

All the Feels

Unweaving Expressive Microtiming

Rhythmic time-feel is the **most basic, fundamental element** communicated by the soloist, and appreciated (or criticized) by an audience. The greatest technique, creativity, melodic accuracy, lyricism, sound, style, etc. matters very little if the music doesn't feel good rhythmically, whereas less evolved technique, ideas, melodic choices, sound etc. can actually sound okay when executed with rhythmic accuracy (good time-feel) and conviction.

Crook 1991, p 10

Even some of the most articulate jazz critics and chroniclers will **avoid** a penetrating discussion of swing and generally back themselves into a corner when they are asked to engage in one.

Coker 1964, p 45

An Inscrutable Way of Thinking

*“You are playing **on** the beat but you have to play **in** the beat”*

Metheny to student

“You have to be tight but not metronomic”

“Never, ever swing on a blues”

“Always, always swing”

Wishart's Lattice

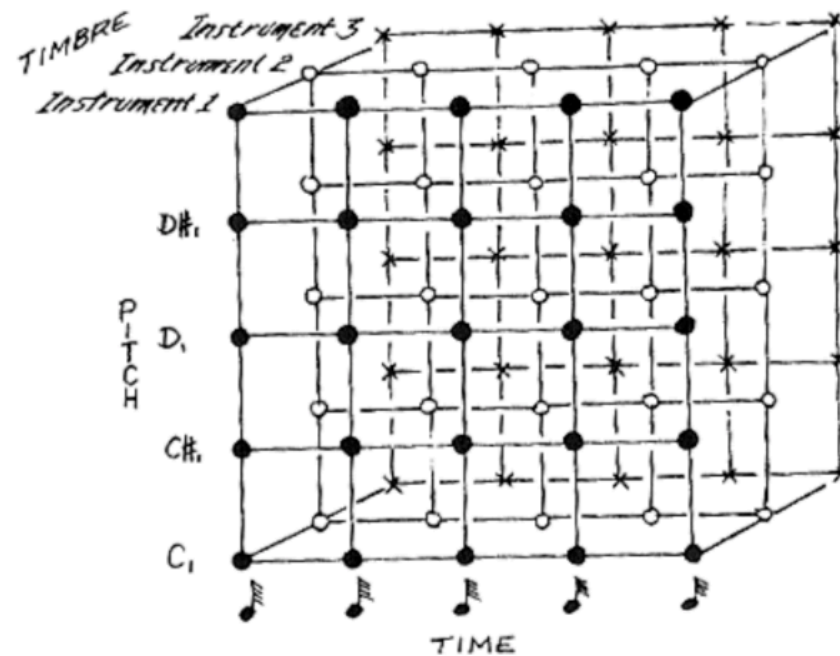


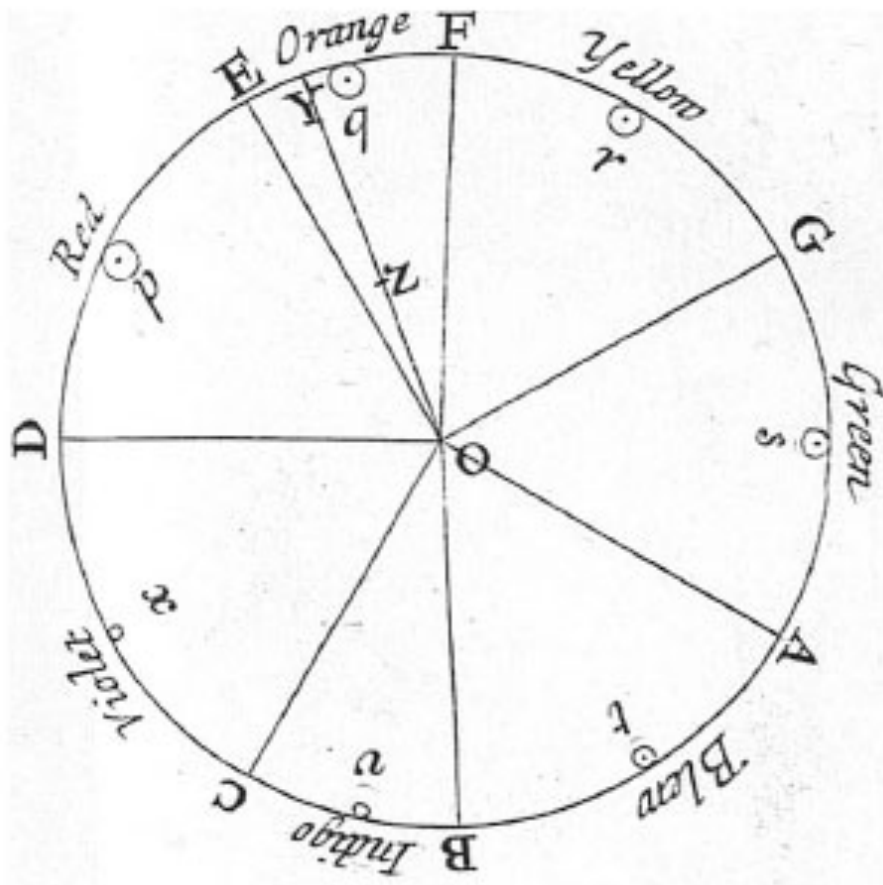
Figure 2.1.1 Wishart's lattice. The representation of standard notation's limitation as a lattice, due to the 'notational economy' of 'finistic' division of pitch, timbre and rhythmic subdivision (Wishart 1996, p 26).

MARTINO UNSTRUNG (2008)



MARTINO UNSTRUNG (2008)





Do not all charms fly

At the mere touch of cold philosophy?

There was an awful rainbow once in heaven:

We know her woof, her texture; she is given

In the **dull catalogue of common things.**

Philosophy will **clip an Angel's wings,**

Conquer all mysteries by rule and line,

Empty the haunted air, and gnomèd mine—

Unweave a rainbow, as it erewhile made

The tender-person'd Lamia melt into a shade.

Lamia John Keats 1820

Unweaving 'Swing'

(swing ≠swing)

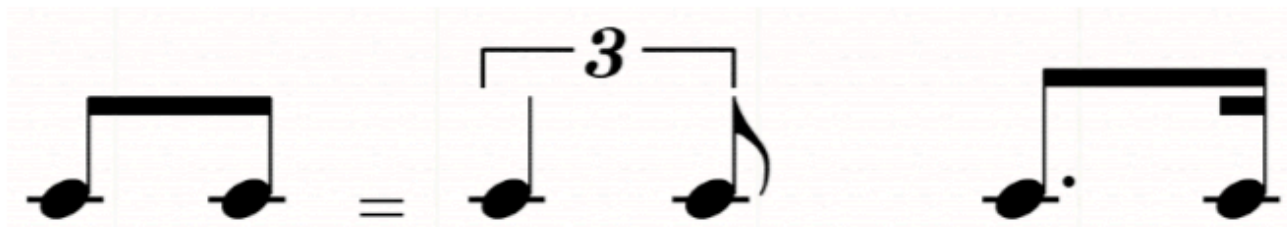
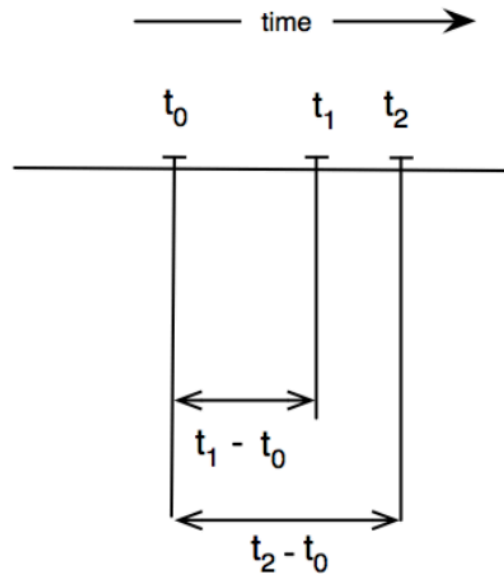


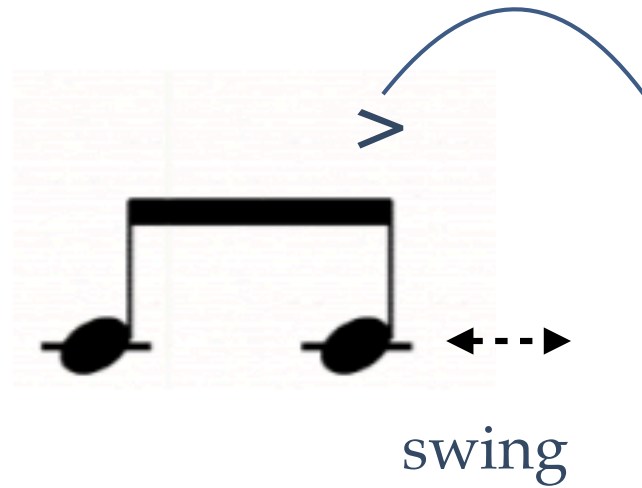
Figure 2.3.3 Standard notation representations of swing.

Defining Asymmetry

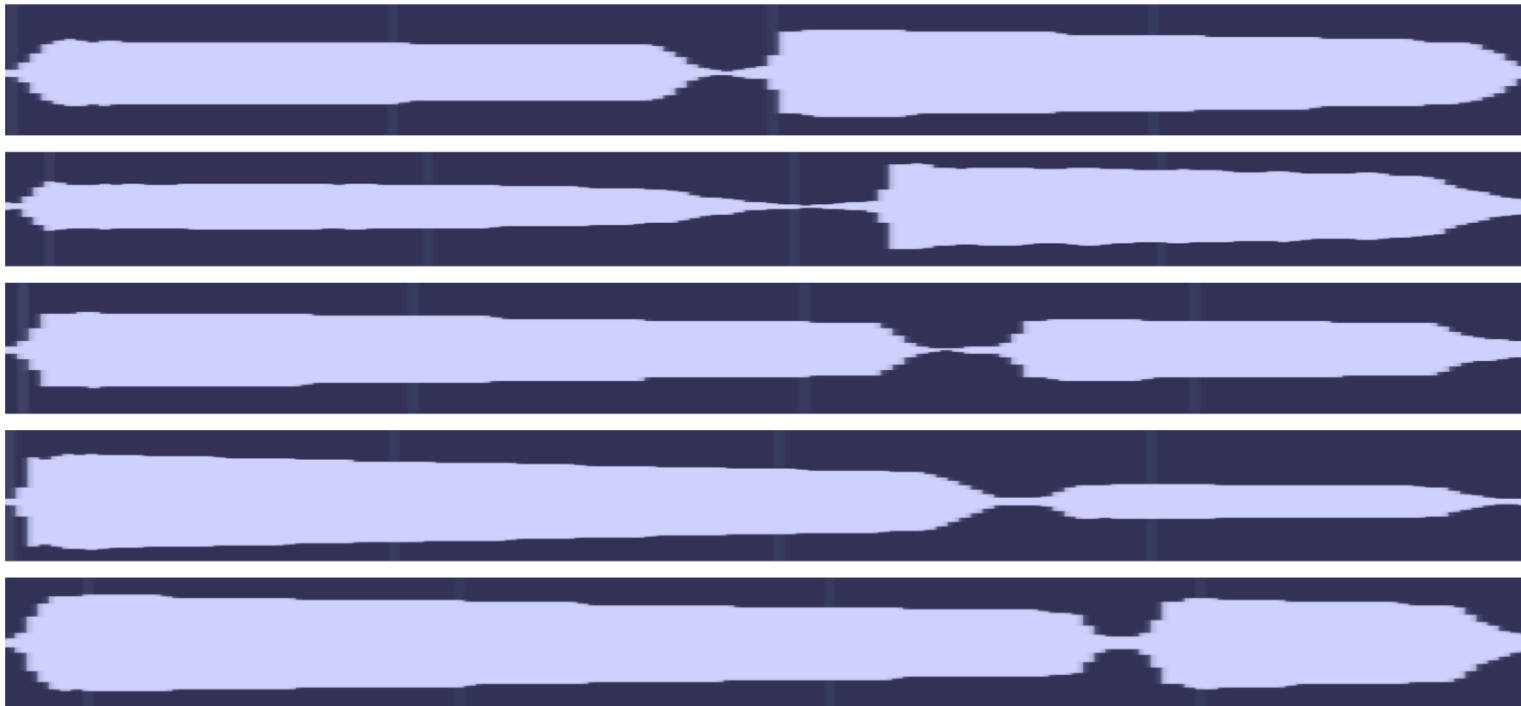


$$S = \frac{(t_1 - t_0)}{(t_2 - t_0)}$$

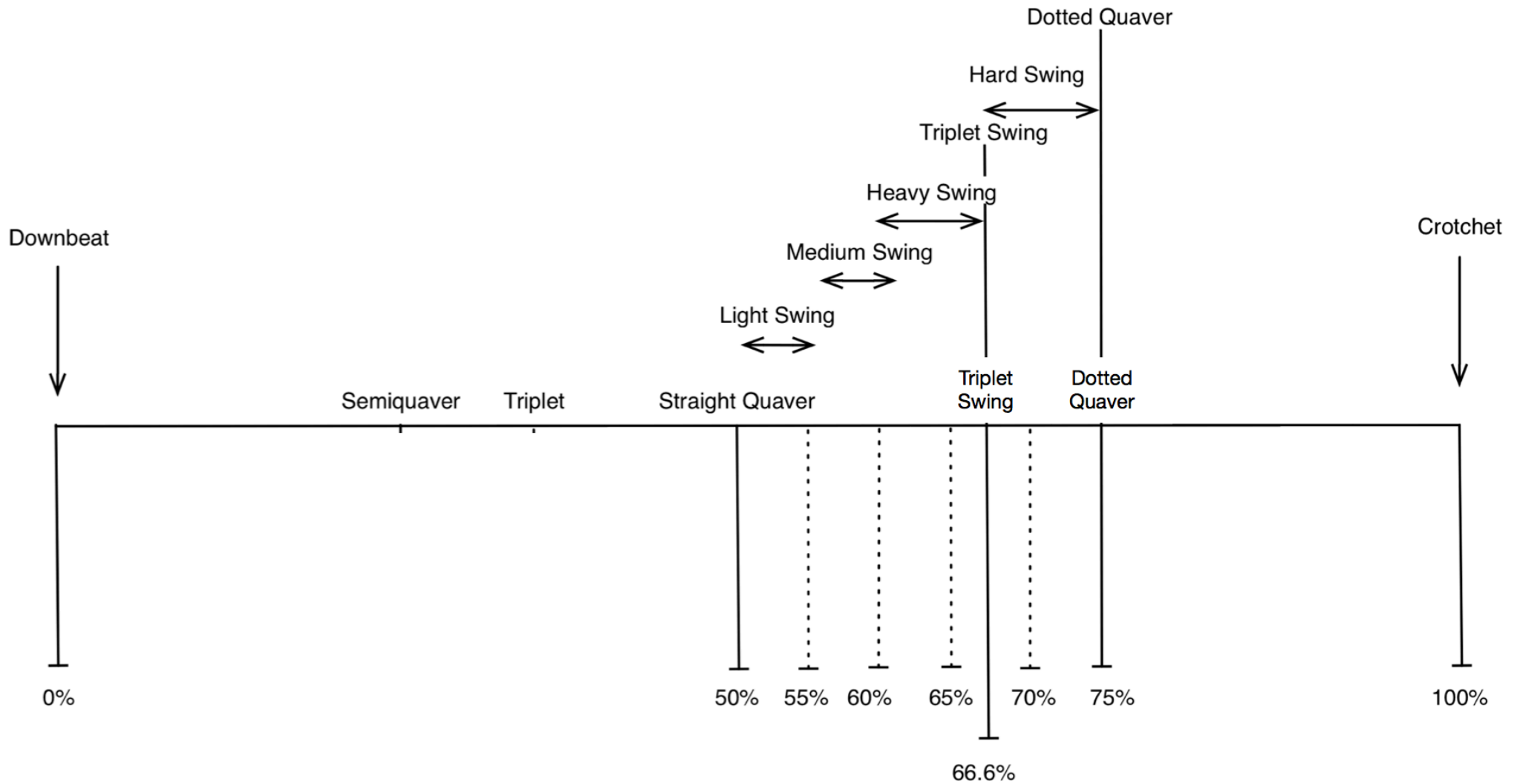
Asymmetry in Upbeat Weighting



Objective Swing



Expressive Continuum



Expression between the Cracks 'Swing Temperament'

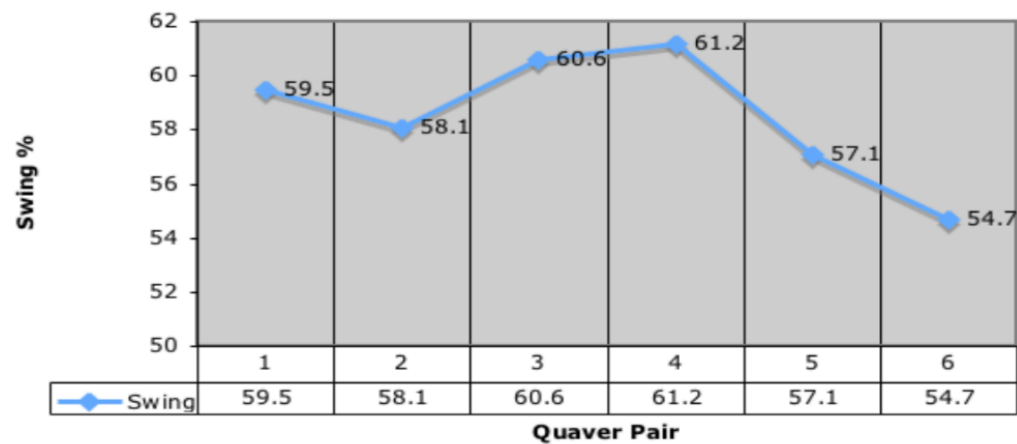
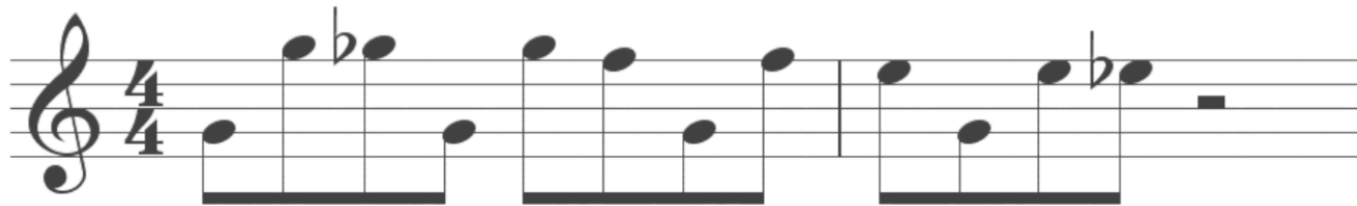


Figure 3.1.2. Swing values for each quaver pair in Reinhardt's phrase.

Expression between the Cracks 'Swing Temperament'

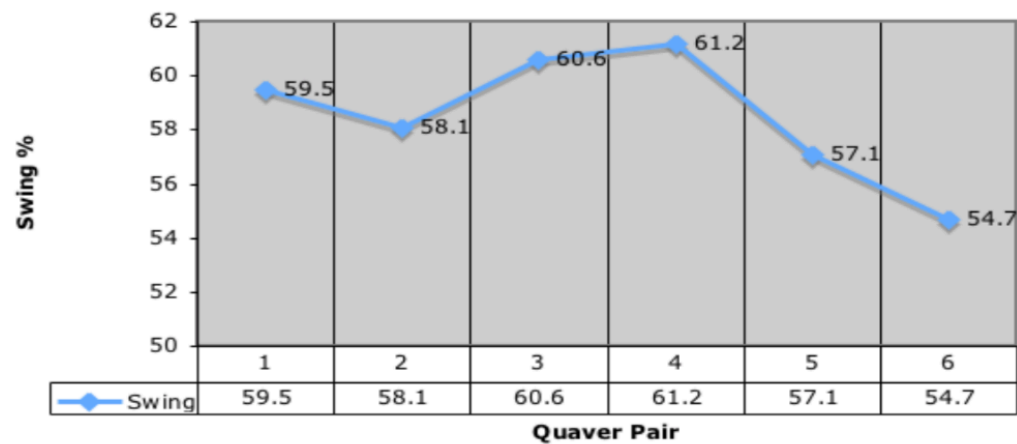
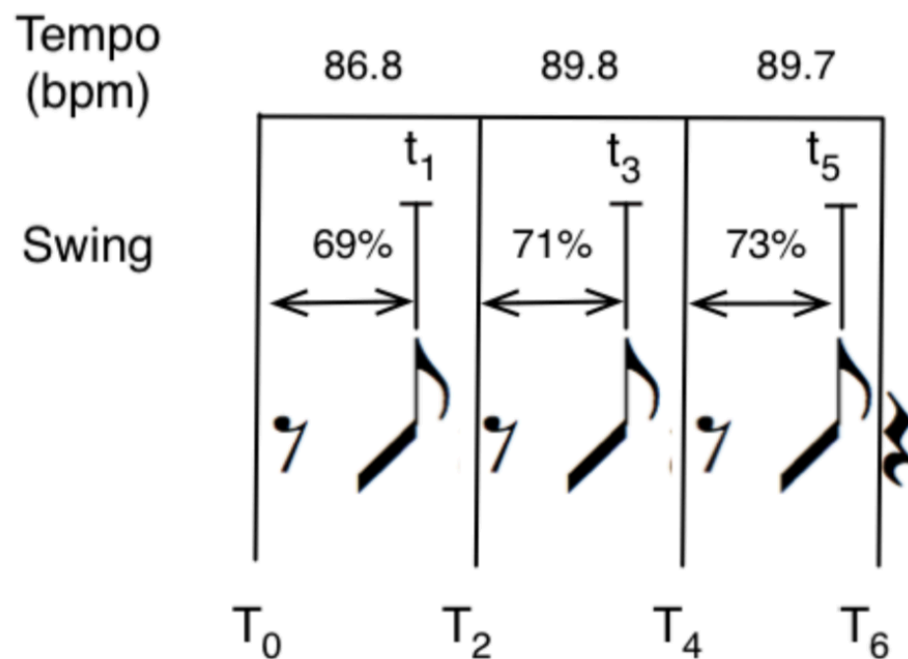


Figure 3.1.2. Swing values for each quaver pair in Reinhardt's phrase.

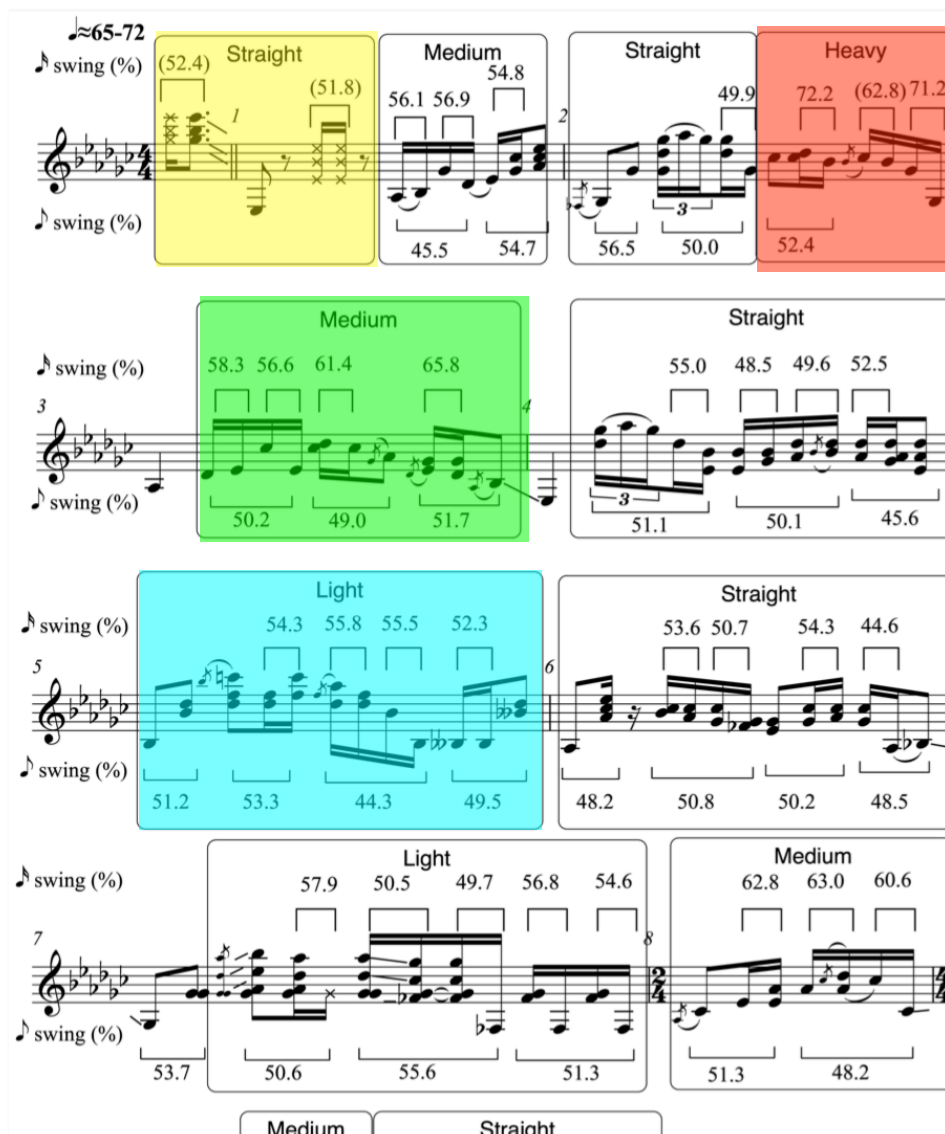
Expression between the Cracks



Dynamic Swing Mechanisms



Dynamic Swing Mechanisms



Dynamic Swing Mechanisms



Swing Friction

The image displays a musical score for four instruments: Lead Guitar, Rhythm Guitar, Bass, and Drum Set. The score is presented in a 4/4 time signature with a key signature of two flats (B-flat and E-flat). The music is divided into two main sections: a yellow-shaded section for the first two measures and a red-shaded section for the remaining four measures.

Lead Guitar: The first measure is annotated with "51% swing" and "2% latency". The notation shows a quarter rest followed by a quarter note chord (B-flat, D-flat, F) and a quarter note chord (G, B-flat, D).

Rhythm Guitar: The first two measures are annotated with "52% swing" and "-3% latency". The notation shows a steady eighth-note accompaniment with chords: (B-flat, D-flat, F) and (G, B-flat, D).

Bass: The notation shows a steady eighth-note accompaniment with notes: B-flat, D-flat, F, G, B-flat, D.

Drum Set: The notation shows a steady eighth-note accompaniment with notes: B-flat, D-flat, F, G, B-flat, D. The first measure is annotated with "ride" and the subsequent four measures are annotated with "67% swing".

Swing Friction

Handwritten musical notation for guitar. The top staff shows a melody line with a slur over the first four notes. The bottom staff shows a fretboard diagram with fingerings: 10, 12, 12-10, 12, 12, 12-11, 14, 14, 14.

Handwritten musical notation for guitar. The bottom staff shows a bass line with a 'Rim Solo' annotation. The notation includes a treble clef, a key signature of one flat, and a 4/4 time signature. The bass line consists of quarter notes with accents and slurs.

Nailing Swing

A 1:1 50% **B** 3:1 75% **C** 2:1 66.67%

D 3:2 60% **E** 4:1 80%

F 4:3 57.1% **G** 5:2 71.4%

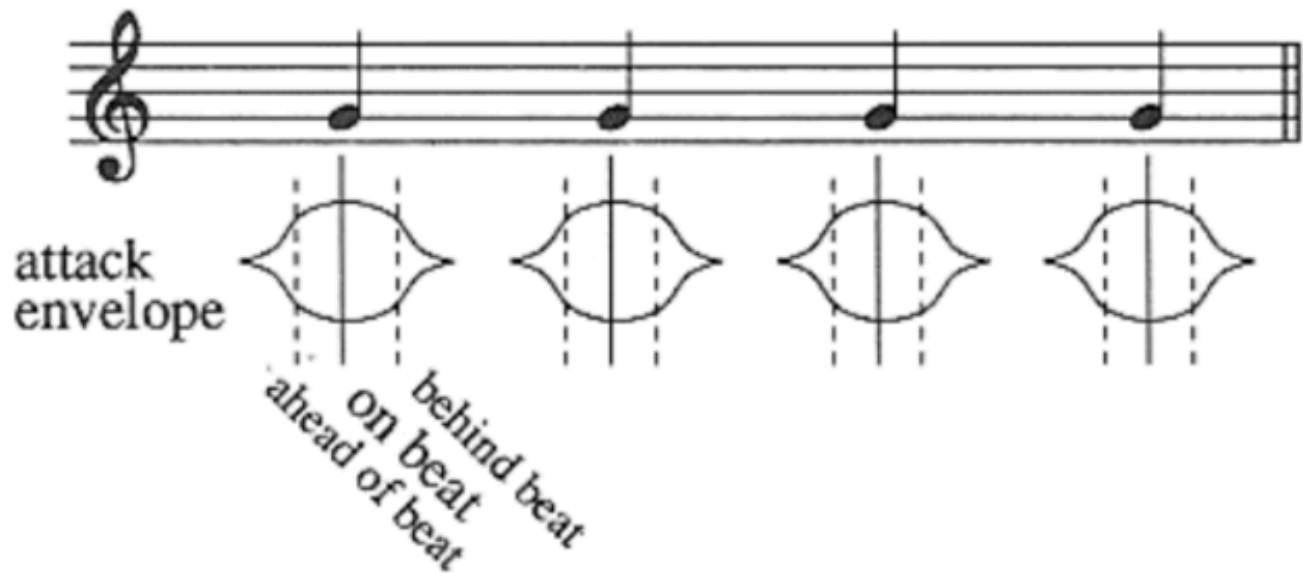
Swing (Lack of) Pedagogy

Example II:1R

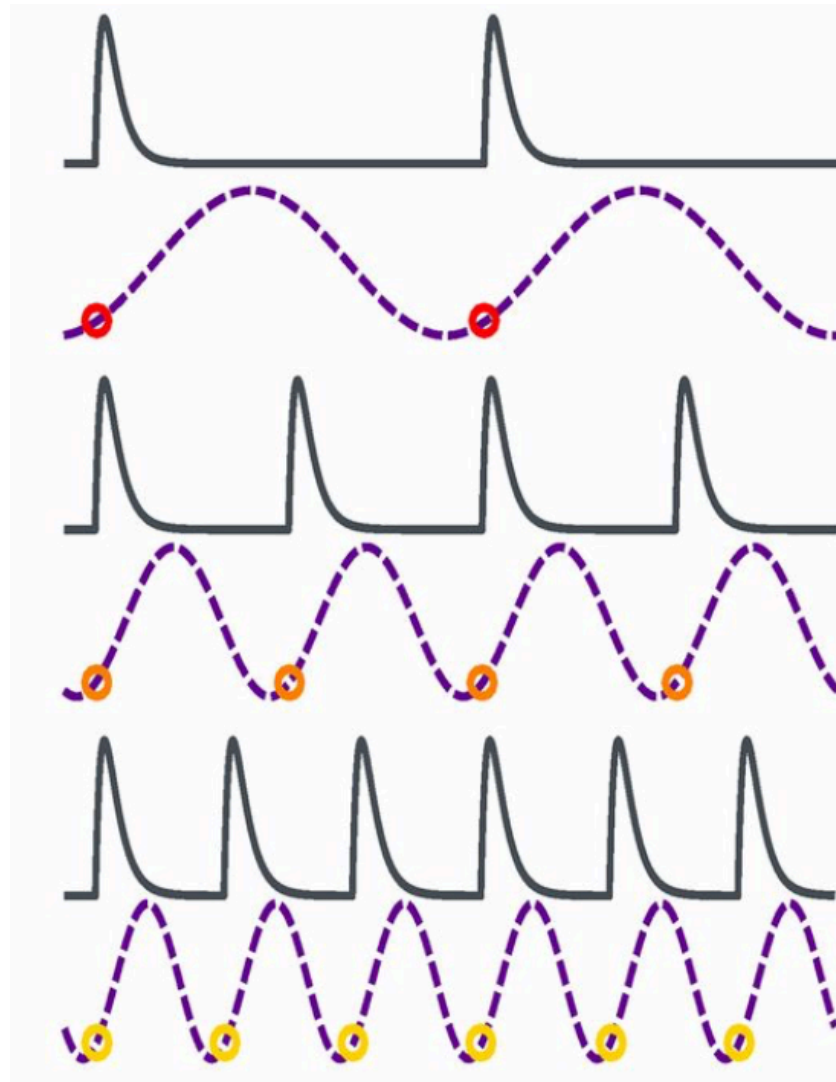
Metronome (♩=96)

Repeat indefinitely

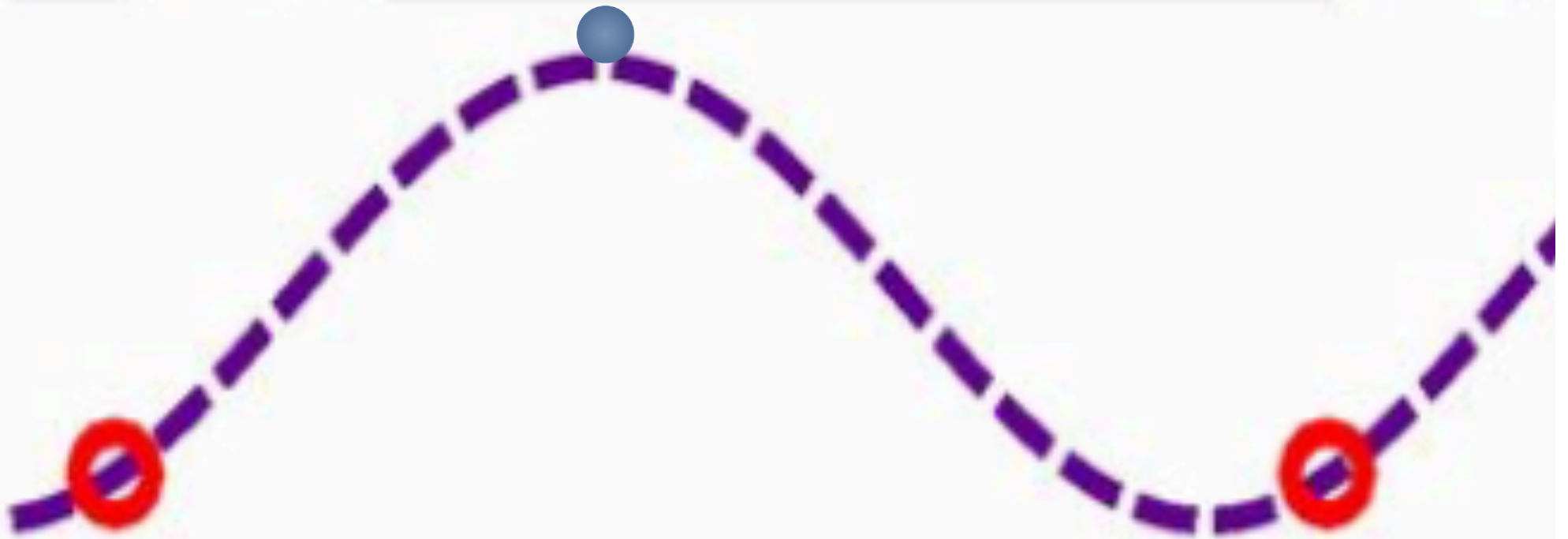
The musical notation consists of two staves. The top staff is labeled 'Metronome (♩=96)' and contains a series of quarter notes marked with an 'x' in the first four measures, followed by measures with a repeat sign (⋮). The bottom staff is labeled 'Play (swing or even feel)' and contains a rhythmic pattern of eighth notes in the first two measures, followed by measures with a repeat sign (⋮). The notation is in common time (C) and ends with a repeat sign (⋮).



Mingus, cited in Berliner 1996, p 96

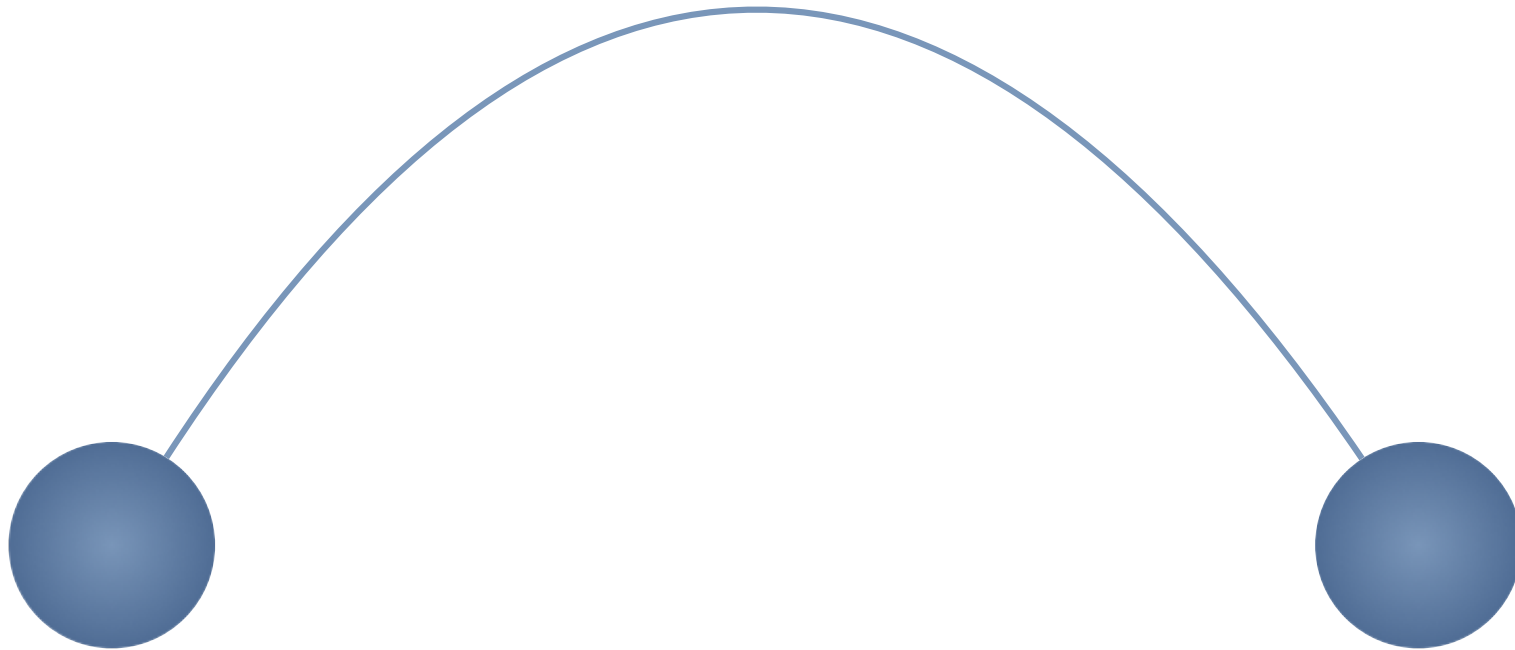


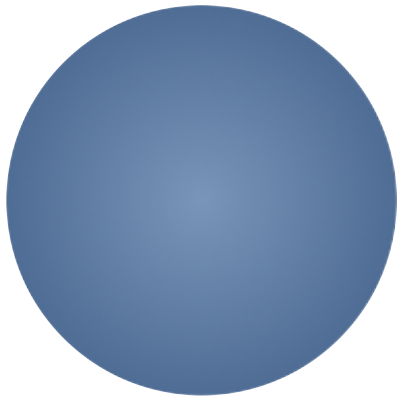
Doelling et. Al (2019)



Beat Negotiation

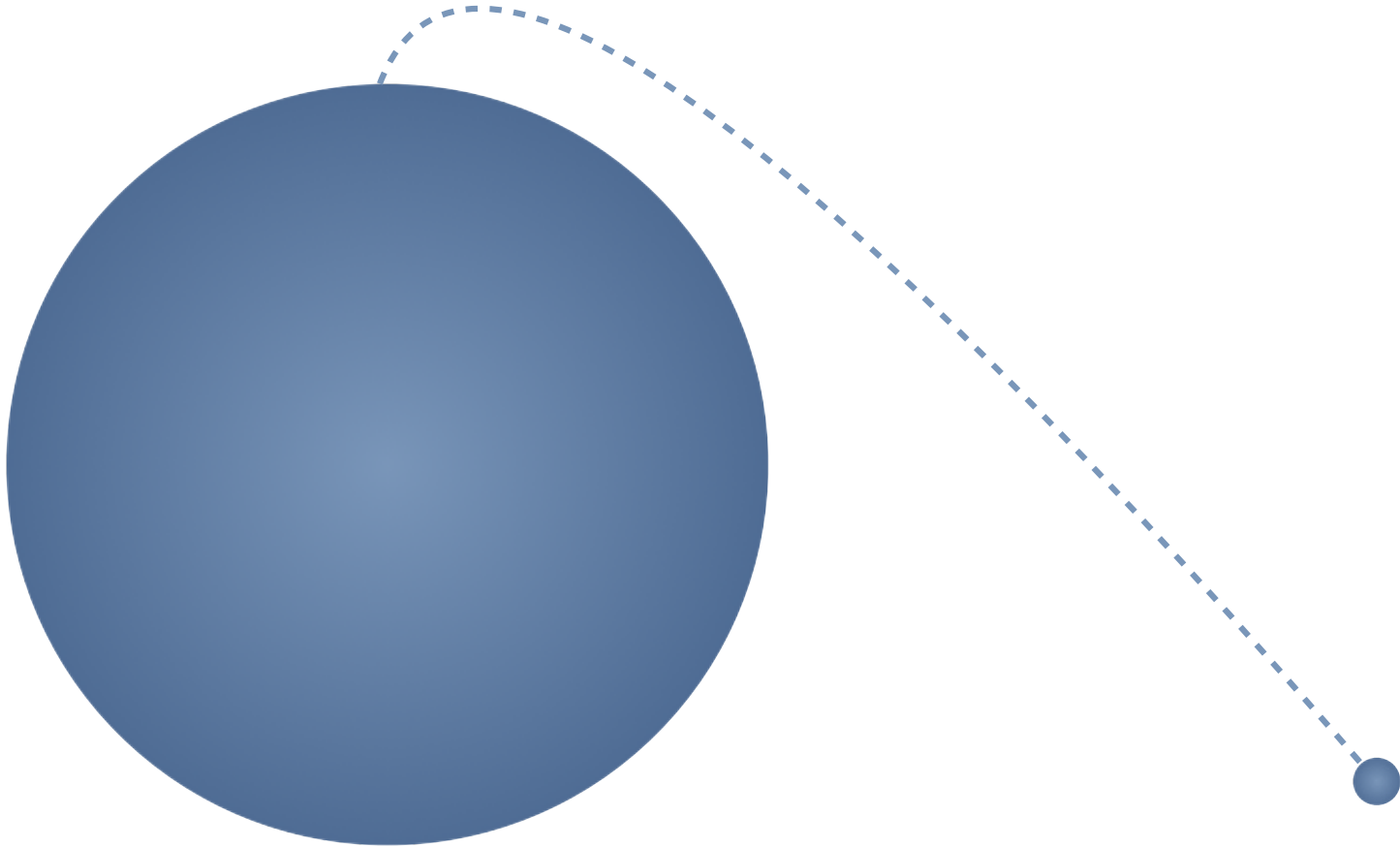
On Beat



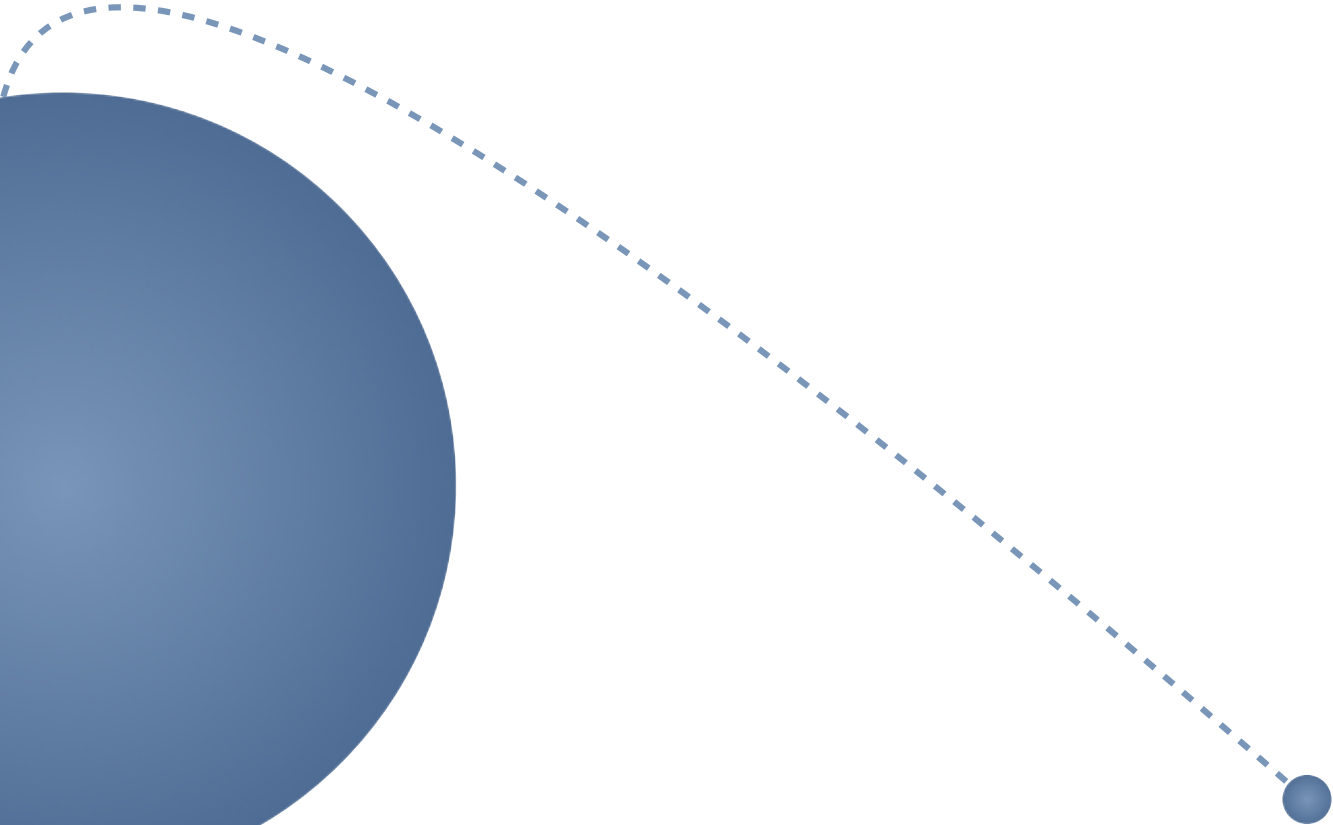
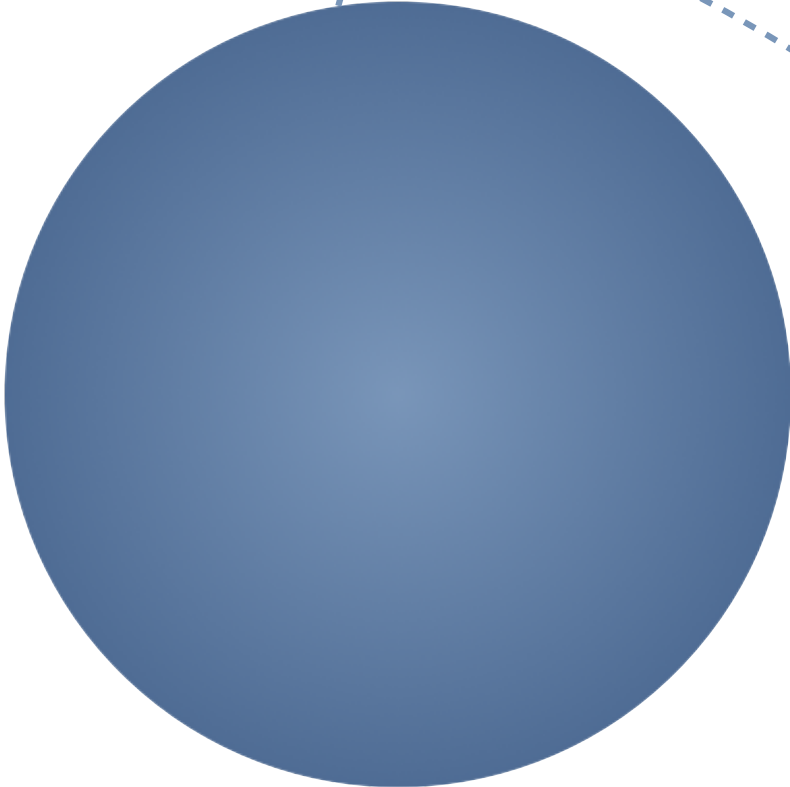


On Beat

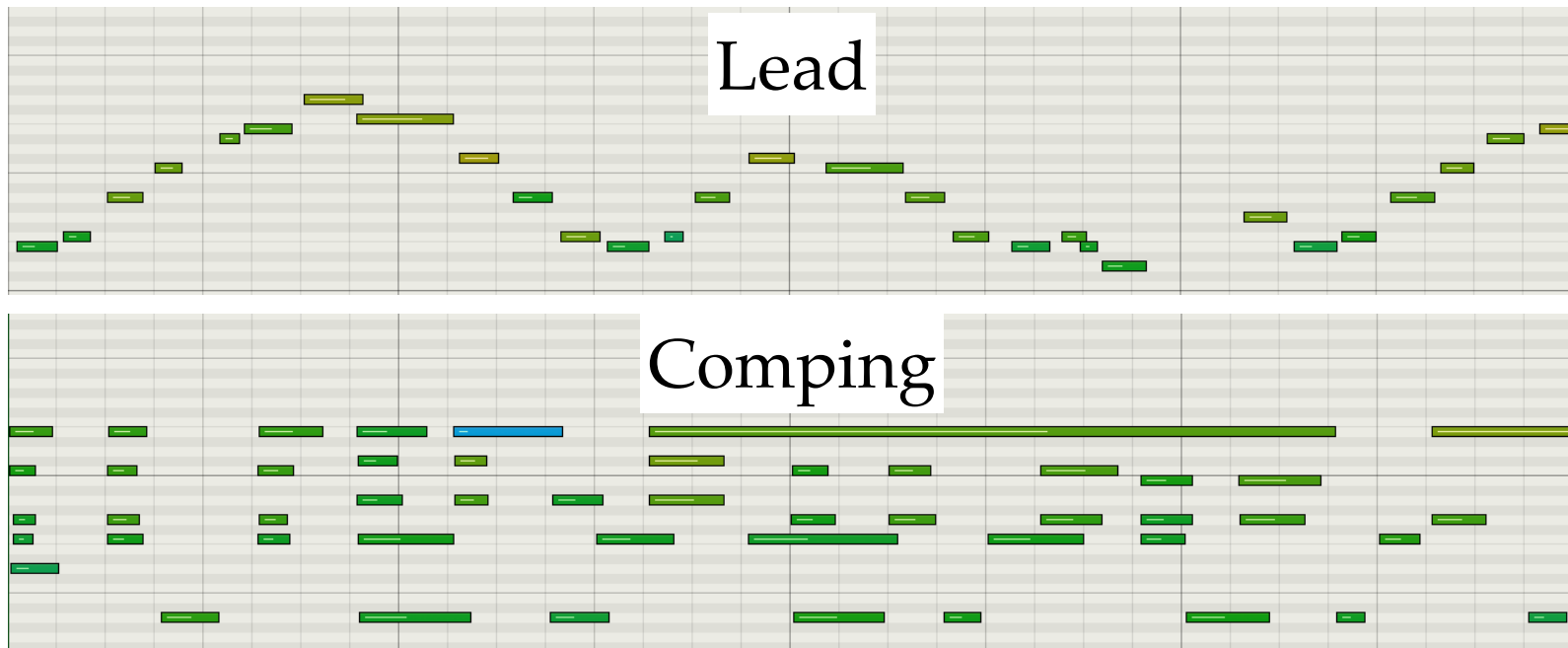




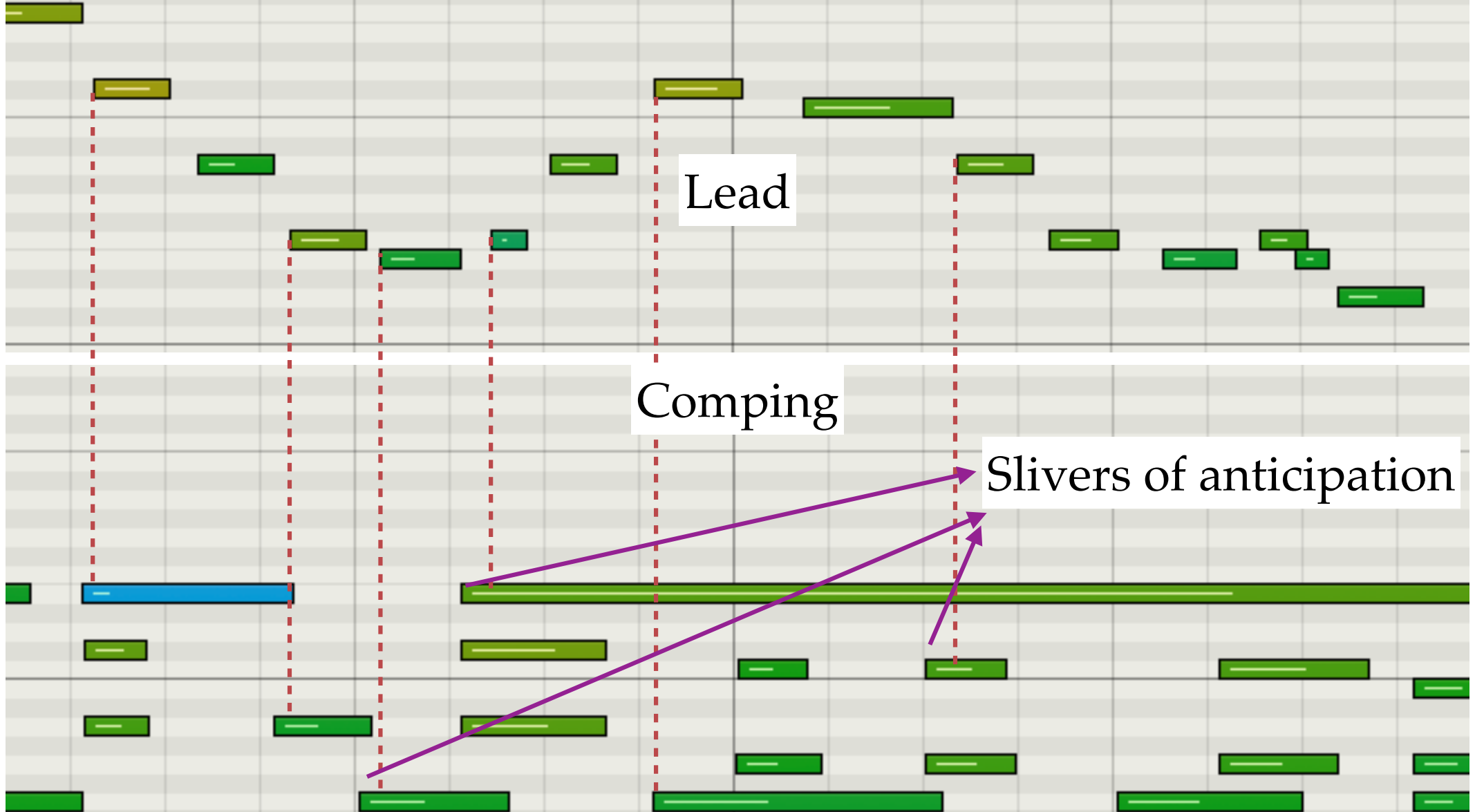
On Beat



Latency by ensemble role



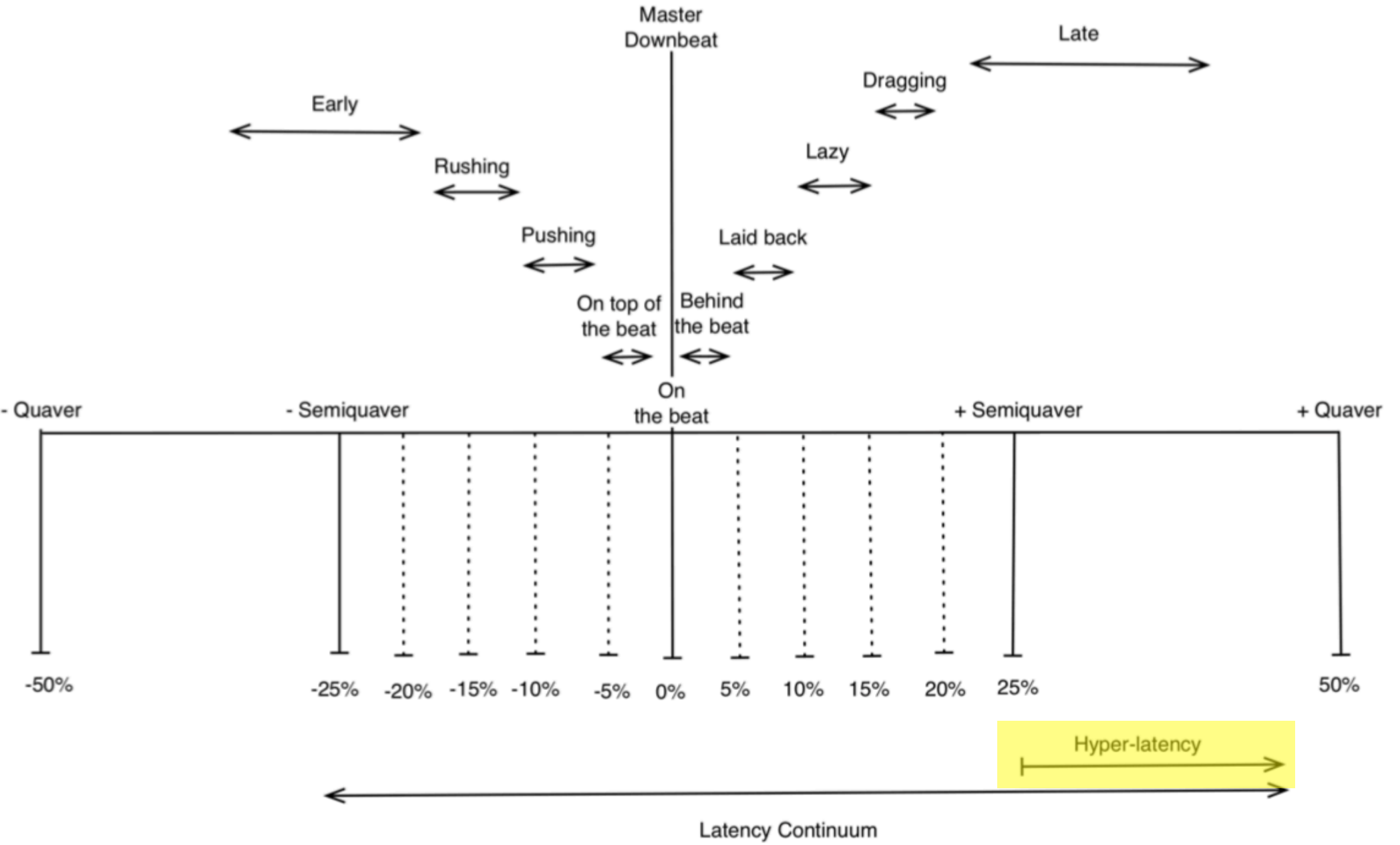
Steve Hamilton on *Seta Para Una* (Mermikides 2014)



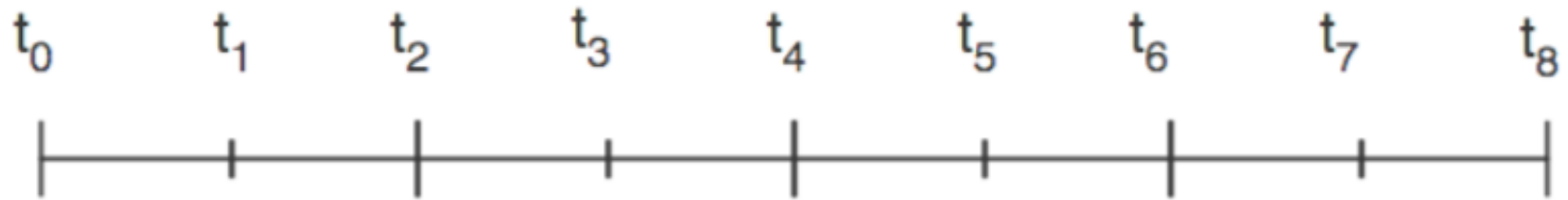
Lead

Comping

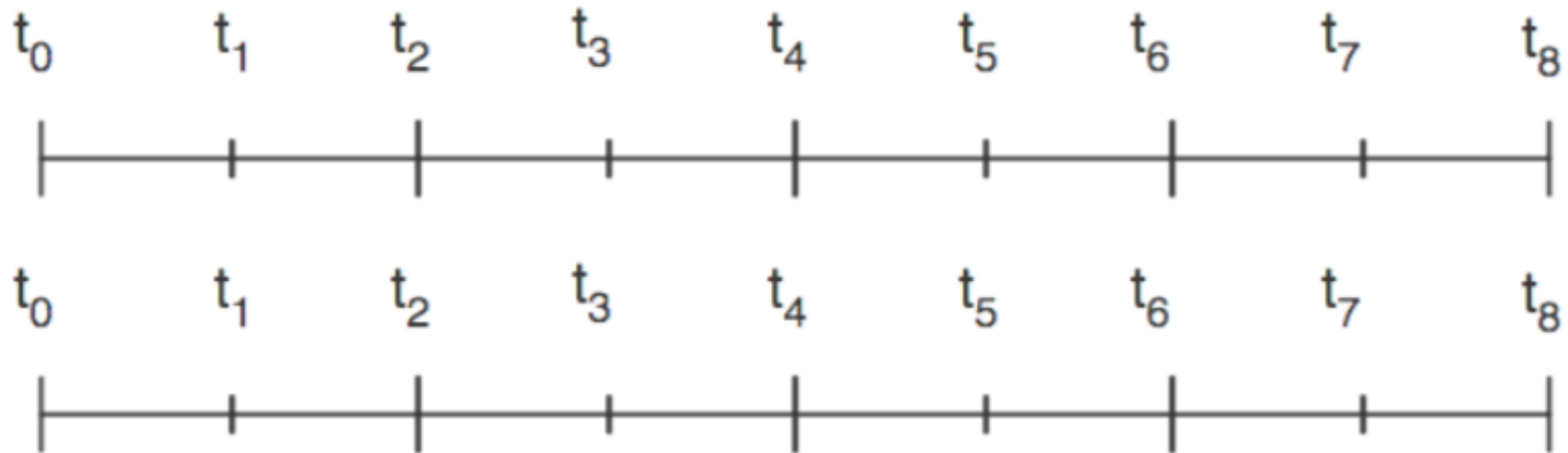
Slivers of anticipation



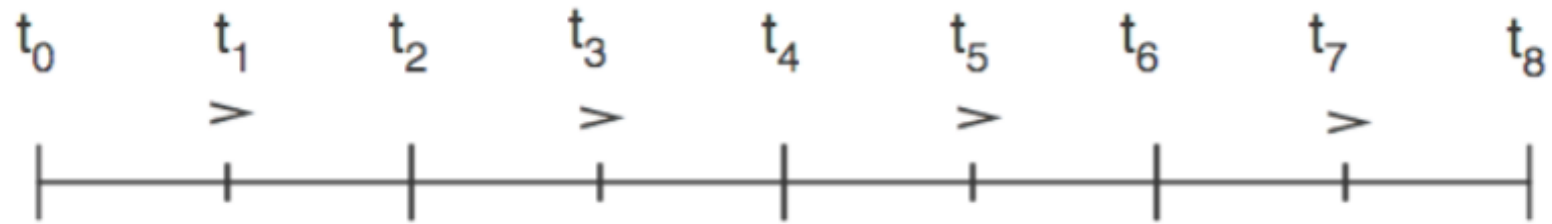
Hyperlatency



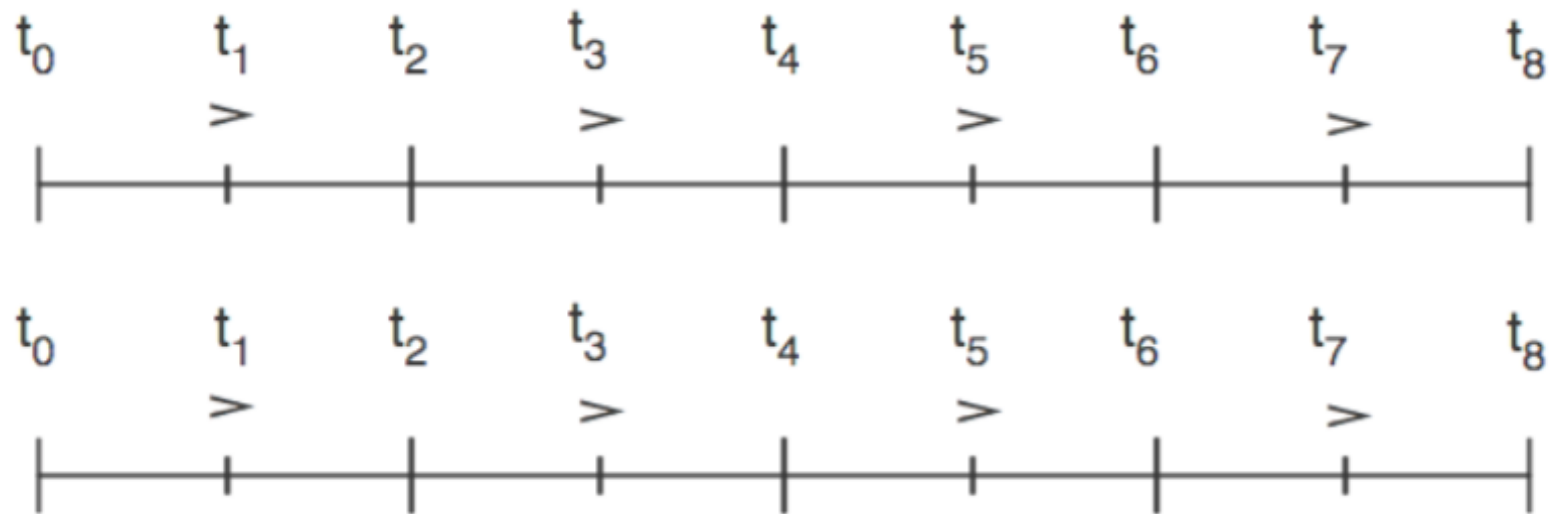
Hyperlatency



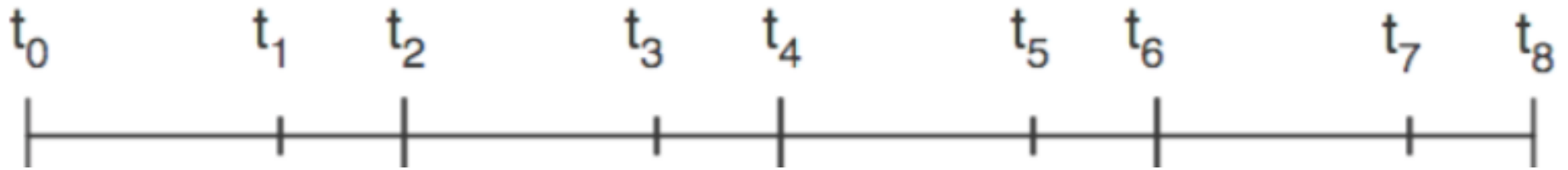
Hyperlatency



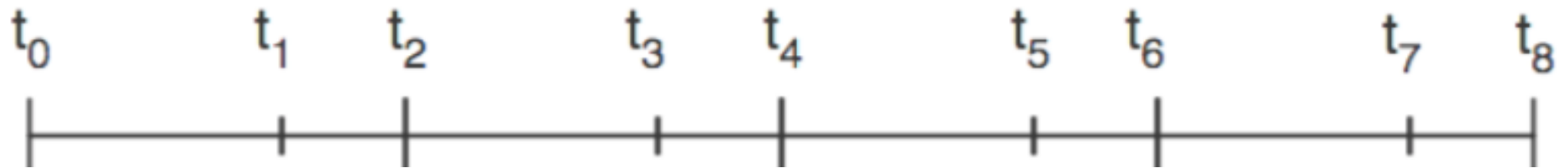
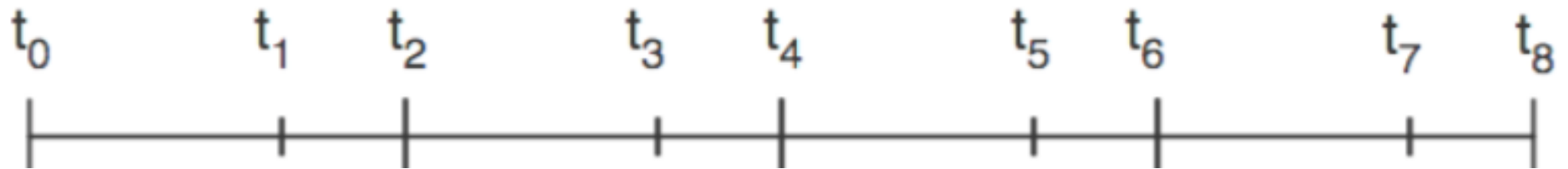
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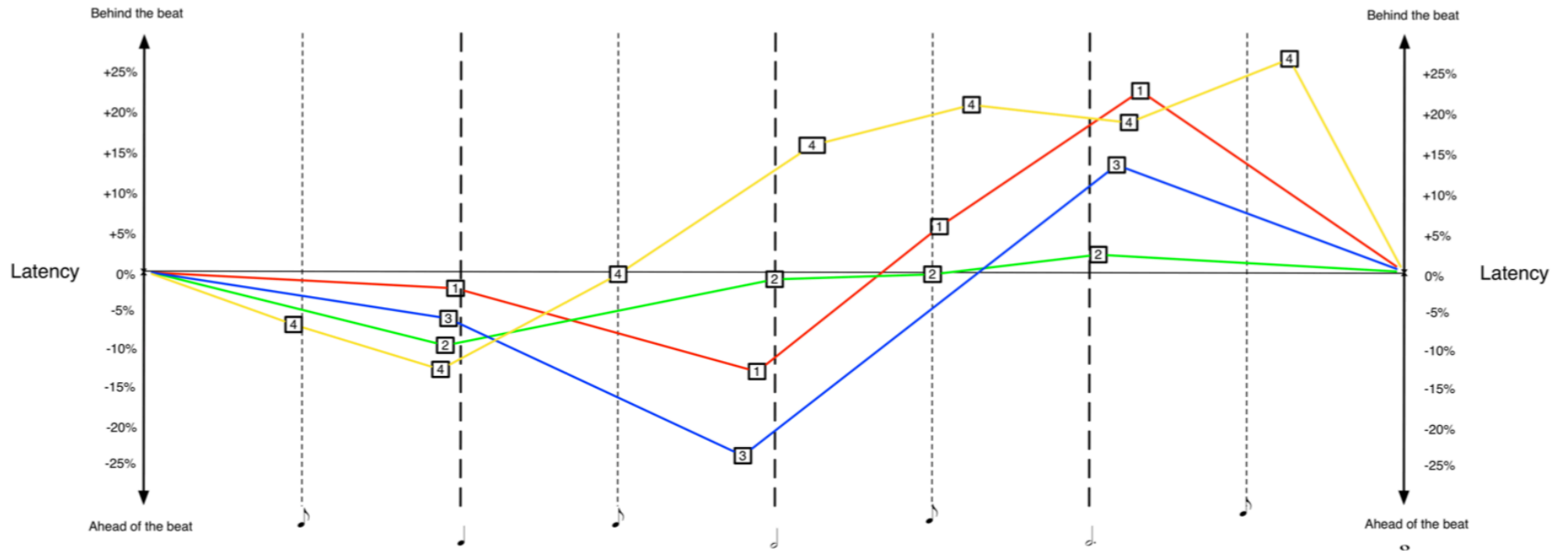
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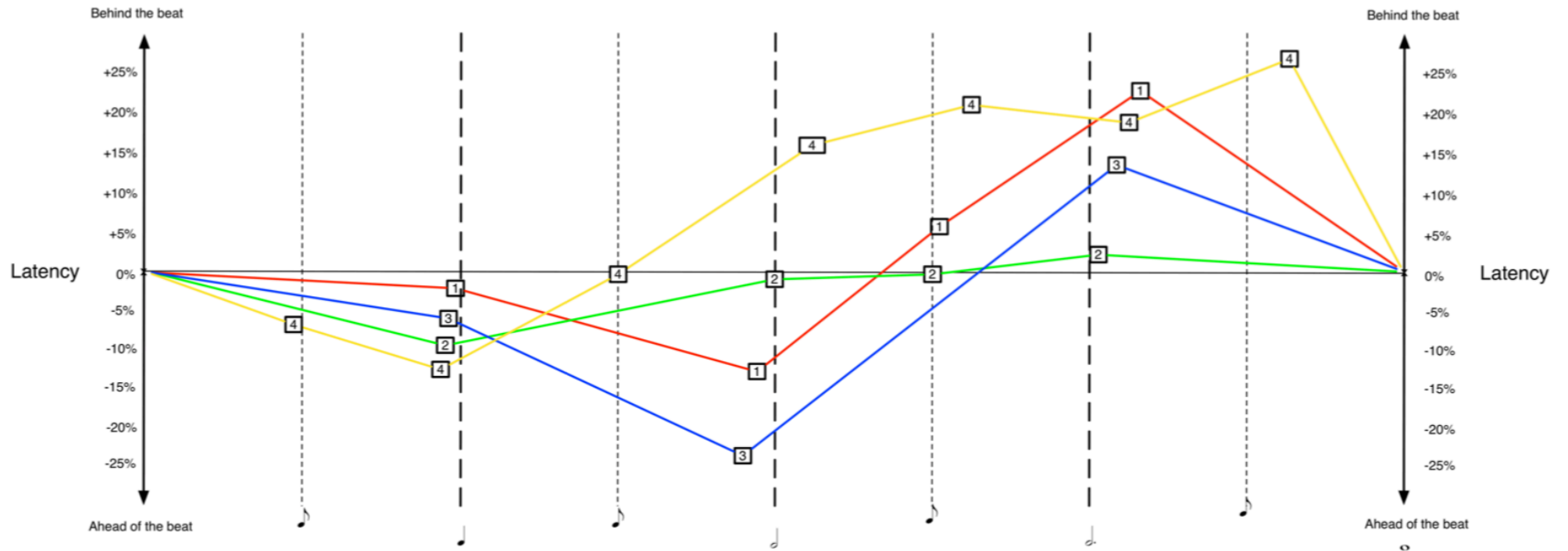
Hyperlatency



Dynamic Latency



Dynamic Latency





Welcome To A Prayer (Take One, Chorus One)

Copyright © 1994 Kitai Music ©2007 Pat Martino

Transcribed & analysed Milton Mermikides ©2008

♩ = 47.5 bpm

↓ ↓ ← ⊥ = primary & auxiliary melodic interpretation & anticipation

Lead Sheet

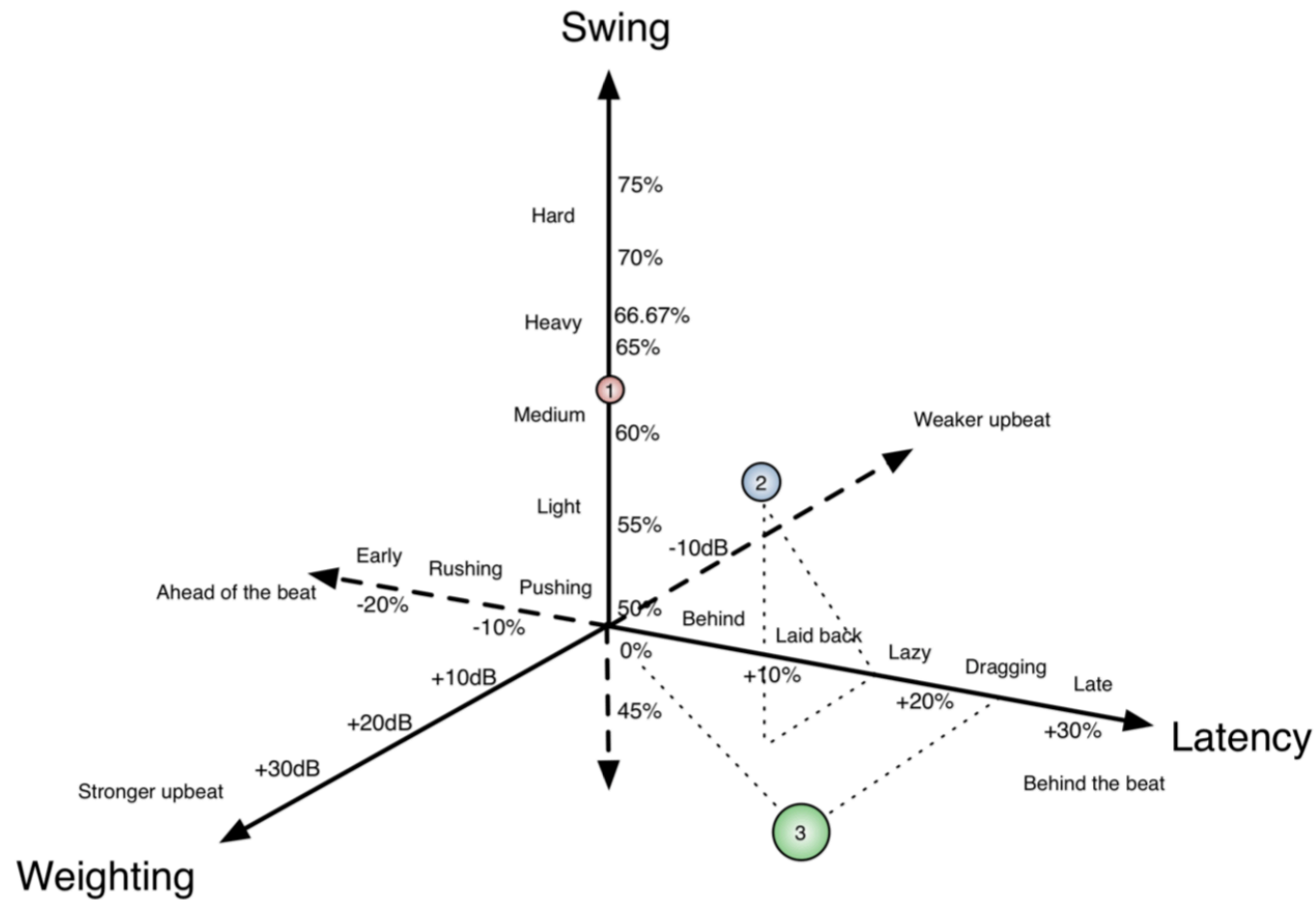
Take One

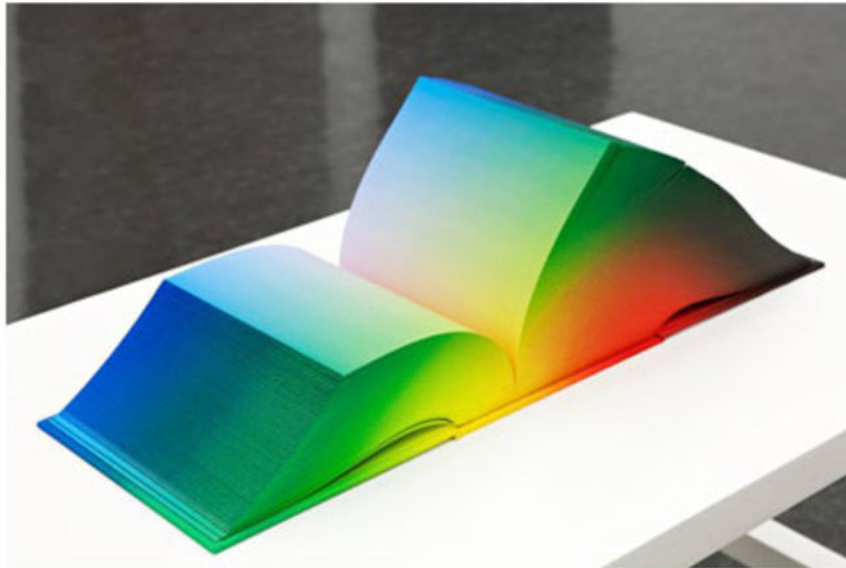
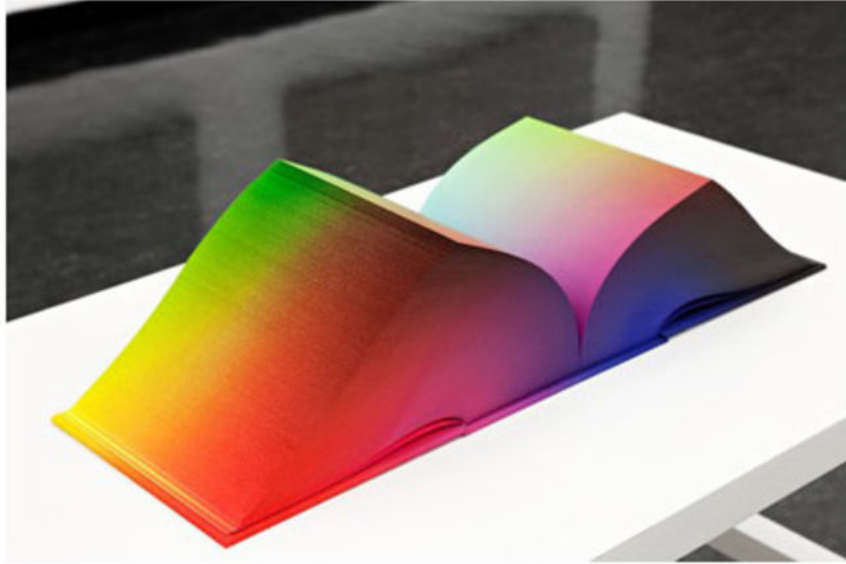
Latency

Take One Tab

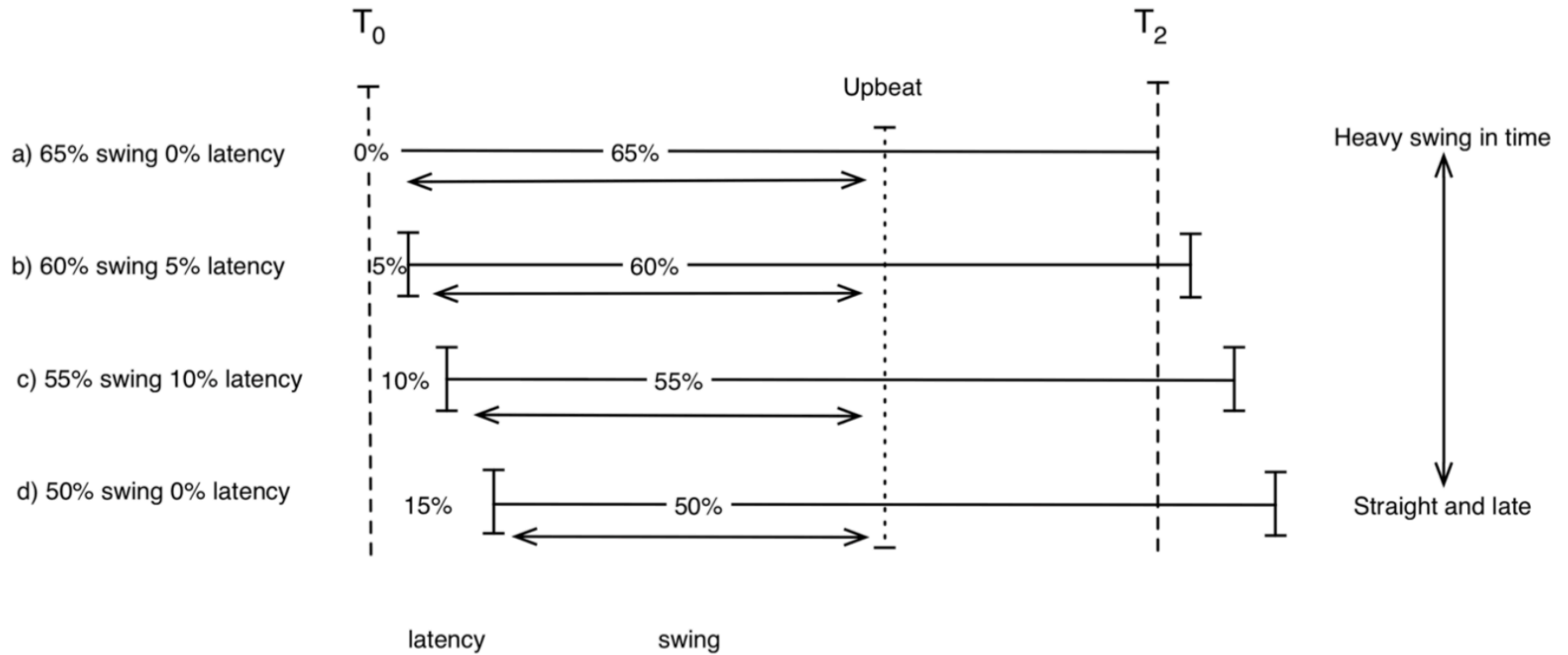
The image displays a musical score for the piece "Welcome To A Prayer" (Take One, Chorus One). It is set in 4/4 time with a tempo of 47.5 bpm. The score is divided into four horizontal sections: Lead Sheet, Take One, Latency, and Take One Tab. The Lead Sheet shows the original notation with chords C7b9, Fmi9, Ab/Bb, Ebmi9, and Ab7(#5). The Take One section shows a performance with various annotations, including fingerings (1, 2) and arrows indicating melodic interpretation and anticipation. The Latency section shows a blue line graph representing timing deviations, with markers for "behind" (+25%) and "ahead" (-25%). The Take One Tab section shows the guitar tablature for the performance, with fret numbers and techniques like bends and slides.

Feel Pantone

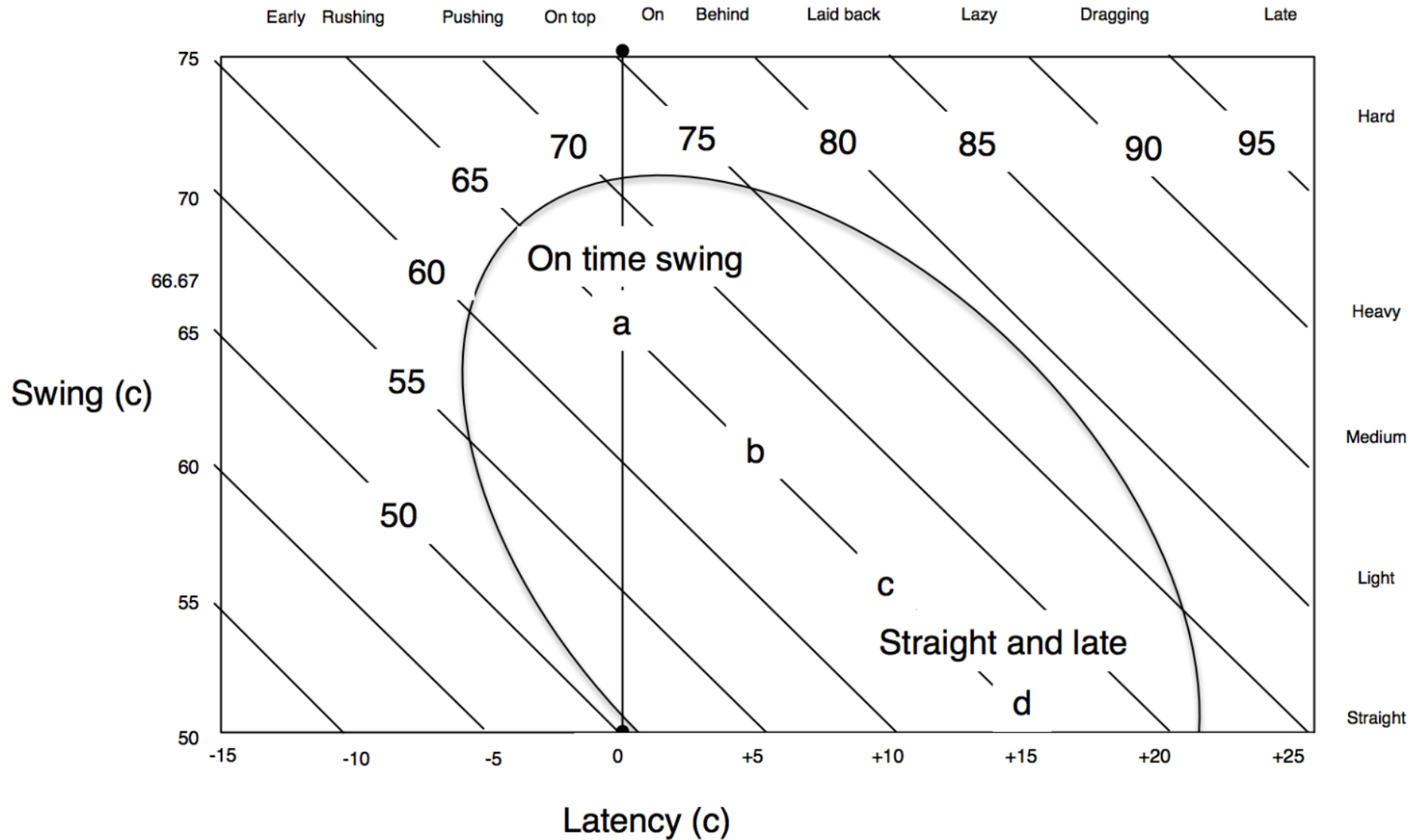


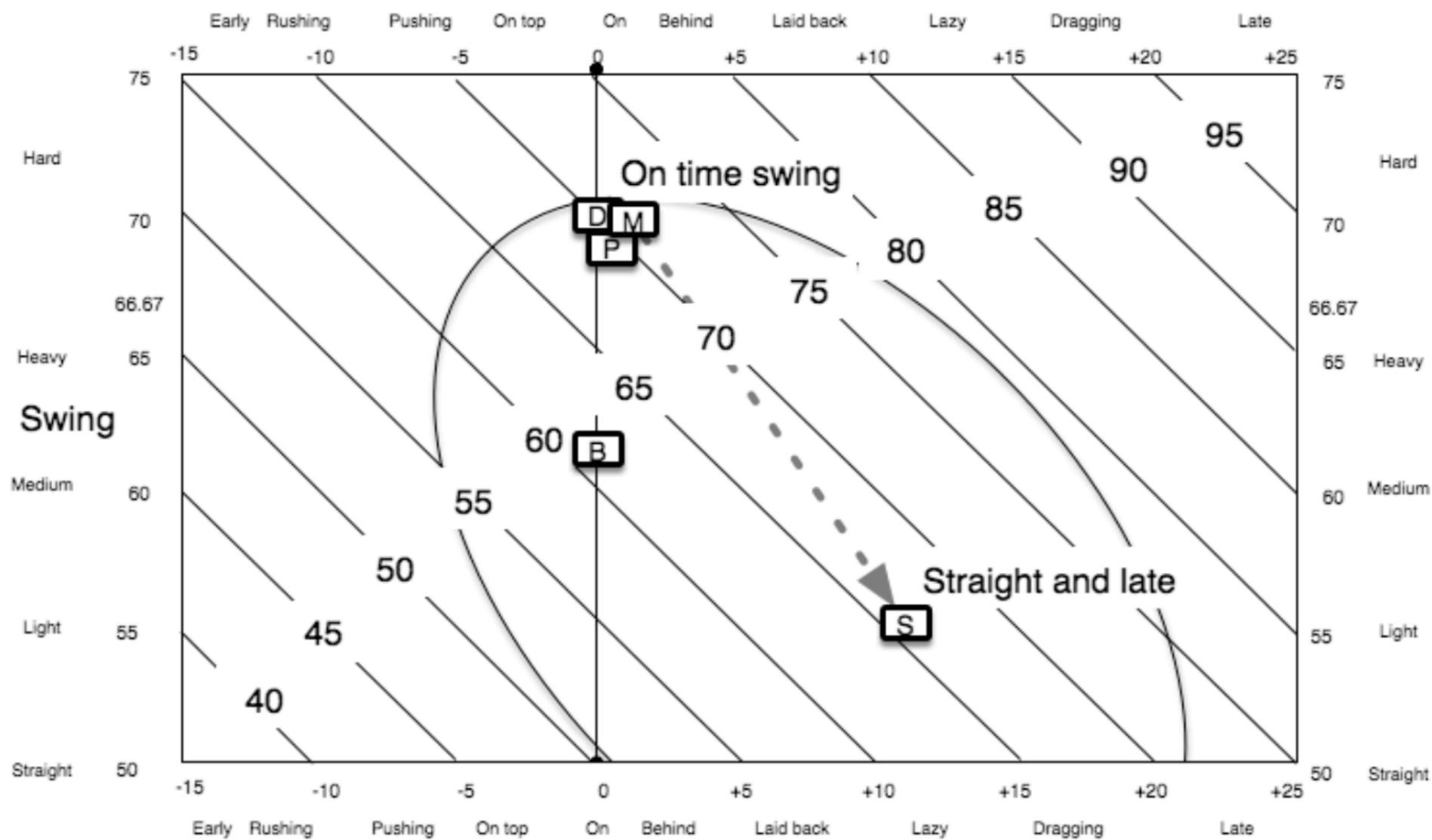


Swing and Latency

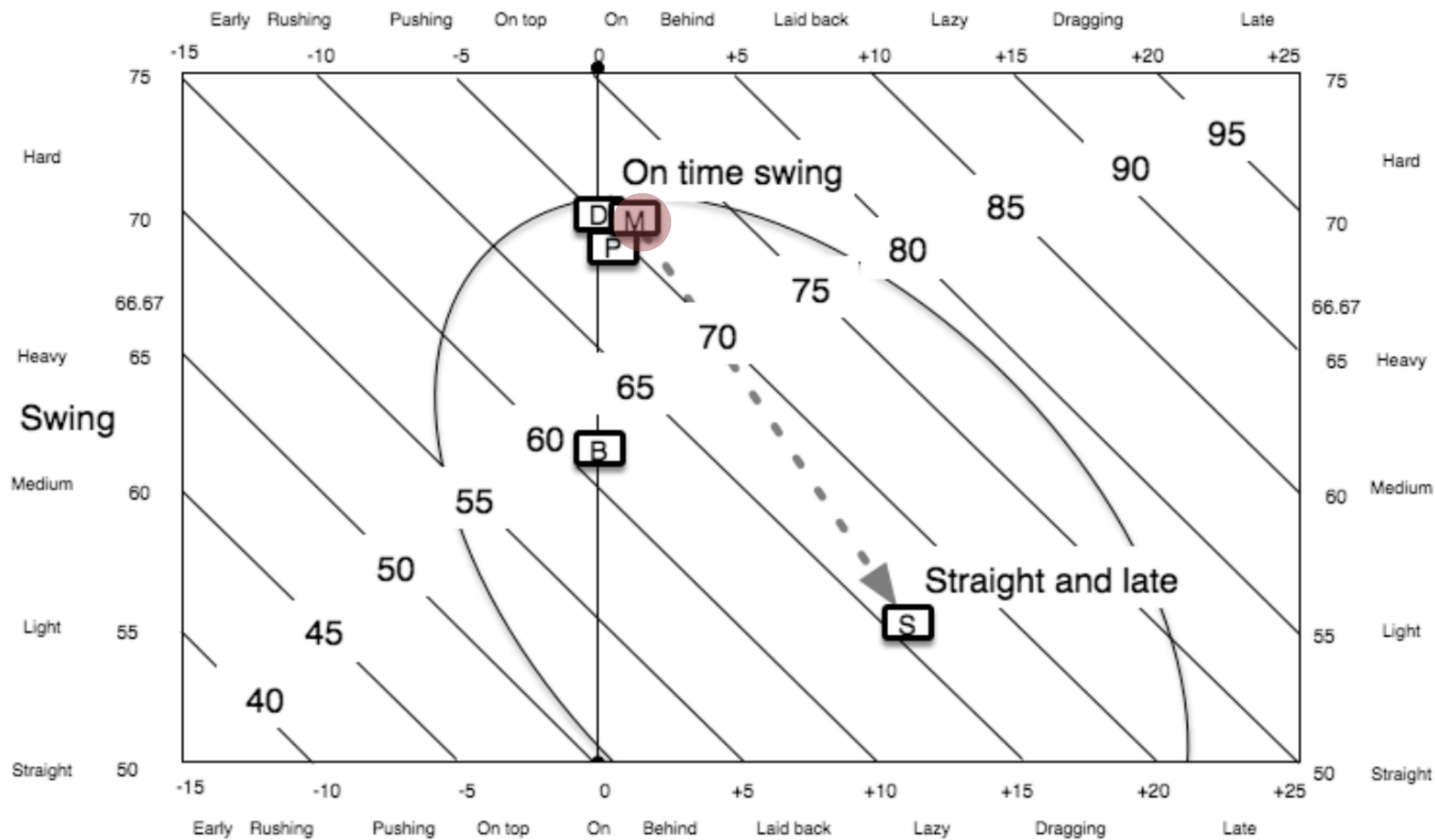


Swing and Latency





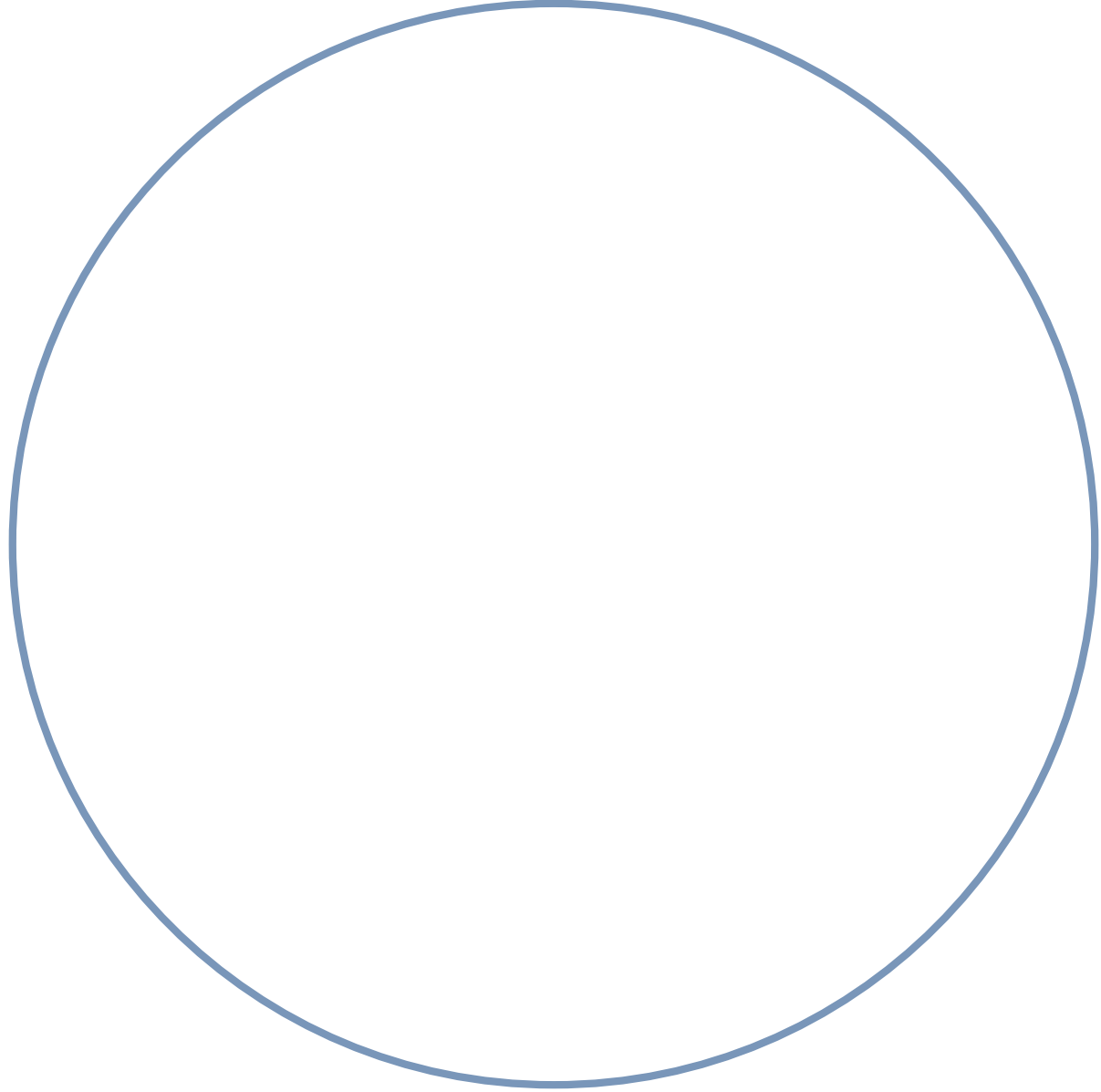
Latency



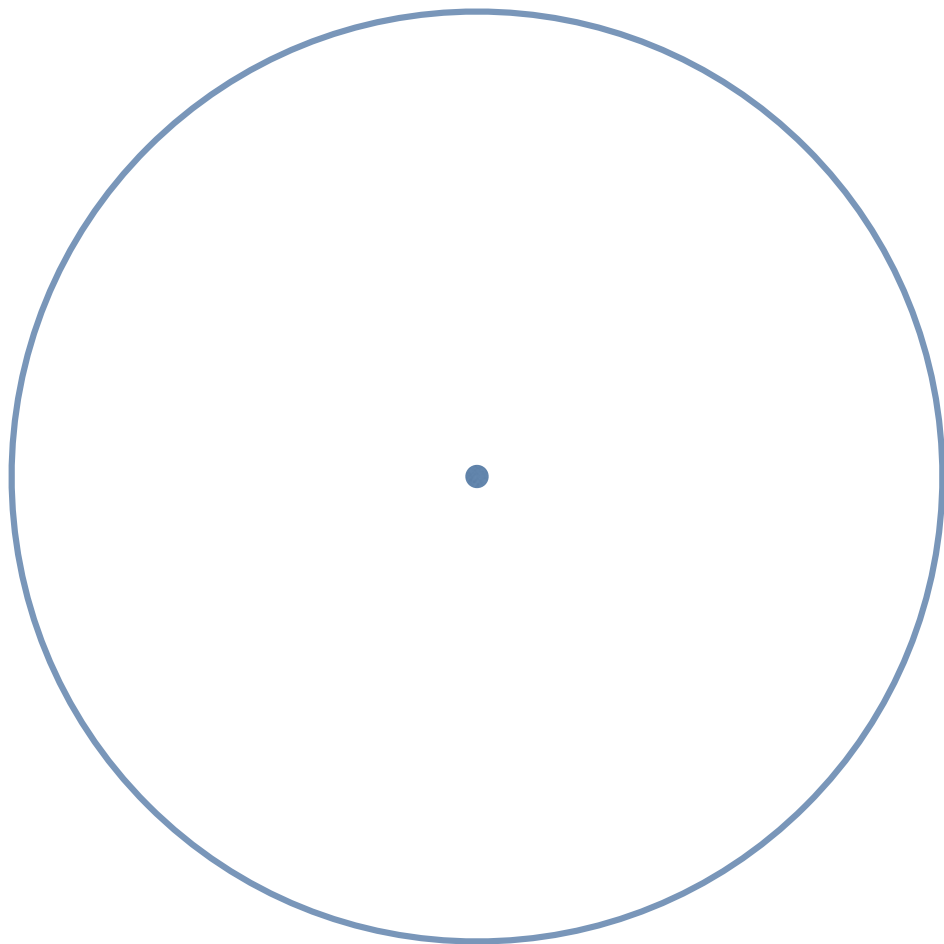
Latency

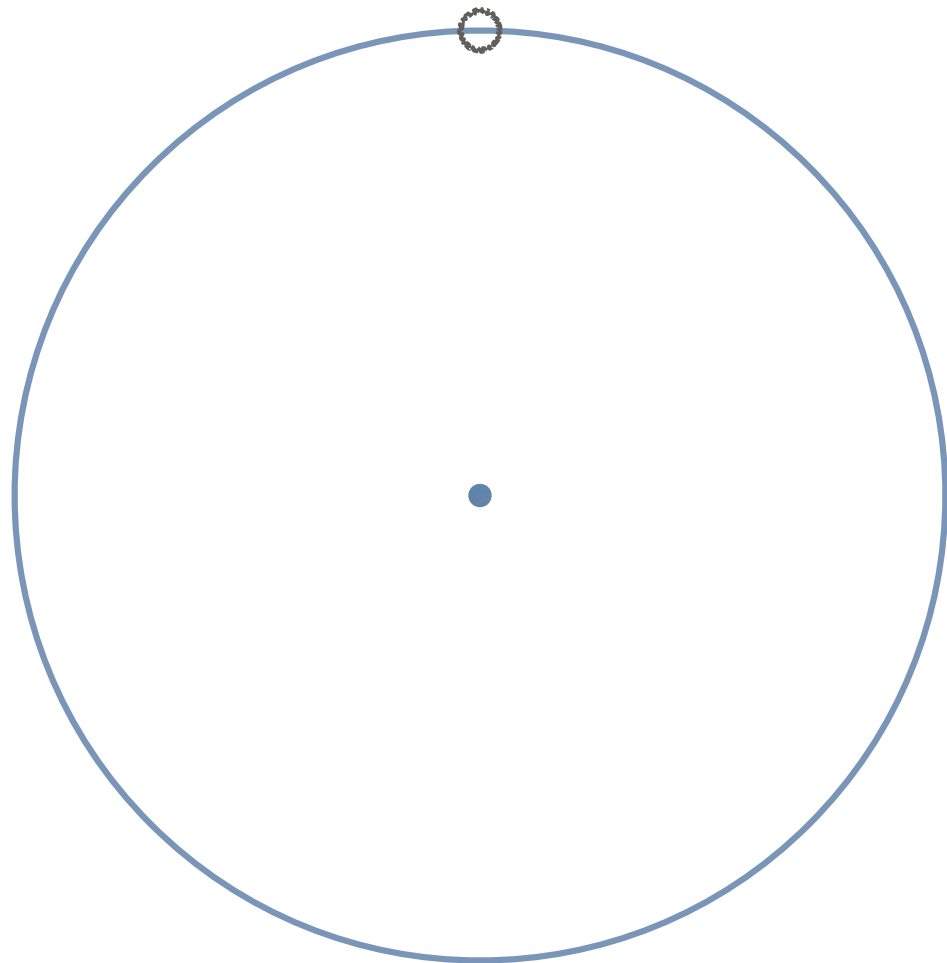
Notating Time

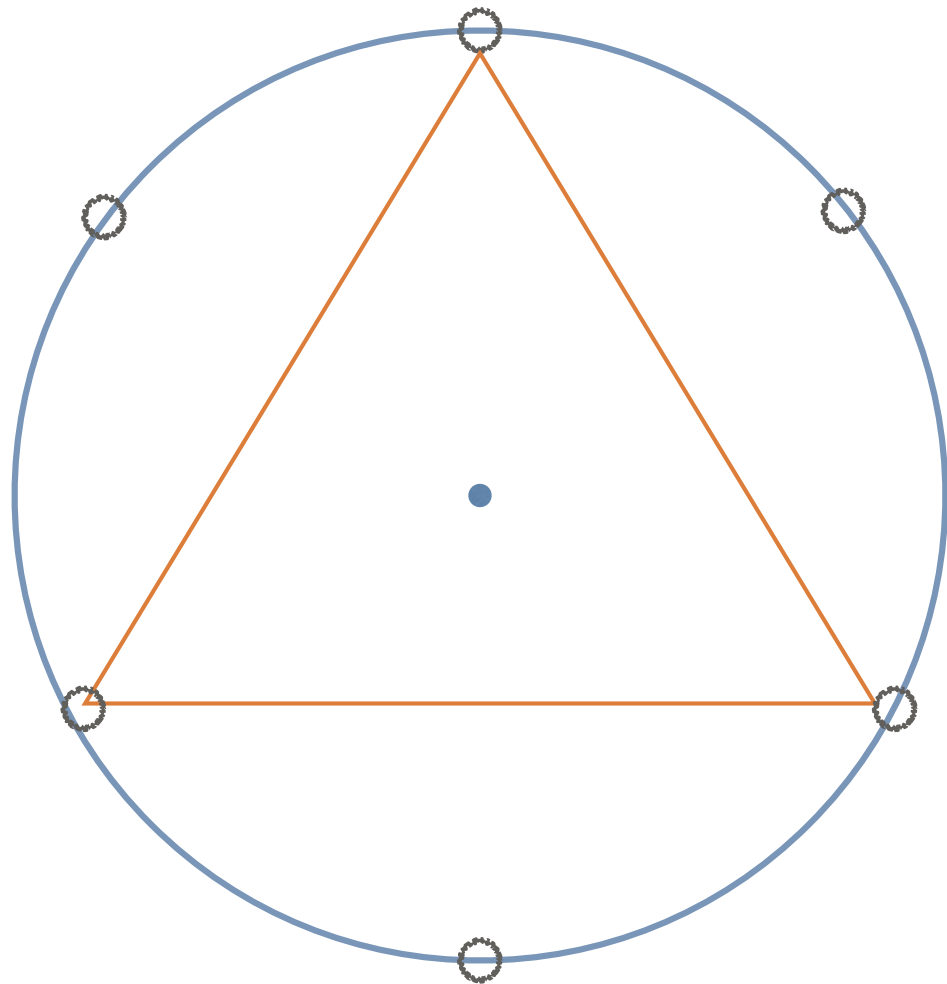


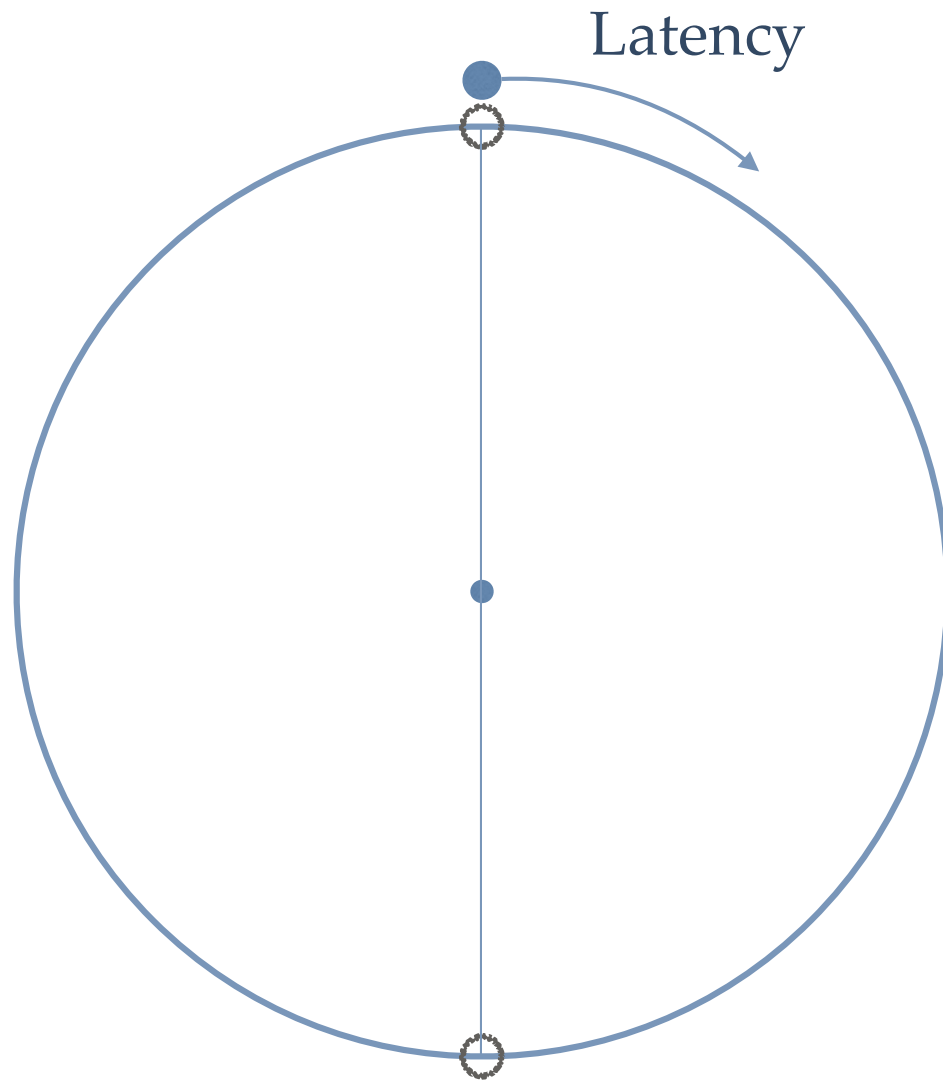


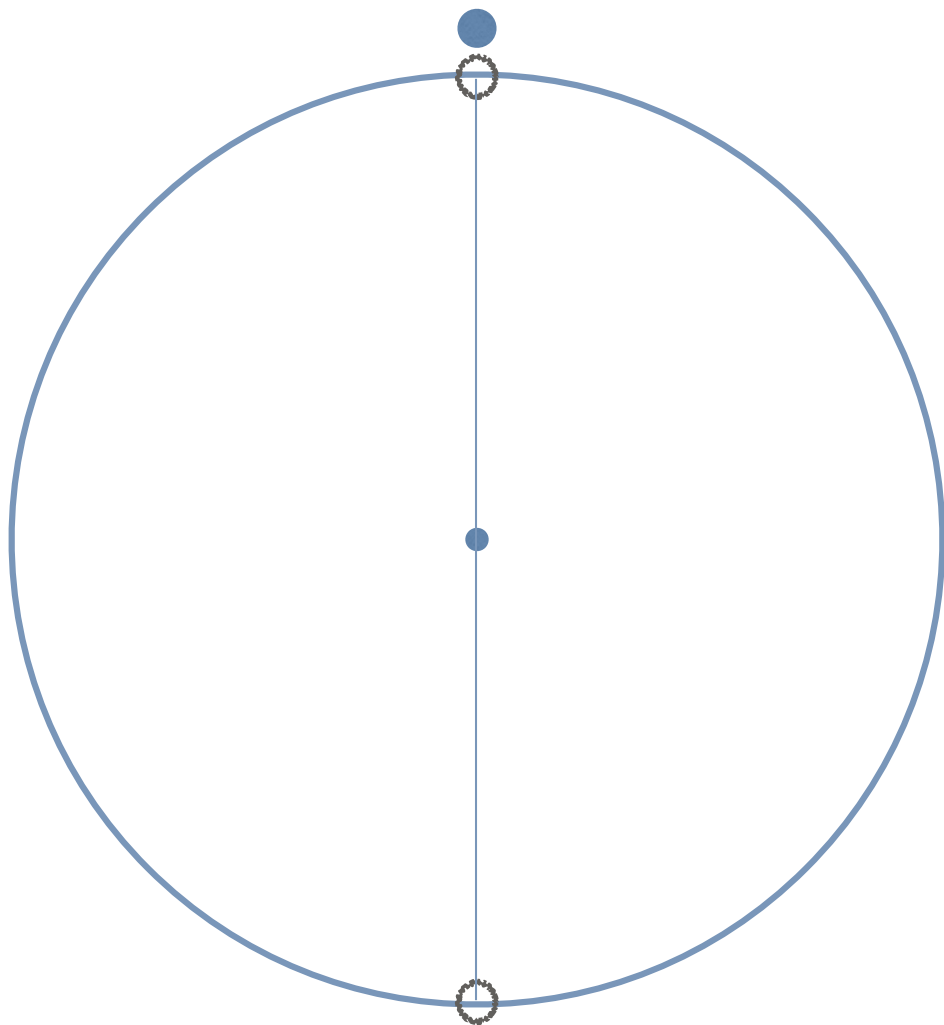
I use the term “**rotary perception.**” If you get a mental picture of the **beat existing within a circle** you’re more free to improvise. People used to think the notes had to fall on the centre of the beats in the bar at intervals like a metronome, with three or four men in the rhythm section accenting the same pulse. That’s like parade music or dance music. But imagine a circle surrounding each beat- each guy can play his **notes anywhere in that circle** and it gives him a feeling he has more space. The notes fall anywhere inside the circle but the original feeling for the beat doesn’t change.

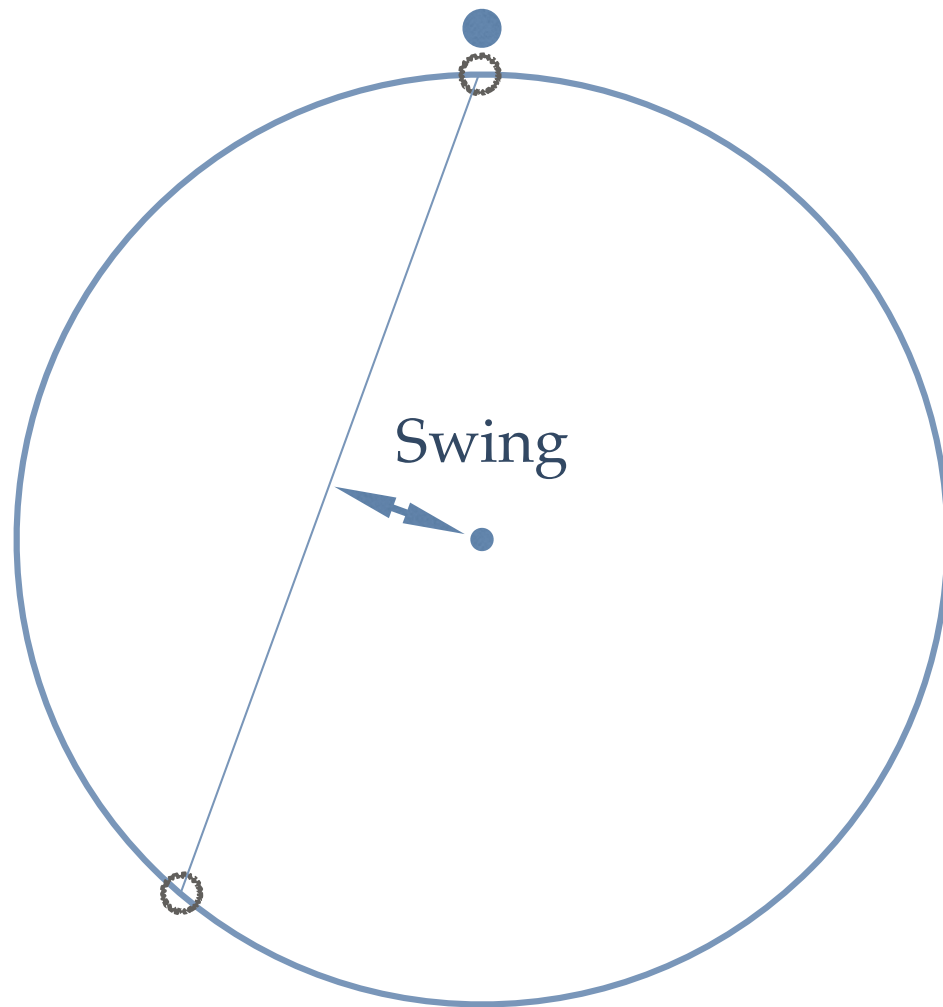


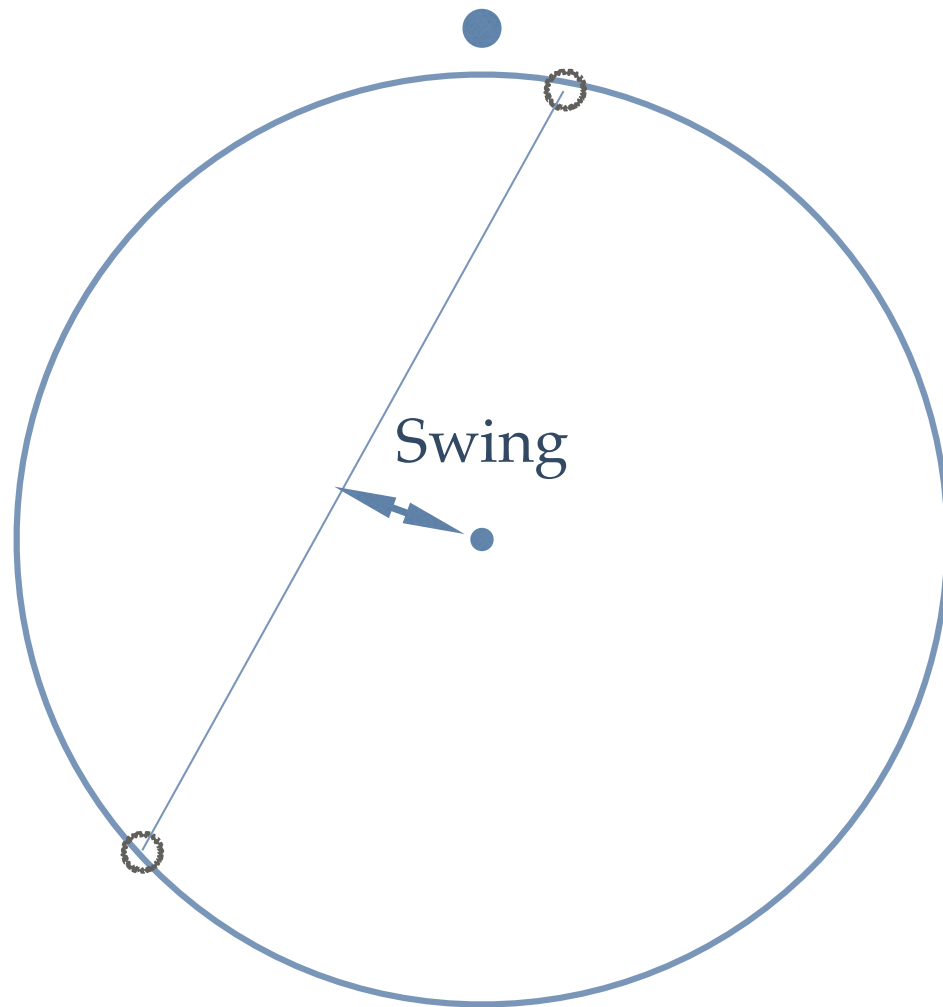


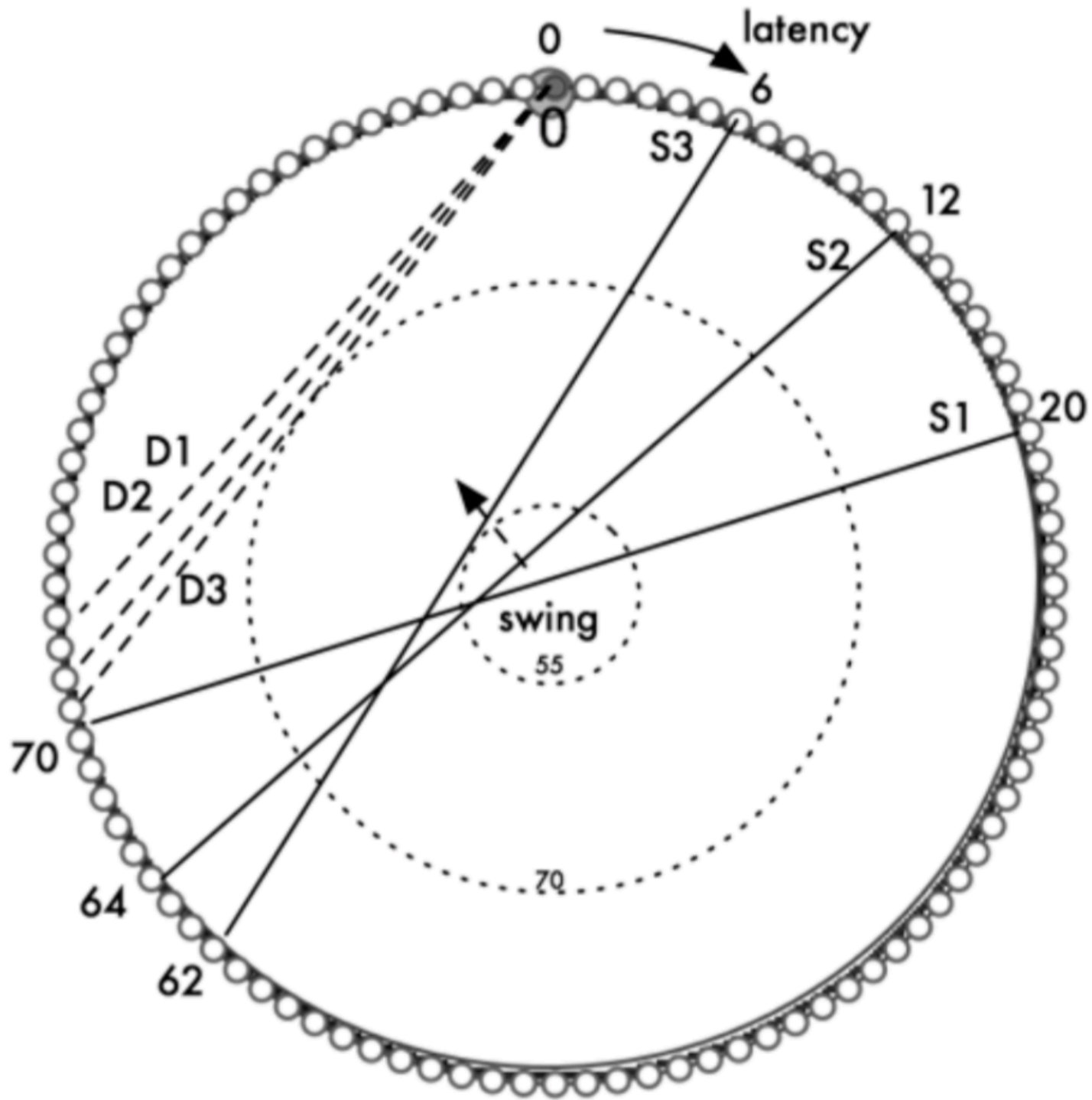






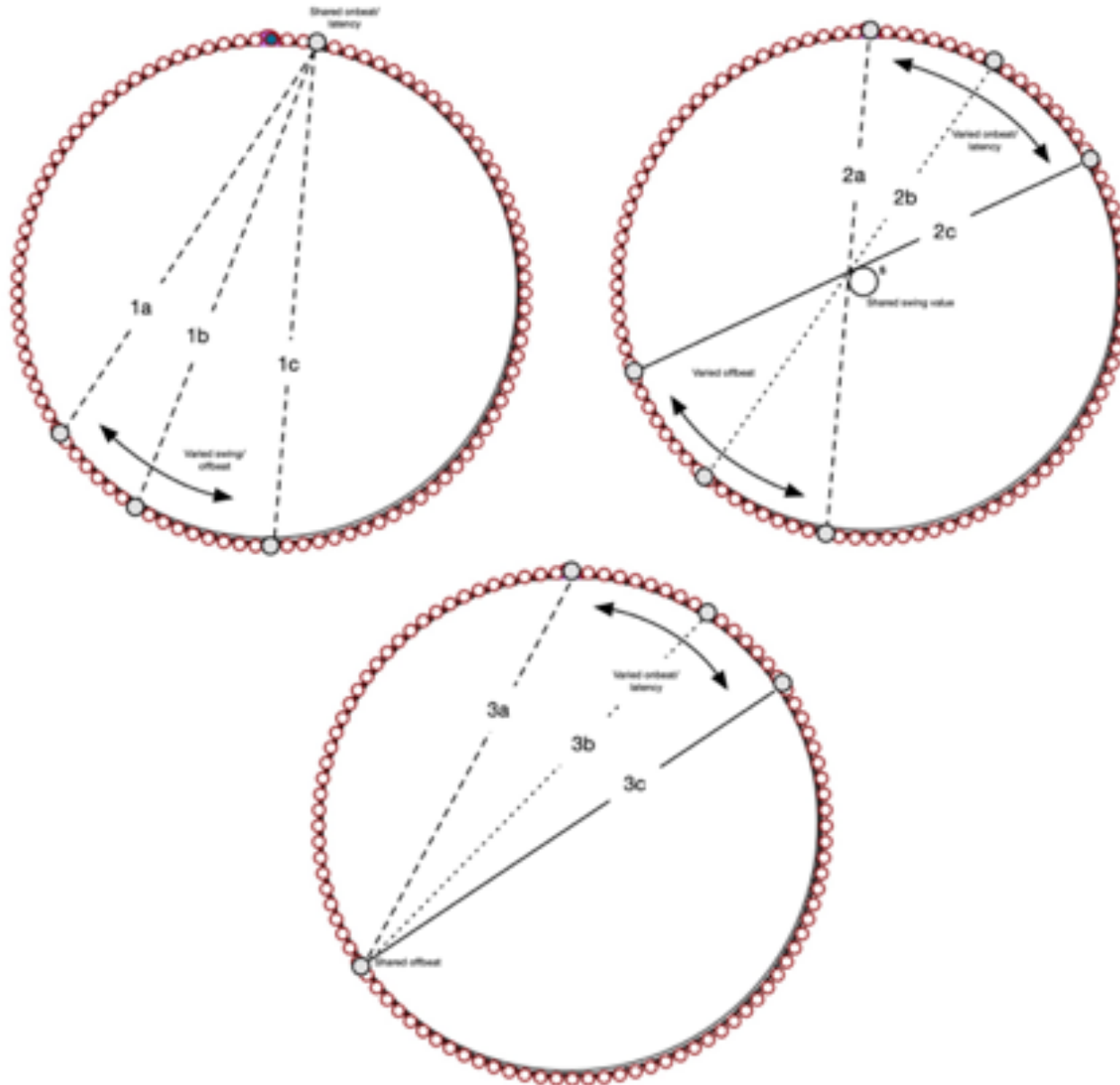




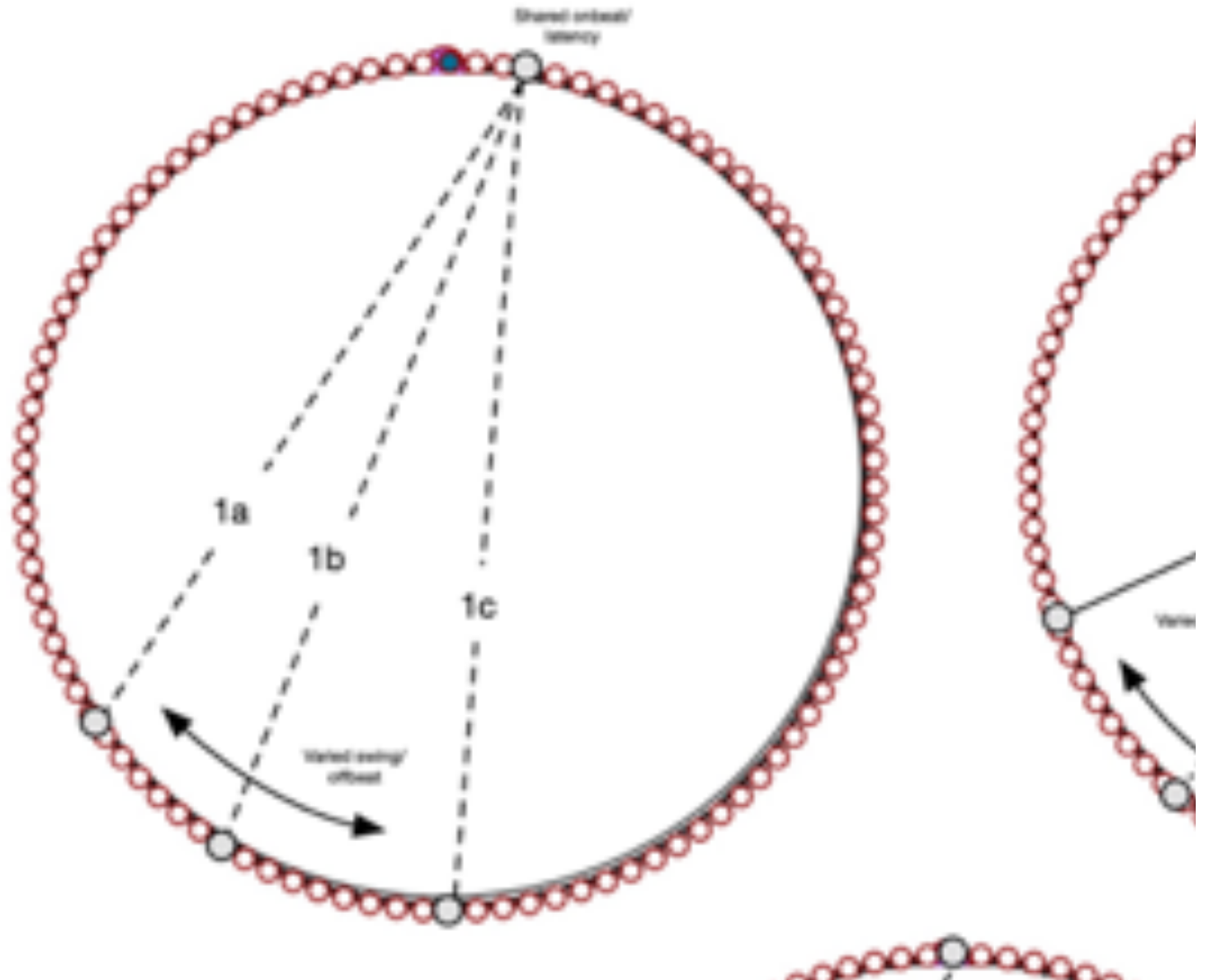


D1-3 Drums
 (phrases 1-3)
 S1-3 Saxophone
 (phrases 1-3)

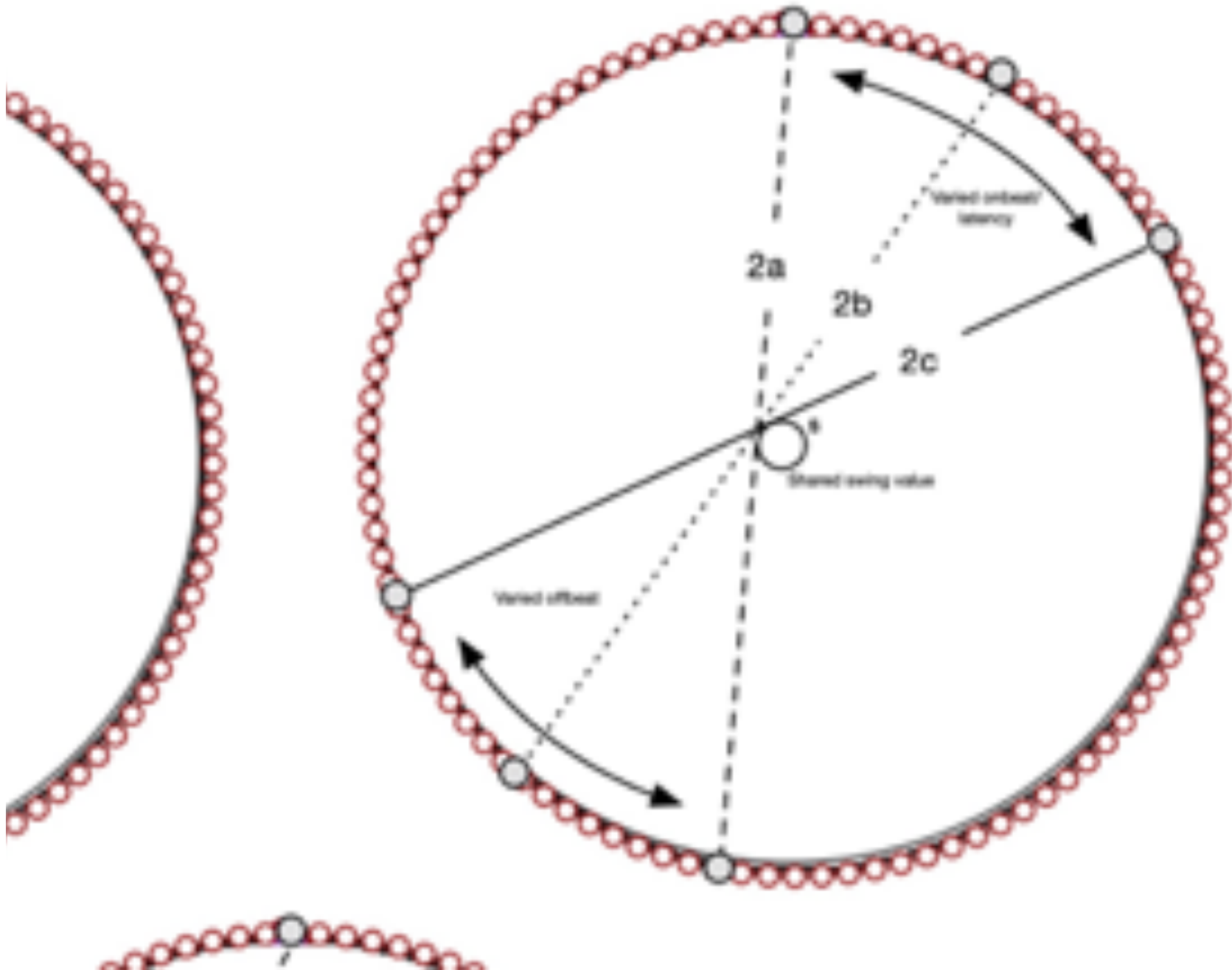
Time Feel Modulations

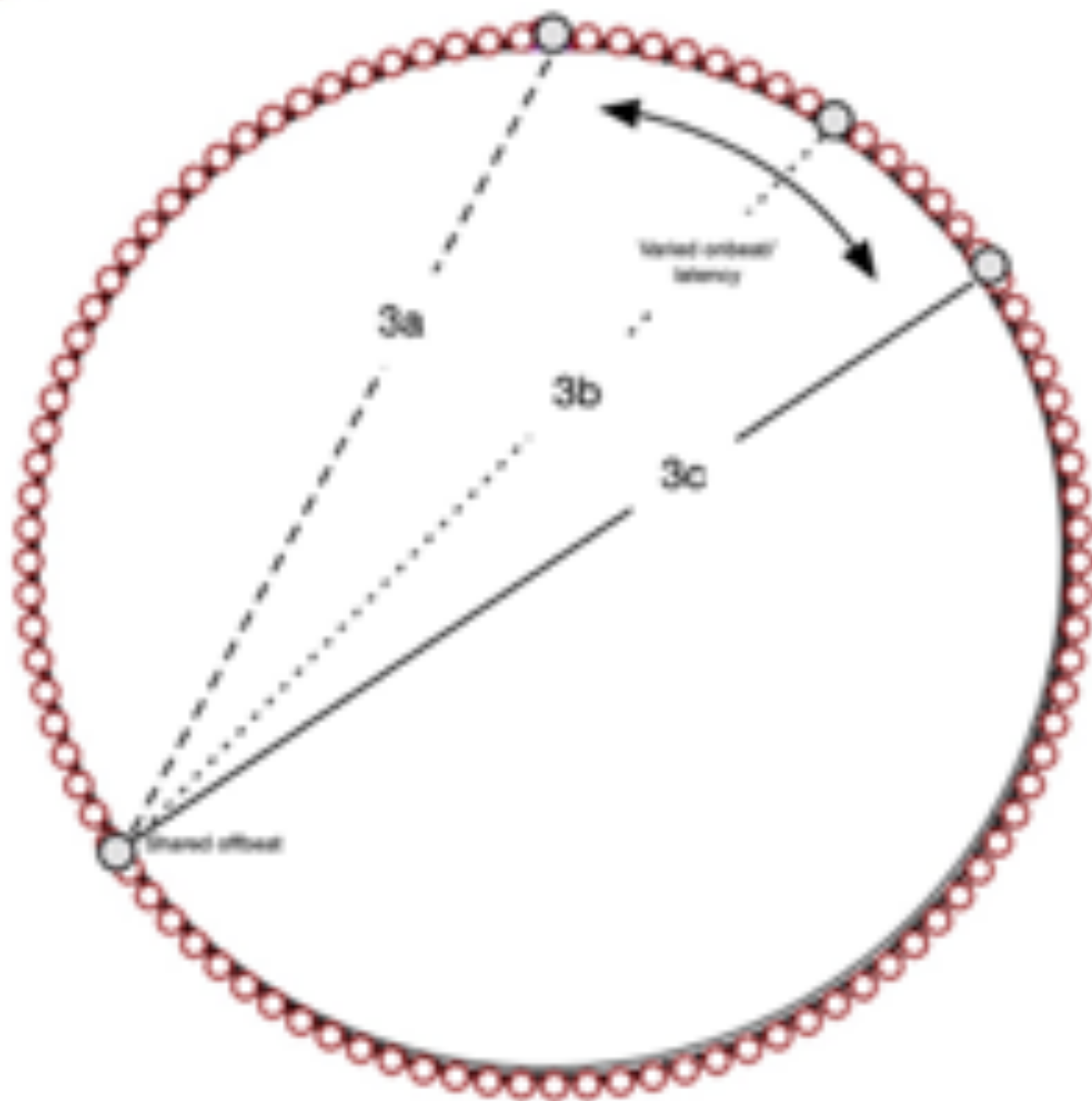
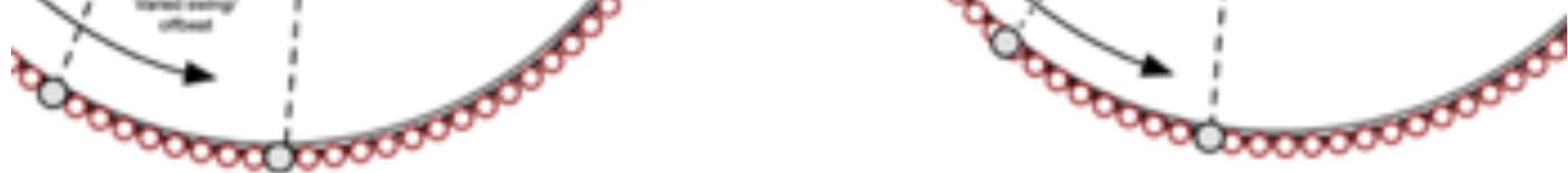


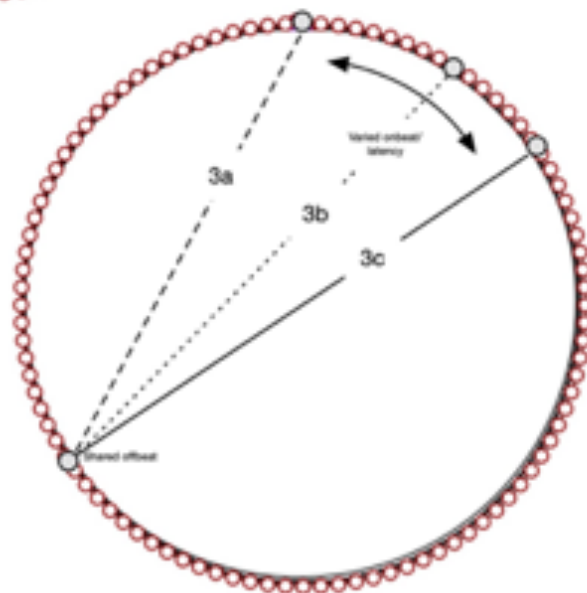
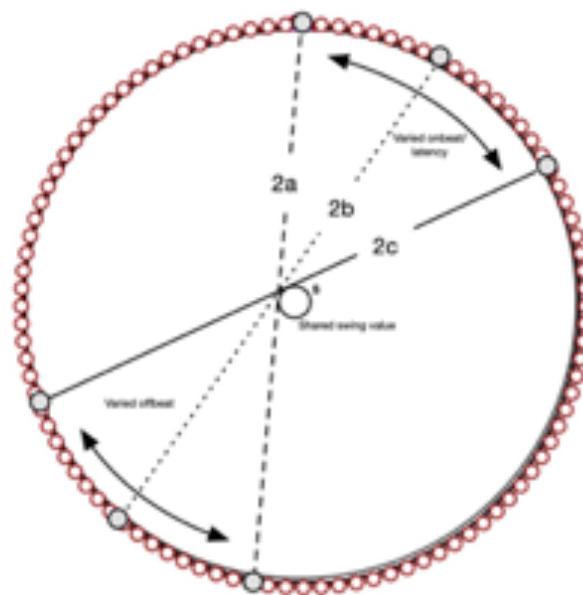
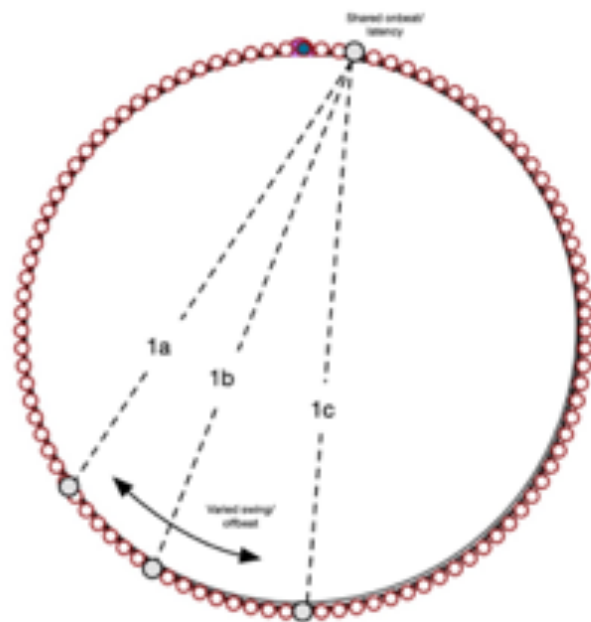
Time Feel Modulations



Time Feel Modulations







The Limits of Conscious Perception

Li f
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Your

Life is an

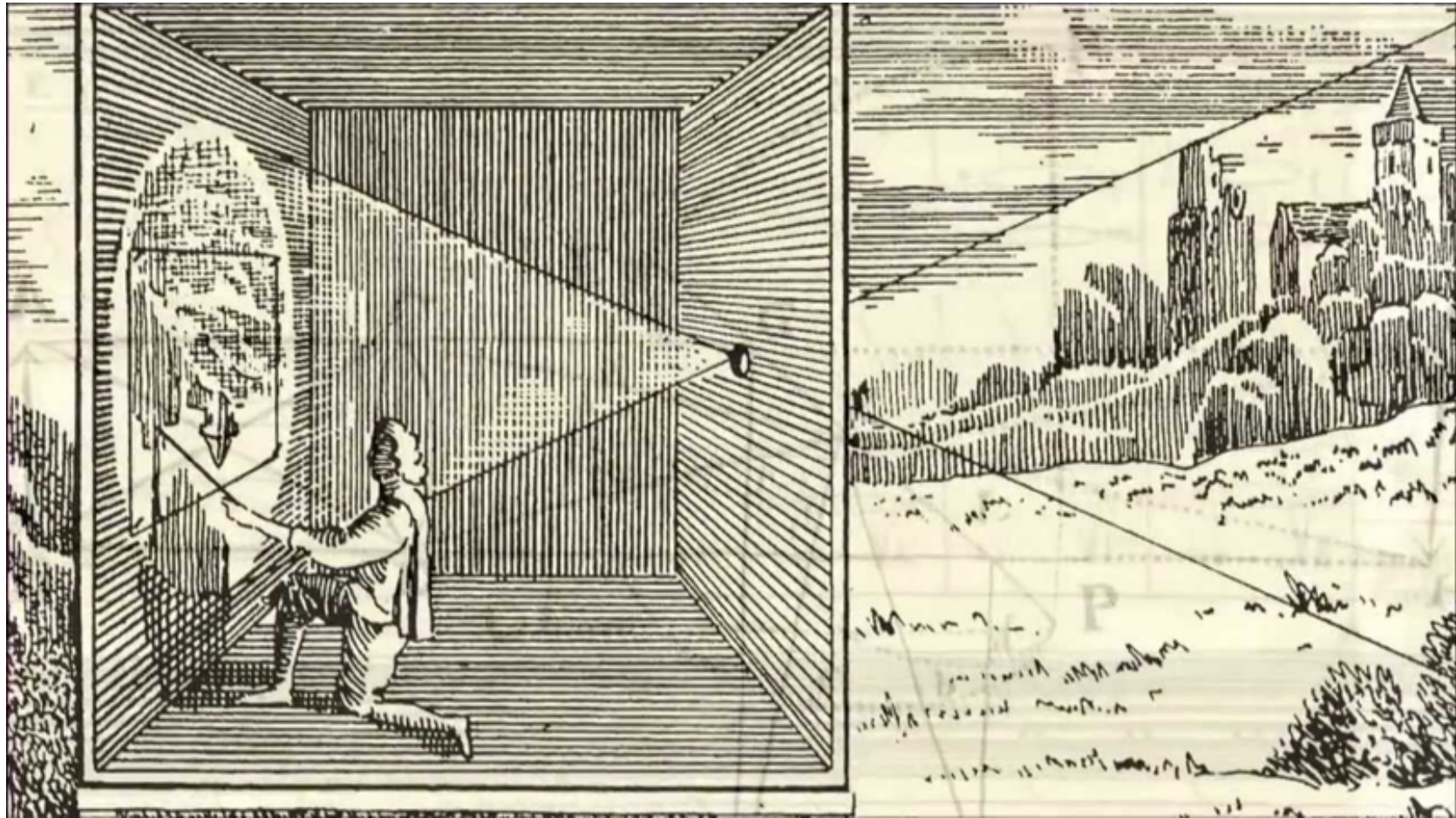
illusion





















Technology as Insight

#nofilter

clear replace drumloop.aif

buffer~ mybuffer 10 2

load sound folder
0

Joao 2-bar loop 65.5 B...

Turn off the cursor

start click 60

CPM

zoom distance from center number of segments buffer visuals
92 96. 2000

4 point radius

number of slices
48 96 96

save and recall selected points

offbeat light swing lazy
50 0 60 3

dump send selected points

clear clear all selections

Percentage target

sol jazz ; dsp open

clave input choice
off space bar audio

bossa Buffer playback

Click groove on/off

niles marley

KB Buffer-Play

Tmplt

click sounds

0 Logic Click Beat.aif
0 Logic Click Beat.aif
0 Logic Click Beat.aif

26

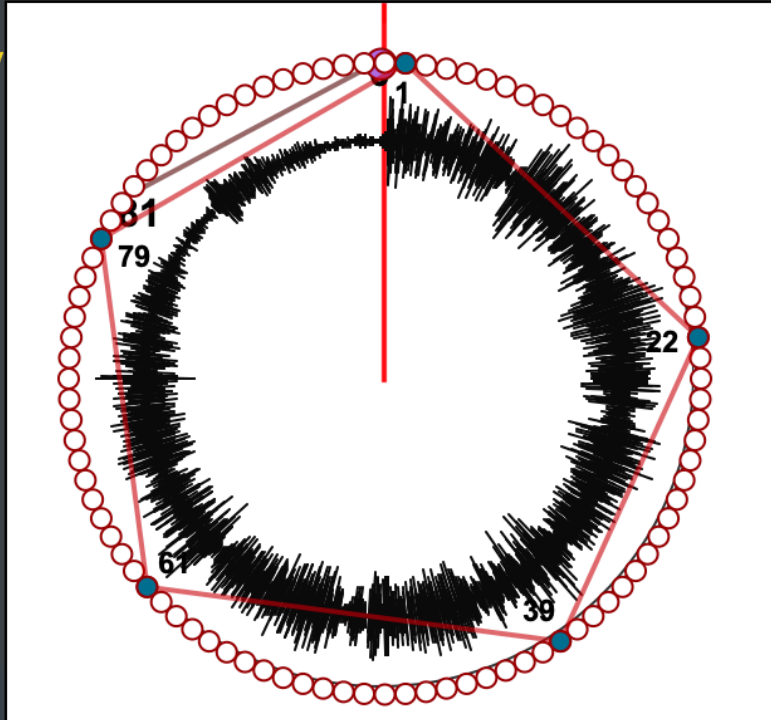
Click-1 Click-2 Click-3 Main-Click
0.0 dB 0.0 dB 0.0 dB 0.0 dB

ctrl + mouse to change velocity

c = click
g = groove
b = buffer play
f = feedback
s = feedback start
esc = all off

p feedback

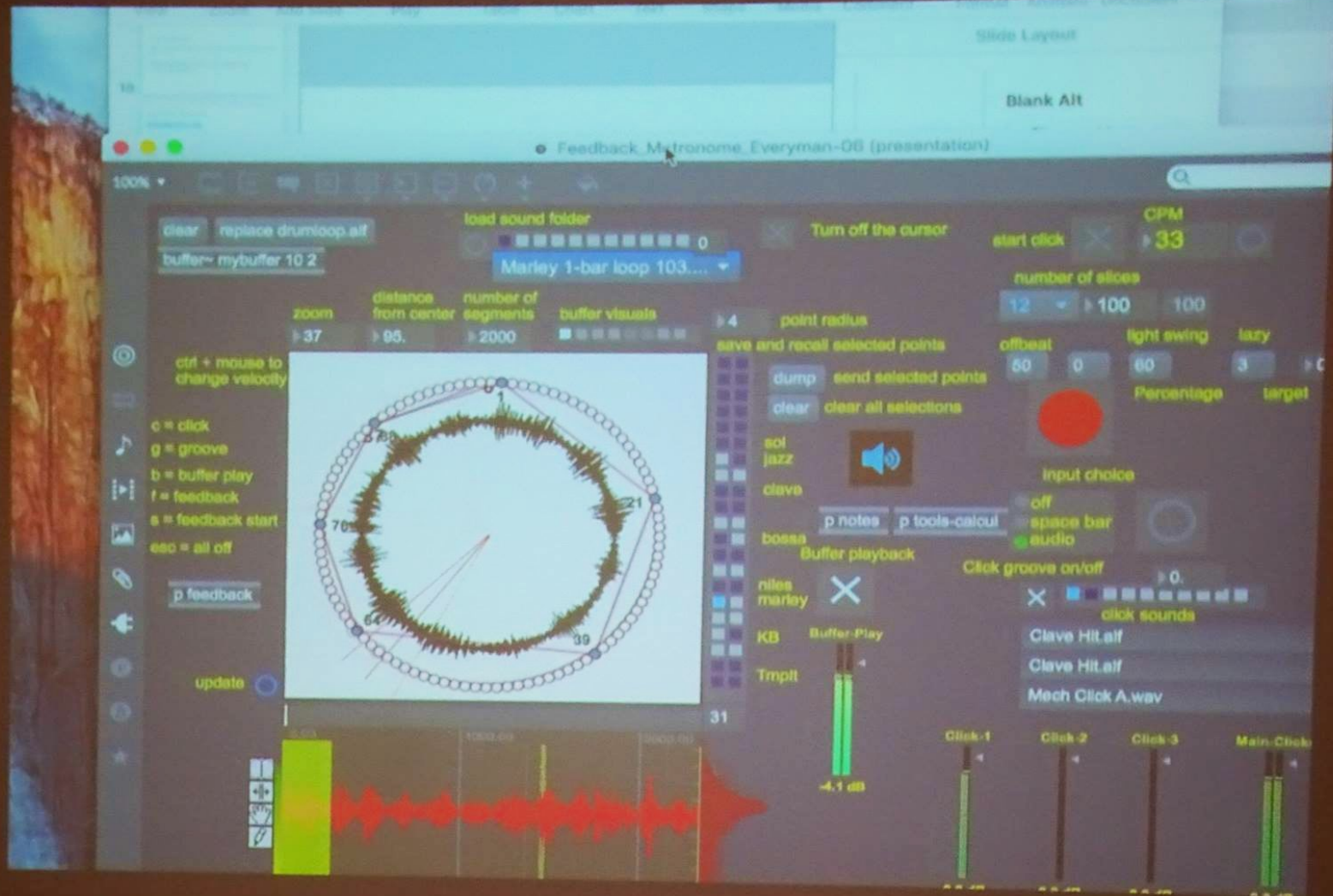
update



reset loop crop undo

Mingus - a feedback metronome

Composition: Milton Mermikides and Carl Faia miltonline@me.com
Programming: Carl Faia and Milton Mermikides cf@carlfaia.com



Mingus @ IGRC2016

