Herbert Brun

The Political Significance of composition

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It is one thing to search for events that will produce the sound one wants, and quite another to discover the sound of the events one wants. In the first case the wanted sound renders desirable the necessary events; in the second the wanted events are the standard for the desirability of the resulting sound. These are not only two different approaches to the composition of music, but also two different political attitudes.

Even if it should be true that the great masters of the past only rarely considered political and social issues as criteria influencing their musical decision taking in composition, this truth should not simply be trusted. The actual concern of composers for their contemporary environment is usually less known than suspected. By now, many phenomena that until recently had been attributed to human frailty, to fate, or even to the laws of nature have been recognized as issues of political and social rather than individual and natural significance. Certainly no reliable documentation exists proving that any composer remained uninfluenced by these issues, as they appeared to him in his day, whether he knew it or not. All one is allowed to conjecture is that the less composers knew of the influence, and the less they considered it, the more they became unconsciously dependent upon it.

The recent wave of growing awareness among artists and young people, of the intrinsic unpleasantness which the systems we are caught in

of the similar wave 150 years ago. It should delight the protesting intellect to contemplate the possibility of an amalgamation of a twentieth century romanticism with the functional changes brought about by the existence of high speed electronic computers. For it would look promising, almost reassuring, if for once in history an attempt were underway to couple the newest ideas for a better world with the latest knowledge about its potentials.

The premise is that there be music. It is a deliberately stipulated premise. As such it need not follow. It isn't even hereditary. That there was and is music proves, at best, that the premise has been deliberately stipulated many times before and that it has legd to a variety of definite conclusions. The premise that there be music is not one of those conclusions. Now to many a fine ear attached to many a fine brain, the premise, on the contrary, appears to claim: after all those conclusions, it may now be time that there at last be music. Only, however fine the attachments, however indignant the ear wagging, and however shocked all those appear to appear who hear what only appears to have been said - - it is all appearances only. The premise is not even a reaction. Nor is it the valiant expression of free and upstanding determination to start afresh, where there's a will there's . a way, and finally succeed where hitherto all have failed. Nor does the premise stipulate that there should be better music or other music, but just that there be music! So the premise is not competitive either, and therefore does not necessarily signal the search for any social

status or the embarking on some corrective action. In short: The deliberately stipulated premise that there be music is amoral, nonethical, non-conformist and asocial, partly in contrast to whoever deliberately stipulates it. For he is not a premise, he only stipulates one. The urge to stipulate and the choice of premise are functions of his views on his participation in his society; and his views, be they affirmative or in opposition, are provoked, if not conditioned, by what happens in that society in the name of morals and ethics. Unfortunately, more often than not, he is a conformist. Instead of intolerantly discussing only the alternative consequences and conclusions that, given the premise, one now could envisage, again and again he allows himself to defend the premise against those who just do not want new premises. And he cannot be asocial, regardless of what he proclaims,

in that he always finds himself either pooling with or pitching against society all those strange concepts his premise generates. No man is or does precisely what he intends to be or do. In various ways the invironment attaches meaning and significance to man's expressions and actions, which inevitably transcend and, in passing, deform all his intentions. This process occasionally creates a period in which man becomes all environment, and, unaware of this fact and hidden behind good intentions, he gets stuck. Whenever man gets stuck, the environment must be changed. An environment cannot be changed by obeying the environment, but only by experiments with deliberately stipulated premises which generate unexploited systems, moments of many alternatives. However, while man is caught in a feedback loop, he cannot recognize a loophole, even if there is one, because the foremost property of such a loophole is its imperceptibility. All he can do is to artificially increase the probability of his hitting on a premise that does more than he intended and so might catapult him out of the loop. Thus, it finally must be added that even the most deliberately stipulated premise lacks definition, if one analyses only the intentions it implies, and that it mocks definition, if it transcends all intentions. music (1

The story of Music and Technology tells of a very old couple which the composer keeps visiting in order to have his dreams materialize, his intentions implemented, his problems solved. It depicts in various terms, largely depending on the storyteller's choice of emphasis, the emergence of man's need for the control of acoustical events for a purpose, and his ways of catering to this need through a maze of apparently continuous chains of either observed or stipulated problems, and either found or invented or stipulated solutions. The story would show the composer to be motivated by a more or less intuitive allergy to the inevitable decrease of information in the systems through which he sees

his world at any given time; even the systems he loves, exhibit to him symptoms of decay and stagnation, and all he can do is retard the final curtain by creating systems wherein that which passes swiftly in reality would stay alive a little longer in an analogy. It does not matter much in what language and in which terminology the composer happens to think his thoughts: his concepts of what is to be music next are always related to some technological considerations, and this relationship ranges from extreme subtlety to gross obviousness. There ought to be no need at this point to elaborate on the rather common place notion that technological considerations show the way from a musical idea to its realization, first in some code and then in a performance; and that technological considerations lead to the availability of the acoustical phenomena needed by the composer for an audible representation of his musical ideas. It may be appropriate, however, to remember that musical ideas are thinking models in more or less deliberately stipulated linguistic systems; that, for reasons to be discussed later, the complexity of such systems is increasing in many a sense and dimension and that, therefore, the composer now has to turn to technology with the additional request for assistance in handling the systems he stipulates.

In the United States composers began to work with tape and taperecorders at about 1950. The next ten years saw the establishment of various studios and laboratories, where composers, musicians and technicians could collaborate in furthering all kinds of projects pertaining to the relationships between electronics and music. In North America almost all such studios are located at and affiliated with Universities. Major examples are the "Columbia-Princeton Electronic Music Center" and the studios at the Universities of Illinois and Toronto. Now there are hundreds of such installations to be found in the Western Hemisphere; and if 10 years ago many a music department chairman did not know what an Electronic Music Studio was, today he would at least always know whether his school has one or not.

For some time now music has been getting involved with the computer. This also began mainly at universities, notably at the University of Illinois, where Lejaren Hiller and L.M. Isaacson completed their first computer assisted composition in 1956. If one combines positive experiences with apparently justified expectations then one can predict that the interaction between computers and the composer will prove far more fertile with regard to compositional procedures than will either the availability of new instruments, or the more and more streamlined modular compactness of portable studio equipment and tape recorders, or even the integration of performing humans into ever more sophisticated circuitries that allow for unlimited amplification of naturally redundant autobiographical sound portraits.

As the composer meets technology through the computer, both have a chance to see one another far more clearly, than the usual barriers, namely sound and industry, permit. The composer has begun to recognize, that technology is not merely the provider of instruments, of devices, of conveniences; in short, he is learning that technology is not just techniques and engineering. He now defines technology as the science and art of applying knowledge to the desire for problem solving and I, for one, concede that technology would have a far more beneficial impact on society if its potentials were controlled by technologists rather than industrialists and politicians.

It is desirable that the technologist take a fresh view of the composer. The time has come for him to see that the composer is not merely a music maker, an art maker, who thinks that his products have to measure up to an established standard of culture and who is eager to call them a merchandize and sell them. Many composers today would like to live in a socially concerned and courageously heuristic environment: they are looking for problems; they do not claim to know but are eager to create models for solutions; they would rather produce some dynamic input than find their product flatly output and consumed; they have experienced the width and the narrowness of at least one 'medium' in depth and so can move in it or on to the next. They would want contemporary technology to return the respect they have for it by using and assisting them so that their work may escape—the psychologist's case study and the aesthetician's collection, and, instead, be given a chance to become a dynamic input to the contemporary social system. Together with technology the composer defines "input" as something that induces and initiates such changes of state in a system as would not occur, without this input, at the moment or possibly ever.

But, as the composer turns to technology today, he is bound to find himself forced into two intertwined admissions: that the belief according to which we live in a technological era is merely a belief, unsubstantiated by any sufficiency of facts; and that the concept conjured up by the word "composer" needs broadening until it embraces more than just music, painting, or the arts in general; that it must extend its pretentions towards the regions where the languages thrive, grow old, and wither, the natural, artificial, formal, and the dead alike.

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As long as technology is ruled and controlled by hard and fast beliefs and as long as it makes its way to the people through a veritable maze of filters consisting of almost exactly those same hard and fast beliefs, we are living in the era of hard and fast beliefs, in the ideological, not in the technological era. The services that technology renders to all those who - being no technologists - need destructive power in order to survive better knowledge, and to those who - not being compo-

sers - use the languages of an incurably sick system to curse and condemn even the discussion of attempts at composing a yet unpolluted one: these services never were designed by technologists. Technology being the science and the art of applying knowledge to the desire for problem

solving, it takes a believer and ideologist to present as applied knowledge the advanced techniques of murder, brainwashing and destruction. Where such a presentation is accepted and successful there one can not help but rebel against the power that language wields over thought, imagery and desire. For much of the power of presentation rests in language, in the grammatical and syntactical innocence with which it acceptably supports even the unspeakable. As long as all this power and innocence act in favor of the believer's and ideologist's presentation, attenuating the voices of everyone else, so long the technologists and the composers have an axe to grind in common.

If ever there will be a technological era worth talking about, it will be thanks to technologists and composers. By their joint efforts, extended over a prolonged period, they may contrive to emancipate thought from language sufficiently for a rehabilitation of both, and, continuing from that, introduce an era for mankind where every thought has its language, and where every man has at his disposal a device that will respond to his input according to the language he stipulates. Today we still labor and suffer under the oppression of those who can hide their determined unwillingness behind a modestly confessed lack of understanding, behind less modestly uttered claims for everyone's right to misunderstand, behind aggressive attacks on an allegedly unrealistic but in effect only nonconformist intellect. Tomorrow, in the technological era, if it is to merit this label, this kind of hide and seek game should have lost its power-illuminated glamour, and have made place for a

prosaic, and thus nonviolent but transparent confrontation, in language and in action, between those who can articulate the desire for an intelligent society and those who understand but do not want it. There should be no question as to what an intelligent society is, nor as to who wants it and who doesn't. The difference between technology and composition will dwindle to an unsignificant degree of a nuance; whereas the difference between nuances of thought will acquire significant proportions, worthy of the discriminating potentials of the human mind.

music (3)

When, many years ago, I was first invited to give talks and lectures, the invitations meant that I was to be a composer of music who is to discuss and to present music for an audience interested in music. I felt that, therefore, I had to show how the thoughts I really wished to talk about were relevant even to music. Under this pressure I soon found out that the composition of music is, in fact, relevant to the thoughts I consider important at any given time. Finally, I asked myself: What if it were true that "composition" simply is the generator of relevance, and that a composer, no matter of or in what, is a person who desires that whatever he creates be relevant to whatever he considers important? If this were true, (and I stipulate it is), then I could go on and state: The thoughts I consider important, and the medium in which I try to create what otherwise might never happen, are related through my desire for relevance; thus they become representatives of two systems which ought to show a high degree of mutual analogy, once a structure composed by me is applied to both. Wherever such an attempt is successful one can consider the process as a model of some

effective method for reaching a desired state; this, then, allows for a new look at what may now appear to be - besides and beyond being desired - also desirable.

The definition of a problem and the action taken to solve it largely depend on the view which the individuals or groups that discovered the problem have of the system to which it refers. A problem may thus find itself defined as a badly interpreted output, or as a faulty output of a faulty output device, or as a faulty output due to a malfunction in an otherwise faultless system, or as a correct but undesired output from a faultless and thus undesirable system. All definitions but the last suggest corrective action; only the last definition suggests change, and so presents an unsolvable problem to anyone opposed to change.

To the composer, however, a suggestion of change is a signal sent out by the system, signifying a deficiency of input and the urgent request for the creation of what otherwise may never happen, be it even a new and different system. The composer's basic attitude is system-conscious and is nourished by observations which reassure him repeatedly that "it" will always look only the way "he" looks at it and so may look different if he looks at it differently.

Discerning between "composition of art" and the far broader concept of an "art of composition" I contend that the latter need reach a higher level if the former is to be an input for, not only an output of, society. I suspect that an intuitive awareness of the recent meagerness

of input has lead, almost justifiably, to the contemptuous sneer at the word "culture" prevalent in many circles, intellectual and otherwise. Many words, including this one: "culture" could be rehabilitated if they were to refer to the dynamics of input rather than to the kinetic triumphs of output. Not that there is a lack of continuously offered input. But the words that indeed refer to it also reject it. The message announcing an offered input is called a threatening disaster, disorder, anarchism, and the like; yes, this society's language is in such a panic that it frequently, in its confusion, calls a threatening disaster that which actually was nothing but a message of its own accomplished output. Such an obvious disorder in so highly a respected system as our language is a challenge to all those composers not exclusively interested in their music. It is a challenge to the art of composition in general; and the composer - oscillating between music, languages, linguistics, analogies, systems, structures, logics, logistics, some mathematics, and an enormous repertory of words burdened with apparently indelible and frequently quite obsolete meanings - calls it all "just so much language" and begins to search for some way in which he might construct languages that do not yet support any power but their own.

In the meantime I shall use the term "language" for denoting structured systems which are made by man, which man thus can change or replace, and which, as a significant property, possess the capacity for involvement in the storage and transmission of intended messages or unintended messages or both. Technologists in all the branches of science and engineering, and composers in all the arts, both continuously design, construct, create and change languages of all kinds, in order to

store and transmit the thoughts or images they had in mind. Little of this is heard in an environment where power can be seized, and more power gained, by redesigning, reconstructing, and recreating thoughts and images that comfortably fit the language everybody knows and speaks already; where trust and confidence can be earned by proving these thoughts and images to have existed for generations as popular grammatical fictions in a language common to us all. No wonder then if within such boundaries everybody thinks he knows what everybody is talking about and words are said to mean simply what people take them to mean.

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The most dangerous person, the most terrifying daily human threat to human society, the most insidious law-abiding culprit forever protected by the legal fetishists of innocence, his secret accomplices, is the self-appointed moron. Not to be confused with the natural moron who, lacking intelligence, is incapable of thinking about knowledge, the selfappointed moron, having some sort of intelligence, uses it to avoid thinking about knowledge. The self-appointed moron is he who recoils in terrorized modesty and complains of lacking communication whenever a thought he never had is proposed in word or script; who then cries; displaying well-faked gestures of frustration: "it's wrong it's bad it's nonsense!", which, in translation, means that, to him, it is neither customary nor his own. The self-appointed moron is he who makes himself believe, until he honestly believes, that interesting things have the property of being interesting, that things are capable of relating to him, of all people, of all things, if only they would - please would and who is incapable of relating to himself - damn him. The self-appointed moron is successful in, but of no good to, society. To no good, he successfully tries to use his high social status as an argument for his personal

value. To no good, he successfully uses his reputation of being a guardian of culture as an argument in support of his definition of culture. To no good, he successfully mobilizes religion, enslaves logic, bagatellizes experience, and exploits hope in order to propagate his own allegedly innocent helplessness as it meets with his own allegedly unintended propagation of war, murder, fraud. He is successful, but his success is conspicuous for spelling failure, injustice, disaster. And for all the complexity and variety of such unfortunate influences on social affairs, matters of state, and human dignity, less cause for wonder is to be found than embarrassment. The self-appointed moron, though powerful, is not a monster but much rather an obedient servant: he shirks all responsibility for the rules he obeys, simply by believing in them. He believes in them so much that even an event he dislikes will find his approval if it is a consequence of the rules in which he believes. Rarely will it occur to him to doubt his belief, to doubt the rules. He will rather denounce mankind for being intrinsically bad than to suspect himself and his beliefs. Far too many political leaders, heads of state, composers, poets, professors, bosses, critics, publishers, chairmen, judges, lawyers, doctors, parents, teachers, police officers make their living as self-appointed morons, as realists who know better than to know better.

The only really valid excuse for them is their ignorance. A very particular ignorance. They all have agreed, by convention, to ignore the possibility of happiness being a desirable premise rather than only a desirable consequence. Even the best among them retreat into mumbled apologies as soon as an idea that possesses them is questioned for reasonability. With liberally docile meekness, they confuse the social status of being called right with the revolutionary action of demanding to become right.

All the arts, and among them also music, occupy a strange position in this dirty mess. It does not matter much what has been said and written and confessed about the arts: In one way or another, the arts were always

analogies to something of significance in their contemporary environment. Some intentionally; some by mistake. Even if one were to grant equal significance and relevance to intended and unintended analogies, even if one were to observe that the arts are full of both, it is of importance to note that only the realized intentions determine whether a particular analogy will become a work of art, or not. There can be no bad art; but there may be no art, if an artist or a composer fails in transforming the intentions of an analogy into poetry or painting or dance or music or

When, that is the question, when will sound, organized or not, be music? And why, even if it were what it should be, should it be? There are answers to these questions, provided they are asked, and provided anyone is around who likes answers even though these answers may not appeal to him, not appeal to his craving for secure knowledge, not appeal to his educated sense of consistency and coherence and reasonable argument. One such answer, for example, might run as follows: Sound will turn into music if the concatenations of its appearances follow a set of rules which were, however, invented and deliberately stipulated by a social being. By someone who thus hopes to demonstrate and, maybe, even to render understandable to his environment his desire for a structure that has not yet been observed as possible in this environment. Any so stipulated structural premise, not permitted or warranted here and now, may generate a system of sound events which would be music, because of its being analogous to structural possibilities envisioned as being permitted and warranted in some environment here, but later. And there should be music because of the composers today who are willing to take on the challenge of structural intricacies and information potentials of systems in sound which are compatible,

and thus capable of communication by analogy, with those social systems that rule our lives. For these composers the deliberately stipulated premise that there (shall) be music is a vital premise and a political necessity. Obviously, it would be without any substance, were it not that there is political significance to musical ideas. And that there is, I now stipulate. For neither do I wish to see myself as a natural moron, who waits and waits for reality to confirm his notions; as if what is real could, at the same time, be a standard for what ought to be real. Nor will I settle for the role of the self-appointed moron whose hope and ambition it is to confirm reality. I contend it to be a real improvement that, slowly, people are beginning to note that there is political significance to musical ideas, just because musical ideas are deliberately stipulated premises; just because musical ideas can conjure up the analogy to a reality we are not yet caught up in, which has not yet warped our ability of committing ourselves to changes almost impossible to envision from where we stand now.

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I challenge technology to escalate its push towards a socially beneficial technological era for mankind by designing and constructing for all of us the compound facility wherein and wherewith many people can be induced to come and enjoy the effort of learning how to compare and measure their languages against and with their imagination and their desires. I am speaking of an artificial system which should function as an accepted member of society and be respected and used equally by the few and by the many, as long as this differentiation will have any validity left.

I imagine a building in which the arts are met by technology and the sciences on their common ground. They all investigate, stipulate, create and exploit systems. They all are faced with the puzzles and the functions of structure. And their aims and results complement one another because of their difference. While the sciences observe or stipulate systems which are to be analogous to an existent truth or reality, and while technology stipulates and creates systems that are to function in an existent truth or reality, the arts stipulate and create systems which are analogous to an existence desired to become true or real.

All three must be represented with all their branches and departments in the team that has to invent, to stipulate, to study, to discuss, and eventually to decide on the interior and exterior requirements that such an artificial system must be able to fulfill. Let me mention just one area of research that might demand no less than such a team's collective efforts before it will even begin to reveal its dimensions and secrets.

What if it were true that, as the saying goes in many quarters, man's mind is limited by nature to the potentials we already know, and that we may thus not expect it to ever possess the properties necessary for the creation of what we call an ideal society? If this were true we would need artificial systems that possess those properties to guide us. And if it were true that, as the saying goes in other quarters, man's mind has shown here and there the potential for change and development but that precisely the rarity of such an event generates hostility against it in the many who did not participate in it, then we would need artificial systems that remove the property of rarity by demonstrating the participation of all. No matter on which assumed truth it is based or to which conjectural reality it may be meant to correspond: any such artificial system should possess properties that man either can not have, or does not yet have, but that he needs and thus should be able to imagine or be taught to imagine.

It is quite obvious: Any such artificial system will contain a computer installation. But what kind of an installation? Nobody knows yet because it should not be developed before the software, the programs, that define the structure of the system have been written. And these programs should be written, and the assembler code should be constructed, only after a decision has been reached as to what the whole system is supposed to do for the user. The user, however, is not to be seen as a paying consumer, whose demands have to be educated until they fit the available offers. The word "user" refers instead to a member of one subset of the set of all possible kinds of input. The first task then is to define this subset until it contains every possible kind of user. Every user is an element of at least

two social systems: The social system he sees and at least one social system that sees him. The artificial system must be able to insist on getting just so much input from the user as it needs for identifying the social systems in which the user's existence is definable. The response of the artificial system could then adopt the property of an input to any one or all of the systems defining the user's existence. The complete set of all possible kinds of input would thus contain all users and all responses by the artificial system. If we roughly define "input" as something that induces and initiates such changes of state in a system as would not occur, without this input, at the moment or possibly ever, then we may expect that the artificial system thus would be capable of supporting what I called "corrective action" as well as what is called "creative acts".

What is asked for is a heterogeneous assembly of input oriented minds that would define an intelligent society, redefine the user, and develop an artificial system that by its response capability would show the user his role in an intelligent society so that he may become induced to also want it in reality.

Inevitably such a project progresses in stages of partial fulfillment of set goals. At every significant stage, however, the results
reached should be incorporated into a systems program which is to
be submitted to and analyzed by technologists. They, in response
to this input, would proceed and invent and construct the apparatus,
the hardware, the computer, the input-output interface which best
can represent, simulate, execute, display the functions of an artificial
system that possesses properties which man either can not have or
does not have yet. Clearly this installation will also be used to reach
the next stage of significance, and will, if intelligently conceived,
eventually only have to be modified and improved. Should there ever
come the day, and an invention or discovery be made, that would
render obsolete this whole machinery, possibly even the whole project, it will be either a no man's day or a day for world wide celebration.

Work on the project has to begin simultaneously in as many places as possible all over the world. Every school, every university or equivalent institution could assign to a selected but preferably heterogeneous group of its members the task of starting research towards a definition of the potential user in the immediate environment up to and including the areas overlapping with those defined by neighboring groups.

The building I imagine should be planned and constructed at each place, combining special features reflecting local preferences with those more general features that would make it a compatible member of a worldwide network of equivalent institutions. Everywhere it should grow as the results of such research accumulate everywhere.

The composer in the technological era is a professional member of such projects. His profession is the art of composition and his work establishes and demonstrates connections of various kinds between various elements, stipulated and desired connections that can not occur in the eternal feedback loop of empirically functioning thinking processes.

Technology in the technological era sees the composer's work as an input of a particular nature, as an analogy to a desired reality which may have to be implemented and to be observed in functional action before anyone can possibly judge whether such a reality is - besides and beyond being desired - also desirable.

To the question whether a statement is true there be added the question: what if it were true?

To the question whether a composition is music there be added the question: what if this were music?

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So that language may not become a fossilized fetish, let it be praised for the thoughts it expresses, but ruthlessly criticized for the ideas it fails to articulate. Language is not the standard against which thinking is to be measured; on the contrary: Language is to be measured by a standard it barely reaches, if ever, namely the imagery of human doubt and human desire.

To measure language, with imagery as a standard, is the function of art in society. The arts are a measuring meta-language about the language that is found wanting. If the imagery succeeds in containing, anticommunicatively, for later, the simulation, the structural analogy to that which was found wanting, then, who knows, it may tell us or someone some day with breathtaking eloquence and in then simple terms what we, today, almost speechlessly have wanted so much.

Our present era meanwhile dictates in ever more venomous terms that we must turn to artificial systems if we wish to conduct intelligent research and intelligent experiments without causing bloodshed, corruption, and misery.

Herbert Brun .

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