

Loop aesthetics Darmstadt 2002

During the last five years I have written about a dozen pieces called Difference/Repetition#1-10 for various set-ups. Those pieces deal mainly with the issue of repetition, mainly differentiated repetition.

In this lecture I'd like to present some insight into the philosophical, but also practical considerations which led to this focusing on a single technique, on a singular theme.

First of all I'd like to present some of the inspirations for the series, mainly from philosophy and from visual arts, the second part will deal with the term loop and its more theoretical implications, the third part is a practical demonstration of my working with loops, featuring an improvisation with Robert Lepenik.

1) The big change in my view of repetition came about through my reading of Deleuze's Book *Difference and Repetition*; I've been studying it since 1995, after my friend Christian Loidl had given me the cue. I will not go into Deleuze deeply this time, but I'll present a quotation from this work [DR, p.70]

This quotation presents a kind of overview over the following considerations: for me the shift of difference, a kind of *differance* in Derrida's terminology, towards perception was crucial here: repetition as a differentiated technique became another means of deconstruction in my work, aiming at a new kind of perception of musical gestures and sounds; herewith I would aim at the same goal as the Minimalists, but this similarity is a superficial one, as I'd like to show in the following.

Being a student of the Schoenberg-school of sorts, repetition had been a banned thing for me for a long time, me aiming to achieve a continuous variety within my music, never saying things twice. In Daniel Charles' Book *Music and Forgetting*, he even draws political consequences from repetition-oriented music, especially from techno and German Progressive Rock of the Seventies; this hit me very hard, because I adored the very music he denounced.

It was mainly Deleuze's book who woke me from my dogmatic slumber.

Another starting point was my changing view of narrative structures. In Literature there have been various attempts to break up narrative structures,

- 1) one of them William S. Burroughs' cut up/fold in technique,
- 2) another the Joycean stream of consciousness technique, wherein the endlessly changing flow of textuality somehow escapes the linear time axis. Differentiation becomes noise somehow, and this was the main idea behind the Schrift-series.
- 3) The third one is namely repetition: my personal metaphor was the one of a kind of third dimension emerging out of the two-dimensionality of a rotating disk.

Here the text-flow is stopped, inverted upon itself, somehow the semantic aspects shift to the aspects of rhythm and movement, or to the aspect of sound.

If this works, it would open a new look on a particle, a gesture, an insight into a special sound, a new perception of familiar things.

Perhaps behind all this is Nonos idea, that we operate within a defined pool of signifiants, and it is our task to develop new ways of listening.

The breaking up of narrative structures is also an issue with improvisation. After having recorded many, many recording sessions we found a certain speech-structure to be inherent in many of the improvisations we did; I found this also in the pieces of the Schrift-series.

After some experiments with flow-of-consciousness-texts [ICHT] we started to improvise with loops about 1997. Several projects emerged from this, VLO, Laleloo, Tricorder. [video VLO]

Since then it has become a mutual process of transcribing and re-transcribing improvised repetitions and written out repetitions. At the beginning the DW-pieces tried to transfer the repetitions from improvisation to written music, now I reintroduced live-sampling into the pieces, also improvised sections, all combined with written textures.

The bands have become the laboratories for the written pieces, on the other hand we have started to remix pieces like DW1 and DW3 with live musicians.

One of these projects called Black Friday, conceptualized by Uli Fussenegger, featured several computer artists like Kurzmann, Fennesz and turntable virtuoso Dieb 13, but also live musicians.

- 4) All these considerations were focuses in some examples of visual arts, which impressed and inspired me deeply in 1996, giving me also the courage to change my ways of composing. The most important one here to be cited is Martin Arnold. It does not seem necessary to comment a lot on this, you certainly will agree that it features a new look on well-known things, and that repetition is a central issue. [Alone]

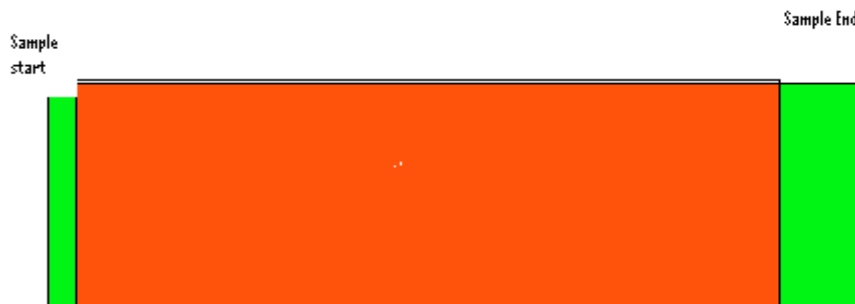
I come now to the second part of my lecture which concerns the central term of all this considerations of repetition and difference : the loop.

Its interesting that the term applies to both acoustic and visual media, in Arnolds Loops there is always a very prominent component of acoustic loops present.

I think the term has a lot to do with the contemporary cutting, copying and pasting techniques (CONTROL X,C,V) common on computer editing platforms.

I'll come to some basic observations concerning loops.

- 1) The condition for building a loop is a Sample: a sample is something given or found, something which already exists. This seems crucial to me in this context.
- 2) Within the sample an area/zone is being defined, which is repeated.



This means, there is a process of reading out the sample, starting from the beginning (LST) moving towards the end (LE) at a certain speed.

(By this speed alone the sample may be transformed, either compressed or stretched.)

The loop is therefore founded on a recurrence, a “Wiederkehr”, and it includes a movement/Bewegung.

We can define:

SST	Sample start	Not modulated
SE	Sample end	Not modulated
SL	Sample length	
LST	Loop start	modulated
LE	Loop end	modulated
LL	Loop length	modulated
LPOS	Loop position	modulated

- a) $SL=LL$; the whole sample is being read out, the read-out-speed may be modulated.
- b) $SL>LL$, modulation of LST, LE, LL, Lpos is possible
- c) $SL<LL$; a special case, the loop traverses non allocated memory, this may produce interesting side effects.

The ways of modulating the loop are for example:

- a) increment
- b) decrement
- c) jitter: an epsilon-area is being defined, wherein the modulated loop-point moves erratically back- and forward, often controlled by random generators
- d) oscillation: the specified loop-point moves to an fro rhythmically within an epsilon area.

By incrementing the LE-point silence can be added at the end of the loop, also increasing LL.

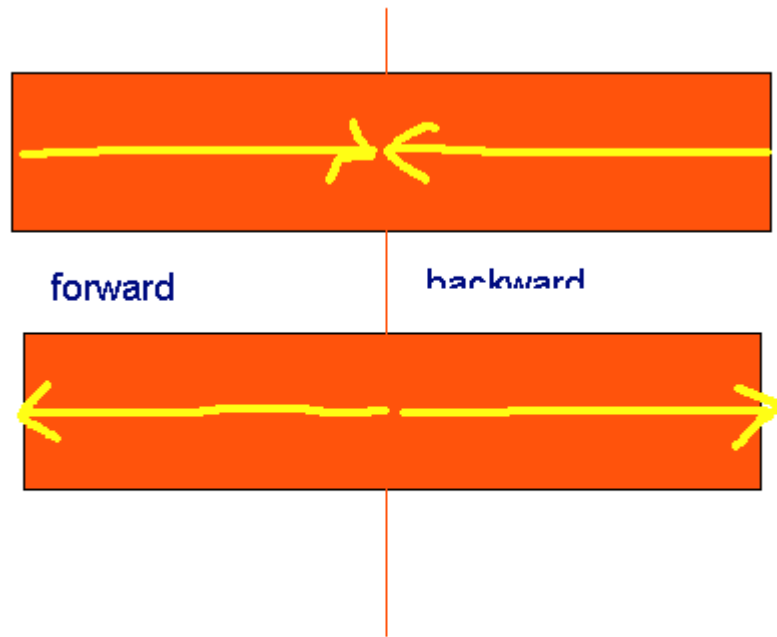
It turned out that the loops work best when using small cells of a duration of about 200ms to 7000ms. I don't know the reason for this, but my speculations tend towards a connection with short time memory.

In the later DW-pieces I differentiated several phenomenological types of loops:

I. technical differentiation:

- a) the non-modulated loop: the so called "Pulse"; it has a constant LL;
- b) the modulated loop, so called "image", LST,LE,Lpos can all be modulated

b) mirror loop/reverse



loop:

- c) asymmetrical loop: LST and LE clearly defined: I often underline the end of the loop by an artificial glitch, e.g. the sound of exhalation or indrawn breath. This is a kind of transcription of the damaged record loop.

IV. Differentiation according to symmetry:

This differentiation is based on a simplification of the mathematical term symmetry, its more a music-phenomenological usage of the term.

- a) quantized loop: there is a symmetrical division of the loop content
- b) non-quantized/asymmetrical loop: here the difference between $4/4 + 1/8$ and a $9/8$ division is crucial. My transcription of this asymmetrical loops is mostly based on the Messiaen-derived technique of added values: e.g. $4/4 + 1/8 + 1/32$.

V. Differentiation according to the modulation of the loop within the repetitions:

I distinguish between global changes/modulations and local modulations:

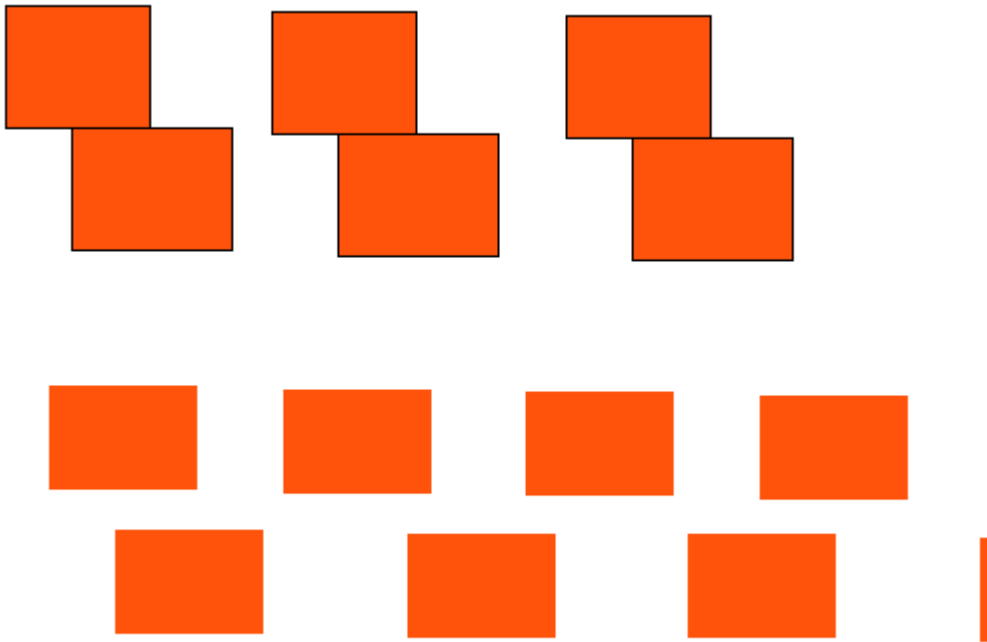
- a) global modulations result in a change over the number of repetitions, e.g. a filter opens during the first and 10th repeton
- b) local modulations result in a change within each repetition. The filter opens and closes within each single repetition.

On the relations between two and more loops: Loop Counterpoint.

There is a crucial difference between a loop which enfolds the whole soundspace within a certain frequency of recurrence, a monophonic loop of sorts, and the technique of layering loops: (External loop counterpoint).

In the 2nd case I differentiate

- a) phase invariant layering: all loops have the same LL=frequency, but different entry points.
- b) Phaseshifted layering: the loops have different LL, there is a constant Oscillation of entry points; (Ligeti)



For me the case of invariant layering became more and more interesting, I think the reason for this is the allusion to film loops, which loose their stringency by being layered and phased. (this is a hypothesis).

Since the loop contents mainly refer to small cells, I developed the notion of **cellular counterpoint**: there are complex counterpoints contained within each cell, but this complex structures are repeated, thereby magnifying and examining the content of the cell, sometimes changing the original meaning. Due to the circular stucture of the loop I became interested in infinite canons again, but this a sideeffect of the whole concept, a kind of ironic play.

On Loops and Movement:

Since the process of reading out the loop from the sample implies a kind of movement, it was interesting for me to project this movement into space: this results in the spatialisation of loops, both global and local. [DW6a,b DW7]

It is an interesting fact, that we are only able to describe temporal changes via spatial metaphors, and spatial changes via references to a before and after. With loops this becomes the condition of the possibility of mapping a timestructure inherent to musical loops onto a space structure; the mapping is brought about by the movement of the loop, not by its content.

I think that the mapping based on movement is also a new possibility for a synchronicity between moving images and sound, which was formerly mainly based on content-based mappings. Since music and film are both temporal arts, the time axis common to both as a differential, which means being interpreted as a sequence of changes, seems an ideal foundation for mappings of all sorts.