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**Language as Material – Language as Communication:  
“Words” and “Texts” in Electroacoustic Music**

“According to the language of the murmur, it could be the piece of an American composer.” was the interpretation and trial of classification a student gave on “Human Space Factory”<sup>1</sup> by Hans Tutschku some weeks ago in one of my classes.

Even if one could identify the language used here, it would be, as we – I think – all know, very hard to understand it in a semantical way of spoken human language and to define it in this vein as the language of the composer. Probably examples like that are in general rarely regarded in such a manner – nevertheless they are communication and in this different understanding of course the language of the composer.

Using a communication model like that of the system-theory of Niklas Luhmann<sup>2</sup> and applying it to music – like for example in the concepts of Peter Fuchs<sup>3</sup> or Klaus Mehner<sup>4</sup> we find the opportunity to describe first a difference in the communicational selections of the two sides of communication and then – observing music – the chance to switch between the selections of information and expression. For Luhmann all social systems are communication-based. And this kind of communication consists of three steps – each one marks a selection – and demands for being finally successful only to provoke another communication as result. To make a difference – according to George Spencer Brown<sup>5</sup> – what means here to select – becomes the central mechanism to manage the complexity of the social world. This approach interprets sense as the difference of the actual selection – the choice – and the totality of possible selections. Normal social communication demands to make very strict decisions in order to select first an information to be communicated, secondly a message – which could be better described as an expression – to transfer the chosen information and at last another information-selection in order to this expression. The last one in a successful communication has to be the beginning of the same process once more. According to Luhmann social systems are aware of the contingency of these selections. So he speaks about a special kind of double-contingency.

The feature of musical communication is now that in order to its artificial character and aesthetic function the pool of possible selections of information and expression is not so differentiated; so that an expression could be taken as information too and an information as expression. The aesthetic character of being observed and communicated makes it part of both pools but directs them in order to beware their communicability.

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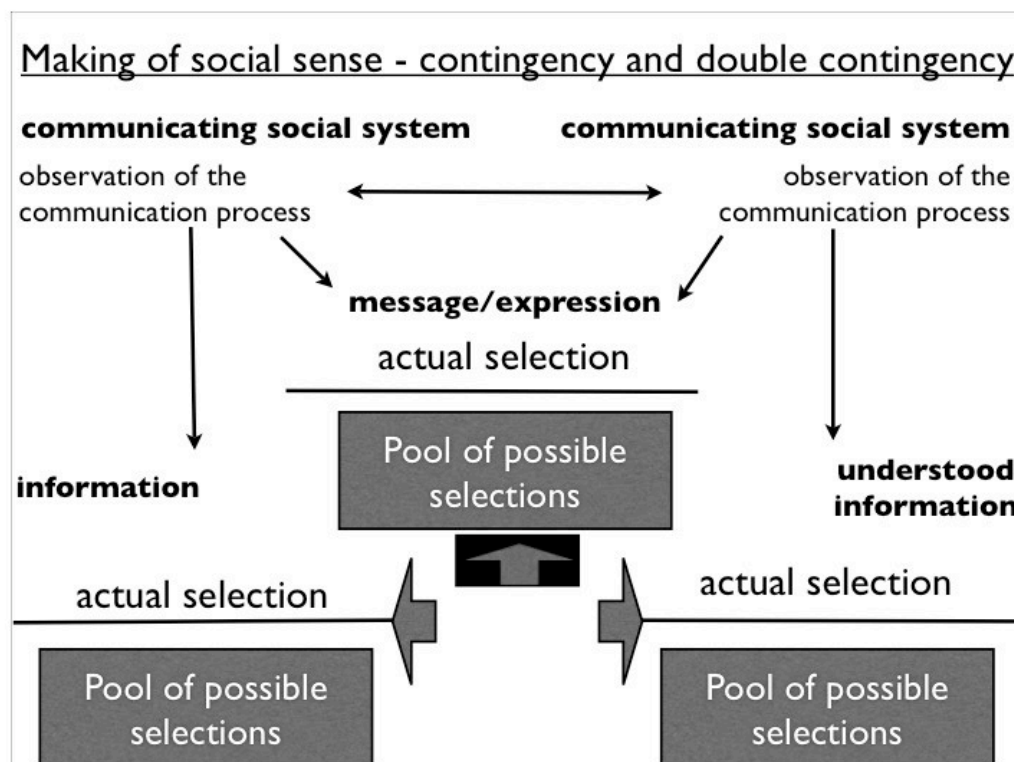
<sup>1</sup> Hans Tutschku: *human - space - factory*, 1999.

<sup>2</sup> Niklas Luhmann: *Soziale Systeme*, Frankfurt / M. 1984; *Die Kunst der Gesellschaft*, Frankfurt / M. 1995.

<sup>3</sup> Peter Fuchs: *Moderne Kommunikation*, Frankfurt / M. 1993.

<sup>4</sup> Klaus Mehner: *Kommunikation musikalisch*, in preparation.

<sup>5</sup> George Spencer Brown: *Laws of form*, London 1969.



That does absolutely not mean that information and expression were automatically the same or (like you often find in descriptions of artists in the fine arts) the expression was the message or the information; but that the pool of possible selections is nearly the same, that information and expression are switchable. Double-contingency is not only there and accepted, but becomes the principle.

That gets more interesting even on another level, when the act of abstraction one could find in notated music is missing, music is recorded and sound-oriented, and gets another dimension if there are expressions and parts of expression using materials ascribable on external communication contexts.

Teaching electroacoustic music – especially its aesthetics – to musicology students you are often confronted with the fact that even today listening strategies for music using recorded speech are missing.

That is not only depending on the missing knowledge and listening practice of young (German) students used first of all to classic and romantic music, its form, structure and materials, but often on association processes resulting from situations more used or regular to the listeners. I don't want to figure an interesting phenomenon relating to this situation too, which I call the Space-Shuttle-Effect, but on another phenomenon: the change of the musical communication-situation at the moment when recorded speech is used.

Nearly from its beginnings (even in the concepts of "electric music" in the Germany of the 1920<sup>th</sup>) electroacoustic music had a special approach to language. What began with common problems of music and spoken language in the radio of the early years and so with the research of technology and new concepts became very fast a new chance, because language very quick was seen as a kind of possibility for a contemporary art more up-to-date.

Analyzing the discussions on the possibilities and chances as well as the dangers of dehumanization – the well known Benjaminian lost of the Aura and so on – there are some strong avant-garde positions as well as the conservative critics find the diabolic tool given to people to complete the decadence and the lost of values of the Post-War era. The chance to record easily gave new impulses to an aesthetic discussion, which touched radio and concert publics at nearly all levels<sup>6</sup>.

It is not a hazard that the “Rundfunkversuchsstelle” founded in 1928 at Berlin Conservatory in Charlottenburg put together Radio-Speech, Composition and Techniques. And there is no doubt that even apodictic avant-garde composers thought about how to use the new possibilities to develop such concepts further more. But on the other hand it is more the pedagogical or with that documentation-oriented approach to composition reflecting the possibilities of more or less concrete speech. And that is what will be especially focused here: recorded human language and sounds with language character; that means not only passages completely understandable, but also material serving a gesture of language.

Especially for the early years of music with radio-background it is important that spoken language gets an intermediary's function – because as part of the media-context it makes music using that part of this context, too. With the new music taking parts of spoken language nearly from every speaking situation, music analysis and with that research got new problems in finding categories.

When Jacques Amblard<sup>7</sup> and Niksa Gligo<sup>8</sup> say in a certain way that the 20<sup>th</sup> century is the century of aesthetics on the one and of composers theory on the other hand because in order to techniques and especially materials nearly everything is possible, we have a very strong function given to musical communication and to communicating music – what can be the same but has not to be it automatically. To communicate, to understand something as music makes it music – and music becomes understood as music as a special form of communication itself. Normally in the system-theoretical context communication is not

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<sup>6</sup> These discussions can especially be found and analyzed in the following magazines and journals:

*Der Deutsche Rundfunk*

*Der Neue Rundfunk*

*Die Deutsche Welle*

*Die Sendung*

*Funk*

*Funkstunde*

*Radio-Umschau*

*Rufer und Hörer*

*Unser Sender*

*Allgemeine Musikzeitung*

*Die Musik*

*Melos*

*Musikblätter des Anbruch*

*Musikpflege*

*Musik und Gesellschaft* (1930/31)

*Pult und Taktstock*

<sup>7</sup> Jacques Amblard: “L’oeuvre esthétique ou l’esthétique musicale comme art, concurrent de son objet d’étude”, in: Marc Jimenez (Ed.): *Art et mutations. Les nouvelles relations esthétiques* (= *Séminaire Interarts de Paris 2002-2003*), Paris 2004, PP. 11-19.

<sup>8</sup> Niksa Gligo: “‘Structure, un des mots de notre époque’: Die Komponistentheorie als notwendiger Beitrag zum Verständnis der Neuen Musik”, in: Otto Kolleritsch (Ed.): *Verbalisierung und Sinngehalt: Über semantische Tendenzen im Denken in und über Musik heute*, Wien 1989, pp. 82-103.

necessarily related to language. It seems important to me that language never was per se an inevitable constituent of music and musical sense. It is important to say that the classical function of text in music differs very much from what I treat here and from language communication in general. Nevertheless we can find recorded spoken language as communication result in the form of: remarkable language as text, as material (but thus also as possible part of communication on this part of music) but also as a sort of communication itself. The last two ones are the more interesting for me at the moment.

According to System-Theories especially the Luhmannian approach language as communication-medium has the function to make understanding more probable. Using symbols as a form of symbolizing generalization it becomes possible to communicate things which are not present or even not existing. So language has the very important function to communicate very abstract things and in order to ambivalent situations to show that the expressions intention really is to communicate. The fact that language-like sounds are not produced accidentally is socially very known and important for social observation. Normally spoken language makes a very strict difference between sound and signification. The sound is not the signification, but it defines it, and thus it guides communication. It gives the direction.

What happens now bringing language to music is that just this very strict difference is negotiated or not that important. It is possible to switch between sound and significance, to exchange them. But by that some more things happen to musical communication. Let us keep three possibilities in mind which are not exclusive but important to show the direction in which this special communication develops. These three are: the listener recognizes the language as language and knows the signification of the words – the significance is kept in mind and becomes part of the pool of possible understandings; the listener recognizes the language as language but does not know the significances – the reference to communication becomes so part of the pool and by that also a special focus on communication, and at the end we have the listener who does not recognize the language as language only as sound beside other sounds.

At the end in a musical communication process this recognition-situation always happens two times, once at the side of the composer and then once more on the listener's side. You can imagine all the possible combinations in order to contingency and double-contingency.

First we can say that language used in musical contexts in order to the special structures and processes of musical communication loses the absoluteness and unambiguousness of its usual communicational function. By that the signification horizon of language is enlarged. The usual signification becomes one (!) part of a pool of possible information to be selected, and any other possible information thus gets another signification-dimension because of the enhancement of the pool. The usual communicational function is still kept in the pool as one possible selection and by that as a forced interest of communication.

The fact that – after Luhmann – language is the only communication medium able to communicate communication is transferred to music. Therefore language communication is reflexive and this reflexivity is used in some parts in musical communication, too. So even to use a gestural moment of language may focus that – consciously or unconsciously.

When I now try to demonstrate some examples for this special role of language in musical communication it must be clear that the pieces discussed are chosen in order to match the problem and that I do not want to demonstrate any complete analysis of the works. It is only

the aim to give shortly some illustrations of these theoretical ideas. The examples are quite known – I guess – and so I will focus only the communication situations in order to some examples of recorded spoken language.

At the end language always means one special language too, so we can often find with regard on language-cultures these cultures also as kinds of reception-cultures. So the cultural gap – installed by language (including the extend of language use, familiarity with this or that language in other language-cultures and the language's grade of literacy in general), the general capacity to understand and so on can become an interesting category when reception and its history become more and more important as a field of musicologist's interest. So terms of avoiding understanding in a semantic way, of provoking understanding in a syntactic way and so on become important ideas in musicological interpretation.

When I just tried to show how the use of language may determine situations of musical communication it is absolutely clear that these are possibilities not every listening process may be determined in the same way – and that is one of the big chances of Luhmannian communication theory too.

One of the most complex works in order to the levels of the use of elements of recorded spoken language for me is Steve Reich's String Quartet *Different Trains*<sup>9</sup>.

It is one of the rare pieces which function on every level of communication shown here – what will say with the biggest range of possible understanding-selections. That may be like that because with Reich and his idea of documentation we have somebody developing a very strong plan in order to a dramaturgy<sup>10</sup>.

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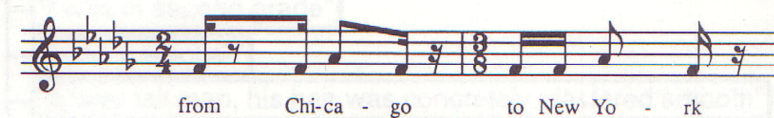
<sup>9</sup> Steve Reich: *Different Trains* for string quartet and tape, 1988.

<sup>10</sup> Steve Reich (1988), in Booklet of the CD WEA 7559-79176-2: “*Different Trains* (...) begins a new way of composing that has its roots in my early taped speech pieces (...). The basic idea is that speech recordings generate the musical material for musical instruments.

The concept for the piece comes from my childhood. When I was one year old, my parents separated. (...) I traveled back and forth by train frequently between New York and Los Angeles from 1939 to 1942 accompanied by my governess. (...) I now look back and think that, if I had been in Europe during this period, as a Jew I would have had to ride very different trains. With this in mind I wanted to make a piece that would accurately reflect the whole situation. In order to prepare the tape, I had to do the following:

1. Record my governess Virginia, now in her seventies, reminiscing about our train trips together.
2. Record a retired Pullman porter, Lawrence Davis, now in his eighties, who used to ride lines between New York and Los Angeles, reminiscing about his life.
3. Collect recordings of Holocaust survivors Rachella, Paul and Rachel - all about my age and now living in America - speaking of their experiences.
4. Collect recorded American and European trains sounds of the 1930s and '40s.

In order to combine the taped speech with the string instruments I selected small speech samples that are more or less clearly pitched and then notated them as accurately as possible in musical notation. For example:



The strings then literally imitate that speech melody. The speech samples as well as the train sounds were transferred to tape with the use of sampling keyboards and a computer. Kronos [the famous string quartet] then made four separate string quartet recordings which were combined with the speech and train sounds to create the finished work.

*Different Trains* is in three movements, though that term is stretched here since tempos change frequently in each movement. They are:

America - Before the war

Working with three forms of material Reich plays in a certain way with double-contingency – transforming rhythm to external signification; external signification to rhythm and to form. Form at the end is generated by a rhythmo (rhythm oder rhythmic)-semantic time-scale. Stories are told chronologically.

In combination with the railway-sounds it installs a dramaturgy like a railway-trip through the times and their possibilities. Using interview-materials – oral history – in that way communication is communicated itself. The reference function of language is employed in a very exposed manner.

Nevertheless the language-character given by transformation even to the instruments and back the material-character given by this transformation to language – provoke the possibility to listen to the quartet without any knowledge of the language.

On the other hand works like Karlheinz Stockhausen's *Gesang der Jünglinge*<sup>11</sup> eliminate many possible variants of understanding from the beginning– such as: giving a programmatic real text to the listener, which never could be understood only by listening to the music, so it deals with a very traditional musical communication model; which – not only by the recording of sung phrases – never refers to another communication-context or another function – in the way of switching between expression and information it is at least of a traditional communicational aesthetic.

An extreme example of another form of information selection for me is in some cases the reception of Luc Ferrari in Germany. I will take now a very little aspect of the *Petite symphonie intuitive pour un paysage de printemps*<sup>12</sup> a bit away from the context of a huge analysis of the work I did to show how this double-contingency may function too. Even if you find points like that in some more of the composer's works and their German reception – it is not applicable on every Ferrarian work. Others like *Unheimlich schön* for example play very well with the absoluteness of signification by language.

The very calm and peaceful, extremely composed and in a special way very meditative symphony plays not too much with very different kinds of materials. But on a very late point – nearly as a sort of contrast it integrates a understandable German passage.

Regarding the idea of anecdotic music it is absolutely no mistake to know the sound-significance-relations of this part, but very often interpretations in German use the abstract language-understanding to construct a very language-oriented story.

In another way interesting could be the discussion for example of the relations between understandable and not understandable moments in Pierre Schaeffer's and Pierre Henry's *Symphonie pour un Homme Seul*.

There could be found lots of other examples communicating in a very different or in the same way.

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Europe - During the war  
After the war

The piece thus presents both a documentary and a musical reality, and begins a new musical direction. It is a direction that I expect will lead new kind of documentary music video theater in the not too distant future."

<sup>11</sup> Karlheinz Stockhausen: *Gesang der Jünglinge*, 1955/56.

<sup>12</sup> Luc Ferrari: *Petite Symphonie Intuitive pour un paysage de printemps*, 1973/74

At least we could find of course lots of distinctions, but also parallelisms between these extremely different pieces and aesthetic directions which can be employed in a special way as moments or even categories in a more “objective” manner in terms of value; they are not exclusive or exhaustive in any way. Regarding the pool of possible information we could find selection and analysis categories, like the rhythm of language as constitutive moment.

Here – according to the examples – we can find first of all the rhythmic structures taken from the language, becoming musical rhythm and so structuring the music. This can be found on different levels – going from a certain diction over different forms of rhythmic categories to narrative rhythms structuring the form of a piece. Here at the end is the exchange of language and gesture of language situated as well.

And of course the semantic structure of language is one central aspect. This will say “Language used as language” in the most common sense, what means to “tell” something: language as a or “the” medium of information at some different levels. That becomes especially interesting by discussing the special levels of double-differences between the different forms of possible meanings, possible understanding and the way of expression, which will say the iridescence of lingual and musical communication. We find here the category of text in a semantical sense and as a kind of material. So here it is to deal with the understanding, the expectation that something could have a signification and so on. That last possibility sometimes can be more interesting than an imaginary “total knowledge” of a signification.

Here the role of syntactical phenomena, the conviction of lingual syntax into musical syntax and vice versa becomes very important.

Language on the level of sound-material could be an interesting categorie too: That means the changes between language in a proper sense and no more language, the idea of looking for sound-structure in recorded language. We find here the conscious and unconscious playing with a kind of category of language likeness and especially un- or no-more-likeness.

Finally the way of using language at the level of self-reflection in music is an interesting aspect especially in a debat on musical communication.

At the end it is to say that employing system-theoretical ideas on communication there could be easily found some interesting generalizing aspects useable in the analysis and theory of electro acoustic music, especially – but not only – in order to “understand” language (not interpretable as text).