Choosing the Connections You Make

A Conversation between Kenneth Gaburo and Herbert Brün

(1973)

KG: We are here today speaking with Herbert Brün, composer and spokesman for the computer in the arts, who has been on the UCSD [University of California, San Diego] campus under CME [Center for Music Experiment] sponsorship this week. [8/23/73]

I’d like to begin by asking about the following subject areas: your immediate plans for your work, your concerns about education at the University of Illinois, your larger view of education and composition, and, finally, your more far-reaching plans.

HB: You gave me some scope, I must admit. But, to try to respond quite sincerely and seriously, I would suggest that . . . to talk with students at the University of Illinois (or wherever one is invited), to talk about composition, to be a composer, to have one’s hands on the computers, and to investigate where the connections can be established between students, allegedly educational tasks, allegedly musical tasks, allegedly programming tasks: one can come to the conclusion—maybe a temporary conclusion—that those things not only overlap, but are complementary parts of a whole. Interactions with persons, interactions with one’s own statements, and interactions with machines have in common the manifestations of one’s mere existence. So, one answer would be that the term “interaction” has not lost any of its challenge, even though it has become a hackneyed word.

If I have any plan that can stand a little bit of outlining (which is always highly predictive, and therefore, to be taken with a sense of humor), it goes like this: I would like to be successful in finding the common denominator that makes people want to be either students or teachers, want to either perform or compose, want to either program a computer or not program a computer. Both “wants” and “want nots” I consider highly respectable, and would like only that people who utter these wants to know a little bit what they mean by wanting “that” or not wanting “that.”

I would like to teach people to be skeptical . . . or rather skeptics, with regard to the first articulation they can find, and instead look for a second, third, fourth, fifth articulation—this is one outline of my plans.

KG: I can remember quite a few years ago, we had a discussion about a sense of a disparity between one’s composing and all else which one does: teaching, having a family, working with computers, and so forth. Maybe it’s a purely sociologically derived sense. On campuses, it’s not easy to function as a unified whole: you either teach or you compose on a given day, you either program or you don’t program, and so on. So there is a possibility for developing a rather schizophrenic attitude with respect to these activities. This seems common.

But also, there seems to be a growing concern on your part for education in general, not just education with respect to music, and for the value which computers may have in general, not just for the values which they may have in terms of the particular problem you address. And somehow, through a deep kind of investigation of your own self, what has come out recently is a notion (which I also have), or let’s say an impression about your position given
this earlier schizophrenic state, that a totality begins to emerge again.

That is to say, you make only a few distinctions now in the way we normally understand composition and education (as a music person understands them), and you begin to do a larger amount of your activity, if not all of it, as an act of composition in some sense. The properties which distinguish one area from another (that cause one to feel rather schizophrenic) have now somehow dissolved and been absorbed by a larger totality, in which composition is always at work.

If I’m correct about this, then it seems, for instance, that you do not make an essential difference between, say, a viewer and a composer—you expect the participant to also be a composer in the sense that he perceives the composition you made. It is likely that a discourse in biology could just as well be considered a composition, if it involves certain structural properties that further—this is a long statement!—that further one of your points which I admire very much—the realization you made many years ago—that to have worked with any systematic pursuit of structuring something (such as composer frequently does) gives you some insight into the structural nature of other systems, which apparently have nothing to do with composition.

**HB:** That is correct. That’s a very important thing to do. I would also like to confirm that I do not know if I succeed. But I do know that it is a counter movement: it goes in two directions at once. Once you find yourself, or once I find myself, in what you say very nicely is a schizophrenic situation, I investigate first of all if this is something given to me or made by me.

I discovered, slowly, that since one draws distinctions, one can also erase distinctions. I therefore decided: I am a person who can make a decision. In a situation, I can either draw further distinctions, multiply the alternatives, and increase my freedom, or I can, for some reason, want, or desire, reduce the number of distinctions, and simply denote different properties for one common owner of these properties.

I think and do both, only not with the same things.

**KG:** Right. Would it be possible to say, that there is something which still plagues us—some kind of conceptual or philosophical situation such as is represented by an “either/or” statement? What you now find operative is not necessarily either this or that at a given moment—the “either/or” statements somehow, in my mind, have something to do with potential schizophrenic propositions . . . [laughter] . . . against that you say, something like “and.” The very conjunctive form of the word “and” is a carrier of non-schizophrenic properties. It’s not necessary to take alternatives such that one side of an equation is ruled out, but rather define ways in which all sides of the equation are contained, and you only select those which you need at any given moment, but . . .

**HB:** Yes, but that “given moment” is very important. I do agree and actually can quote recent work which you have done and where you speak about the desirability of rehabilitating the “and” decision—to decide for this and that, instead of either this or that.

Now, “at a given time” I find very important for the following reasons, that is—I have to again make up my mind. I may say, that if I need the “either/or” in order to multiply alternatives, then I will use the “either/or” so that there be more alternatives, and I will remember that it was me who said “either/or”, not it, and so I am also able to say, one day, no longer “either/or” but “and”.

---

Gaburo/Brün 2

Choosing the Connections You Make
So I’m the maker of the network and will deal with the network so that it always has enough alternatives to make me a composer of freedom and require decision making, but I will not be stopped by it or stampeded by it into a blind alley which I have to follow.

KG: Yes. You use the word “network”, which is certainly important in this. That is to say, you don’t see your system as a collection of disconnected components, but rather, interrelated in the sense of a network. Furthermore, I can say of the “either/or” proposition: if either/or is not either/or but either/or and either/or.

HB: And either/or, right.

KG: This is where you continue to multiply your possibilities. Not to reduce it to a binary system which says it must be this or that: if we use “either/or” we are not talking about that.

HB: Yes, we are not talking about that, correct. We are actually approaching the hope that you should be able to deal with multi-valued systems, and I have the desire, a very strong desire, to work without finding myself only between right and wrong . . . bad decisions . . .

KG: And what can we say to clarify this notion? That what we are dealing with, is a unary system, that is to say: I want to be one person, I don’t want to be in pieces. But it still seems to necessitate the thought that I am unary and the notion of a multi-dimensional network of which I am a representation that allows for all of this elasticity to be going on, and still consider myself in that sense to be unary—that is to say, a whole individual.

HB: But one thing is not necessarily unary, I would think, since the concept of a system is not dependent upon nature but on the observer. It is the observer who says that today in this particular look I throw on my environment, I will consider Ken Gaburo an element in the School of Music in San Diego.

I can now say this system called the School of Music contains among other elements, the element Ken Gaburo which can be in a number of states, a very large number of states, as I happen to know.

But there are also possibilities to see a system where the elements are only in one of two possible states, or one of three possible states. Human beings usually can be in more states than some elements in nature.

KG: But do they think they can? That’s—

HB: Ah! That is what I want to bring about! What I would like to bring about is that every person is capable of articulating (by speech, gesture, action, or sensitivity) whether he wants to see himself as an element and in one of the states of this element, or whether he would like to see himself as a whole system, and stating the state of his element. There is a flip/flop somewhere at one point. First of all, the person is a system in which elements have many states. Furthermore, he is an element in other systems, and as an element, he can have many states. Which one of those two looks that are dialectically overlapping—almost enharmonic change, if you are familiar with this musical term?

KG: Yes.

HB: Which I consider very important in the history of music. —Which one he thinks important at a given time will conduct his articulation. So when I hear him speak, it is my task to learn how to observe: “Was this the sentence of a system? or of an element?” Otherwise I will never understand why he said that.

The language never tells why he said that, only he can. And if I can too, I can understand.

KG: When you do such a kind of perceptive activity, is it possible however, that you really are listening to a larger language? You are not really talking about verbal communication. That might be the betrayer of some other nuance which his body is articulating independently, seemingly independently of that, right, but maybe your cue as to what he is really saying comes from some other larger sense of language.

HB: Yes. Speaking with you I never worry about these things, because I know so well how far the language goes with you. Maybe one should call it “the linguistic behavior.”
KG: Ah, yes.

HB: From your work I know that when you use the word “language” you mean linguistic behavior.

KG: So, we are also talking in a sense about a compositional behavior, not mere composition in any constraint. And we’re talking about linguistic behavior, not mere language. And we’re talking about systems and behavior, not systems. And the reason I want to get at that is because you’re as aware as I am, there is a certain revulsion in certain quarters—in many quarters perhaps—against the very notion of “system.” I don’t mean socio-economic, but I mean even in terms of limited finite fields such as music composition. Certainly, there is some notion that a system is mechanical and therefore not to be desired when one thinks of one’s network (one’s human network) as a system. People don’t like it.

What I would like to get from you is some insight as to why something which seems to be so proper and in fact, undeniably true, is so highly disregarded.

HB: I think that we can point an accusing finger at the use of language, and the use is ambiguous in the following sense: use of language may mean the way people use language, and it also may mean the way language uses people. For example, if I tell a young person he ought to go about his job far more systematically, he considers me a fuss pot and actually understands me to say: “You did not follow the order I proposed.”

KG: Yes.

HB: From there on, if this is early enough in his life, he will associate with the term “system” something which is a set of instructions which he should learn slowly in order to be approved of—by me or by the group, whoever has said those instructions.

What is not yet accepted is that a “system” (as I said in the beginning) is not something that exists without you. It is a way at looking at something with a purpose. Indeed, there are certain observations that you cannot make unless you look at certain things as “a system”. Now, I know observations that you can make very nicely without looking at things as a system. What you ought to have is both alternatives.

The system alternative is neglected, so I am trying to emphasize it.

KG: Right—right.

HB: And language is one of the media that has done everything in its power to retard the enlightenment: namely, that man is the auditor of how things look to him.

KG: Ah, it therefore follows that one of your major concerns is (isn’t it?) in some sense, to destroy the way in which we use language? Not to destroy language, but to destroy the way in which we have come to either use or be used by language such that . . . what?

HB: Such that it makes us say that which we didn’t intend, by looking and being correct according to the grammarian. Wrong language never is in this danger, it is the so-called “correct language” which lies. The belief in language where it is correct is more dangerous than the hope for language where it is not.

KG: The possibility then does exist (given your view of what needs to be done with language) that it is perfectly reasonable for us to not have to develop again a kind of meta-language, in which the components necessarily mean the same thing to all people.

We need to stipulate (which requires composition) or rather create our own language, and that your charge is to understand what I mean by my language.

HB: That’s precisely it.

KG: That is to say, I define that context in which my language already has some meaning for me, and you must deduce from that my meaning.

It sounds to me very much like a fundamental division in the field of linguistics: on the one hand the system (that is to say the individual system) somehow biologically and neurologically develops its own language, and on the other side of the coin,
an environmental proposition in which the environment develops the language for you.

The example of the former, I think you may recall, is already exhibited in work by Whorf a long time ago at, I think, MIT . . . Didn’t he imply that even in the earliest stages of development, in infancy, a system begins to generate its own language? When a child says “Mom” for the first time, it is not because he has necessarily responded to a sound that has already appeared in his environment, but maybe because the collections of articulative words which are necessary for that word felt better, and that’s what comes out first.

HB: That is one problem of the whole statement. The other part of the whole statement is the moment this becomes discouraged: the thought process of the person will now follow the taught language instead of following the generated language.

KG: Yes, yes.

HB: And therefore we have conditioned people at the moment they’ve learned the language of their parents.

Now that has many advantages, but it has some disadvantages. The present situation with most linguists is that they would like to explain how language functions instead of explaining why it doesn’t. And if you propose that to them, they say: “But that’s not my job! That’s the job of the sociologists, or psychologists or . . . !”—everybody puts the responsibility on somebody else.

It may be that you are reminded of the concept “For every person his language”. Actually I go one step further: Not for every person his language, but for every thought of that person its language.

KG: Ah ha!

HB: Then I would like to go even further if I only could, but language does not permit. The next step would be that language would be always a spontaneously generated signal set which holds now and here for that.

Now, this is not meant to be a dream nor is it meant to be a program—it is also not meant to be a plan. It is meant to be a description of a tendency that we should play with. If I could generate a social system in which I would know for sure (not believe, but know) that he speaks the way he wants, it would be no problem for me to take the pains for me to understand him.

KG: Yes.

HB: But as long as I live in a social system where I have all reasons to assume that he does not speak the way he wants, if then I don’t understand him, I will think he doesn’t know how to speak, and I will not take any means in trying to understand him. So people today who refuse to take pains to understand the other are actually quite justified, if only they were to attack the system in which they live, and not the language or the unintelligible problem.

KG: Ah ha! Ah ha! And on that I’m afraid we’re going to have to close. It seems to me that ultimately you’re really a protagonist for the uniqueness of each individual—I mean, you begin with the assumption that each individual is unique, and that all of these processes about which we speak are means by which the individual can come to believe that he’s, in fact, unique.

HB: He is, yes. He must know that he is unique, that he is different from anyone else—that one does not have to iron out the differences, that we have to find a social system in which people can be unique, different, and don’t have to change in order to live in peace together.

KG: Well, Herbert, I wish we had hours to explore this. I’m afraid we must end for the moment. Let’s hope we will have an opportunity to have another discussion in the very near future.

HB: I certainly hope so.