Stockhausen in 1976:

Prediction in retrospect

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Taking risks: Robin Maconie on the genesis of his new book about Stockhausen. The Times Educational Supplement 28 May 1976, 22.

Stockhausen's Foreword to The Works of Karlheinz Stockhausen. London: Oxford University Press, 1976, v–vi.

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Taking risks*: *Robin Maconie on the genesis of his new book about Stockhausen. *The Times Educational Supplement 28 May 1976, 22.*

I did not ask to write my book; my publisher asked me. Had I been given the opportunity to choose a composer to write about, though, my choice would have been the same.

In 1972 Boulez's position in public esteem was secure. Berio, too, had earned himself an immense popular following. Stockhausen, to my mind a greater figure, was also the more vulnerable. One has only to remember Schoenberg's life of embattled isolation, consider how Bartók's fortunes declined, so that like Mozart he died in poverty, reflect on the life of Webern, to whom recognition never came, or Varèse, to whom it came too late, to know that a composer's genius counts for little in present-day society. Until, that is, the composer is safely out of the way. What better service could one hope to do then, than to make the sort of effort to win a popular following for the contemporary composer that poor Bartók, Webern, and Schoenberg were largely denied?

When I began work on my study of Stockhausen in 1972, all my major sources of reference were German publications. Bill Hopkins's translation of the Karl Wörner monograph (Faber) was still in preparation, the Jonathan Cott conversations with the composer (Robson) had yet to appear, and Jonathan Harvey's survey (Faber) was likewise beyond my immediate horizon. The only texts I was at all familiar with, then, were two collections of essays and programme notes by the composer himself (a third had just been published), Karl Wörner's book in the original German, and a lengthy essay by Helmut Kirchmeyer accompanying my copy of *Kontakte* in the early mono record by Wergo.

This might seem a lot, and in fact it is. But as well as being written in exceedingly inscrutable German (and occasionally translated in *Die Reihe* into even more inscrutable English), Stockhausen's writings and those of his commentators up to 1963 are extremely piecemeal; treating every work as a new and separate entity, referring only to distinctive features, and betraying little which might be construed as connective tissue relating the work to anything earlier or subsequently written. It seemed either that the composer preferred each piece to be considered intact, or alternatively, that he genuinely did not see his output as a connected whole. For my part, I was convinced there must be an underlying logic to the composer's development, and was determined at all odds to find, or if necessary, to invent one.

I had little choice. I cannot break down serial music into series, and am lost in

admiration for those like Hugh Davies or Richard Toop who can. At the same time, I was not competing with their kind of expertise. Analysis of this kind is of little use to the layman; while enabling the music to be defended as an organized system, it says little to justify the primary intuition that brought the system into being. Composers are human and so is their music; my task was to discover a frame of reference and a focal length for Stockhausen's personality with the aid of which an observer without privileged knowledge might perceive what his music sets out to be and to do.

This assessment of personality was critical. It had to be built on the assumption that the composer was trustworthy. That may read rather oddly, but in music criticism the prevailing attitude to the living artist is normally a form of scepticism.

I had observed Stockhausen at work as a student of his in Cologne in 1964. His method of teaching was to outline the principles on which he was working out a current piece (at the time *Mixtur* and *Mikrophonie I*), set us exercises to complete, and see whether anything useful emerged. I am not sure that he trusted me much as a student, because instead of trying to understand the purpose behind his compositional rules, I tended to look for inconsistencies in the rules themselves. Perhaps I was simply bloody-minded; yet, when I think of those who studied along with me up in the top floor of the Rheinische Konservatorium, of Tom Ehrlich from New York, Gonzalo da Olavide from Spain, Attilio Filieri, the puckish Italian priest, the Welshman Jeff Morgan, and the many others from all over the world, I cannot remember any of us feeling we knew what Stockhausen's purpose really was, or what he actually expected of us. He was too far ahead.

We were convinced by him in other ways than understanding. The music he made, the very fact that he knew what he was doing, his immense capacity for work as shown in those extraordinarily complicated but beautifully organized and detailed scores. And yes, we were also convinced by the unselfish motives that had led him to organize the Cologne New Music Courses, that had given us the chance to study—at no cost for those who had no money—with some of the best brains of contemporary music: Stockhausen himself, Pousseur, the musique concrète composer Luc-Ferrari, Georg Heike of Bonn University's Acoustics and Phonetics Research department, Schernus the choirmaster of Cologne Radio, the cellist Siegfried Palm, the harpist Francis Pierre, Caskel the percussionist, Aloys Kontarsky the pianist, and flautist Aurèle Nicolet. It was a noble initiative.

Believing in the composer was one thing, believing in the possibility of explaining his music in terms comprehensible to an interested layman was something else. "The critic of today is in possession of sufficient evidence, of sufficient means of analysis, to enable him to arrive at considered conclusions about his own culture. . . . Posterity is no more than a convenient exit for the critic who will not venture a positive judgement". The words were Donald Mitchell's, from an essay ("Criticism: a State of Emergency", *Tempo*, Autumn 1955) which had greatly stirred me as a university student. Somebody believed it was possible to make a balanced assessment of avant-garde music, and dared to say so. By 1972 early music was being transformed by the addition to scholarship of precisely that element of moral conviction to which Mitchell, drawing on the example of F. R. Leavis, referred. "The serious critic's concern with the literature of the past", said Leavis, "is with its life in the present; it will be informed by the kind of perception that can distinguish . . . the significant new life in contemporary literature."

New music had its champions on the practical front. Robert Craft was a hero of mine, for his pioneering efforts on behalf of Webern, Varèse and Schoenberg, as well as his better-known association with Stravinsky. Boulez was another: a composer who cared enough about music to devote a large part of his life to conducting other people's works, in particular Messiaen and those of his own generation. Whatever we think of their interpretations, both made it possible for others to hear and acknowledge what they were able to take on trust. That is their contribution: they took the risk.

On the literary side, however, the composer has tended to make the running. The most

trenchant appraisals of recent developments have come from Stravinsky, Boulez, and, until recently, Berio. Cage and Stockhausen have both written extensively about themselves and their music, and rather less critically about their contemporaries. It is now regular practice for a visiting composer to be interviewed by the press for the very purpose of bringing readers up to date with his work. In the face of so much privileged information, the critic has tended to retreat or capitulate. This is unfortunate. Few composers, whatever their literary gifts, are able to appraise themselves dispassionately. They should not be expected to do so. A critic may not be able to know a work as the composer knows it, but that, too, is not his function. The critic's duty is to know the composer in terms of his music: to see a pattern of thought overall where the composer may conceive only a succession of special cases; to discern an aesthetic where the composer is unaware of anything more than a pleasure principle.

But there is a limit to even the best motivated speculation when one's experience is small and the evidence affected by as many intangibles as Stockhausen's undoubtedly is. At the outset neither my publisher nor I thought of making more than a token gesture, something on the lines of a BBC Music Guide, a brief survey interspersed with some closer study of a few selected pieces on which I felt competent to make a more detailed pronouncement.

I wrote to Stockhausen, to let him know of the project, and he replied. Later he came to London for a performance of *Kontakte* and we met after rehearsal in the Royal Festival Hall. He was friendly, but cautious. It was essential to print the facts, he said. I must tell the truth. To which I replied that he would be kept informed at every stage of writing, and would thus be able to vet every word before printing. He agreed that this was a good idea.

I was quite sure that this would not affect my critical position. Indeed, Stockhausen's agreement to read the typescript meant that I could now attempt a much more ambitious study. Since I could rely on him to correct my mistakes, I could afford to make mistakes. From this point the book was written in effect as an extended interview: I imagined connexions I could not directly perceive, and invented reasons for musical procedures I did not wholly understand.

It was more like detective fiction that analysis at the time, though in retrospect very little was added to simple description. The promise of cooperation also enabled me to extend my field of reference to cover the whole of the composer's output. I was put in touch with Richard Toop (who was at the time involved in sorting and researching Stockhausen's archives) and was given access to the archives myself to study the unpublished works. Slowly a picture began to emerge. When the first 80,000 word draft was completed, after nearly two years of work, I had a fair idea of how much I still needed to know, and a much better intuition of what sort of answers I was looking for.

The scripts were returned with detailed annotations and a warm covering letter from Stockhausen himself. He was not at all offended by my frequently crass generalizations; as he had said, how could I have known these things? His general suggestions on the shape and emphasis of the book were very much to the point, and agreed with my publisher's feelings. His marginal comments, also, were scrupulously fair, keeping to errors of fact and misjudgements arising from errors of fact, and not interfering at all on wider issues of interpretation, provocative though these must have seemed. I had the impression that he was both puzzled and fascinated that somebody who knew so little could presume to account for so much that he himself had never attempted to rationalize out.

By 1974, coincidentally, Stockhausen had become a much more outgoing personality than he had been as a younger man when I first knew him. He was intense, very shy, and I found it possible to interpret his changing modes of literary expression as a series of efforts to find the appropriate style of discourse for the audience he felt would be most receptive to his music. Early on he felt himself as part of a world of researchers, and evolved a specialist literary style, using the terminology of acoustics and phonetics and electronics from which

his music drew sustenance. Twenty years later he was in the process of adopting the cryptic mode of utterance current among West Coast American youth, a language of feeling seemingly remote from the logical positivism of his apprentice days. However diffuse his transcendental manner might appear, however, the mind was as sharply focused, and the language as clear in his personal dealings with those he knew, and on specific issues, as always.

Perhaps he was amused that I should want to portray him as a pragmatic Englishman. Certainly I felt that he could be given an image midway between the impersonal sans-serif intellectualism of *Die Reihe* and the gnomic mode of the guru he had come to favour.Well, why not: Stockhausen's work has a critical dimension as well, and if that is more likely to appeak to the reader who wants to learn, and to dispel the superstitious fog that so often stands between the living composer and his audience, so much the better.

Robin Maconie's "The Works of Karlheinz Stockhausen", with a foreword by Stockhausen, was published this week by Oxford University Press at ?17.50.

Stockhausen's Foreword to The Works of Karlheinz Stockhausen*. London: Oxford University Press, 1976, v–vi.*

"Robin Maconie leads the reader through my work like a travel guide. He offers an overall and coherent view. The music is experienced through his eyes and ears, as one who has inhabited this musical world for many years.

Let no one suppose that the composer may be better able to interpret the musical vibrations transmitted through him, than a commentator who immerses himself, body and soul, in this music. All the commentaries that have ever been, and those yet to be written, all thr thoughts and dreams and impressions and visions and actions which my music arouses in its hearers, all these, no less, add up to the'meaning' of this music—something which must always remain largely a mystery, never totally to be comprehended by a single individual. The resonance is different in every person, for each stands on a different rung of the ladder of spiritual self-enhancement.

Knowledge of this music must therefore come via a mind which has thought long and deeply about it. It must be obvious to everyone that each individual must work out his own view of the music he loves, and that a Maconie by his side can only give him a certain amount of help. But there are very few who can manage it with no help at all. . . .

Maconie has left many questions open, and these the lover of my music must find out for himself:

Am I a newcomer in musical history, or am I a reincarnation of an earlier composer? Are the supericial parallels between my music and the music of other cultures perhaps grounded in experiences of my earlier lives on this planet?

What are the distinctively new vibrations and rhythms in my music, and what laws of the Universe are transmitted in them? To what spiritual planes do the different works, or isolated events from individual works, aspire? To what levels of awareness do they bring us?

What are the underlying moods of particular works? Wich is the appropriate state of feeling for listening to a given work? Which works are expressly spiritual in tone, that is to say music of praise, prayer, and thanksgiving to God? In which is the spirituality more hidden?

Which works appeal more directly to the physical being, the feelings and sufferings of sensory existence, and which more to the transcendental life of the spirit? Or is a balance of sorts discernible overall between the vibrations and rhythms of the beast and the angel in

man?

Which pieces sing more than others, which transport us to worlds far removed from our planet? Which works allow us to experience the way of life of much smaller creatures, down to the smallest micro-organisms? Which enable us to traverse great distances with the stride and breath of giants, to fly with giant wings?

In which work has the Prince of Satania, Master Lucifer, insinuated himself with his brilliant with and glittering alchemy? Which works, which parts of works allow us, like a child seeking protection, to cling to God's foot, snug and content in the certain knowledhe of complete secutiry?

Where sounds the voice of prophecy?

Where the voice of Divine Humour?"

Kürten, 30 January 1976.

Preface, Introduction, and Epilogue

The Works of Karlheinz Stockhausen [first edition 1976]*, vii–viii, 1–4, 321–25.*

Preface

Among living composers Karlheinz Stockhausen is pre-eminent. After an early life of considerable hardship he is now, in a material sense, reasonably secure. A hard-working and prodigiously inventive composer, he is also his own most active publicist, as author, lecturer, conductor, and recording artist and supervisor. Ironically much of the respect he has earned by these efforts is tinged with the sceptical envy usually accorded to self-made men. His music is still little understood, and while his influence is generally acknowledged, his reputation, for one who is undoubted heir to the tradition of Mahler and Schoenberg, remains a prey to rational unbelief and ineffectual enthusiasm.

I have not the slightest doubt that were Stockhausen suddenly to vanish from our midst a great deal of the diffidence with which he is at present regarded would mysteriously vanish, and that we should witness an immediate upsurge of critical interest in the man and his music (though probably the artist-as-prophet more than the musicians). But to deny an artist of Stockhausen's stature a measure of sustained critical attention while he is at the height of his powers seems not merely uncharitable but shortsighted too. The composer gains from public interest in his music, and we gain some insight into how the artist's mind works while he is actually working among us (which itself may spur him to greater achievement).

I have attempted to write this book from the viewpoint of a commentator in the future. The difference between present and future critical perspectives is that the former is characteristically an expression of doubt, the latter an affirmation of belief. It seemed only reasonable, for instance, to accept in principle that Stockhausen knows what he is doing, and means what he says. I have also assumed that the pattern of his compositional development is logically continuous, that his earliest pieces were subject to outside influences, and that his later works represent progressive refinements of earlier ideas. My method has been, therefore, first to reconstruct the conditions under which Stockhausen worked, and then to interpret his music as a response, or rather a series of responses, to these changing conditions.

Stockhausen's own writings, which are numerous, I have also interpreted both as studies of interest in themselves and as a parallel account of his creative development. In his early working notes in particular, Stockhausen is apt to turn personal observation or conjecture into general statement couched in more or less scientific terminology; the result is that the reader looks for consistent criteria and logical progression of argument, instead of

consistency of approach and objective in a series of differing situations. Most of his seemingly theoretical writings are in fact reports of the practical implications for music of organizational hypotheses derived from other disciplines. Moreover, the central issue of any one paper almost invariably refers to one or more compositions on which the composer is working at the time.

If his working notes are over-generalized, his programme notes are rather too specific. When he writes publicly about a work, Stockhausen tends to confine his (and the reader's) attention exclusively to that one work. Of its place in the context of the composer's development, its history or motivation, little is consciously divulged. It is a delicate question. Stockhausen's music is an extremely clear barometer of his affections, and at times contextual analysis brings one to a point where to proceed further might appear an invasion of privacy. An obvious instance is the text cycle *From the Seven Days*; in *Kontakte* and *Mikrophonie II* the undercurrents of drama are not so apparent, but are there all the same.

As a general introduction to the composer this book will serve, I trust, tolerably well on its own. The student, however, is recommended to read Stockhausen's texts as primary and mine as commentary, for I have endeavoured to make the two complement each other, by avoiding excessive duplication of either fact or opinion. Mine is not meant as a definitive study. It is rather a speculative view of the whole of Stockhausen's creative development to the present time, intended to allay ordinary suspicions and, it is hoped, stimulate those better qualified than myself into more detailed research. I chall be well satisfied if these aims are achieved.

NOTE: *As of February 2009, Stockhausen's Texte I and II are still awaiting publication in English translation.*

Introduction

Great composers who are also men of influence are always few in number, and the number seems to remain constant in spite of natural and technological increases in the musical population.'Creative talent certainly seems to be spreading thinner,' remarked Stravinsky in a mischievous aside, 'if only to support the hypothesis that diffusion is necessarily followed by corresponding loss of density.' Now Stravinsky is gone, and the number of living composers whose progress consistently attracts the professional attention of their contemporaries as well as the admiration of a large public following may be counted on the fingers of one hand. Karlheinz Stockhausen, Pierre Boulez, and Luciano Berio belong to this distinguished group. All three are survivors of a period of radical innovation in music as influential in its field as the Bauhaus in painting and design. The movement was a post-war, European development ('European' in the 'Common Market' as well as the geographical sense), centred on the new music festivals of Darmstadt and Donaueschingen. Its leaders all belonged to the then younger generation, served their apprenticeships together, and for some years applied their skills to solving common problems of musical form-building. The unusual closeness of their association certainly contributed to their early rise to fame, and probably accounts in part for the extraordinary durability of their leadership. They have been a considerable force in music for the best part of twenty years. How much the success of any one of them rests upon individual genius, and how much upon the corporate authority of the group, is a moot point. That they depended upon one another for moral support, and were popularly identified as members of a group rather than as individuals, is certainly true. A shared sense of mission made them noticed; at a time when an older generation of composers was hopefully waiting for recognition (with the war over, and Schoenberg dead, what was to prevent a revival of tonality?) the younger generation alone knew what had to be done, had the courage and energy to undertake it, and an evangelical conviction of its

social importance. This corporate sense of purpose gave them an edge over their sceptical elders, and sustains their authority still over a present new generation of composers who have never experienced, individually or collectively, the intense spiritual excitement of being in at the beginning of a new era in musical history.

This is not to deny the influence of some senior composers on the direction of new developments. The influence of Olivier Messiaen on the young, as composer of the visionary proto-serial *Etudes de Rythme*, and as teacher (at different times) of both Boulez and Stockhausen, has been profound. Messiaen's concepts of rhythm and form, and to a lesser extent his style of gesture and characteristic opulence of orchestration, have all left their mark on the new music. To his outstanding qualities of aural sensitivity (Messiaen's sound-world is exceedingly animated) and ritual order, Boulez and Stockhasuen have added their own exceptional capacity for formal invention and instrumental innovation. More intellectually disciplined than Messiaen's, their music also tends to have greater range and stamina. All the same, many of the younger composers' more startling inventions were prefigured in their teacher's work. To take only two examples, both the formal intricacies of Stockhausen's *Klavierstück XI* and Boulez's strangely elusive tempi compare with features of Messiaen's style of organ writing. There are many more technical similarities.

John Cage is another key figure whose importance to the new music may be said to exceed what his own music has accomplished. Cage's main contribution to the new way of thinking was to shift attention from the musical end-product to the compositional process. This change of emphasis, manifested in a new open-mindedness, a sort of suspension of disbelief towards the musical outcome of a system of choice, enabled composers to work confidently even though they might not have any clear idea what the sound result would be. Cage's example curiously enough restored abstract form to a position of importance by making it unnecessary for form to refer to historical convention or even individual taste. Ironically, his cultivation of indifference, whether we call it a religious impartiality or quasi-scientific detachment, ended by estranging him from music as an art of intervention.

If, then, Messiaen and Cage provided the incentives and theories for the new style of music, it has been the achievement of the Darmstadt group to make those principles work. It was not an easy task. Everything involved in the process of encoding and decoding sound had to be examined anew. Old forms of notation were reinterpreted, and new conventions introduced to make a terminology as 'functional' as possible, reduced to exactly quantified essentials. The young composers took encouragement from the discovery that Webern in his later years had been patiently working towards a similar ideal. But Webern never lost sight of the fact that notation is relative; the younger composers had to learn by trial and error that serial refinements of dynamics, attacks, or durations could not be taken very far before becoming mutually contradictory. Even today the search for an adequate notation has not been satisfactorily concluded, but we may be sure that exposure to the limitations of notation at an early stage of their development gave many young composers a depth of appreciation of the formal and expressive properties of their materials which would not normally be acquired until after a lifetime's experience.

In the sixties their paths began to diverge. While some of their contemporaries have allowed their conspicuous talents to be diverted to political ends, Berio has acquired a reputation for music of sophisticated charm, and Boulez for a glittering and pungent sensuality. Only Stockhausen seems as restless as ever, and his music as unpredictable. The image of an untiring revolutionary is attractively topical, perhaps, and may account for Stockhausen's growing acceptance by enthusiats of 'progressive rock' music. On the other hand, his bewildering variety of output is all too easily attributed by bemused and sceptical observers to a fundamental instability of character (and his forceful manner, even more unpleasantly, to dictatorial paranoia). But the real difference between the consistency that has emerged in the music of Berio and Boulez, and the consistency we cannot see in Stockhausen, is a difference of spiritual location. Whereas the former pair are essentially

instrumental composers who have made sporadic sallies into the the electronic field, Stockhausen is basically an electronic composer who makes regular incursions into instrumental music. The ordinary listener and student who is not intimately acquainted with the alien techniques and modes of expression of electronic music is ar a loss to understand many of Stockhausen's innovations in the instrumental sphere which arise directly from his synthesis of the two disciplines. In the studio the composer encounters the age-old conflict of expression versus imagination raised to a new peak of intensity. Symptomatic of the conflict is the sense of a discrepancy between what the composer appears to have intended and what (however interesting) he has actually achieved. It is a difficulty Cage tends to sidestep by professing to accept any number of possible interpretations of an extempore work as equally valid; when one is left unsure about even his general intentions (other than to illuminate or divert), the question whether they are—or can ever be—effectively realized remains unanswerable. But with Stockhausen one *is* able to identify particular expressive intentions with some certainty, and as a result more readily notice modifications of the original concept in the final work, and deviations in performance. There is evidence, for instance, that the composer's first hopes for his early electronic studies did not materialize; one may query whether, or how, *Zeitmasze* can be made to fulfil the implications of its title ('Different tempi superimposed but distinguishable')—though the question here seems to be one of performance rather than concept; again, I suspect that *Mixtur*'s ring modulators did not turn out to work in quite the way the composer intended.

But whatever the reason for a particular discrepancy, all tend ultimately to referback to something more fundamental, the problem of translating ideas and techniques learned in the studio into live performance situations. The composer's principal difficulty lies in reconciling a neutral, self-effacing technology with the self-expressive demands of the performing art. The problem is not peculiar to Stockhausen's music but lives in it at a particular intensity simply because, working in both fields, the composer draws inspiration from the conflict of techniques, seeking to confront it afresh in every work rather than regarding it as a drawback to be gradually eliminated. Though the area of interaction between studio thought and instrumental practice may be readily identified for a particular work, it would be wrong to judge the work merely on whether it resolved the technical point at issue. Knowing the theoretical situation of a work may help a listener to understand it, but the work is much more than an exposition of theory: it is music as well, after all. On the other hand, one may feel justified in preferring those pieces like *Zyklus*, *Refrain*, *Mikrophonie I*, and *Mantra* which are triumphantly successful on both musical and theoretical planes. But more important than success is the palpable presence of the conflict in Stockhausen's oeuvre, for it is this opposition of expressive intention and technical limitation that makes the listener pause and consider. Stockhausen is not a composer of empty reassurances, but a philosopher in sound whose role is to rediscover and reformulate questions of perception upon which our survival as sentient beings depends. It takes talent in order to know what these are, but it takes genius to give them expression.

Epilogue

Looking back over twenty-five years of Stockhausen's composing life, one sees a cyclic pattern emerging. His music in the fifties is characterized by extreme surface differentiation made audibly coherent by progressively more refined techniques of performer inflection. During this period he appears to view music as the expression in sound of fundamentally intellectual models; even though his ideas of organization relate ever more closely to acoustical processes, their manner of reconstruction remains essentially abstract, i.e. based on classification and permutation of a range of sound categories. The first stage reaches a peak and turning-point with *Kontakte*, and is succeeded in the sixties by a development in the opposite direction, in which his attention is focused on the sensual and allusive properties of sounds themselves, and his music is designed to demonstrate that sounds we

ordinarily classify as different are acoustically related. This stage of his development reaches its extreme with *Stimmung* and the *Aus den Sieben Tagen* texts of 1968. A new period of synthesis is signalled with *Mantra*, which combines the formal objectivity of the fifties with the continuity of movement and sound-relationship characteristic of his music in the sixties. The sense of evolving in a circle and beginning again becomes increasingly clear during the latter years of the sixties, from hints like *Spiral'*s distant reference to Schaeffer's 'dynamic melody' theory, or *Sternklang*'s revival of the earlier 'star sound' ideal, or *Mantra*'s allusion to Cage's prepared piano, to such obvious signs as the 1972 Stockhausen retrospective in Paris, including first performances of the earliest pieces, and the composer's 1973 restoration of *Spiel*.

All Stockhausen's music is serially orientated, even his most 'minimalist' scores. At a very early stage he rejected the numerical organization of *materials* characteristic of conventional serialism, in favour of a system based on *interval*, i.e.degrees of differentiation. Alone among present-day composers Stockhausen has refined and extended our awareness of audible change, particularly in complex sounds. His attraction to rich, fluid textures derives to a great extent from a practical involvement with recording media. Stockhausen's ears are attuned to radio, and his imagery and manipulation of sound material frequently draw on the profounder implications of quite familiar radio and tape effects, for example static, tuning in or out of a broadcasting frequency, or mutual interference of adjacent stations on radio, and variable playback speeds, feedback, and 'hard cutting' in tape recording.

He is fascinated by pair-symmetries and the reconciliation of opposites. Two-part writing predominates in all his piano pieces, and double formations representing reciprocal tendencies are a consistent feature of his style, in *Schlagtrio*, *Kontakte*, *Mikrophonie I*, *Solo*, *Pole*, and *Mantra*. In works combining live and electronic elements they too function reciprocally.

Despite outward appearances of calculated impersonality, it will now be apparent that Stockhausen's music is greatly influenced by his emotional condition, to the extent that one may even say that the music is a biography of the man. Temperamentally he oscillates between periods of buoyant self-reliance and periods of extreme dependence upon other people; one can gauge his mood at the time of composing a particular piece to some extent by whether and how much he imposes either on technique or on the emotional sympathy of his performers. How he feels may also be indicated by the instruments and notational style he chooses. The piano, for instance, is typically associated with a rational determination of form: from the piano's imposition of order on the material of *Kontra-Punkte* to the stabilizing rationality attributed to the pianist Aloys Kontrarsky in the Stockhausen ensemble's performances of intuitive music. The tam-tam repeatedly appears as an image of generation, in *Kontakte*, *Momente*, *Mixtur*, *Ylem*: an image probably derived from his studies in *musique concrète*. Wind instruments, woodwind especially, serve as emotional complement to the intellectual piano. When Stockhausen wants to make his feelings public he uses voices—solo to express himself, choral groups to express what he feels about the society in which he finds himself (the more intelligible the text, the more confident he feels, as a rule). Unpitched percussion instruments generally signify division and change, by articulation of formal divisions (by analogy with consonantal action in speech), as in *Kreuzspiel*, *Mixtur*, *Telemusik*, and *Mantra*, or alternatively to show that the prevailing mode of organization is gestural, as in *Spiel*, *Punkte 1952*, *Kontakte*, and naturally *Zyklus.* Apart from his early Sonatine, Stockhausen has shown little interest in string instruments except as an orchestral sonority. A sentimental association is suggested by the early song 'Der Arme Saitenmann', however, and allusions to the string style of Bartók are frequent in his later works.

Of course strings play only a minor role in the jazz big-band sound which has exerted such a powerful influence on Stockhausen's style of expression and instrumentation, in its

opposition of solo and block sonorities, its delineation of structure by changes of timbre and density, and its characteristically ‘sprung’ rhythms. An awareness of jazz timing, and of its intuitive discipline, peculiar instrumental combinations, and exceptional blend of sonorities, all are constant features of Stockhausen’s approach to music from the Sonatine to *Trans*.

Predictions are unreliable, but it is clear that with *Mantra* Stockhasuen has entered a new phase of emotional detachment and technical restraint. He seems to have discovered a sympathy with neo-classical artificiality at a time when many of his most pressing problems of the sixties have at last been overcome. These include the long-standing technical difficulties of intermodulation, resolved in his invention of the ‘Modul 69B’, his successful training of performers to realize intuitive and process scores, and not least his having finally won public acceptance and interest in these most demanding works.

His latest compositions, including *Alphabet* and *Ylem*, rely much less on emotional preconditioning. Instead we are presented with concrete situations—sometimes theatrical, sometimes simply procedural—out of which the music arises and to which it constantly refers. We may compare this development with the changeover from sound assemblage to sound processing in the synthesis of material for *Kontakte* in 1959.

Another important development indicated in *Mantra* is the composer’s surprisingly late conversion to contrapuntal thinking. This has interesting implications for the future of live electronic music. We may expect a change from *Mixur* and *Mikrophonie II*, in which ring modulation functions as a source of harmonic tension (‘dissonance’ in classical tonality), or *Mantra*, in which timbre-transformation corresponds more closely to classical key-modulation, to a new kind of intermodulation in which selected characteristics of one instrumental ‘layer’ may be imposed directly upon another live or pre-recorded music, the novelty being that both modulating and carrier signals may be equally flexible. Such a development is clearly within Stockhausen’s reach.

He is also likely to continue using and refining the transformational notation developed for the orchestra of *Third Region of Hymnen with Orchestra*; on the evidence of *Fresco* and *Alphabet* there is also a strong likelihood that he will pay increasing attention to techniques of sound reproduction. There is much to be found out concerning large-scale loudspeakers, and the operation of infrasound on audience perceptions. In contrast to the static, enclosed spaces of *Carré*, *Kontakte*, *Hymnen*, and the Expo ’70 auditorium, we may see the production of static, three-dimensional sound sculpture, experienceable only by the audience’s own movement, and more sound mobiles of the kind first envisaged for *Carré* and *Kontakte* but not achieved then. These two works, and perhaps *Momente* as well, may ultimately be revised to bring out their latent spatial movement.

But enough. These are only the idle speculations of a prejudiced observer. Stockhausen’s work of exploration continues. It is up to us to follow.

E N D