessing a temporality that 'vanishes into space'. Adorno cannot sense that immersion in the temporal flow of consciousness requires a releasing of consciously controlled time.

Perhaps the statement which best sums up the narrowness of Adorno's outlook is the following: "The total energy exerted (in Stravinsky's music) is placed in the service of blind and aimless obedience to blind rules; this energy is devoted to Sisyphus-like tasks. The best of the infantile compositions exhibit the delirious and confining gesture of chasing-one's-tail. This provides the alienated effect of not being able to escape one's own grasp" (p.179). Alienation does not derive from a lack of self-distancing and objectivity, but rather from an excess of it. And because distancing and objectivity is, in both a personal and social sense, what Adorno subscribes to, he cannot help but feel alienated in the presence of a music which is concerned with the revelatory process of continual Becoming, rather than the over-extension of the incarnatory



process of static Being.

Adorno's musical 'ethnocentricity' is reflected in his attitude towards the consciousnesses of pre-literate and industrial man. Pre-literate consciousness, in Adorno's view, is simply a proto-version or undeveloped form of industrial consciousness: "The belief that the archaic simply lies at the aesthetic disposal of the ego - in order that the ego might regenerate itself through it - is superficial; it is nothing more than a wish fantasy. The force of the historical process which has crystallized the firm contours of the ego, has objectified itself in the individual, holding him back and separating him from the primeval world contained within him. Obvious archaic impulses cannot be reconciled with civilization" (p.168). Again we are in the hands of our old 19th century friend - progress.

The critical sociological and anthropological traditions of this century have dispensed with the notions of inherent social progress and the unquestioned superiority of modern Western man. Furthermore, in recent years, Marshall McLuhan and others have argued that the structuring of our consciousness and our society has during this century begun to change to something comparable with that of the consciousnesses and societies of pre-literate men. Instead of living in a contradictory world of individual purpose and social domination, of which the watchword with regard to both man and environment is that of conscious alienated control, we are entering a period where the immediacy of interpersonal relationships and the acceptance of rapid and frequently

unpredictable change is fast becoming the order of the day. We are beginning to live more within ourselves and our world, and this is a situation which is simply incompatible with the domination of bourgeois society. For the increased intensity of man's relationships both with himself and the events of the world has resulted in many sectors of society becoming too aware to remain ciphers in a centralised system.

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In many ways Stravinsky's music articulates this changed structure, a structure which is so clearly anathema for Adorno. Neither sociologically nor musically does Adorno escape the bourgeois - all must be highly conscious, 'objective', 'rational' and painful effort. Anyone who does not face 'the problem' in this fashion is reactionary and regressive. Adorno cannot conceive that to Stravinsky, who was brought up in a country which did not have a Renaissance, his formulation of the problem of late bourgeois society might have little significance or relevance.

APPENDIX V

TRANSLATIONS OF TWO ARTICLES

BY JACQUES CHAILLEY

Chailley, J. "Essai analytique sur la formation de l'octoechos latin", in Westrup, J., (ed.), Essays presented to Egon Wellesz, Clarendon Press, 1960.

Research on the source of the eight ecclesiastical modes has progressed considerably in recent years. We owe particularly to Eric Werner an insightful comparison [of the modes] with the traditions of numeric symbolism in which the source is located, and to the eminent dedicatee of this present study a demonstration of the correspondence between the Western repertory and the Byzantine tradition from which the modes take their oldest names. Nevertheless, the source remains a mystery. We must henceforth give up the overly simple explanation of Gevaert's school, who found an implied parallel with the music of Ancient Greece. No other serious landmark occurs between this and the treatises of the eleventh century which put forward the same concept in an all but definitive form. Perhaps, in this matter as in others, it is necessary to beware confusing theory with practice, and taking as the cause something which is often only the result of subsequent rationalisation. The present study proposes to suspend theory, and to attempt, through simple musical analysis, an approximate reconstitution of the probable chain of events as they occurred in a situation undoubtedly comprised of unknown singers charged with developing the repertory. We apologise for drawing on concepts more familiar to ethno-

musicology than to the traditional analysis of gregorian chant, but does not our best chance of solving old problems with new insights rest in this collaboration of disciplines?

The point of departure for this study has been the assertion of two facts to which traditional theory has hardly paid any attention, and which, although formerly ignored, are today almost universally recognised: on the one hand, the pentatonic nature of very old melody (cf. the work of P. Delalande or of Y. Hameline) which allows one to surmise a certain similarity of development with pentatonic melodies of an ethnomusicological background; on the other, the historical importance of chanting the psalms, and so of the reciting note or tenor (cf. the work of P. Claire at Solesmes) which, however, plays no real role in the traditional classification, based as it nearly always is on the finals (these latter, however, being absent from numerous plainchant formulae).

The initial criterion for a mode seems not to have been a classification according to the final, but the manner in which sounds and melodic patterns group themselves around the reciting note. Universal practices in chanting tell us that the predominant tendency was, on the one hand, for there to be ornamentation around the tenor and, on the other, for there to be a final melodic descent away from the tenor which, in other circumstances, could sometimes have been described as a true parlando. It would seem that things were much the same with gregorian chant, the basic scale being pentatonic, without semi-

tones, in which the unfilled minor thirds are optionally divided by weak and often moveable piens whose exact placement is fixed by attraction. Later, the tenor became the dominant, that is to say, it lost its importance as a reciting note and became little more than the axis of a melody, or, more precisely, the upper limit of the principal melodic nucleus [kernel]. It is the relationship between the upper and lower limits of this same kernel - the lower limit becoming the final and then the 'tonic' - which gave rise to the actual modes themselves. Given this perspective, it is not necessary to say that the idea of the tetrachord is as much a fiction as that of the hexachord. The first is a scholarly left-over from Greek theory (for which it was a reality), the second a teaching device destined to undergo solminisation (and thereby be improved), and not at all a structural element.

Other, additional characteristics emerged; in particular, the piens 'solidified', and became reinforced in their function through the attractions they underwent; the strongest of these attractions was that of the dominant, provided the pien was next to and in melodic conjunction with it - the next strongest that of the tonic; finally, the attraction exercised on a weak pien caused the tritone to be reduced to a perfect fourth, at least within the same area of attraction, there naturally being no reason for this phenomenon to occur between two different areas.

The change from chant to free melody also saw an inversion of the dominant-tonic relationship into that of tonic-

dominant. But in both cases there none the less arises a principal melodic area [zone] which constitutes the kernel of the mode. An occasional overstepping of this zone does not necessarily result in the creation of a new one, but if the overstepping persists and develops, a new one arises which is independent of the first and in which attractions may be modified and piens transformed. ~~As long as the range of the kernel is no more than a fourth, that is, the universal unit of homogeneous vocal utterance, there is nothing to prevent new zones being created both above and below the existing one.~~ There thus arises a central kernel flanked by two adjacent zones. Is it a coincidence that theory labelled these types as 'plagal', thus indicating ["en glosant"] id est a latere? But if the kernel is a fifth or greater, vocal effort gives rise to a characteristically high zone which precludes any development lower down, with the exception of a single note which may be compared to the sub-tonal note [proslambanomenos] of the Greek system. It is to be noticed that this note only emerges as a whole tone beneath the tonic, and not as a semi-tone or as the unfilled minor third of pentatonicism. There thus arises a kernel made up of a lower zone (+ the contingent sub-tonal) surmounted by a higher zone, with the dominant forming the link. This is the authentic mode, the following being the correct sense of ἀὐθέρτης: 'that which surmounts, which rises'. It is strange that etymology gives a totally different and difficult to justify definition (authentic = master, plagal =

servant, as partners ["associé"] ). Such definitions are frequent when lost initial meanings are followed by an artificial search for explanations.

Having made these generalisations, we may now examine the different possibilities to emerge from the above conditions one by one. In general terms the result of our analysis will be nothing other than the eight ecclesiastical modes, including some reputedly eccentric shapes for which theory has had great difficulty in accounting, but whose existence cannot be denied.

We must first of all have reference to the basic pentatonic scale, enumerated by fifths according to the principle we have outlined elsewhere [i.e., the cycle of fifths] :

- I. F G A C D F = T T 3 T 3
- II. C D F G A C = T 3 T T 3
- III. G A C D F G = T 3 T 3 T
- IV. D F G A C D = 3 T T 3 T
- V. A C D F G A = 3 T 3 T T

The two notes B and E are piens, weak optional notes whose absence does not prevent conjunct melody. Their varied placement depends not on the cycle of fifths fundamental to the structural notes above, but on the circumstances of their usage as dictated through attraction. Thus arises the well-known problem of B flat. But has this problem ever been correctly formulated? Here is why we doubt so:

When gregorian chant came into being there was neither appropriate notation nor appropriate solfège. The only point of



reference was intervallic [i.e., overall shape] . It is hence impossible to see how the view could be established that 'only B was able to be flattened', since such a phrase was meaningless before the ninth century. But when, towards this time, the degrees of the solfège scale came into being, they at first borrowed a tetrachordal terminology from ancient Greece. Did this usage stem from a preserved scholarly tradition, or from a humanistic study of ancient authors, particularly Cassiodorus, but above all Boethius? We would opt for the second possibility. Be that as it may, these last two Roman survivors of ancient Greek music were improperly adopted as theorists for the sole music then existing, ecclesiastical music, so that when alphabetic Roman notation came into being, it was assigned a theory belonging to the ancient pre-established scale which approximated it the most, that of the Greek diatonic system. In this system there was only room for one moveable note, B, brought about by the building up of conjunct tetrachords from disjunct ones. It is probably for this sole reason that theory, then solfège and finally notation, never allowed for any other possible alteration in the gregorian framework than that of B to B flat. By contrast, the pentatonic structure calls for two: B and E (or even more in certain complex cases). Thus - and here, of necessity, one is guessing - there arose the transpositions which have avoided theoretical difficulties, but by which we must be careful not to be influenced.

In effect, and this cannot be repeated too much, the medieval concept until about the ninth century was a purely

intervallic one. The names of notes were unknown, and we should only use them to help understanding: it is always necessary in constructing a theory to follow a logical course. This said, and although the real point of departure should be the dominant rather than the tonic, it is the tonic which, through convenience, we will set out as above by fifths in ~~equating it with the lowest extremity of the kernel.~~ This procedure also gives us the position of the dominant and so measures up to the crux of the problem. For example, to discover which system contains a kernel made up of two whole tones, written T T, we look for the pentatonic system which begins T T, and find the pentatonic shape I, also called pentatonic F - (F is presumed to be the tonic) - of which the dominant is consequently  $F + T T = A$ .

In this system, and although the real point of departure should be the dominant, the habit of counting upwards causes us to posit the first note as the tonic for the sake of simplicity. This procedure does not involve any notable distortion, since it defines the dominant just as clearly. It follows that this notation will eventually lead to a symmetrical development of the scale going downwards (for example, one can recognise in the T T 3 T 3 shape of our pentatonic F another potential shape T T 3 T 3 which must, of course, be approached backwards, since the procedure adopted here requires the enlargement of the melodic kernel). Similarly, in going upwards, the scale must continue for as long as necessary by repetition.

We will hence be looking at all the hypothetical intervals possible between the tonic T and a dominant D, studying the shape of the kernel, the position and the role of the moveable piens, and then the adjacent melodic zones. What will emerge will be the formation of the eight ecclesiastical modes:

KERNEL OF A SEMI-TONE. This is excluded by definition, since the interval is unknown in the scale.

KERNEL OF A WHOLE TONE. Theoretically possible (shapes I, II, III). Its presence in the repertory is attested to by several archaic pieces for which theory has never been able to account (Sanctus and Agnus of mass XVIII, for example). Its rudimentary form permits little development, and it seems to have rapidly disappeared. It is with the kernel of a minor third that a definite modality appears.

KERNEL OF A MINOR THIRD. This third is in principle unfilled and can be divided by a pien + II [i.e., the pien is the second note going upwards from the tonic]. It corresponds to the two shapes IV (D) and V (A):

(a) The Kernel. Two possible internal shapes, T S or S T according to the position of the pien + II. By reason of its proximity to the dominant, the attraction of the latter is the strongest, and so the natural shape largely predominates, without, however, excluding an occasional flattening under the attraction

of the lower note (see the Gradual 'Haec dies').

(b) Upper zone. The piens are +VI in shape D or +V in shape A. +V only remains a natural because of the threat of a tritone being formed with the tonic: in this case it coincides with +V of the other shape. For its part, +VI can only be flattened, for, placed at the extremity of the scale, it is only pulled downwards: ~~it thus coincides with +VI of the other~~ scale. As in the case of the kernel, the two scale shapes coincide.

(c) Lower zone. The piens are -III in shape E [i.e., the pien is the third note going down from the tonic] and -IV in shape A (the others are too far removed to be of consequence). Turned upwards towards the kernel, -III is normally a natural and so doesn't coincide with -III (F) of shape A, unless, in being extended exceptionally far downwards, it is subject to a reverse attraction and becomes unexpectedly flattened (see the response 'Collegerunt'). In fact, this degree of the scale seems particularly weak, and it is to be noticed that it is nearly always absent. Consequently, its divergence from shape A doesn't really hinder the unification of the two shapes. For its part, -IV coincides in both cases: it is a natural in shape A for the same reason that -III was in the other shape.

(d) Modal structure. The two scale shapes are fused into one mode, whose kernel is a minor third. This third may be

unfilled or may be divided by a moveable pien (S T or T S) with a large predominance of the shape T S. In the upper zone the shape becomes T T S T T, in the lower (in descending order) T T S T T. The weak and moveable degrees of the scale shapes are -III, +II and +VI in shape IV (D), with -III usually being omitted, and -IV, +II and +V in shape V (A). The two shapes are sometimes added to one another in the same piece (see the Offertory 'Tollite portas').

(e) Notation. Depending on the position of the piens, there are two possible methods of notation: in D or in A. Both methods are used, without there being any need to consider one as the 'transposition' of the other.

The mode we have been considering is the second mode or "protus plagal" [i.e., the Hypodorian].

KERNEL OF A MAJOR THIRD. A single shape is possible for the kernel, T T, without an interior pien. It corresponds only to the pentatonic shape I (F):

(a) The kernel. Defined above, it poses no problems.

(b) Upper zone. The piens are +IV and +VII, but this latter is rarely in evidence. Located at the extremity of the scale, it would tend to be flattened: this situation hardly occurs, and this is fortunate, for it would only match subsequent theory with difficulty. +IV is normally moveable but, because it usually looks back to the kernel below, there is a tendency for flattening to occur.

(c) Lower zone. The piens are -II, which is normally a natural because of its tendency to look up towards the kernel,

yet is also frequently omitted; and -V, which is rarely in evidence (looking upwards, its tendency would be to be a natural).

(d) Modal structure. Uniform: kernel of T T; in the upper zone the shape is usually S T T, but with a theoretical possibility of T S T or 3 T; in the lower zone (in descending order) the shape is 3 T or S T T, exceptionally T S T. The structure is of pentatonic shape I.

(e) Notation. In F or in C.

This is the sixth mode or "tritus plagal" [i.e., the Hypolydian].

KERNEL OF A FOURTH. The fourth may take the form T 3 or 3 T.

Two different modes are thus derived:

(A) The fourth T 3. This corresponds to two pentatonic shapes, II (C), that is to say T 3 T T 3, and III (G), that is to say T 3 T 3 T:

(a) The kernel. The moveable pien is +III, with an overall tendency to be a natural because of its immediate proximity to the dominant above. However, a flattening is possible if the pien looks back towards the tonic, and this tonic allows the development of a strong -II which requires the avoidance of the tritone; this may happen with the pentatonic shape G of which -II is a fixed degree.

(b) Upper zone. The piens are +VI or +VII according to the pentatonic shape. With the pentatonic shape G, +VI is the pien E. Given its close proximity to B +III, which remains a

natural if it is in any sort of relation with the E (since it will be drawn upwards), there is little chance of the E being flattened, since that would lead to the creation of [another] tritone. As a natural, it corresponds to the A +VI of the pentatonic shape C. In this latter shape, it is +VII which is the pien (B). Situated extremely high in the shape, it has ~~little chance of turning anywhere but to the middle,~~ and hence tends to be flattened, thus corresponding to the F +VII of the other shape. The two scale shapes coincide.

(c) Lower zone. The piens are -II or -III according to the pentatonic shape. -II is B in the pentatonic shape C. Situated immediately beneath the tonic, it tends to become a natural, but this results in the formation of a tritone with the dominant, and this outweighs the influence of the tonic. It is thus flattened, and corresponds to the F -II of the other shape (see, for example, the Alleluja 'Virga Jesse'). The E<sup>b</sup>-III of the pentatonic shape G is without contradiction drawn towards the kernel and so becomes a natural, corresponding to the A -III of the pentatonic shape C. Once again, the two scale shapes coincide.

(d) Modal structure. This follows from the preceding remarks: a kernel of a fourth T 3 with +III moveable, thus giving rise to either T S T or T T S; in the upper zone, T T S T; in the lower (in descending order) T S T T. The structure can be thought of as the pentatonic shape III with weak degrees +III & VI, or the shape II with weak degrees +III & VII, -II & VI.

(e) Notation. Since +III is the only degree which is

truly moveable, one would expect to find notation in G entirely satisfactory.

This is the eighth mode or "tetrardus plagal" [i.e., the Hypomixolydian] .

(B) The fourth 3 T. This corresponds to two pentatonic shapes, IV (D), that is to say 3 T T 3 T, and V (A), that is to say 3 T 3 T T.

(a) The kernel. The pien is +II, and is too far removed from the dominant to come under its influence. It thus becomes subject to the influence of the tonic, next to which it is situated, and so becomes flattened, but only provided that it does not lead to the creation of a tritone with any other important note which influences it.

From this point of view the situation is different with regard to the two pentatonic shapes. In the case of the pentatonic shape D, the tonic which flattens the +II also influences the pien -III, which, drawn back towards the kernel, tends to become a natural and in turn causes the +II to become a natural in order to avoid [another] tritone: besides, a flattened +II would induce a tritone with +V, which is here a fixed note. This gives rise to a naturalised shape, T S T. With the pentatonic shape A, the situation is exactly the reverse. The exterior pien which instigates the rejection of the tritone is +V. Situated immediately above the dominant, it is forced to become flat, and thereby causes +II to become flat. Going downwards, it is -III which gives rise to a tritone: unlike in



the previous pentatonic shape -III is not a moveable pien, but a fixed note (F) which causes +II to become flat. This second kernel thus tends to adopt a shape, S T T, which is different from that of the pentatonic shape D.

By contrast with the shapes already studied, the kernel of the fourth 3 T thus has for a pien not a moveable note which varies at the dictation of attractions, but a degree which has a different position according to whether it is located in the pentatonic shape D or A: natural in the first case, flat in the second.

(b) Upper zone. The piens are +V or +VI, #V occurring in the pentatonic scale V (A), which usually involves the flattening of +II and +V, with the latter nevertheless remaining moveable; +VI occurs in the pentatonic shape IV (D) which usually involves a natural +II and +VI, the latter nevertheless remains moveable.

(c) Lower zone. The same situation. With the pentatonic shape IV (D), the pien -III becomes a natural in the same way as +II; with the shape V (A), the pien -IV is by contrast moveable: its attraction towards the kernel tends to make it a natural, the danger of forming a tritone with +II tending to make it a flat.

(d) Modal structure. Despite the original similarity of the kernels, the two shapes have too many differences to enable them to be reconciled. The pentatonic shape D gives rise to a kernel T S T extended upwards by the shape T T S T, and downwards

(in descending order) by the shape T S T T, with weak degrees -III, +II, +VI. The pentatonic shape A gives rise to a kernel S T T extended upwards by the shape S T T, and downwards (in descending order) by the shape T T S T or T T T S, with weak degrees -IV, +II, +V.

Furthermore, in the shape with the flattened +II, a conflict often appears between the pentatonic structure which gives this +II the role of a weak pien, and the considerable reinforcement that the pien receives from the cadential movement associated with its semi-tonal proximity to the final. This conflict often results in artifices of style. One of the most frequent of these consists of the avoidance, up until the cadential close, not, as one might think, of the pien +II itself, but of the tonic to which it is leading. Thus arise the long insistances on the minor third -II/+II which, until the cadential close, actually create the impression of the second mode [Hypodorian]. (See the Introit 'Resurrexi').

(e) Notation. A notation which conforms to etymology is seldom possible because of the importance of the E flat. That is why one habitually notices notation in A or E; but it is necessary to understand that in either of these cases one is not dealing with the etymological orthography: even the notation in A, with B natural, is often a transposition of the pentatonic shape D, while notation in E is usually a transposition of the pentatonic shape A (with B flat).

The explanation that we have put forward does, we believe, dispel a number of the anomalies that result from a traditional

theory which always seems to be at a loss when faced with the mode under discussion. Because, with its characteristic S T T kernel, the mode is considered by traditional theory to be in E, such theory can only include the shape T S T with difficulty. This shape is considered to be a deviant form in A, and theory is hard put to explain how antiphonals in one shape correspond so easily with intoning in the other. Despite their considerable differences, the two shapes in fact originate from the same kernel, and this is why they remain identified with the same mode: the fourth or "deuterus plagal" [i.e., the Hypophrygian] .

KERNEL OF A FIFTH. For reasons set out in the introduction we now leave behind the plagal structures (kernel = a central zone flanked by two adjacent zones) - to come to grips with the authentic (kernel = a lower zone surmounted by a higher). Beneath this lower zone there only remains a weak sub-tonal note.

The fifth can give rise to three shapes depending on whether the minor third is at the bottom, the centre or the top: 3 T T, T 3 T, T T 3.

(A) The fifth 3 T T. This corresponds to the pentatonic shape IV (D) 3 T T 3 T.

(a) The kernel. The pien +II is subject to two contradictory but unequal forces. The lesser force is the attraction of the adjacent tonic, which tends to flatten it. The greater force is provided by the danger of forming a tritone with

the dominant, which tends to make it a natural. In these conditions the pien becomes a moveable note, flattened or not according to whether it is drawn downwards or upwards; in fact the two tendencies are clearly differentiated and have led to two distinct modes. However, the one which contains the flat was not for long able to resist the aversion to the tritone and soon became transformed, thus leaving it little more than an archaic remnant.

(b) The sub-tonal note. Normal: a tone under the tonic.

(c) Upper zone. This is more developed than with the plagal structures. It is easily able to take in +VII, and is pretty nearly able to become autonomous. This is why the pien +VI, which in a plagal structure is almost always drawn downwards, and hence flattened because of its proximity to the dominant, here remains moveable: a flat or a natural according to whether it tends downwards or upwards. The tritone which is formed with +III also doubtless plays a role, but is not so much a sole determining factor.

(d) Modal structure. That of the pentatonic shape IV. The kernel of 3 T T becomes T S T T (and even S T T T, but in this case one is confronted with a new mode which will be studied in terms of the kernel of a sixth which has taken its place). The sub-tonal note is a whole tone. The upper zone comprises 3 T or S T T or T S T. The weak degrees are -II (the sub-tonal note), +II and +VI (piens).

(e) Notation. In D if +II is a natural, but in E it is a flat.

With a natural +II, the mode is the first or "protus authentus" [i.e., the Dorian]. With a flattened +II we are

confronted with an archaic form of the third mode [the Phrygian] ,  
notated in E with a dominant of B natural, which has a strong  
tendency to 'slide' to C to give a kernel of a minor sixth.

(B) The fifth T 3 T. This corresponds to two  
pentatonic shapes, II (C) T 3 T T 3, and III (G) T 3 T 3 T.

(a) The kernel. The pien +III is an equal distance from  
the tonic and the dominant; since the attraction of the latter  
is stronger, the overall tendency would be for the pien to  
become a natural; this tendency is reinforced by the danger of  
creating a tritone with +VI, a fixed note in the pentatonic  
shape C, and fixed by analogy in the pentatonic shape G, as we  
shall see. The flattened form is thus rejected in favour of the  
shape T T S T.

(b) The sub-tonal note. Normal: a whole tone under the  
tonic in the pentatonic shape G. With the pentatonic shape C,  
it becomes a moveable pien with a tendency towards the natural,  
but we have already seen that the sub-tonal note can only be a  
whole tone. The natural form is thus rejected and the two  
shapes remain identical.

(c) Upper zone. The pien is +VI with the shape G, +VII  
with the shape C. In either case a +VI which is flat is not  
capable of being notated with a +III which is natural. Is it  
for this reason that this combination has never been  
encountered, or because the notation itself is inadequate? Be  
that as it may, the +VI which would normally be moveable is in  
fact always a natural. It hence corresponds with the +VI of

the pentatonic shape C. Similarly, the flattened +VII of shape C corresponds with the fixed +VII of the pentatonic shape G. It thus seems that the two types are founded on one shape only, the strong notes of one reinforcing the weak notes of the other.

(d) Modal Structure. The kernel is T 3 T or T T S T with a sub-tonal note. The upper zone has the shape T S T. The weak notes, other than the sub-tonal -II, are +III and, according to the situation, +VI or +VII. Naturally, -II will cease to be weak if, by an exceptional downwards extension of the scale, it becomes a proper pentatonic note (see the Gradual 'Jacta cogitatum').

(e) Notation. Usually in G, exceptionally in C.

This is the seventh mode or "tetrardus authentus" [i.e., the Mixolydian] .

(c) The fifth T T 3. This corresponds to the pentatonic shape I (F) T T 3 T 3.

(a) The kernel. The pien +IV vacillates between the attraction of the adjacent dominant which tends to make it a natural, and the danger of forming a tritone with the tonic, which tends to make it flat. It is thus moveable according to whether it is drawn upwards towards the zone of attraction of +V or downwards towards that of I.

(b) The sub-tonal note. It would not here be a tone, but a semi-tone or a minor third. It did not develop.

(c) Upper zone. The pien is +VII, which is attracted upwards towards +VIII rather than downwards; the natural form, moreover, is favoured by notation, which was unable to reconcile

the flattened form with the ability of +IV to become flat - the required notation was in F (and E flat can't be notated).

(d) Modal structure. The pentatonic quality is very obvious, the pentatonic shape I having no rival. The kernel is of the shape T T 3 with an optional and moveable +IV. The shape may thus become T T S T or T T T S; frequent omissions of +II are noticeable, although etymologically this is a strong degree. There is insufficient space to study this phenomenon here. There is no sub-tonal note. The upper zone takes the form T 3 or T T S, and is thus structured like a genuine tetrachord; +VII is reinforced to the point of creating a real pentatonic unit of 3 T T between +III and +VII (see the Gradual 'Ex Sion', on the word 'congregate').

(e) Notation. Generally in F, exceptionally in C.

This is the fifth mode or "tritus authentè" [i.e., the Hydian], with occasional references to the seventh mode [the Mixolydian] transposed in C (see the Antiphonal 'Me suscepit').

KERNEL OF A MINOR SIXTH. This is the greatest distance at which the tonic-dominant relationship can occur. It only arises in a single case, through the extension of the kernel of a fifth in connection with the third mode [the Phrygian]. This is brought about because of the tritone which results between the dominant, the strongest note of the mode, and +II, which, despite its origin as a pien, becomes reinforced through its importance to the cadence.

It follows from this that the traditional explanation

according to which the dominant moved from B to C because B cannot become a dominant can only be an explanation (?) after the event. Couldn't it be that this explanation implies a "solfège" reasoning based on a non-existent notation system?

Although notated in E because of the inadequacies of solfège, the third mode is not, as we have seen, a mode in E, but the flattened +II shape of pentatonic IV (D). Hence its 3 T T 3 T structure, with the first minor third divided S T. The same pentatonic shape with the division T S would have given the first mode. The stridency of the tritone +II/+V (+V being the dominant) led to the displacement of this dominant towards +VI, so that the pentatonic shape D in its turn 'slid' towards the pentatonic shape V (A) 3 T 3 T T. The orthography (in E) E-G-A-C-D-E is in reality a transposition of A-C-D-F-G-A, with a stable B flat. In the same way that, up until its own cadence, the Hypophrygian mode makes frequent references to the Hypodorian, so the Phrygian achieves its own kind of juxtaposition with the Dorian, even though this juxtaposition is founded on different degrees (see the Introit 'Sancti tui', which begins in the pentatonic shape IV on D and then moves into the pentatonic shape V of the third mode, on E). In this situation, there can be no question of flattening the new pien +V (the old dominant), only of leaving it out if the occasion presents itself. Such, in its definitive form, is the third mode, "deuterus authentus" [i.e., the Phrygian] .

Conclusion. It can be seen that, regardless of theory, the



eight ecclesiastical modes were the result of the creation - below the tenor of the chants, and in terms of a pentatonic scale ultimately completed with moveable piens - of a melodic zone fixed at one extremity by this tenor or dominant, and at the other by a final or tonic. The modes exhaust all the combinations derived from this hypothesis, from the minor third to the fifth (plus one addition historically accounted for by the minor sixth). This hypothesis is, however, quite different from the view presented by traditional theory. Such theory presents the eight modes in terms of a succession of pre-established finals forming a tetrachord D-E-F-G, with each note giving rise to two modes; a principal or authentic mode is characterised by the division of the octave of the mode into a fifth + a fourth; a secondary or plagal mode by the division of this same octave into a fourth + a fifth. Everything about this description is wrong. It doesn't take into account dominants or moveable notes. The explanation of the terms authentic and plagal is a misinterpretation of another legitimate meaning which we referred to above. The concept of the octave of a mode and its division is simply a misunderstanding whose origin is located in the middle of the ninth century. It is, moreover, a concept with absolutely no musical application to the repertory. In conclusion, the finals only form a justifiable tetrachord through a transposition whose sole vindication is the incorrect transfer of the ancient Greek tetrachordal (diatonic) scale - a transfer which it seems improbable

was noticed before the ninth century.

If the eight modes were formed in the absence of theory by the slow and unconscious work of unknown singers preoccupied with establishing the repertory, must it be concluded that this theory was constructed (badly at that) by classical scholars more aware of Boethius's diagrams and Ogdoad's symbols than of the musical structures which they were expounding, and must it be deduced from this that theory could hardly have taken root before the ninth century? We would not pretend to be able to confirm this view; but we are not far from thinking it. As for determining, in this development, what derived from the Romans and what from the Byzantines, this is the sort of question we cannot allow ourselves to become engaged on here. The most we can wish for is that Egon Wellesz, after so much prestigious work on related subjects, will one day present us with the definitive solution.

## B

Chailley, J. "Une nouvelle méthode d'approche pour l'analyse modale du chant grégorien", in Becker, H., and Gerlach, R. (eds.), Speculum Musicae Artis, Wilhelm Fink, 1970.

Having rejected the idea, dear to Gevaert and his school, that the eight modes of plainchant were nothing other than the ancient Greek modes handed down under other names as part of an uninterrupted tradition (with or without the intervention of

Byzantine chant), one is increasingly forced to consider the ecclesiastical repertory as an autonomous creation, influenced more by the chanting practices of the people of the Middle East where the church took root, than by theoretical concerns which became evident very much later and which, at least in the early stages, were without any real influence.

~~How did this repertory come into being? In a study~~  
dedicated to an authority on Byzantine music, we put forward a hypothesis which we would like to develop here, happy to be able to dedicate this new work to one of the musicologists who in our own time has contributed much to an understanding of the music of the high Middle Ages.

What is a gregorian mode? In the light of the following article, we are able to reply with the utmost conciseness: it is a formulaary pattern originating from the ornamentation of a melodic shape which links a tonic note with a recitation note or tenor (latterly called dominant), in a fixed pentatonic scale. This pentatonic scale is freely completed with weak notes which are more or less moveable.

Such was the hypothesis that we put forward in 1966. We would now like to specify its scope and consequences.

#### 1. The Pentatonic Kernel of the Modes.

In the aforementioned article we analysed the different possibilities that could arise with kernels of an ambitus ranging from a major second to a minor sixth, and showed that

once placed within a pentatonic scale, these kernels corresponded exactly to the different forms of the eight ecclesiastical modes. Without beginning the demonstration anew, we will lay out a table which shows the schematic typology of these eight modes.

The basic pentatonic scale will be written in the usual alphabetic notation, without E or B:

. . . A C D F G A C D F etc.

The octave of C as set out in this table (C D F G A C) will be called the pentatonic form C - the octave of D (D F G A C D) that of D, and so on. The following intervals arise:

|               |   |
|---------------|---|
| minor second: |   |
| major second: | $\overline{C D}$ , $\overline{F G}$ , $\overline{G A}$                    |
| minor third:  | $\overline{A C}$ , $\overline{D F}$                                       |
| major third:  | $\overline{F A}$  |
| fourth:       | $\overline{A D}$ , $\overline{C F}$ , $\overline{D G}$ , $\overline{G C}$ |
| fifth:        | $\overline{C G}$ , $\overline{D A}$ , $\overline{F C}$ , $\overline{G D}$ |
| minor sixth:  | $\overline{A F}$  |

Ignoring the major second, which can be recognized in archaic forms (Pater etc.) but which subsequent repertory in actual fact abandoned, one notices that, in moving from the tonic to the tenor and back again, the schematic melody-types can adopt eight different forms only (it being clearly understood that regardless of solfège concepts there is no difference, for example, between A C and D F, both intervals being the same): we will set out these types below, noting the tonic and dominant in capitals, and the pentatonic notes which pass between them in small letters. Since [in some cases]

there is more than one possibility, we will give first the 'spelling' which approaches subsequent theory most closely.

These eight shapes form the basis of the eight gregorian modes:

PLAGAL

minor third, forms A C, D F : D F D = A C A . . . . . mode 2  
 major third, form F A : F g A g F . . . . . mode 6  
 fourth, forms A D and D G: D f G f D = A c D c A . . . . . mode 4  
 forms G C and C F: G a C a G = C d F d C . . . . . mode 8

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fifth, forms C G, G D : G a c D c a G = C d f G f d C mode 7  
 form D A : D f g A g f D . . . . . mode 1  
 form F C : F g a C a g F . . . . . mode 5  
 minor sixth, form A F : A c d F d c A . . . . . mode 3

2. Authentic and Plagal.

We know that for a singer with an ordinary voice (and the trained voice of the eighteenth century not having come into existence, our gregorian chanters must have sung with an ordinary voice) an ascending movement which goes beyond a fourth can only be kept within the same compass with difficulty (Paul Collaer has studied this phenomenon with regard to ethnomusicology in the fourth volume of Colloques de Négimont, 1964).

Beginning with the fifth, the singer thus gains the impression of arriving in a new register. The melody established in this new region 'surmounts' the one below; this latter remains within a common area on both sides, and doesn't go beyond it; such is the original meaning of the words authentic and plagal, a meaning which finds justification in the following table. This table transposes the previous one in terms of a single final (D

by convention);

|       | I  | II  | III   | IV  |
|-------|--|---|---|---|
| Plag. |  |  |  |  |
|       | 2  | 4   | 6   | 8   |
| Auth. |  |  |  |  |
|       | 1  | 3   | 5   | 7   |

There can be little doubt that this is the reason for the choice of the words ἀνθέντης (which surmounts) and πλάγιος (which accompanies), a choice which is entirely justified in terms of the above meaning. In consequence, the double meaning of these words has undoubtedly led to the introduction of an incorrect notion of qualitative ranking: hence the latin translations such as principalis, subjugalis, etc., which have given rise to a misunderstanding of these terms.

### 3. Completion Using the Sixth and Seventh Degrees of the Scale.

The filling in of initially empty minor thirds with weak intermediate notes (piens), which then gradually 'solidify', is a phenomenon well known to ethnomusicology. We now meet the procedure again in conditions which this discipline would find familiar. Even if, as is the case with the fourth mode, these notes of completion (which introduce the semitone) are integrated into the characteristic modal shape, they play a very different role from all preceding notes. We have studied their treatment in detail in the aforementioned article; the basic principle would seem to be the following:

Completion notes assume a high or low (natural or flat) position according to forces of attraction or repulsion which are exercised on them. If these forces are contradictory and equal, the note becomes moveable. The attractions derive above all from the tonic and the tenor, the repulsions from the tritone. In the case of conflict, or of different possible interpretations, opposing schools will frequently arise, and variants will be

introduced. The well known phenomenon of sliding from B to C which is found in germanic regions, and the changeable tradition with regard to the flattening of certain B's, are different examples of this fundamental fact.

#### 4. Orthography.

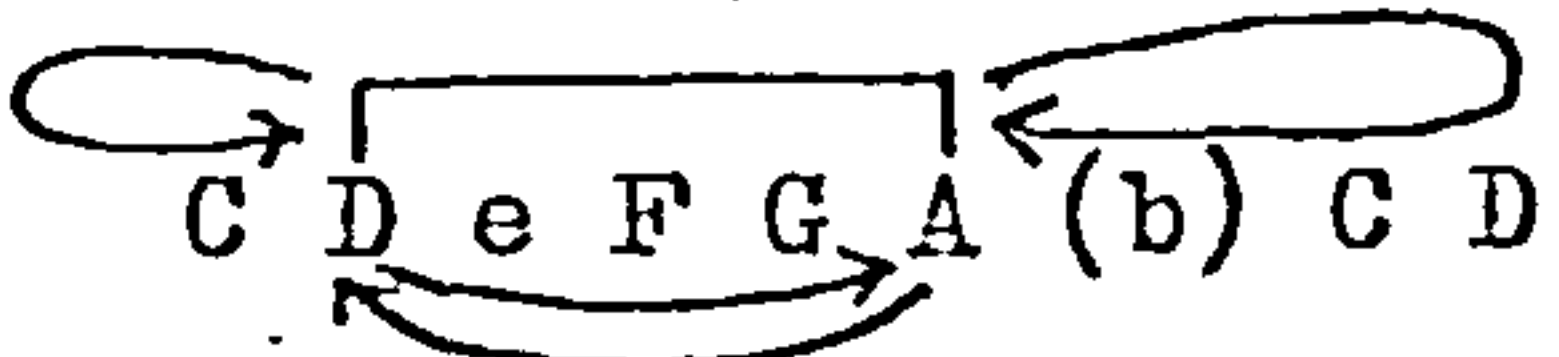
There are not one, but two completion notes, which are ultimately moveable: E and B. Until the eleventh century or thereabouts, theorists were not disposed to refer to them by any other means than the Greek terminology of synemmenon, the old tetrachord with a diatonic B flat. The Medievals had distorted the sense of this term in giving it the meaning of a note. It allowed them to take account of one moveable note, but not of two. Once the Greek terminology had been adapted to the medieval scale, this note could only be the B. There thus grew up a tendency to adopt an orthography which on the one hand eliminated E flats, and on the other made B the only moveable note. The well known adage that "gregorian chant knows no other alteration than B flat" is thus a misleading one that results from a posteriori transpositions made necessary through the inadequacies of solfège. Numerous examples of this appear below (notably in the fourth mode).

#### 5. The Structure of the Eight Modes.

The fixed pentatonic notes will be written in capitals, and the completion notes in small letters ("si" will always be written 'b', according to the English practice, and not 'h').

Those completion notes which remain moveable will be put in brackets. We will refer to our article in the *Mélanges* Wellesz (M.E.W.) for detailed substantiation. The scale should not be read from left to right, but from the central kernel indicated by the square brackets. The scale of the first mode, notated

C D e F G A (b) C D will, for example, be interpreted as



that is to say, in terms of the central kernel: a departure from and return to the tonic D (the point of departure and final arrival) through the dominant A with a weak 'e'; an occasional overstepping in one direction or another through a departure from and return to the tonic at the bottom, and the dominant at the top; a moveable b.

The first mode: There is the one form D A, with a moveable 'e', which is usually solidified as a natural because of the danger of forming a tritone with the dominant A. It hence keeps its spelling:

C D e F G A (b) C D

But the attraction of the tonic D can also give rise to an 'e' flat which, if it is strong enough, can threaten the dominant A: this shape is transposed and considered as the third mode; we will meet it again then.

The second mode: There are two forms A C and D F, of which the scales occasionally coincide and blend, the differences between them resulting more or less from the relative strength of



the notes. The moveable note, which is 'b' for A C and 'e' for D F, and which solidifies as a natural, gives rise to two spellings, which are best used in accordance with the position of the "piens":

- a) the form A C: F G  $\overline{A b C D}$  = B $\flat$  C  $\overline{D e F G}$   
 b) the form D F: A (b) C  $\overline{D e F G A}$  = E f G  $\overline{A b C D E}$

The second mode which is said to be "in A" is thus not necessarily a "transposition" of an original in D, as is customarily thought: the two forms have parity, and only classification with a view to strict enumeration would give a theoretical pre-eminence to the form in D.

The third mode.

- a) One recognises here the first mode with an 'e' flat (replacing 'b' flat)

C D  $\overline{e\flat F G A}$  b $\flat$  C D

This change requires a clear reinforcement of the 'b' flat by reason of this note's role of attraction, which is in turn sustained through resistance to the tritone. In order to avoid the 'e' flat, the mode is written under the transposed form:

$\overline{D E f G A B}$  c D E

This is an archaic form, often described as the origin of the one that follows, which is the same, but with a gliding of the dominant B to the adjacent C. There might perhaps be cause to vary this description slightly.

Among the consequences of our etymology is the weakness of 'f', which is a transposition of the old "pien" 'e' flat.

This weakness is not in contradiction with the frequent presence of 'f' at the cadential close, and is something that has already been emphasised by gregorian scholars (cf. Hameline, le Chant grégorien, p.73).

b) The kernel of the minor sixth which is generally adopted appears in our theory in the form:

$$\overline{G \ A \ (b) \ C \ D \ (e) \ F \ G}$$

of which the 'b' is flattened, doubtless because of the tritone it forms with the dominant F. The resulting shape is:

$$\overline{G \ A \ b' \ C \ D \ (e) \ F \ G}$$

which is then transposed in order to change the moveable 'e' into a 'b':

$$\overline{D \ E \ f \ G \ A \ (b) \ C \ D}$$

The fourth mode: It is this mode which has given the most trouble to traditionalists, because it does not fit easily into the simplistic classification based on the one range of [four] finals.

We can see the result of the two forms A D and D G to be found in our table.

a) The form A D, with a 'b' flat (M.E.W., p.89, in translation, p.445):

$$\overline{F \ G \ A \ b' \ C \ D \ (e) \ F} \quad \text{transposed to}$$

$$\overline{C \ D \ E \ f \ G \ A \ (b) \ C}$$

b) The form D G becomes  $\overline{A \ (b) \ C \ D \ (E) \ F \ G \ A \ (b) \ C}$

transposed in many different ways according to the use of flats:

- with a moveable 'e', the necessity of turning this 'e' into a 'b' results in the following spelling. This in turn requires a flattening of the 'b' above, which becomes the 'f' below:

E f G A (b) C D E f G

- with e natural, this spelling is usually preserved, hence

E f G A b C D E f G

- with e flat, the transposition becomes

B c D E f G A B c D

The same remark should be made concerning the value of the second degree as with the third mode.

It can be seen that the fourth mode which is said to be "in A" is not a derivation or a transposition of the fourth mode in E. Both have parity, with frequently misleading spellings whose different forms result from the normal development of the same kernel.

The fifth mode: There is but one form, F C, which is not transposed:

F G A (b) C D e F

The sixth mode: One form only, F A, which is not transposed:

C D e F G A (b) C D

The seventh mode: There are two forms C G and G D.

a) The form C G contains an 'e' which is always a natural and a 'b' which is generally a flat (M.E.W., p.91, in translation, p.450), hence

(bb) C D e F G A (bb)

usually written

f G A b C D E f

b) In contrast, the form G D has a 'b' and an 'e' which stay as naturals (M.E.W., p.91, in translation, p.450), and so there is no transposition:

F G A b C D e F

The eighth mode: There are two forms G C and C F

a) The form G C, without flats, is written

C D e F G A b C D

b) In practice the form C F coincides with the previous one (cf. M.E.W.), the only difference being in the lower zone, which is not often used. — Hence

F G A (b) C D e F G

which is written like the previous form in cases where the preceding 'b' is flattened:

C D E f G A b C D

To sum up, the normal development of the kernels which we have studied here gives rise to the structures set out below. Within these structures, the notes in small letters, which are the old "piens" or moveable notes that may or may not have become stabilised, have diminished structural importance, the essential part of the mode being naturally the central kernel:

I. C D e F G A (b) C D

II. a) Bb C D e F G or F G A b C D

b) A (b) C D e F G A or E f G A b C D E

III. a) D E f G A B c D E transposition of C D e b F G A bb C D

b) D E f G A (b) C D transposition of G A bb C D (e) F G

IV. a) C D E f G A (b) C transposition of F G A b C D (e) F

b) E f G A b C D E f G transposition of A bb C D e F G A bb C

c) B c D E f G A B c D transposition of A bb C D e b F G A bb C

V. F G A (b) C D e F

- VI. C D e  $\overbrace{F G A}^{\quad}$  b C D
- VII. a)  $\overbrace{f G A b C D E f}^{\quad}$  transposition of  $\overbrace{b C D e F G A b}^{\quad}$
- b)  $\overbrace{F G A b C D e F}^{\quad}$
- VIII. a) C D e  $\overbrace{F G A b C D}^{\quad}$
- b) C D E  $\overbrace{f G A b C D}^{\quad}$  transposition of  $\overbrace{F G A b C D e F G}^{\quad}$

It can thus be seen how artificial the traditional system of classification is. — With this classification, the eight modes are ranged according to four finals, D E F and G, with each final giving rise to an authentic and a plagal mode. The same can be said for the "rule of the dominant" (a fifth above the tonic in the case of authentic modes, and a third below the dominant of the authentic for the plagal modes, with a sliding to the adjacent higher note in the case of a dominant B). These are mnemonic devices and no more. That they are inadequate and sometimes wrong takes nothing away from their pedagogical ingenuity, but it is important not to be led astray by them.