Marcus Heier 2021

Five different types of rhythmical patterns found in the music of ‘Meshuggah’.

This seminar aims to enhance comprehension of the diverse patterns employed by Meshuggah in their musical compositions. The objective is to facilitate the integration of these concepts into improvisation or composition. We will explore five pattern types found in their music.

Who is Meshuggah?
Meshuggah is a Swedish extreme metal band established in 1987. Renowned for their innovative contributions to metal, particularly within the realms of progressive metal and djent, the band's musical signature encompasses complex, polyrhythmic patterns, dissonant guitar riffs, and technical precision. Their earlier albums, such as "Contradictions Collapse" (1991) and "Destroy Erase Improve" (1995), showcased a unique amalgamation of thrash metal and progressive elements. However, it was with the release of "Chaosphere" (1998) and "Nothing" (2002) that they solidified their reputation as pioneers of the djent sound. Among Meshuggah's iconic albums is "obZen" (2008), distinguished by intricate compositions and extreme technicality.
Meshuggah's rhythmic complexity and groundbreaking use of polymeters have left an indelible mark on the metal genre, influencing numerous bands and contributing to the evolution of progressive and technical metal. The band's distinctive sound and musicianship have created a dedicated fanbase worldwide.

Pattern 1 - “Numbers”

Let's delve into the first pattern called "Numbers." It's a sequence of hits that is easy to remember by thinking of the patterns as numbers. Each note within the pattern has the same duration, except for the last one, which is strategically placed to create a gap before the next segment.

Pravus

In the intro of "Pravus," the pattern is a sequence: 1 2 1 3, 1 2 1 4. Including the rest at the end, the entire sequence is in a 23/8 time signature, but it's played over a 4/4 pulse. They repeat this pattern until they reach 16 bars of 4/4.

Our ‘rule’ for this pattern is as follows:
1 = one 8th note + one 8th note rest = two 8th notes in total*
2 = two 8th notes + one 8th note rest = three 8th notes in total
3 = three 8th notes + one 8th note rest = four 8th notes in total
4 = four 8th notes + one 8th note rest = five 8th notes in total

*Please note that here the note values are changed, in order to keep the imaginary lines of the beats intact, in order to enable easier reading. Tied notes are also broken up. This practice will be used throughout the seminar.

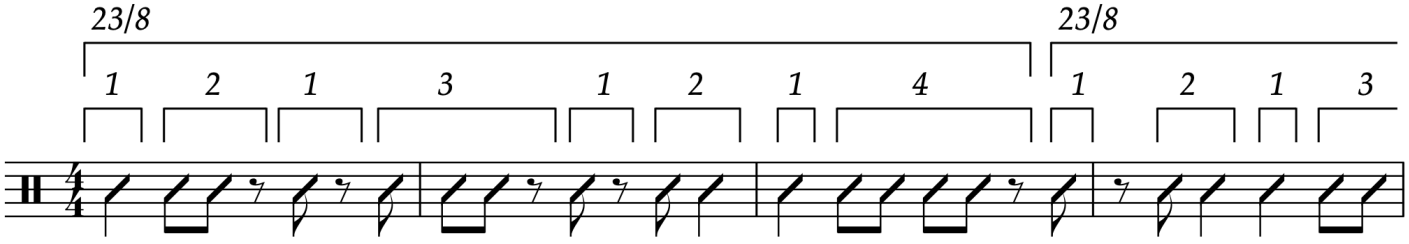


Fig.1

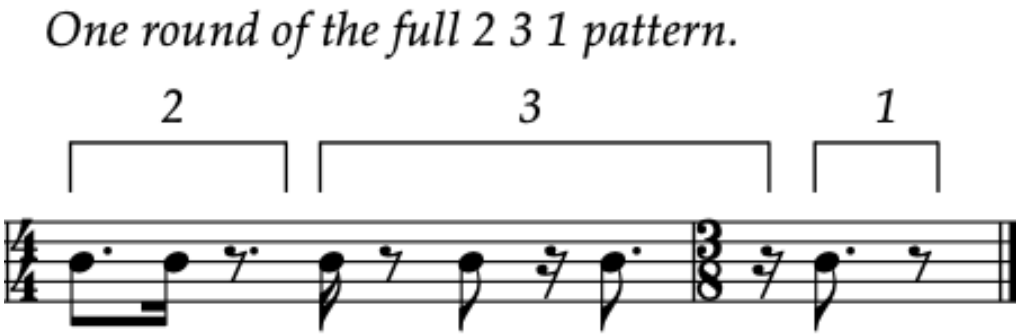
Challenge - see if you can follow the pattern for the whole 16 bars with the help of these ‘numbers’ (Looping 1 2 1 3, 1 2 1 4).

Stengah

The next example is found in the song "Stengah," where the numerical sequence is 2 3 1. Let's start by listening to the intro.

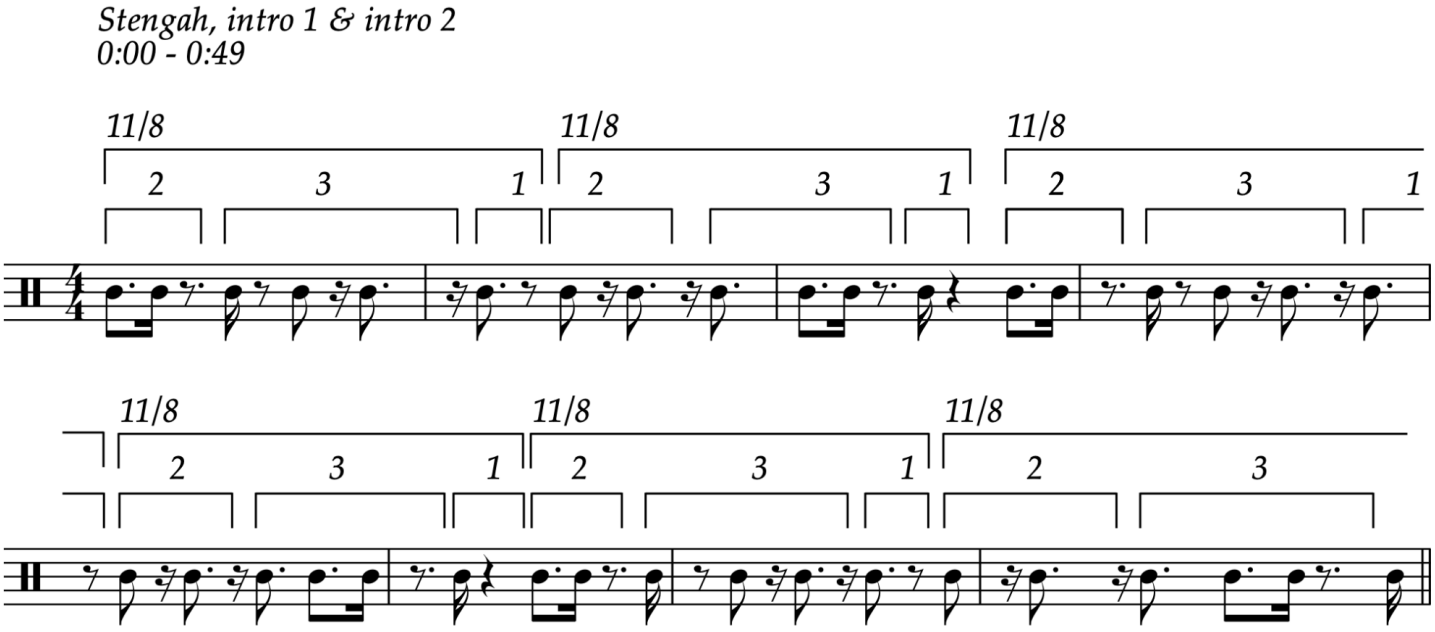
If we split up the different numbers we get the following rule:
1 = one dotted 8th note + **two** 16th note rest = five 16th notes in total
2 = two dotted 8th notes + one 16th note rest = seven 16th notes in total
3 = three dotted 8th notes + one 16th note rest = ten 16th notes in total

It can also be written as one bar of 4/4, and one 3/8 bar.



Or as one bar in the time signature 11/8.

Then, taking this pattern and putting it on top of a 4/4 time signature, we get the final result:

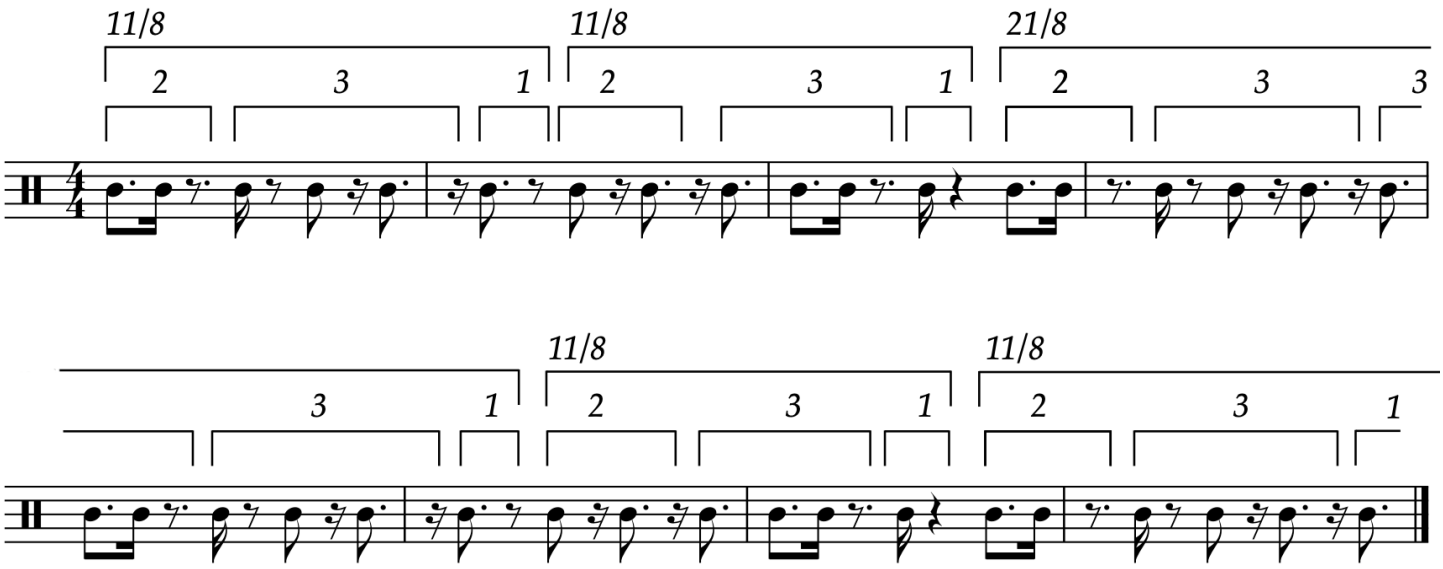


The cumulative effect of this pattern results in eleven 8th notes, creating an 11/8 time signature over 4/4. The polyrhythm would be 11:8 (eleven over eight), not 11:4 because the denominators need to be of the same value.

Challenge - Write down the numbers on a piece of paper and try to follow along with just the numbers.

Later in the song, a variation introduces an alteration in the third round of the pattern, repeating the pattern 2 3 1, 2 3 1, 2 3 3 3 1.

Stengah, variation
1:45 - 2:01



Here, this pattern is played through only once.

Pattern 2 - “Polyrhythm Omit”

In this pattern, Meshuggah establishes a polyrhythm and creates a pattern by selectively omitting notes. They primarily use a 4:3 polyrhythm, though theoretically, any polyrhythm could be used.

The Faultless

In the song "The Faultless," they establish a 4:3 polyrhythm which can be presented in two different ways. Because it helps us read with more ease, we will use the second one.

A continuous representation of the polyrhythm across 16 bars is depicted, with the accent denoting the start of a new cycle.

In the following figure, the notes in red are the notes they chose to omit.

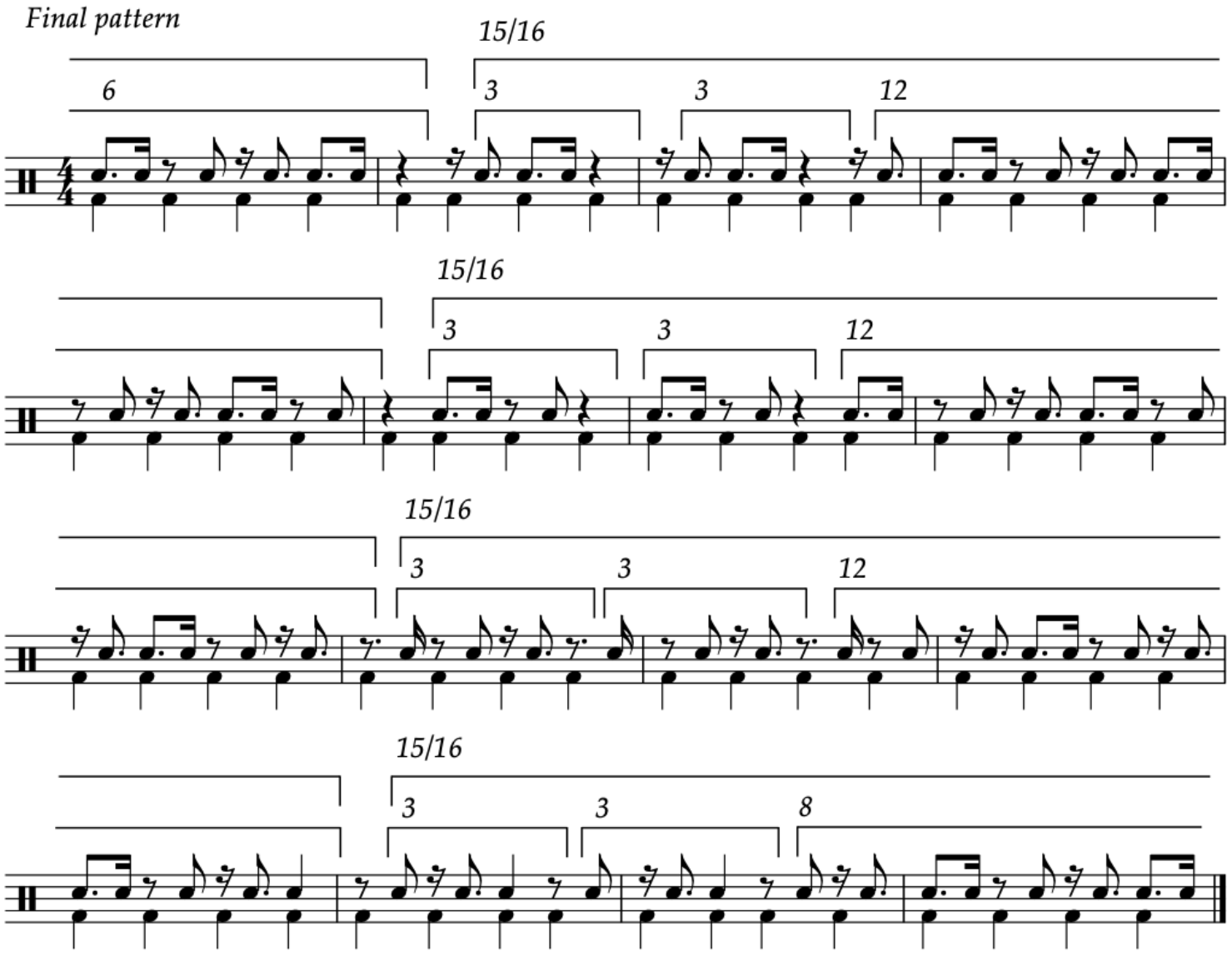
Remove the notes in red to create breaks between the groupings.

Challenge - try to clap the 4:3 polyrhythm over this section of the song, without omitting the notes they are omitting.

We can then apply the “Numbers” technique which reveals three distinct groups of notes: 3, 3, and 12, creating a pattern spanning sixty-three 16th notes.

One "round" of the whole pattern which by itself would be sixty-three 16th notes long

Looping this pattern over 16 bars of 4/4, as Meshuggah does, culminates in the final result at 2:40 into the song. But, they chose to start the riff halfway through the ‘12 pattern’. This is because doing so creates a sense of release at the end of the last pattern, because the pattern lines up with more downbeats, which we perceive as more resolved.



It is fascinating how an image this symmetrical can represent something sounding so chaotic.

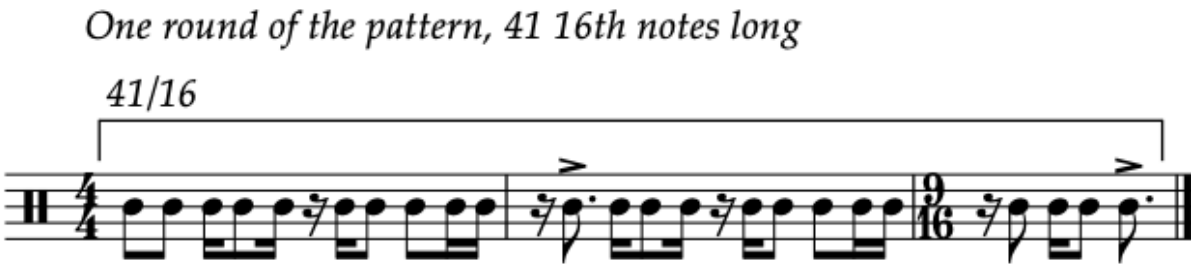
Challenge - Follow along with the numbers only.

Pattern 3 - “This over That”

This category involves a pattern played in any meter except the meter of the meta pulse (usually 4/4). For example, a pattern in 9/8 over a 4/4 groove. These patterns, played by guitars and the kick drum, feature a mix of 8th notes and 16th notes, which adds complexity. The difference here from ‘numbers’ and ‘polyrhythm omit’, is that these patterns mix note values, and create a more random sounding pattern.

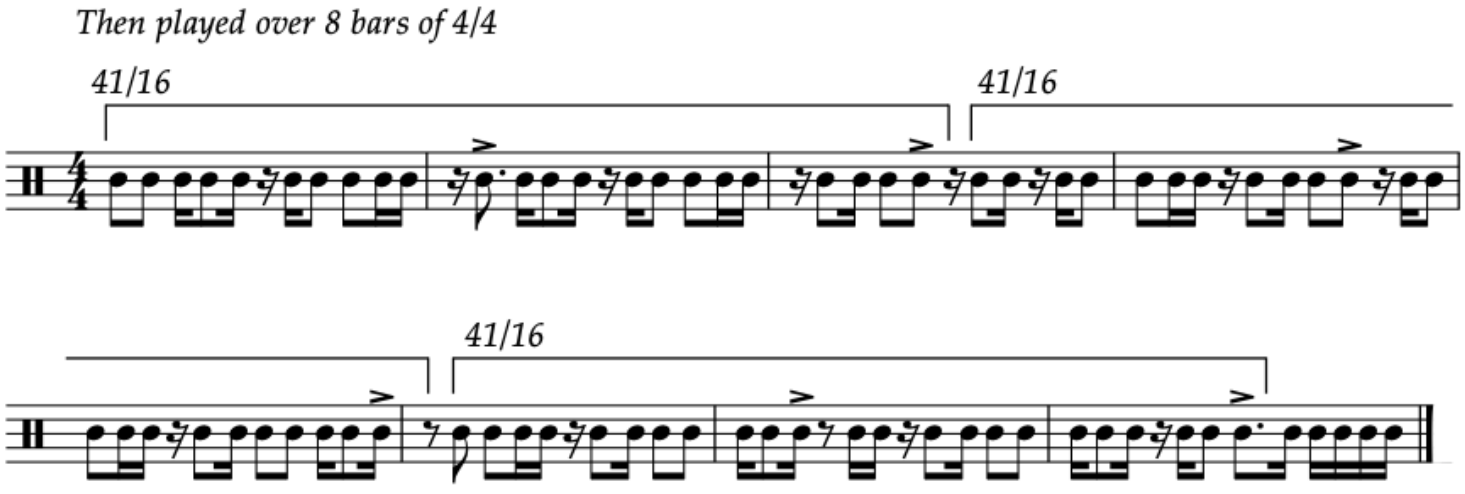
Ligature Marks

In the song "Ligature Marks," the isolated pattern is presented at 0:51.



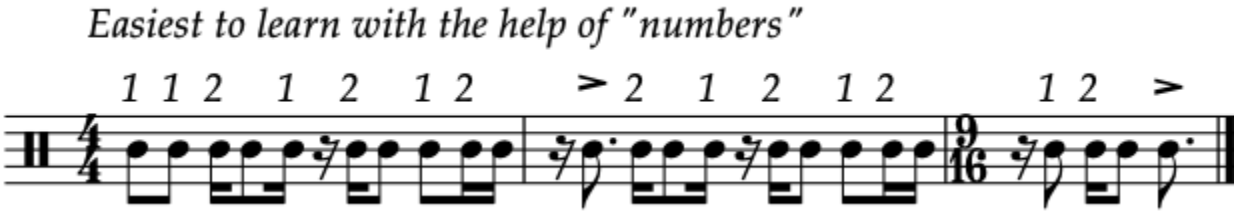
Challenge - Listen and try to follow along with the help of the picture above for the whole 8 bars (even though the notation would have been permuted).

This pattern is repeated over 8 bars of 4/4, creating a well-crafted rhythmic resolution towards the end when it hits the downbeat in the last bar.



Challenge - Clap the accents and notice how the pattern resolves at the end.

The “Numbers” technique is applicable here too, aiding in comprehension and memorization.



This methodology is then applied to the entire pattern.

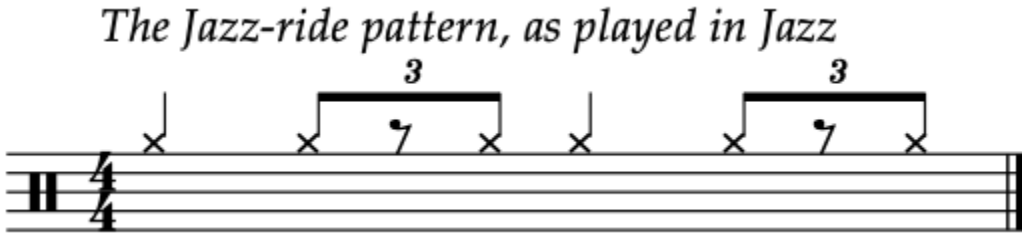
Challenge - Try to follow along with the numbers only, with the symbol “O” representing the accent. The trickiest part (which is only achieved after listening to the riff several times), is to feel where the new round starts.

1 1 2 1 2 1 2 O 2 1 2 1 2 1 2 O

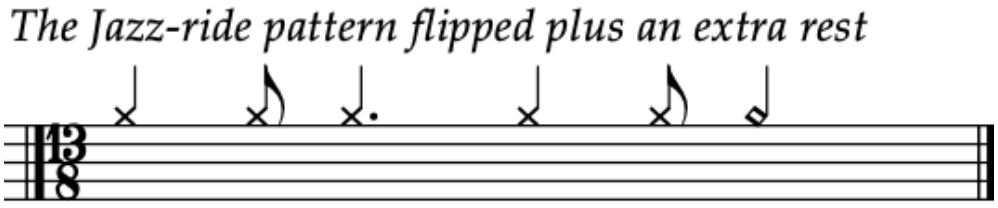
Question - Why do we have two “1’s” right after eachother instead of grouping them together as a “2”?

Do Not Look Down

In the song "Do Not Look Down," Meshuggah manipulates a standard Jazz-ride pattern, creating a pattern of thirteen 16th notes.

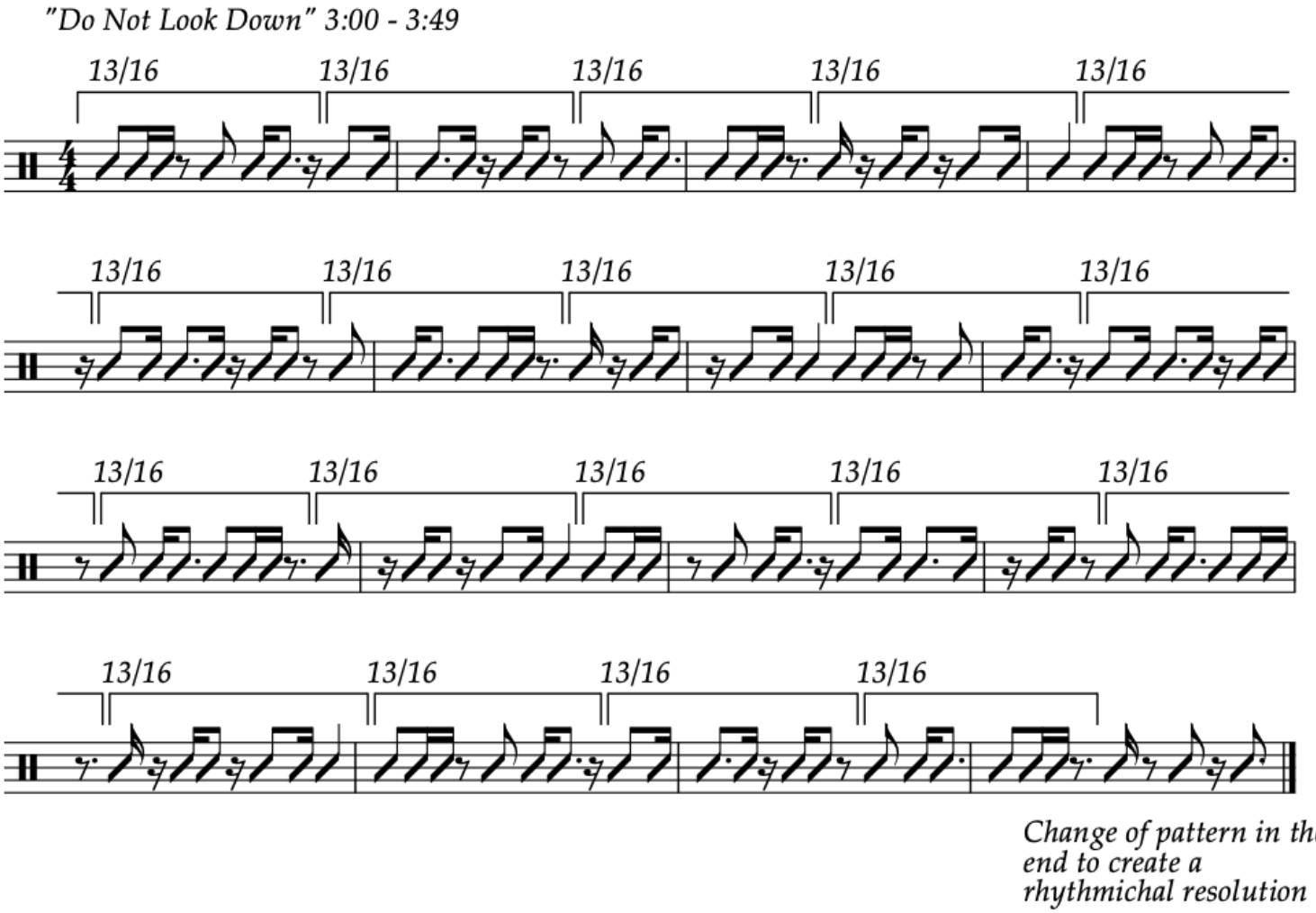


But they start on the second beat and add an extra rest.



Challenge - Play this pattern as a 13/16 groove (subdivision 3 3 3 4)

The final manifestation of this pattern, played over 16 bars of 4/4, is presented.



Challenge - follow along, but think of the pattern as bars of 13/16, instead of a pattern in 4/4.

These patterns can take various forms, with differences in length, and different subdivisions. Most commonly in 16th note subdivisions, but also in triplet-based grooves.

EXTRA - Electric Red

In some songs, they have more than one thing over the meta puls of 4/4. In the following example you can find a guitar top-note pattern in 19/2, over the main riff in 37/16.

Pattern 4 - “Odd meter with ‘Makeup bar’”

This technique involves adding an extra bar to seamlessly integrate the complete pattern over 4 bars of 4/4. In "Electric Red," for example, this extra bar is referred to as a “Makeup bar.”

Electric Red, written over four bars of 4/4

The pattern comprises four rounds of a 7/8 pattern, followed by a 2/4 “Makeup bar” to fit into four bars of 4/4.

Alternatively, the pattern can be notated in their respective time signatures.

Same pattern, but divided into four 7/8 bars, and one 2/4 "make-up" bar

Other songs with similar intros include “Glints Collide” and “Spasm.”

Pattern 5 - “Simply 4/4”

The final category shows grooves that are resolving after a single bar of 4/4. Three examples are presented below.

In "Demiurge," the simplest illustration is evident.

A one-bar pattern is repeated throughout the composition "Stengah."

In “The Faultless,” a two-bar pattern with various endings is introduced.

This concludes the seminar - thank you for participating.
//Marcus Heier