

## Time Aspects of Drone Music

Drone is one of the most radical experimental music styles, which is characterized by extreme reduction of musical parameters.<sup>1</sup> Rhythm is not an exception; sounds in such works last for a very long time. A single sound may last several minutes or more and the changes are best revealed in timbre modulation. Conventional talk about rhythm becomes impossible since there are no usual rhythmical or metrical patterns. There are very few written works about drone music, especially its compositional aspects. Problems exist even in the definition of the style. One of originators of that style composer La Monte Young defined drone music as “the sustained tone branch of minimalism”. Yet musicologist Joanna Demers<sup>2</sup> states that it can be also defined as maximal music style. There also exist definitions where drone and ambient music are mixed together. However, in this research La Monte Young’s definition is used that defines drone as a minimalist music branch and the paper is concentrated on compositional solutions connected with rhythm and organisation of time.

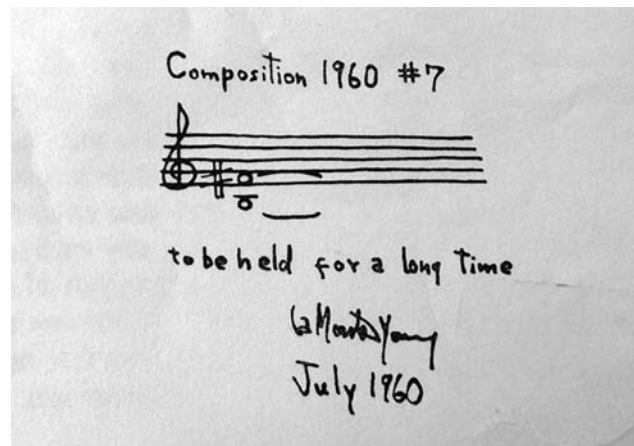
It is problematic because drone style compositions are usually electronic or electro-acoustic and they often have no written scores. Another problem is that variations of the sound in drones can be very slight and difficult to describe. Therefore spectral analysis is used to help to explore the sound changes further and reveal the characteristic patterns of the style. Sonic Visualiser software was used to analyse drone music and spectrograms were made with it.

From the previous research it is known that drone style could be characterized as a style which has those characteristics:

1. Long duration;
2. Sustained sounds;
3. Display of one sound;
4. Lack of salient contrast.

However, it’s about overall characteristics of the style. Rhythm in these pieces is often somewhat hidden or used in a non-conventional manner. Analysing drones one can find only one sustained pitch, absolute lack of rests, slight modulations of timbre and sometimes some dynamic changes. Usually changes are so slight that they cause impression of timelessness. In some pieces rhythm seems inaudible in a general sense, but some interesting things do occur.

Let’s look at the most extreme example of drone music – La Monte Young’s “Composition No. 7” (1960) (Example 1). Young was one of the most famous precursors of drone music. This piece is one of the most radical musical pieces and could be compared to John Cage’s 4’33. There are only two sounds – *b* and *fsharp* – natural fifth, which should be “held for a long time”. Living in Manhattan he had association with the FLUXUS<sup>3</sup> group<sup>4</sup>: George Maciunas<sup>5</sup>, Nam June Paik, Yoko Ono, George Brecht, and Jackson Mac Low. This piece was played for the first time in 1961 in the George Maciunas Gallery where it was performed for three hours on bowed violas. This piece had a great influence on other artists. It was performed later at various



Example 1. La Monte Young. “Composition No. 7”

<sup>1</sup> Drone music is defined as a branch of minimalism that emphasizes the use of sustained tones, cluster, or repeated notes.

<sup>2</sup> Demers, Joanna, *Listening through the Noise: The Aesthetics of Experimental Electronic Music*. Oxford University Press, 2010.

<sup>3</sup> Fluxus is an international network of artists, composers and designers noted for blending different artistic media and disciplines in the 1960s. They were active in Neo-Dada noise music and visual art as well as literature, urban planning, architecture, and design. Fluxus is sometimes described as intermedia.

<sup>4</sup> His name was written in George Maciunas’ list of Fluxus associates.

<sup>5</sup> George Maciunas was a Lithuanian-born American artist. He was a founding member and the central coordinator of Fluxus, an international community of artists, architects, composers, and designers. Other leading members brought together by this movement included Ay-O, Joseph Beuys, George Brecht, Dick Higgins, Yoko Ono, Nam June Paik, and Wolf Vostell. He is most famous for organising and performing early happenings and for assembling a series of highly influential artists’ multiples.

venues. One of them was a performance in Fluxus Festspiele where it was performed with “Trio” for strings.<sup>6</sup> The concert was attended by famous avant-garde artists John Cage, Andy Warhol, and Jonas Mekas. Mekas stated that this piece inspired Andy Warhol to create his static film “Sleep, Haircut, Eat, Kiss and Empire”.

As Wim Mertens states, this piece belongs to the second period of La Monte Young’s compositional style. The first period pieces made the background for the second period pieces and were mixed with the serialism technique and called “sustenance.”<sup>7</sup> An example of that period is the famous “Trio” for strings written in 1958. It is a static piece with duration of fifty-eight minutes. This piece was influenced by his studies in Berkeley where he worked with serialism and this piece was made from twelve note series. It consists of long sustained notes mixed with long rests. This and similar pieces created the background for later pieces and “Composition No. 7”.

Although the last piece was created more like conceptual art it has the main aspects which are found in drone music: one sustained sound, no salient contrast and long duration. However, they were taken to the extreme and there could be no change at all. It has conception of timelessness taken very seriously and was very important not only as an inspiration for various artists, but also for music history.

Timelessness and vertical time<sup>8</sup> (term by J. D. Kramer) are characteristic of drone music. Kramer says that listening to music where timelessness is expressed is like approaching a sculpture. Similar pieces like those have no clear beginning or end. Each listener has his personal time and can start or finish the listening process when he wants.<sup>9</sup>

According to Gilles Deleuze<sup>10</sup> and Felix Guattari<sup>11</sup> there are two ways to conceive the time: *chronos* – the time that “situates things and persons, develops a form and determines the subject.”<sup>12</sup> Another sort is *aeon* – the indefinite time of event that is at the same time not-yet-here and a simultaneous too-late and too-early. Both of those concepts find the meaning in drone music, which isn’t teleological in its nature and sounds like an extended present. The concept of an extended present is also found in the vertical time description of Kramer.

Bob Snyder in his book “Music and Memory” mentioned very low informational strategies for pieces consisting of very few events. The first is sustained notes with long rests (it suits describing such pieces as Young’s “Trio” for strings) and the second is music, which is as one extended events where the events are too subtle to distinguish them as separate. These suit especially drone music so we can see that there is lots of theoretical background where drone music is described as music without change; thus we can find some very slight changes what we can group in such categories.

We find four types of rhythmic compositional means in drone music:

1. **Macrorhythm.** It is periodical sound changes which are too slow to call it rhythm (for example periodical changes whose duration is more than 30 seconds). In conventional non-experimental music proportions of this kind fall into formal categories. If we compress composition of this kind this rhythm will sound as a conventional rhythm. It is characteristic of Charlemagne Palestine<sup>13</sup> and some of Eliane Radigues<sup>14</sup> works. Paul Stretch<sup>15</sup> software is an example of creating music of this type.
2. **Resultative rhythm** is the direct result of acoustical phenomena for example beating. Acoustical beats create rhythmical patterns, which can be heard in compositions with strong microtone content. It is

<sup>6</sup> Trio for strings is La Monte Young’s early piece.

<sup>7</sup> Poter, Keith “Four Music Minimalists” p. 22

<sup>8</sup> Vertical time is time where past and present are denied in favour of an extended present.

<sup>9</sup> Kramer Donald Jonathan (1942–2004) was an American composer and music theorist. Kramer published primarily on theories of musical time and postmodernism.

<sup>10</sup> Gilles Deleuze (1925–1995) was a French philosopher who, from the early 1960s until his death, wrote influentially on philosophy, literature, film, and fine art. His most popular works were the two volumes of *Capitalism and Schizophrenia: Anti-Oedipus* (1972) and *A Thousand Plateaus* (1980), both co-written with Félix Guattari.

<sup>11</sup> Pierre-Félix Guattari (1930–1992) was a French militant, an institutional psychotherapist, philosopher, and semiologist; he founded both schizoanalysis and ecosophy. Guattari is best known for his intellectual collaborations with Gilles Deleuze, most notably *Anti-Oedipus* (1972) and *A Thousand Plateaus* (1980), the two volumes of *Capitalism and Schizophrenia*.

<sup>12</sup> Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. B. Massumi, Minneapolis: University of Minnesota Press, 1987, p. 262.

<sup>13</sup> Charlemagne Palestine (b. 1945 in New York) is an American minimalist composer, performer, and visual artist mostly associated with drone music. His music has a strong sense of ritualism.

<sup>14</sup> Eliane Radigue (b. 1932) is a French electronic music composer. She started her work in the 1950s; her first creations were presented in the late 1960s. Until 2000 her work was almost exclusively created on a single synthesizer, the ARP 2500 modular system, and tape. Since 2001 she has composed mostly for acoustic instruments.

<sup>15</sup> Software for extreme time stretching of sounds.

very typical of Phill Niblock's<sup>16</sup> music<sup>17</sup>. Charlemagne Palestine uses this tool in his compositions too. We can also find it in some pieces of Lithuanian composer Rytis Mažulis<sup>18</sup> (e.g. "Ajapajapam"<sup>19</sup>).

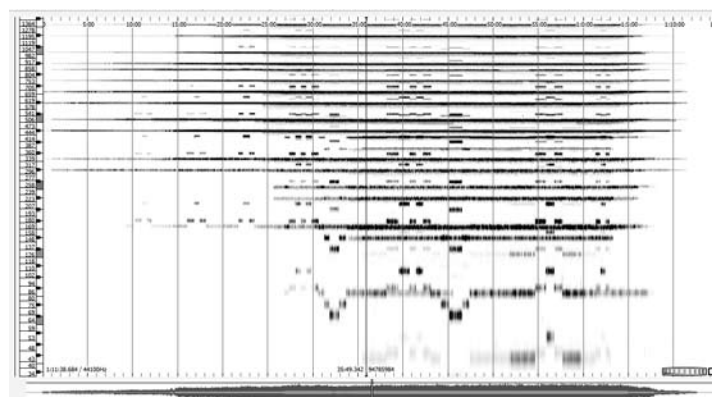
3. **Use of conventional rhythmic passages.** We can find some rhythmical passages in drone music, which sometimes break the stasis and add some accidental rhythm. We can find this means used in Eliane Radigue's "Kyema".
4. **Absence of any audible change.** It's more than a means; it is a concept of radical avoidance of any possible change. This type is hypothetical since there are very few examples of this music. It's perhaps most radical type of music comparable to John Cage 4'33". La Monte Young's "Composition No. 7" is an example of this type. Also some Niblock's music in a certain sense can be taken as an example.

All these tools except the last can be used together. They can be combined in different ways to create artistic impression.

Another important thing dealing with time is proportions. As Demers states drone music is very diverse. She notes about different compositional, formal means. It is necessary to add that all these changes can be grouped into three distinct formal organisational categories:

1. **Episodic or fragmental form** (E. Radigue "Kyema", "Islas Resonantes"). It is characterised by quite sudden changes to this kind of form. Macrorhythm often can be found in this kind of pieces.
2. **Linear development** (characteristic of Palestine's works). A very gradual evolution of sound can be found. It is characteristic of most of Niblock's music.
3. **Stasis** (La Monte Young "Composition No. 7" (1960), Eliane Radigue's "Transmorem Transmortem" (1967)). It's the complete absence of change. This kind of music directly causes effect of timelessness.

Charlemagne Palestine's work "Schlingen-Blängen" (Examples 2, 2a) is an improvised 72 minutes long piece for pipe organ. Palestine's drone works are as rituals especially when he performs it live using plenty of stuffed animals, drinking whisky or wine, or smoking special cigarettes. He claims that he wants to create his own ritual which has nothing similar with traditional religious rituals.



Example 2. Charlemagne Palestine. "Schlingen-Blängen"

Example 2a. Palestine. "Schlingen-Blängen" (reduction)

<sup>16</sup> Phill Niblock (b. 1933) is a composer, filmmaker, and videographer.

<sup>17</sup> Glover Richard, *Phill Niblock: Identity through instability* Phill Niblock: Working Title. Dijon: Les presses du réel, 2013. Website: <http://eprints.hud.ac.uk/16271/3/GloverPhillIdentity.pdf>

<sup>18</sup> Rytis Mažulis (b. 1961) is one of the most distinctive Lithuanian composers, representing the super-minimalist trend in Lithuanian music, always taking into account the same repetitive principles, supplemented with new ideas close to various avant-garde techniques.

<sup>19</sup> *Ajapajapam* is a piece for 12 voices, string quartet, and tape by Lithuanian composer Rytis Mažulis.

The first tool used in this composition is **macrorhythm**. The pitch material of this composition is radically minimal. We see only one sustained cluster and one motive in organ pedals which is later extended using its inversion. However, it is interesting that moving pedal part notes are from 30 to 90 seconds long and it moves in a quasi-periodical manner.

Another type of rhythm used here is **resultative rhythm**. Charlemagne Palestine in his interview with Daniel Varela claimed that beating was used in his pipe organ pieces. It is heard while he improvises with organ stops not fully pulling the stop though making microtones and **resultative rhythm** which is a direct result of acoustical phenomena.

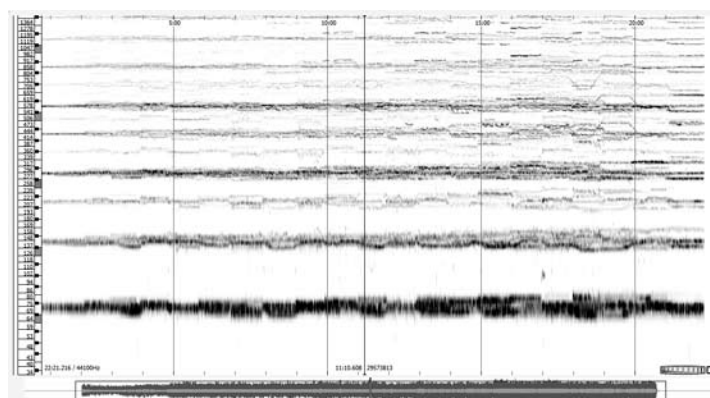
The whole piece is of a linear form beginning from very soft sound, going to organ *tutti* and fading out. The keyboard has a long evolving cluster and most movements in pitch are in the pedal part. Here we can find seven sections where first three sections repeat the motif, fourth and fifth sections are extended with the inversion of the motif and the last two sections come back to the original motif. The piece has a very big dynamic range and has characteristics of a linear form.

A1	A2	A3	A4	A5	A6	A7
Original (O)	O	O	O+Inversion (I)	O+I	O	O

**Table No 1.** Scheme of motive development Palestines “Schlingen-Blängen”

Phill Niblock is one of most important drone composers. Steady in his compositional style, he composed lots of acoustic and electroacoustic music. His drones are static and he uses acoustic sounds (real instruments and samples as well). Layering of sounds is a common composition method. In electronic music he records the sounds of the instruments and then layers them one on another and makes changes varying the pitch of each layer. Often this music is performed very loudly, which helps to hear and feel the microtonal beating.

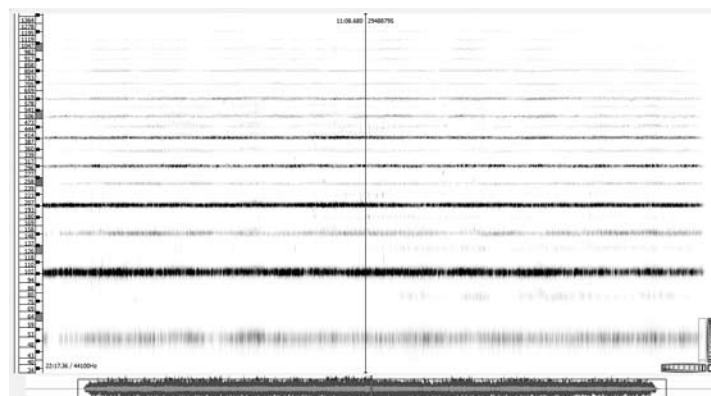
Niblock in his composition for symphonic orchestra “Disseminate Ostrava” (Example 3) uses stasis as a formal construction concept and mostly resultative rhythm, which arises from expanded and narrowed orchestral *tutti*. The use of microtones is essential for this piece since the main element of composition is very slight changes in instrument pitches. Contrary to Palestine’s piece there is no timbre or dynamical growth so we consider it a static form. Orchestration also seems to be stable as we see in the spectrogram. Only very slight changes we see in the golden ratio section of the piece where texture looks bit more tense and complex. Composer didn’t use any of narrative and linear time tools or the contrast. It’s even more radical in the sense of time than Palestine’s piece since there are no clues to define the details of the form; it’s just raw sound which makes the listener dip into the trance. The piece begins with unison and ends with small second.



**Example 3.** Phill Niblock. “Disseminate Ostrava”

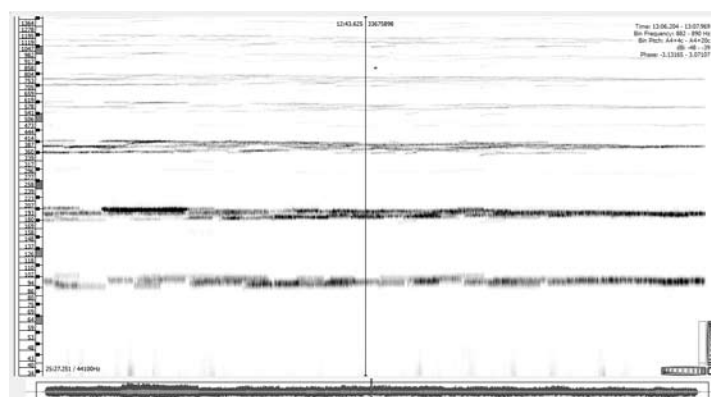
Niblock’s “Kontradikcionares” (Example 4) is a static piece where we hear acute overtone. We hear lots of resultative rhythm, but the piece looks static. In the example spectrogram we can see constant spectrum, which doesn’t change in time so here we can state that has the true static form. The differences are found only in

slight changes of dynamic of overtones. Predominant octave interval (g sharp) enhances the feel of one sound. There is no development to another interval like from unison to minor second in “Disseminate Ostrava”.



**Example 4.** Niblock. “Kontradikcionares”

In “Five More String Quartets” (Example 5) resultative rhythm is used. In the spectrum we can see one main tone g sharp and the microtonal variations of it. There are plenty of them. Instrumentation is homogeneous and it clearly articulates the changes of microtones. Since there is no teleology and clear direction we define this piece as static.



**Example 5.** Niblock. “Five More String Quartets”

“Early Winter” is a lengthy piece (44 minutes). Various instrumental timbres are taken and it has dense timbral structure. However, this piece is quite different from other Niblock’s pieces because fragmental form here is used. We can conditionally call it binary since it has the first section consisting of one tone (e) and in the second section (from 20:11) a new sound (d) arrives and makes fluctuating second. Plenty of resultative rhythm as in the other pieces is heard here.

### Conclusions

As we see there are some characteristic uses of rhythm in drone style. We find four distinct types of rhythmical means – resultative rhythm, macrorhythm, the use of conventional passages and lack of the change. Also there are three formal organisation concepts: fragmental form, linear development and stasis. These distinctions could help explore drone music further and dig deeper into the world of “timeless” minimal music which was not systematically analysed. The compositional means and principals are also bypassed in the literature so this research can lead to more systematic classification and could be the inspiration for analysis method for drone music.

Drone music is an evolving genre of experimental music and needs systematic and conceptual approach to its analysis. Since it doesn’t have lots of conventional musical structures it becomes even more important.

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## Santrauka

### Laiko aspektai *drone* muzikoje

*Drone* yra vienas iš radikaliausių eksperimentinės muzikos stilių. Jam būdinga kraštutinė muzikinių parametų redukcija. Garsų trukmė tokiuose kūrinuose yra labai didelė: vienas garsas gali tęstis kelias minutes ir ilgiau, o įvykių kaita yra matoma daugiausia tembre. Konvencionaliai kalbėti apie ritmą tampa neįmanoma, kadangi garsai yra beveik neartikuliuoti.

Problemų kyla ir dėl to, kad *drone* stiliaus kūriniai dažniausiai yra elektroniniai arba elektroakustiniai ir nėra užrašyti natomis. Išsamiau patyrinti garsų kaitą ir atskleisti charakteringas stiliaus struktūras čia gali padėti spektrinė analizė.

Vienas įdomiausių *drone* aspektų yra laiko organizacija, kuri netelpa į įprastas ritmo koncepcijas. Straipsnyje kalbama apie šiam stiliui būdingas makroritmines ir proporcijomis grįstas struktūras pagal spektrinę Phillo Niblocko ir Charlemagne Palestine'o kūrinų analizę.

Pateikiame keturias ritmines priemones, randamas *drone* muzikoje:

1. Makroritmas. Tai periodinė garsų kaita, kuri yra per lėta, kad ją būtų galima vadinti ritmu (pvz., periodiška garsų, kurių trukmė yra ilgesnė nei 30 sekundžių, kaita).
2. Rezultatyvusis ritmas yra akustinių reiškinių (pvz., samplaikų) rezultatas. Samplaikos sukuria ritmines struktūras, kurios gali būti girdimos kompozicijose su mikrotonais.
3. Konvencionalių ritminių struktūrų naudojimas yra pastebimas kai kuriuose kūrinuose.
4. Girdimų kontrastų trūkumas. Tai ne tik priemonė, bet ir koncepcija. Šis tipas yra hipotetinis ir randamas labai nedaugelyje kūrinų.

Kadangi dauguma ritminių *drone* stiliaus priemonių yra labai iššętos, todėl čia apžvelgiame ir formos klausimą. Kaip teigia Joanna Demers, *drone* muzika yra labai įvairi. Ji išskiria įvairias kompozicines ir formos organizavimo priemones. Šios priemonės gali būti sugrupuotos į tokias kategorijas:

1. Epizodinė arba fragmentinė forma. Jai būdingos kontrastingos padalos. Dažnai tokios struktūros kūrinuose esama makroritmo.
2. Linearus plėtojimas. Čia randame nuoseklią garso evoliuciją. Ši priemonė itin būdinga P. Niblocko kūriniais.
3. Statika. Tai visiškas kontrasto ir pokyčio nebuvimas. Ši priemonė sukelia belaikiškumo efektą.