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Media of Composition

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Translator's Note

This translation was undertaken not as a work of scholarship, but simply as an attempt to make the content of the original German article as clear as possible for an English-speaking reader who has some familiarity with the world of contemporary composition. Thus the terms used in this translation have not been examined as to their consistency of use in other disciplines and schools of thought, yet it has, however, been examined and approved by the author, so one can be assured of the fidelity of the content. Where I have come across difficult words to translate, or where I would like to render my interpretation transparent, I have included the German word(s) from the original text in [brackets]. Any errors or discrepancies that still reside in the text can be brought to my attention by sending an email to (dswayne92@gmail.com).

Media of Composition

The differentiations at the bottom of the linguistic terms about music are for their part variously justified. Oscillating air is classified in several temporal magnitudes: extremely fast elapsing units are pitch frequencies; those moderately so are rhythms, and proportionally slow units are the form with its subdivisions. These are physiological, psychological, and utterly constructed distinctions. As helpful as the terms are, in order to enable compositional thinking and a speaking about music at all, their boundaries stay hypothetical. Some terms succumb completely to historical vicissitudes: the "musical material" denoted in the classic-romantic epoch, namely themes and motives, are contrastingly in New Music, for example, serial number constellations (and starting with the post-serial "musique concrète instrumentale" the material becomes musical material itself). Other terms are somewhat precise, but in turn let themselves be transferred: Eduard Hanslick speaks of the musical form as "rhythm on the large scale",¹ Arnold Schönberg calls the change of instrumentation "Klangfarbenmelodie"² (and already with him a single chord is valid as a "theme"³), or Helmut Lachenmann metaphorizes the "instrument", in a compositional imagining, with which every key corresponds to another sound-world.⁴ There are in turn other terms practically variable from the outset. The most uncanny example is the term "structure" – once a slogan of the postwar avant-garde –, which never produced a sharp definition in music. In Karlheinz Stockhausen's writings one reads about "Klangstruktur",⁵ "Materialstruktur",⁶ "Werkstruktur",⁷ "Schwingungsstruktur",⁸ "Tonhöhenstruktur",⁹ "Gruppenstruktur",¹⁰ "Massenstruktur",¹¹ "Phasenstruktur",¹² "Formantstruktur",¹³ "Dauernstruktur",¹⁴

¹ Eduard Hanslick, *Vom Musikalischen-Schönen*, Leipzig 1854 (reprinted in Darmstadt 1955), p. 32.

² Arnold Schönberg, *Harmonielehre*, Leipzig and Vienna 1911, p. 471.

³ Dieter de la Motte, *Harmonielehre*, Kassel 1976, p. 274.

⁴ Helmut Lachenmann, *Musik als existentielle Erfahrung*, Wiesbaden 1996, p. 396.

⁵ Karlheinz Stockhausen, *Arbeitsbericht 1953: Die Entstehung der Elektronischen Musik*, in: *Texte zur Musik Band I*, Köln 1960, p. 39.

⁶ Karlheinz Stockhausen, *Orientierung*, in: *Texte zur Musik Band II*, Köln 1960, p. 37.

⁷ Ibid

⁸ Ibid p. 35

⁹ Karlheinz Stockhausen, *...wie die Zeit vergeht...*, in: *Texte zur Musik Band I*, Köln 1960, p. 103.

¹⁰ Karlheinz Stockhausen, *Gruppenkomposition: 'Klavierstück I' (Anleitung zum Hören)*, in: *Texte zur Musik Band I*, Köln 1960, p. 70.

¹¹ Ibid p. 67.

¹² Karlheinz Stockhausen, *...wie die Zeit vergeht...*, in: *Texte zur Musik Band I*, Köln 1960, p. 109.

"Ablaufstruktur",¹⁵ "Impulsstruktur",¹⁶ "Lautstruktur",¹⁷ "Elementstruktur",¹⁸ "Gesamtstruktur",¹⁹ and the inflation of the expression drove consequentially towards innumerable blossoms – the term is an arbitrary shell.²⁰

Medium - Form

Certainly the variable usage of a word has its necessity and can be thoroughly illuminating. At the beginning of the chapter about musical form in *Die Musiktheorie im 18. und 19. Jahrhundert in Deutschland* Carl Dahlhaus reports the Aristotelian Form-Material relation: Differently than music theory looks at it, there is no particular significant magnitude for the form; there is rather a differentiation that can be applied at practically every position.

"that the term form is narrowly limited to the musical form, does not deny; and it virtually challenges aesthetically justified objections. Under Aristotelian assumptions, an interval, in order to exemplify a vocal movement type, is the form of tones, a melodic gestalt [shape/figure] the form of an interval, a durchimitation [imitative counterpoint carried through the piece] the form of the melodic gestalt and a motet the form of the durchimitationen."²¹

Dahlhaus does not, however, follow this model of differentiation any further. Niklas Luhmann also deals with these relations in his art theory, especially in the text *Das Medium der Kunst*. He speaks of "Medium" and "Form".²² From a medium, something is formed, whereby in a higher sense this form can however again be medium. Luhmann defines: the medium is a relatively "loose coupling of elements", on the other hand the form is "consolidation of interdependencies between elements, thus

¹³ Ibid p. 112.

¹⁴ Ibid

¹⁵ Ibid p. 135.

¹⁶ Karlheinz Stockhausen, *Die Einheit der musikalischen Zeit*, in: *Texte zur Musik Band I*, Köln 1960, p. 220.

¹⁷ Karlheinz Stockhausen, *Musik und Sprache I/II (Über Boulez und Nono)*, in: *Texte zur Musik Band I*, Köln 1960, p. 157

¹⁸ Karlheinz Stockhausen, 'Gesang der Jünglinge', in: *Texte zur Musik Band II*, Köln 1960, p. 52.

¹⁹ Ibid p. 57.

²⁰ Compare "'structure' is not a technical musical term" (Klaus Kropfinger, *Bemerkungen zur Geschichte des Begriffwortes "Struktur" in der Musik*, in: *Zur Terminologie der Musik des 20. Jahrhunderts. Bericht über das zweite Colloquium der Walcker-Stiftung 1972*, hg. von Hans Heinrich Eggebrecht, Stuttgart 1974, p. 199.)

²¹ Carl Dahlhaus, *Die Musiktheorie im 18. und 19. Jahrhundert. Zweiter Teil*, in: *Gesammelte Schriften*, Bd. 4, hg. von Hermann Danuser, Laaber 2005: Laaber, p. 601

²² Niklas Luhmann, *Das Medium der Kunst*, in: *Aufsätze und Reden*, Stuttgart 2001, p. 198-217. Luhmann does not explicitly refer to Aristotle, instead to work from the psychologist Fritz Heider from 1927.

selections from possibilities which a medium offers".²³ Thus a scale is a form of pitches, for example. These elements are however relatively loosely coupled; the scale is not yet a melody. A melody forms the elements of a scale again, out of which they are again selected. Their "formedness" [gestalthaftigkeit] lies in the consolidation of interdependencies.

Luhmann's perspective is historical. His theory "suggests describing the evolution of art as the increase of dissolution and recombination capacity, as developments of always newer Media-for-Forms".²⁴ In the individual work these development steps are stored as a hierarchical system. Out of the primary medium of air, for example, a pure tone is formed, which demands an elaborate technique. In the middle ages one used this tone as the carrier of the declamation of a liturgical text, for acoustical amplification in church buildings. From this followed the Gregorian singing, the polyphony, and so on, up until sampled monk's choirs in pop music, where all this in turn can be traced back.

Luhmann denotes with the word "dissolution" [auflösung] on one hand the quantitative potential of a medium, thus in which quantity its elements offer themselves; a decrescendo with ten piano tones has a higher resolution than one with only two. On the other hand it also implies the disintegration of a given ordering and the recombination of its elements. Art offers spaces for possibility, though not due to an already existing medium in which form is imprinted, as one could initially think with the Medium-Form-Distinction. Luhmann brings to art the contrary thesis that a new artwork first creates the medium as form. A medium of art can only be recognized in a formal manifestation.²⁵ The art theorist Arthur C. Danto for example notices while observing the *Brillo Boxes* of Andy Warhol, that the actual, new medium of this artwork is not the wood and the paint on it, but the reception-relation [rezeptionsverhältnis] towards the painted wood cases.²⁶ And this medium grows to where these objects are no longer seen as sculptures, but rather as provocative derivatives in their triviality. They are a borrowed form, which now makes a new medium visible.

For Luhmann, an artwork is only comprehended in the difference of medium and form. Art wants to "affix differentiations".²⁷ Naturally, this is precarious with the most advanced art products, whose effusiveness jiggles on the border of intelligibility. Excesses are however only possible where "even this excessing is still audible"²⁸ (and renewed, when the excess exists in regression. Furthermore, there are sculptures intended, whose (for the time being) last Medium-Form-Relation is the traditional one between material and arrangement). It is a method of art, which is "thoroughly historical" (Adorno), that it recognizably transfers the old to new. Schönberg's talk of "Klangfarbenmelodie" should really lead the listener – and Schönberg himself – from his trusted perception to a new one. This only proves the expression as problematic with

²³ Ibid, p. 200.

²⁴ Ibid, p. 208.

²⁵ Ibid, p. 200.

²⁶ Arthur C. Danto, *Kunst nach dem Ende der Kunst*, München 1996.

²⁷ Luhmann, *Das Medium der Kunst* (Footnote 22), p. 206.

²⁸ Ibid, p. 209.

incoming observation: the logic of a melody's wanderings is only slightly similar to partial-tone relationships. However, the universal Medium-Form-Operation can be applied to the melody as well as the tone-color change [Klangfarbenwandel], whereby in one case something from the media of pitch and duration will be formed, and in the other case something from the media of tone color and duration.

The opportunity of the Medium-Form-Distinction is thus its abstraction; its terms are "modules" without specific contents. It cannot replace the handed-down analytical instrumentarium (and the competition of the established term "form" in music theory is naturally difficult), but as a supplement it offers to make more differentiations in the composition process transparent and with that to close the gaps that lie in the absent relativity of the ancestral music theory term. Accordingly the quite simple theoretical concept enables comparison between the "media" and "form" carved out on various levels.

Traditional Music

The familiar media of traditional music are thus identified as generally valid and unquestionable: the duration of the meter, the tones of the scale, the chords of tonality, and the limbs of the form. But with these no individual artwork can be explained. The focus soon turns to the forms in order to then in turn recognize new media – the motive of the themes for the development, the difference between main clause and side clause for the formal figuration [gestaltung] or the deviation possibilities from convention for surprise effects.

The music of traditional music is largely built on given schemata. To the question of what was actually configured in a work of traditional music come precisely the differences from convention and their individual appropriation, to which an awarded scope [spielraum] is of interest. In traditional music the tradition itself is interesting: which media the tradition permits and how progress functions therein. Furthermore it is admittedly the immanent course of a work that invites differentiation, which generates the listening experience. The variation-principle is distinct: the same melodic frame that is variously figured. The differentiations, which are constituted alongside, reconstruct not only the composition process. Usually sources are missing, which verify the alleged intentions of the author, and intelligibility means not only understanding the selection of the composer, rather understanding a selection of the current hearing. This is then a deconstructive reading: it is about the media of the composition, not the media of the composer. The analysis observes itself and its media of listening.

For instance, one can say that in Bach's *Kunst der Fuge* the scale is the medium of the theme, the form of the theme is in turn the media of the fugue, and that the fugue plainly portrays here medium for the idea of a treatise of fugal composition; meanwhile the form of the tones is for lack of an instrumentation specification only that of an (arranged as tempered) oscillation frequency. The choice of the rhythmic formation of the tones of the theme can be formulated before the background of the available meters as well as before tropes or rather characters and with that these media can be compared to the analysis. The essential differences can however also be the

result of the comparison with other pieces, up until the question, whether the enjoyment exists in the interpretation or even the representation, whether the work is interesting as art or exhibit. The application of the always-the-same coupling of terms – Medium-Form makes the various domains comparative.

In relation to musical pieces, in regards to observing a spectrum of possibilities, methods of composition in harmony and counterpoint [tonsatzlehre] for the fabrication of style copies are arrived at. With comparisons, by which general foundations, recurring patterns and historic differentiation can be recognized, schemata are abstracted for their own applications. Modern music theory has given way to this; instead of using historically absurd accumulations of prohibitions, it derives rules from the given works themselves²⁹. Media, forms, and their differentiations are compared. To illustrate a simple example: in the masses of Josquin there is a certain inventory of ways of embellishing the clausula, which themselves – in principle – are unchangeably certain. These various forms of clausula are furthermore medium for the diversification of cadences inside a larger work. Accordingly exercises can be drafted whose didactic simplification lies in the clear denomination of medium and form: the form of ornamented clausula, the richly diverse punctuation of larger trends through various cadences. Hierarchical models of this kind form the basis since the middle ages of quite a few methods of composition, harmony and improvisation [Tonsatz- und Improvisationslehre]. And so is the Medium-Form-Distinction heuristic means for the analysis of historical music and its re-synthesis in the style copy.³⁰ One structures a music so – for there is not "the" structure, only a method of structuring to be defined at any time.³¹

The above example of Medium-Form-Classification on the basis of Bach's *Kunst der Fuge* – the scale as medium of the form of the theme, the form of the theme as medium of the individual fugue, the fugue as the medium of a baroque "art book" [kunstbuches] (Peter Schleuning) – initially builds a logical chain, but too many attributes of a work should not be forced in such a *sequence*. Often one jumps from one medium to another and back again; thus the Fuxian regime of "species" [gattungen] in the epochal counterpoint treatise *Gradus ad Parnassum*³² with methodically applied exercises of many various notes is not essential. The handed-down model of writing "inventio – dispositio – elaboratio – decoratio" does not compel a fastidiously

²⁹ In the wake of the pioneering work of Diether de la Motte with his writings on harmony and counterpoint from the 1970s the picture becomes more painstaking, for example in the books of Thomas Daniel on Bach chorales and renaissance counterpoint: Thomas Daniel, *Kontrapunkt. Eine Satzlehre zur Vokalpolyphonie des 16. Jahrhunderts*, Köln 1997, and *Der Choralatz bei Bach und seinen Zeitgenossen*, Köln 2000.

³⁰ See Johannes Kreidler, *Luhmanns Medium-Form-Unterscheidung als Theorie der Satzmodelle*, in: *Zeitschrift der Gesellschaft für Musiktheorie, Jahrgang 2007, Ausgabe I*.

³¹ One must not forget that neither the *MGG* nor *New Grove* has an entry on "structure". In the latter there is at least the article "structuralism", which however deals only with the linguistic term.

³² Johann Joseph Fux, *Gradus ad Parnassum*, Wien 1925 (New edition: *Sämtliche Werke, Serie 7, Bd. I*, Kassel 1967).

chronological advancement. The advanced usage means definitely, to reverse such a schemata, that is: in turn medial handling – from detail to the whole and vice versa. It is to delineate possibility from possibility and with this to determine a meta-medium. Luhmann expresses this with a self-referential formula: in art is "the difference of medium and form in turn medial".³³ All layers of formulation build out of the distance in turn an ensemble of possibilities, from which selections can be made. The theory model of the Medium-Form-Distinction does not only pursue a hierarchical chain, but rather something multi-perspectival.

With the Medium-Form-Distinction as practice of the style copy the historical difference is also manifested, which seriously decides over the quality; the "masters" created in spite of and because of the traditional inventory of their media itself, due to forms, which are inspired ideas. Today these media and form-ideas are on hand, and in the best case the lucky, appealing combinations from the given vocabulary, still the creative combustion, which triggers the formulation of a new, unique medium, are not to be reached in this way. For the form-ideas arose out of processes of their time; their repertoire initially formed, the selections were partially unconscious, which benefits the creative work.

New Music

The Medium-Form-Distinction can be traced in the development of new music in particular ways. Paradigmatically the parametric differentiation of the sound stands for this. A quality of a tone can be so formed, that opposite another it can comparatively seem marginal and in extreme cases become a mere carrier, that is: become a medium. The unity of the musical dimension diverged with the step into atonality. With atonal music alternatives to the traditionally fixed dominance of harmony and melody initially arise. In the famous *Farben* of Schönberg, nearly static pitches prevail against the tonal harmonic decline. These retreat behind a new surface of composition, the medium of instrumentation. The twelve-tone technique can also be read in this way: the series constantly repeats, its intervallic character "rests" behind the accidental rhythm (except for Webern, who already before the war developed a "functional" disposition of row configurations, which are more than only an equivalent of the scale, since they achieve a higher form(ulation) in their construction). Here the gradation becomes distinct: the twelve-tone row is a medium of rhythmicization, but itself already from a (yet looser coupled) medium, the tempered division of the octave. As the material disintegrates for Schönberg in a Purpose-Means-Distinction with the invention of the twelve-tone technique, he states that tonality is also only one "means of representation"³⁴ among others; it is therefore only to a certain extent a selected medium relativized for an applied idea.

A significant new distinction in new music is the *Precomposition*. Since there is no longer a generally binding musical vocabulary on hand, the composer generates as

³³ Luhmann, *Das Medium der Kunst* (Footnote 22), p. 203.

³⁴ Arnold Schönberg, *Stil und Gedanke*, in: *Gesammelte Schriften*, Band I, Reutlingen 1976, p. 43.

the initial work the "material structure" of a piece, before he can "compose" with it³⁵. The expanded twelve-tone technique is in serialism the form of the number row, which then is applied to different media – now named parameters – for the most homogeneous handling. Two aspects are here problematic: on the one hand a row of proportions is not a suitable form for every medium (for example the incommensurable timbre), on the other hand more and more media of the composition are found; serialism begins accordingly to research what is at all able to be composed (today we've known for a while: it is infinite).

A descriptive example of "media composition" is Karlheinz Stockhausen's *Klavierstück I*. From the individual tone as network of sound characteristics to sequences/progressions [Reihen(ab)folgen] of such tones to the large-scale organization of densities of row groupings [reihengruppierungen], a wide spectrum of Media-For-Forms is generated. Stockhausen stays however not only on the top level of complexity of his predisposed systematization, rather moves within the piece back and forth – again with Luhmann: the difference of medium and form becomes itself medial. We experience 'form' in various magnitudes, from the proper time of fading, isolated tones to that of extremely convoluted/nested [verschachtelter] configurations inside faster tempos, as the total form of a piece.

The innovation of twelve-tone technique is not the compilation of intervals, which one could also identify as private, muddled modes, but their necessary succession. In Luhmann's theory media can also arise from "events in the time dimension",³⁶ similar to the grammar of a language, which already stipulates certain successions. Different, however as with tonal syntax, the figure-possessing [gestalt hafte] elements like construction of the diatonic scale or the periodic theme purports, the entire strict succession leads to new time experiences: linearity and processuality. Although linear procedures are barely figure-possessing (that is just their difference from diatonic scales), they are however in turn recognized in the closest sense as the compositional preforming of the medium for a work, as the stepwise crescendo in Ravel's *Boléro* or the sketched glissandi and accelerandi in the background of the orchestral works of Matthias Spahlinger. Initially, the parameters are brought into a chronology and sketched into the formal process. With Ravel the aspect of loudness is predetermined for the entire duration of the piece; partially coupled to that is the instrumentation, which nevertheless plays as its own "klangfarbenmelodie". Spahlinger drafts virtual glissandi, which are fragmented into many single points, and out of this pitch arrangement he chooses for the real composition. Certain registers occur only through certain time points, according to where an imaginary glissando resides and with which

³⁵ Beside the aforementioned "structuring" it seems to me currently that the term "structure" is only usable in this sense, as a material disposition of a piece, just as in the tonal music the scale is structure, or to use an illustration: the chromatic scale is the material, the twelve-tone row the pattern [strickmuster], the form is the cut, and the piece the whole dress. See also Erhard Karkoschka: *Der Terminus "strukturell"*, in: *Terminologie der Neuen Musik, Institut für Neue Musik und Musikerziehung Darmstadt Veröffentlichungen Band 5*, Berlin 1965, p. 70-82.

³⁶ Luhmann, *Das Medium der Kunst* (Footnote 22), p. 199.

slope it prolongs.³⁷ From that it finally deviates, as something narrative-linear can be used for medial fundamentals: an already cohesive, formally shaped music. Instead of translating the Schönbergian idea of the "klangfarbenmelodie" onto a nearly stationary [beinahe stehenden] sound, Anton Webern also applies it to an existing [be-stehenden] one, the *Ricercare* of Johann Sebastian Bach, a type of continuum, onto which another "melody" is placed, comparable to a text setting.³⁸ The precomposition is delegated to a precursor; totally historically transmitted works are again medium. In contrast to only parametric progressions, the medium conveys itself in increased ways with such a process of an already existing work; the new composition is a "partial composition" on a certain aspect of the model, which has another medial character – in the Webernian example it is the instrumentation, which the baroque score conceals. Again one can demonstrate with the primary material, the *Ricercare*, an initial evolutionary chain of Media-For-Forms: the scale emanates from the chromatic repertoire, the theme from the scale, the counterpoint from the complementary material to the theme, the entire movement from theme and counterpoint. But then a leap follows, when the instrumentation borrows from the reservoir of the late-romantic and the cell-thinking fundamental to the aesthetic of Webern springs up. The evolution of Media-For-Form no longer seems to be a unity; the past does not rise up any more in higher development levels, rather shows itself presently through a fissure.

Storage Media

The Medium-Form-Distinction is also manifested in music with storage media, as the notation itself is already one.³⁹ Music is always mediated, as a score, as interpretation, through the design of the instruments, and so on. But the idea of the Media-Form-Distinction coincides not at all serendipitously exactly with the emergence of the new technologies of recording. Technology and aesthetics are closely linked. Parametrization is unthinkable without the acoustic analysis, which is the foundation of phonography, and the collage owes itself to the medially available music. The order of elements that are set in a work become newly unfastened, because this ordering is for its part "carved" in a *physical medium*, which means still in a *medium*. Unfastened, because medium and form differ, and on these break points room for play can be won. Stravinsky's neoclassical workmanship is based on scores, which he almost literally "cuts". Cuts in the space (here: the paper) are compositionally easier to conquer than in the time, which is anyway only possible in the medium of thought.

³⁷ In the most explicit case Spahlinger deploys this processual harmonic system in the instrumental concerto *akt, eine treppe herabsteigend*, and analogically with durations through accelerandi and ritardandi in the orchestra piece *passage/paysage*.

³⁸ Here the wordplay in the original German needs some clarification: it is emphasized that Webern does not apply the idea of klangfarbenmelodie to something static, like in the Schönberg, but something dynamic, the Bach *Ricercare*.

³⁹ This "manifestness" is also the reason why the heavily growing media theories of the 20th century almost never take into account a media concept uncoupled and abstracted from storage- and mass-media.

The difference of medium and form is even apparent with the computer, which is denoted as the universal medium. For the computer, a family photo, a message transmission, a cooking book or a piece of music are nothing but sequences of numbers, and these can undergo algorithmic transformations, for example if they are compressed and available in the internet for download, independent from their economic market value. With sound processing these are samples, which are transposed, stretched, and further transformed, no matter if they were early classical sonatas or field recordings.⁴⁰

A pioneer of sampling, John Oswald, formulates in his apology against the overpowering record industry, which brought him to court as a supposed thief of intellectual property in the mid-80s (as if an aesthetically virulent phenomenon can be so discussed), that he considers found sounds as instruments, on which he plays his own music.⁴¹ Every form can again be Medium, as on the contrary every Medium is truly already formed. The storage media for sound are instruments – as also instruments are storage media, which at least have types of music inscribed in them. Both adhere to an aura in their application in art; with technical reproduction is this above all the functionality. Sound data, the popular mp3 format, are normally played back in private, over speakers in a living room or when jogging from earphones. They are virtually the negative of the concert situation; applied there they resemble the infamous urinal of Duchamp. Similarly, comparable to the conventional instruments, the material aspect is specifically present on the storage media. Sound playback also always implies an alienation through the quality of the recording and the loudspeakers. The medium shares itself, after the well-known thesis of Marshall McLuhan⁴² – and can be the medium of composition. The needle of the record player of a DJ is virtually his plectrum, every record is another guitar model. The contained music is often already structured on this, being a Medium, it was "produced" for this (in the sense of an honest redrafting from "composed"), being variable, being a playable instrument. Lachenmann's statement also applies here: *composing means building an instrument*.⁴³

Existent Media

Whether a twelve-tone row is built or a DJ rummages around in his record case – the material of a musical piece is a selection from elements, and these elements are always already themselves formed.⁴⁴ The material is, wanted or unwanted,

⁴⁰ In detail here: Johannes Kreidler, *Soundfiles*, in: *Kunstmusik 8*. Online: <http://www.kreidler-net.de/theorie/soundfiles.htm>.

⁴¹ John Oswald, *Plunderphonics, or Audio Piracy as a Compositional Prerogative*. Online: <http://plunderphonics.com/xhtml/xplunder.html>.

⁴² Marshall McLuhan, *Das Medium ist die Botschaft*, Dresden 2001.

⁴³ Lachenmann, *Über das Komponieren*, in: *Musik als existentielle Erfahrung* (Footnote 4), p. 73.

⁴⁴ "Form and Material are on one hand relative terms in European, Aristotelian thinking: the brick is the form of the piece of clay, the house the form of the brick, the settlement form of the houses. On the other hand – and the second attribute is decisive – Form and Material correspond to each other correlatively: the one does not exist without the other, and the matter in itself is – although the expression "matter" suggests palpability – likewise an empty

precomposed, and generally available in objects. The single tone serves an (mostly highly developed) instrument that was built with intention to make available all possible successions of tones. It offers a pool of specific effects, which are compositionally picked up. To exaggerate: he who writes for violin, is copying. (Principally the context creates novelty.) Instrumentation is the teaching of sonic externalization, which only came to consciousness late, and much later one recognized notation as hierarchical externalization and began to change its way from mere reproduction – to suggestive notation, for example.⁴⁵

Karlheinz Stockhausen devises in his essay *...how time passes by...* [wie die Zeit vergeht] the idea for the quantization of parameters that one may imagine durations on a keyboard.⁴⁶ This is a metaphor for the Medium-Form-Thinking. Finally, one can simply map everything onto this keyboard – a film is also a piano.⁴⁷ Medium and Form can however diverge in such a way that they come to a confounded disparity. Serialism became famously criticized for having no justification to demarcate durations after an ideal of the tempered octave division in twelve values against each other, and for bringing timbre more than ever in no linear succession. Helmut Lachenmann criticizes extensively the usage of cowbell as merely sound with a particular characteristic, as it also has a contrabass sound, whereas the cowbell however should be questioned according to its very specific provenance and aura.⁴⁸ And Carl Dahlhaus states in the face of the "anything-goes" mentality that a fifth and a machine noise "through nothing but the fact that they are acoustic data, would be held together".⁴⁹ In extreme cases no single (or only very abstract) logic between Medium and Form arises, particularly when strong semiotic qualities are in play, which exhibit no common denominator in regards to content. And where several objects, intentionally very distant from each other, form the basis of a medium, they are placed to each other in a distanced "inorganic" relationship of competition, leveling, or arbitrariness. That is observable in the chance

abstraction, like Form in itself. But just the idea, to get a hold of the acoustically manifest "first matter", of a sounding "materia prima", forms the center around which the musical or anti-musical events circle, which John Cage devises with tireless genius. And the means, with which Cage attempts, nevertheless the actually empty abstract, and lasts only an instant, to let it appear or to make it felt, are that of a persistent crossing through and destruction of all formal moments, which, as Cage believes, present the way to the "actual nature" of the sounding. That the single experience in which the "first matter", when at all, can be accessible, is a mystical one, may be evident." (Carl Dahlhaus, *Abkehr vom Materialdenken*, in: *Gesammelte Schriften*, Bd.8, hg. von Hermann Danuser, Laaber 2005: Laaber, p. 485.)

⁴⁵ Brian Ferneyhough, *Aspects of Notational and Compositional Practice*, in: *Collected Writings*, edited by James Boros and Richard Toop, Harword Academic Publishers (= Contemporary Music Studies, edit by Bigel Osborne and Peter Nelson, Vol. 10), Amsterdam 1996, p. 2-13.

⁴⁶ Karlheinz Stockhausen *...wie die Zeit vergeht...*, in: *Texte zur elektronischen und instrumentalen Musik*, Band I, Köln 1963, p. 102.

⁴⁷ According to a certain manner of speaking one plays also on the "Piano of emotions".

⁴⁸ Helmut Lachenmann, *Bedingungen des Materials*, in: *Musik als existentielle Erfahrung*, Wiesbaden 1996, p. 46.

⁴⁹ Carl Dahlhaus: *Form* (Footnote 44), p. 439.

compositions of Cagian workmanship: in these radio pieces for instance, in which receivers with many station selectors are turned on and off, the collectively sounding music piece stands fully unconnected – or only with extreme fantasy otherwise – simply next to each other.

Media can be strikingly ostentatious, as with the estrangement of purpose. Bernd Alois Zimmermann unifies in the last movement of the *Musique pour le Soupers du Roi Ubu* Stockhausen's *Klavierstück IX*, Berlioz's *Symphonie Fantastique* and Wagner's *Walkürenritt* as caricature, for which the means are furthermore suited to exaggeration: Stockhausen's chord, which in the original piece is already repeated often, sounds out with Zimmermann just over 600 times. On the other hand it can also come to confusion and misunderstanding when the difference between Medium and Form is not clearly conveyed. It is the wisdom of teaching that a quotation in art should have a quotation mark. In some cases these are proper devices [Kunstgriffe], as the alienating recitation of the Bach chorale in Alban Berg's *Violinkonzert* through the (unknown to the baroque) clarinet, or the simultaneous declamation of spoken commentary to the Mahler outtakes in Luciano Berio's *Sinfonia*. Therefore one gladly uses more trivial subjects as objects, just as the motives of the first cubists do not weigh much in their contents, rather are simply anonymous human figures or still-lives – a type of "loose coupling" according to Luhmann's definition. The marches and chorales of Charles Ives also function in such a way, which are themselves already from utilitarian music – if not for such a purpose. But where the distinctiveness of the quotation is not attained, just as when the composer moves themselves in the fairways of traditional contexts like in the areas of melody, gesture, and motive, he/she enlists the allegations of either not having overcome the semantic implications of the material or exploiting them as a cheap positive [Positiv]. There is material with a high symbolic value, of a historically grown chain of Media-Form-Relationships, and de-qualified [ent-qualifiziertes] material, that generates from the primary medium air the most possible inherent relationships of Medium and Form, with the avoidance of conventional connections. Altogether neutral sound material probably does not exist anymore. It is a paradox of New Music in the 21st century that, on the one hand, after the end of the tonal inclusion, or rather, exclusion system, it leaves everything sonic to use for music, but on the other hand almost everything sonic is already historically pre-embedded [vorgeprägt]; as was said above, it is always already precomposed. Ariane Jeßulat discusses in an analysis of the early String Quartet in A-minor Op 13 from Felix Mendelssohn-Bartholdy, to which the Beethovenian Op 132 was obviously a model, that one can turn out various forms of quotations: the style quotation, the literary quotation, the assembled quotation, the inspired quotation.⁵⁰ The opposite question arises for New Music fundamentally: can the difference to the historically objectified, what thus remains as not-objecthood [nicht-objekthafte], in no way quoted and with that "absolute" music, exist whatsoever? That can be according to atonal understanding the unmediated-expressive or the parametric-serial ("only correlated to each other"), or something that is targeted at the

⁵⁰ Ariane Jeßulat: *Mendelssohns Beethoven-Rezeption als Beispiel musikalischer Zitiertechnik*, in: *Zeitschrift der Gesellschaft für Musiktheorie*, Jahrgang 2005, Ausgabe I.

primarily non-conceptual, sound-sensual perception of music. With the motivation to eradicate meaning, strategies in the music of the 20th century like parameterization, atomization, reduction (up until silence), randomness, synthesis and radically energetic concretion were developed. Indeed the un-qualification [ent-qualifizierung] of sound and sound connections required an always-larger severity and consequence, and sees itself submitted to a growing skepticism against the autonomy of sound in general, the more so these techniques themselves in turn naturally become historic. Expressed in the Medium-Form-Distinction: a medium disposes of its form when it has more opportunities for the consolidation of its elements as the form alone puts into place. If the number of possibilities of the forms is largely exhausted, the medium becomes as a whole a form, for example a self-contained epoch of music history. In order to then again win medial qualities – lose couplings, the novel [Neues] up to the alien [Fremdes] must be consulted, or destructive methods must be applied to the existing.⁵¹

Often the question is raised about the identity and authenticity of an artwork, thus what is its own and what is borrowed. Tradition in the compositional practice long meant taking over style-typical forms from the older generation. This operates contrarily in New Music [verkehrt sich wiederum]; tradition is here no longer seen in the directly preceding school, rather in the long since past styles of the so-called "traditional music". (It seems paradoxically typical for the modern that composers assert themselves as traditionalists like Stravinsky and Schönberg. And as long as the habitual bourgeois concert industry nourishes the late-romantic repertoire, there will always be new and successful "late romantics of the modern"⁵².) Whether a model alone is set as form or as medium in a new work or whether, where possible, clarity and unclarity is played with virtuosically, the questions are then of reception: is a trope simply used or does an ironic breaking take place? Will something be at all perceived already as a stronger trope or not yet? – Form or medium.

Composition and Reception

The Medium-Form-Distinctions are determined on one hand from composers and perhaps first serve only the particular orientation; on the other hand they are also methods of reception. Luhmann would say: the last medium of art is communication. Out of this quality criteria are drawn: how good distinctions function, which media are

⁵¹ That is the approach of musical deconstruction. Vgl. Johannes Kreidler, *Musik mit Musik*, in: *Positionen 72*. Online: <http://www.kreidler-net.de/theorie/musikmitmusik.htm>. From the consequence of integration of existing musics it follows that also the single work, as it looks at other works, recognizes itself as object (of the deconstruction). Here one speaks of the inner deconstruction, in contrast to outer, which concerns itself with the alien. The former suggests an immanence, which in the face of the increasing objectification of all sounds is not perpetuated any more. Every deconstruction is outer deconstruction.

⁵² From Hans-Peter Jahn, editor for New Music with the Südwestrundfunk Stuttgart, utilized expression in an email to the author from 7.12.2006. He meant "supportive of the state" [staatsragend] composers like Matthias Pintscher or Jörg Widmann, against whom the "reflectionists" would stand.

gained and how many possibilities they recover. In McLuhan's words, media, which create the artwork, are the actual message, the yields of cognition: the logic of an artwork grows from the question of which media it is generated from [es sich verhilft], which available media it uses for this, and how the media arrange their configuration. After all that already said, this appealing thesis must be expanded, when but the strict dependency on the Form-Ideas exists, with which the artist reaches new media. It always deals with the difference of mutual dependence and independency of medium and form.⁵³

Included therein is also the question of the axioms, thus which areas stay divested. Not every medium will be questioned about its fundamental [darin liegende] form, and not every form becomes once again medium in a piece. As many works in the art of the 20th century were jolted on the ever-creeping boundaries of aesthetic perception, succeeding works, which stand in the shadows of those experiences where advancement is concerned, must defend in turn their old borders. Here is for example the situation of the stage, a tableau for the concentrated perception of all sonic happenings, for whose sake the "magic" is not to be destroyed; where possibly one also leaves unrecognizable the mechanics of the instrument and the complexity of their playing techniques, yet one realizes manifold references [bezüge] and differentiations for this *inside* these frames somewhat with parameters, allusive sprinkles and formal cross references [querverweisen]. Political music is stuck in such a dilemma: it can operate on various levels in its logic, but never on all simultaneously; and what it does on one, it uses others in more conventional form.⁵⁴

Media Music

What medium is and what form is, is variable, which means the difference between medium and form is variable, thus in turn itself a medium. The reinterpretation from form to medium, initially seen as evolutionary above all, can be fulfilled immanently from a certain condition of consciousness [bewusstseinsstand]. Prototypical for this are recursions, as in Alvin Lucier's piece *I am sitting in a room*, in which the sound is recorded, the recording filtered through the room, recorded again and then filtered again and so on to the characteristic transformation. A preliminary result, the form, becomes again with the next step medium for again exactly the same work-step. Furthermore the transformation from form to medium can operate not only in a temporal-linear sense, as process from the pristine to the end product, but rather as an oscillating movement between the primary-medium of air and of the "very" secondary medium of an entire music, in intervals gone here and there or jumped, measuring the entire horizon of distinctions – when thus both the single sound is illuminated compositionally in its variability ("sound-composition"), as well as various large connections cultivating differences to each other ("group-composition"), without these

⁵³ Luhmann, *Das Medium der Kunst* (Footnote 22), p. 201.

⁵⁴ Claus-Steffen Mahnkopf, *Politik und Neue Musik*, in: *Die Humanität der Musik*, Hofheim 2007, p. 90.

magnitudes having to be put forth evolutionarily. This was shown previously in the discussion of Stockhausen's *Klavierstück I*, in which unmediated single tones again always follow huge sound organizations. With the triumph of the so-called mass media, the sonic material, as well as the medially expanded music as medium of the composition, has long since expanded, for it is disseminated through mass production and distribution in the collective consciousness and can be comprehensively deconstructed. The sampling and remix artists have been dealing with this since the 1980s.⁵⁵ Whole musics⁵⁶ are exemplary as "large sound-connections" [klangzusammenhänge]. When these musics, otherwise identified as large superstructures of Media-Form-Relations, become medium again, one interposes gladly the distinction of a qualitative jump: if a music plays with other music as media, it is called "meta-music" or "music about music". The term "media-music" is now also fitting; "media-music" is music that productively reflects the relationship between material and figuration [gestaltung]. Productive for this is the difference between medium and form, which itself becomes a material. That can occur in the same piece with "concrete" historical or extra-musical samples as well as with the "abstract", only with parameters of sound, connected to the actual current in the visual arts. Abstract and representational painting – paradigms of the 20th century – now blend onto the canvas [leinwand].

All of this underlies the trans-"form"-ation of music in language, a sibling to the notation of music, whereby the inevitable in- and overexactness, gaps, one-sidedness, and errors arise, which however challenge the imagination on the part of the composition as well as the reception. One thinks somewhat of the innovation of opera, which induced the compositional handling of the theater stage. Many musical ideas become first conscious in another medium: singing a melody backwards is utterly difficult, but reading it backwards is easy. The carrying forward of sound in writing makes possibilities visible or opens new ones. Using media productively means to transform its contents medially, to call forth the imagination and to find rooms of play [spielraum], which hearing does not have in itself. The progress of music lies in the not-sounding, as the graphic and language; compositional work is a not inconsiderable part also language-play. The motive for his *Hänschen Klein* was Lachenmann's thoughts, not a melody on the piano, rather, as he said himself, to play "a piano on a melody". Concepts are points that goad the fantasy. Similarly, Iannis Xenakis externalized the pitch space [tonraum] formally as a graphical-architectonic space, to a certain extent an "unmusical" approach, but one which yielded a new music.⁵⁷ Media music is more than

⁵⁵ Nevertheless, sampling, albeit already largely scientifically absorbed, has strangely barely found its way in the concert hall.

⁵⁶ The linguistically ugly plural "musics" is symptomatic of the fact that the Medium-Form-Declaration leads to a terminological white spot.

⁵⁷ Claus-Steffen Mahnkopf, *Mensch und Neue Musik*, (Footnote 54) p. 105.

music, it uses paper and word, digital code and instrumental surfaces,⁵⁸ up until the political dimension of this unbordering [entgrenzungen].

The problematic metaphorization of the musical term at the outset is media-theoretically to be understood as poiesis, although Luhmann himself viewed the Medium-Form-Distinction as "sterile"⁵⁹ for art production (an observation of "third order", focused on art, which is itself an observation of "second order" and would only be perceived)⁶⁰. Transformations are techniques of the *ars inveniendi*. Inflationary circulating buzzwords like "music and language" or "music and space" consistently grasp too short, when only text setting or sounds distributed through space are meant – what language speaks the text of the sheet music [notentext]? What about the social space of various sound media? Is pop music, the "media-noise" that impinges upon people from all corners, not more "noise-music" than actual noise music? Is an open form also conceivable with the "form" of the single tone? These deconstructive methods are the area of media music. Media composition would be on one hand abstract characterized, for example as parametric conceptions or language-play, and on the other hand concrete, above all in the debate with storage- and mass-media. Their goal is to bring on distinctions, that means: to involve a lot.

The media-concept [medienbegriff] made here fruitful for music should give the impetus to a media theory of music, which broadens the hitherto existing perspectives of musical thinking. It is then on hand to say that from there the step to more general (time-media, space and language media, acoustic and visual media) is not far and future art will be more and more produced and received as media art.

⁵⁸ Vgl. Johannes Kreidler, *Instrument Design*, online: <http://www.kreidler-net.de/theorie/instrument-design.htm>.

⁵⁹ Luhmann, *Das Medium der Kunst* (Footnote 22), p. 214

⁶⁰ Niklas Luhmann, *ibid* and *Die Kunst der Gesellschaft*, Frankfurt a.M. 1995, p. 177 und p. 187.