RE-VOLVER: RE-VOLUTIONARY LOOP-USAGE WITH LUTOSLAWSKY; DOBROWOLSKY; SIKORSKY; SCHIMANSKY AND HAUBENSTOCK-RAMATI

1 Masks The Fifties

The fifties seem to be the age of difference in music: serialism of the Darmstadt brand obviously dominated the aestethic ideal. Nowadays I ask myself, which role did the notion of repetition play at this time?

It was formally banned within the aesthetics of Adorno and his relatives, being associated with political questionable aesthetic viewpoints which went as far as discriminations and accusations of composers who consciously used repetition as a medium of seduction and dulling of consciousness: this attitude is still being displayed in the writings of Daniel Charles (Musik und Vergessen).

The fifties were also the age of masks and maskings; in architecture the quotations of aboriginal and Eastern art often quoted ritual and magical masks in living room design. (Japanese, Indonesian, African). The whole society seemed caught in the attempt to mask the cruelties and violence of the recent war behind a mask of catholic harmlessness, the former political system still being incorporated by mainly the same population, partly having joined the new systems, partly masking themselves with these systems, remaining the same political persons behind.

The banished Wagnerian rituals of repetition (Leitmotif, ecstatic techniques of crescendo repetitions etc.), which had influenced the second Vienna school and resulted in very different approaches (c.f. Berg, Schönberg, Weben and Hauer !), seemed to have disappeared in the Varietas-oriented art of the serialists like Stockhausen and Boulez, the former still heavily Wager influenced. But there seemes to have been a kind of Verdrängung going on, since at the heart of Serialism there is to be found the very principle of repetition serialism tried to avoid.

The term series in itself is a category of repetition, which becomes evident at once if we look at the visual arts. In music the series consists in the postulate of a mainly dodecaphonic loop, which is bound to disappear by the various techniques of processing. Isn't it strange, trying to swindle something away, which is the foundation of the whole construction?

2 Re-Volver: the Sixties Social Re-volutions

The time between 1960 and 1970 brought about great changes in society, the consequences and merits of which we still are profiting of. In America new forms of literature, music and visual arts were explored, and it again pays to reflect upon the role of repetition (William Burroughs tape experiments, Bryon Gysin)

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In Europe the great political Re-volutions of society were also coming to light, mainly inflamed by the students revolution, by Pop art and philosophy: 1968 G. Deleuze wrote his book Difference and Repetion, and this seems not to be just coincidence.

Here suddenly the focussing on repetition in itself arises, introduced by Schoenbergs prodigal Son John Cage, and then profligated by the Minimalists on one hand and Andy Warhol on the other.

Now the pendulum seems to strike into the other direction: the minimalists evidently neglect the notion of Difference, as repetition was before by the serialists. Art based on Difference suddenly becomes uncool and old fash.

Both parties denounce each other, the quarrel ending with stupid comments like: Techno music is a fascist art form and the like, to be found with Daniel Charles.

3 The Polish Solution

I was introduced to Polish contemporary music by my Teacher Andrej Dobrowolsky, and went to see the Warshaw Autumn with him in 1989;

when Lutoslawky, to whom I was introduced later, entered the concert hall, the whole audience, many among them working men, arose applauding. This was one of the first realisations, that this new Polish music between 1968 and 1975 had deep political roots and justifications.

This led me to take a closer look at these composers, and again with the definite viewpoint of the notions of Difference and repetition, as far as they concern their works. It was also the discovery of how much they have influenced my concepts and ideas, which encouraged me to take a second reading of these texts.

Lutoslawsy	Livre pour orchestre	1968	
Dobrowolsky	Music for Orchestra 6	1982	
Sikorsky	Music in twilight	1978	No recording
Sikorsky	Strings in the Earth	1980	No recording
Schimansky	2 Ilusoric Constructions	198?	
Schimansky	Appendix for Piccolo	198?	
Haubenstock-Ramati	Jeux for 2 percussionists	1968	

Discussion of Examples to be illustrated by sound files and corresponding scores: [not included here]

Lutoslawsky Livre pour Orchestre S.9

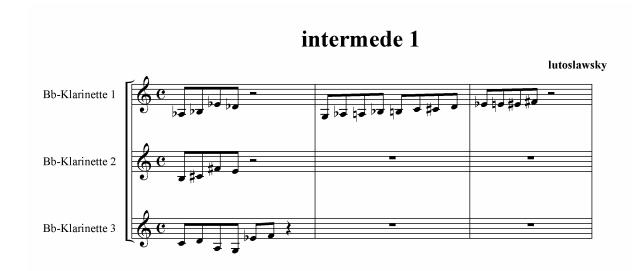
Here the formal principle of D/W is clearly visible: After a metrically ordered section representing the narrative mode, representing difference in time and content, there follows the first intermede; this term occurs in early opera compositions, signifying the sung sections in a music theatre piece, interpolated between the spoken and acted parts.

This intermede (there are several more interpolated in the rest of the piece) represents repetition: the 3 clarinets repeat three different loops, signified by the repetition brackets and a straight line signifying the repetition; a time mark shows the approximate duration of about 20 seconds.

The content of the loop is being repeated slightly differently, involving transposition, cancer movements etc., this means counterpointal techniques;

In this case the difference between the loops creates loop polyphony, which transforms difference into a cloud of sound, a technique also used by composers like Ligeti, Cerha and Xenakis.

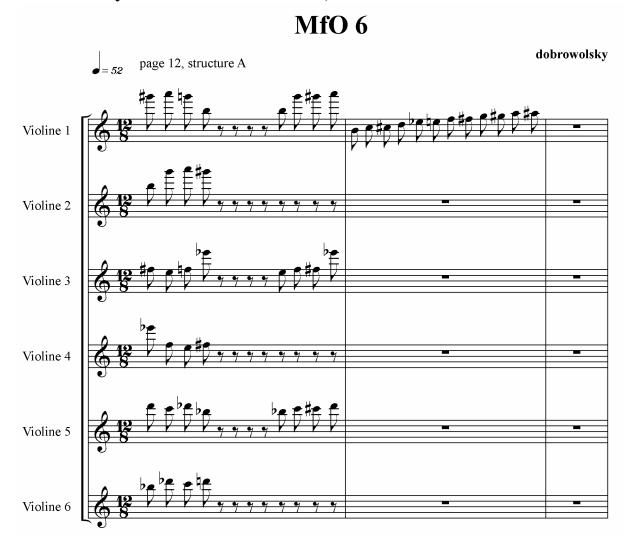
This loop polyphony still masks both the repetition process and the inherent differences behind the seemingly randomness of the cloud, simulating a chaotic process: randomness is generated by a relatively simple structure generator, the loop.



What is also astonishing, that the analysis shows, that the seemingly minimalistic pattern truly is a filling of a twelve tone field encompassing an octave, a technique shared with other loop composers like Feldman.

The term space filling curve also occurs in the chaos research and fractal science, initiated by Mandelbrot nearly at the same time.

Another analysis shows the same usage of technique, an excerpt from **Dobrowolskys Music for Orchestra #6**;



Here the principle is not visible at the first look; V1 shows chromaticism + a leap figure, V2 the same in cancer movement; another sogetto and its cancer movement in V3 V4 and V5 V6.

+1	-2	+4		
-2	+1	-2		
+3	-1	+1		

This indicates the usage of a 12 series, split into 3 fourtone groups and their cancers.

The Intervall constellations are closely related to the typical series of the 2^{nd} Viennese school; also to BACH which is -1 + 3 - 1 (V5 V6)

Thomas Sikorsky example shows an excellent example of global looping. Here the bracket is combines with the counter-symbol saying "x12"; this has more consequences than one would believe, since psychologically it is something very different to tell somebody: do this 12 times, to writing down the same instruction 12 times; as musicians report, the former has some hypnotizing quality which makes you loose count and coordination.

Sikorskis cells seem not to be that complex, nevertheless they will reveal their complexity within the process of repetition, something which is more evident and strong in Global Loops like this; they focus the mind on the repetition process in itself. A good example for this is the change in perception produced by mechanically repeating one word over and over: it looses its original sound surface by and by, also its meaning, gaining new connotation from subconscious levels of perception.

The other Sikorsky example shows more complicated cells, introducing global modulations over the process of repetition

Haubenstock Ramatis Jeux for 2 percussionists expose the technique of Mobile specially devised by him. Here also the cellular concepts is evident. The players repeat the cells by different readings. The structure is created by repetition.

4 Consequences and interpretations: Re – Reading the Composers of the Seventies

What I'm trying to do here is a a posteriori interpretation of these composers of the seventies, looking back on yesterdays future. I tried to choose the term loop as the predefined viewpoint, with the intention of focusing on aspects which have not been discussed so much in this context.

I try to summarise

1 Transcribing Media:

The usage of the loop at this time can be mainly deduced from studio work with electronic or electroacoustic composition:

most of the composers mentioned chose a kind of interaction between experimenting and conceiving electronic versions and prestudies of their pieces, and transcribing these studies into wirtten scores. Steve Reichs classic piece "Its gonna rain" is a good example of this;

Dobrowolsky for instance created all his work by this pendulum movement between studio work and score work, he both wrote a Passacalia for orchestra and for synthesisers.

Perhaps it was the increasing lack of opportunity for composers to experiment with orchestras which led to this, but the consequences seem to have gone much further: the electronic medium became also the message, the context influenced the content, and loop usage is a good example for this.

The notion of transcription can also not be underestimated, the transmedial translation of codes also involves an enrichment on the side of both media. Therefore this technique became a strong source of inspiration for composers like Ligeti and Xenakis. Dobrowolsky intensly worked at the Warshawa studio of electronics and at the IEM at Graz.

2 The cellular dimension:

The whole issue of loop usage focusses on the repetition of a closed musical entity, a cell, or, if we choose Leibnitzian terminology, a monad. Dobrowolsky called it model repetition, Haubenstock called it Mobile technique, based on cellular compositions, which in their graphical appearance clearly show the monadic concept.

We should not forget, that Leibnitzs idea is basically a harmonic idea, suggesting a prestabilized harmony of windowless Monads. The Late Deleuze wrote extensively on this, in the Fold (la plie).

Interestingly enough, the average duration of a loop cell is between 50 Milliseconds and 7 seconds; there exist loops with greater extensions, but they seem to be the minority. My thesis for this is, that loop usage is closely linked to our use of short time memory; I lately heard about some results from lates brain research which stated that our experience of the presence (gegenwart) lasts about three to five seconds, which also roughly coincides with this time span.

So perhaps one could draw the conclusion that the loop transfers us into a state of eternal presence, of a now contradicting the continuous flow of time.

A quotation from Deleuzes "Mille plateaux" illustrates this thought:

"Die Neurologen und Psychophysiologen unterscheiden zwischen einem Langzeit- und einem Kurzzeitgedächtnis (in der Größenordnung von einer Minute). Die Differenz ist allerdings nicht nur quantitativ:

das Kurzzeitgedächtnis gehört zum Typus Rhizom oder Diagramm, während das Langzeitgedächtnis baumartig und zentralisiert ist (Abdruck, Einprägung, Kopie oder Photo). Das Kurzzeitgedächtnis hängt nicht von einem Gesetz der Kontiguität oder Unmittelbarkeit seines Gegenstandes ab. Es kann sich entfernen und viel später kommen oder wiederkehren, aber immer unter der Voraussetzung der Diskontinuität, des Bruchs oder der Mannigfaltigkeit. Mehr noch, beide Gedächtnisformen unterscheiden sich voneinander nicht nur als zwei zeitgebundene Wahrnehmungsweisen derselben Sache. Es ist nicht dieselbe Sache, es ist nicht dieselbe Erinnerung, und es ist auch nicht dieselbe Idee, die sie beide auffassen. Der Glanz eines schnellen Einfalls: man schreibt mit dem Kurzzeitgedächtnis, also mit kurzen Ideen, aber man liest lange Entwürfe immer mit dem Langzeitge dächtnis. Das Kurzzeitgedächtnis schließt das Vergessen als Prozeß mit ein; es ist nicht mit dem Augenblick, sondern mit dem kollektiven, zeitlichen und nervlichen Rhizom verbunden. Das Langzeitgedächtnis (Familie, Generation, Gesellschaft oder Zivilisation) kopiert oder übersetzt, aber was es übersetzt, wirkt in ihm weiter, aus der Distanz, zur Unzeit, "unzeitgemäß", indirekt."

3 Polyphonic Layers versus Homophonic Frames Global versus Local Loop structures.

At the beginning of the loop usage of the sixties and early seventies the concept of layer and layering seem to be predominant; the principle of repetition is hidden/masked behind the counterpointal structure; the layering can be differentiated:

- a) several loops of similar content are being layered: Lutoslawsky
- b) several loops of different content are being put against each other (Dobrowolsky)
- c) one or several loops are being put against a non-loop structure (Dobrowolsky)

The usage of loops, being deduced from electronic tape music, has therefore also a close connection with the cutting and looping of movie frames and video clippings. This relation has become more and more evident through the eighties, when the visual arts again started to become important in music videos and Pop art.

The strange thing about videos is that they are rarely poyphonically layered like music; there may be a multiplicity of screens, but the single picture is rarlely even split. Splitting in itself is not really the analogy of layering, the synchronicity of which would rather be represented by picture on picture dubbing/overlay.

So within polyphonic loop usage there occur local loop structures, the global perception masks the loops more or less.

On the contrary, a global, monophonic loop puts the loop structure in the foreground, making it an object of phenomenological study. In the best case the shift of focus from the repeated object towards the mind of the observer takes place.

For me the piece "2 Illusoric Constructions" by Pavel Schimanksy was most influential in this regard.

4 The formal principle of D/W

When discrimination the Global Loop from the local Loop it is quite evident, that in the pieces by Lutoslawsky and Dobrowolsky a kind of linare dialectic between sections of linear narrative based more or less on varietas/difference, and sections of locally looped cells/repetitions; so Difference/Repetition here becomes also a formal principle, also to be found with Schimansky.

So we can distinguish between these structures and, on the other hand, pieces which are solely based on loops, like Sikorskys and Haubestocks. The latter utilize more of the global loop processes.

5 Complexity

Another characteristic trait of the loops used in the mentioned pieces is their inherent complexity. This distinguishes them from the loops used by minimalist composers like Reich and Glass and Riley. The classic minimalists reduce the content of the cell to a near trivial level, often reverting to 16th century harmony combined with Jazz elements.

With Lutoslawsky and others the loops are based on a complex concept of twelve tone harmony, associated with the space filling curve. With Penderecky (Treni) and Dobrowolsky the concept of complex sound also enters. There noise elements produced by highly differentiated articulations come in, including differentiated modulations of definite pitch.

Lutoslawsky also uses Quartertones, breaking up the limitations of the Dodecaphonic pitch classes.