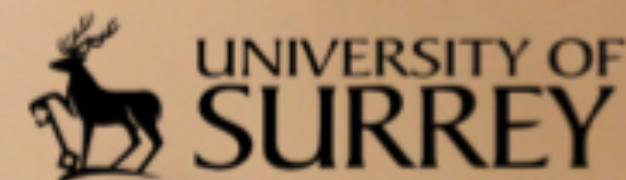


Dr Milton Mermikides
University of Surrey
International Guitar Research Centre
surrey.ac.uk/guitar



Jazz Guitar Research Day

Exploring the history,
craft and future of
jazz guitar

Dr Tom Williams
John Wheatcroft
Nigel Price
Dr Kate Lewis
James Dean
Mike Outram
Dr John McGrath
Ant Law

10am-6pm
October 20th 2018
Ivy Theatre
University of Surrey



Unswung Hero

Breaking Jazz Guitar's Rhythmic Taboos

Milton Mermikides

Ant Law Trio

Speaking of Rhythm

“You can’t have a sound without having any duration.”

–*Steve Reich*

“One of the reasons I believe in jazz is that the oneness of man can come through the rhythm of your heart. It’s the same anyplace in the world, that heartbeat. It’s the first thing you hear when you’re born — or before you’re born — and it’s the last thing you hear”

–*Dave Brubeck*

“Music creates order out of chaos: for rhythm imposes unanimity upon the divergent, melody imposes continuity upon the disjointed, and harmony imposes compatibility upon the incongruous. –*Yehudi Menuhin*

“Rhythm is our universal mother tongue. It's the language of the soul.”

–*Gabrielle Roth*

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

An Unspoken Language

1



2

3



4



6



5

7



8



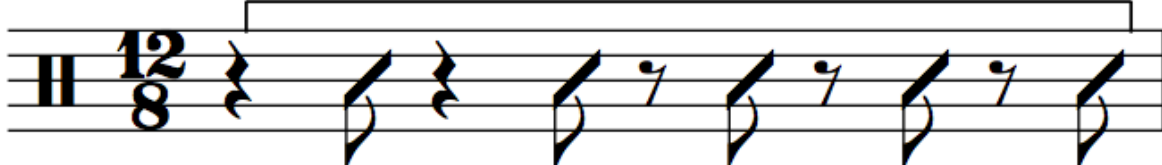
9

10



11

12



Tresillo

3-2 Son Clave

Double Tresillo

2-3 Rhumba Clave

Batida

3-2 Bossa Clave

African Standard Pattern

Agbekor Timeline

Diatonic (palindromic)

Soleares

Cáscara (IOI palindrome)

Bulerias

1. Proximity Blindness

2. Brain/Body Bias

MARTINO UNSTRUNG (2008)



MARTINO UNSTRUNG (2008)



3. Rhythm as Belt

Music and Time



Multiple Perspectives

♩=90



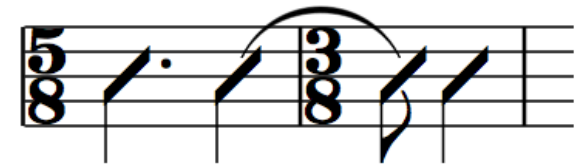
♩=60



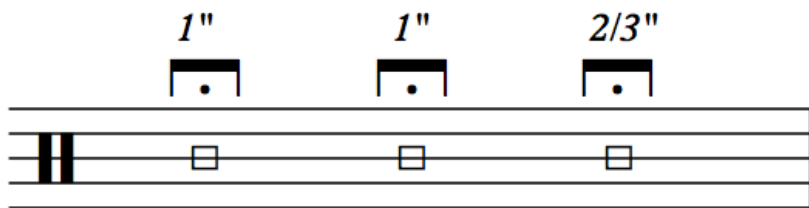
♩=90



♩=60



no pulse



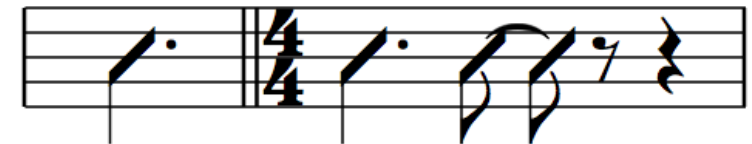
♩=90

♩=60

♩=♩. →



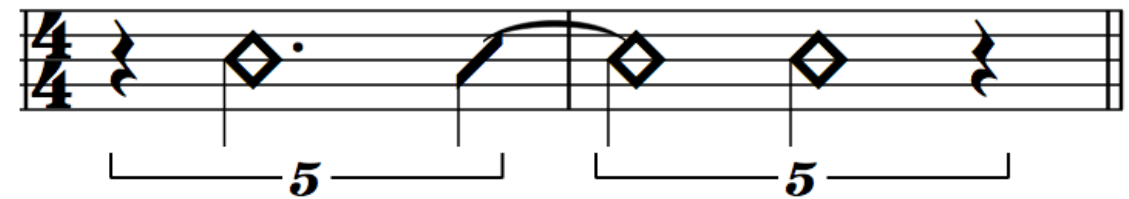
♩=90



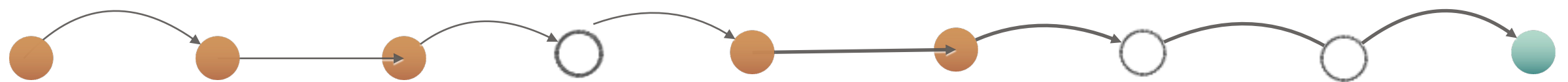
♩=60



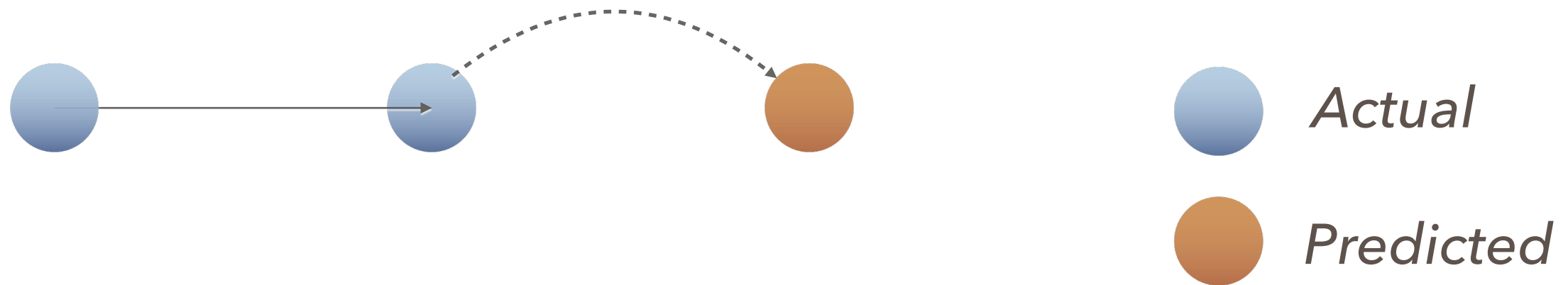
♩=144



Rhythm as Prediction

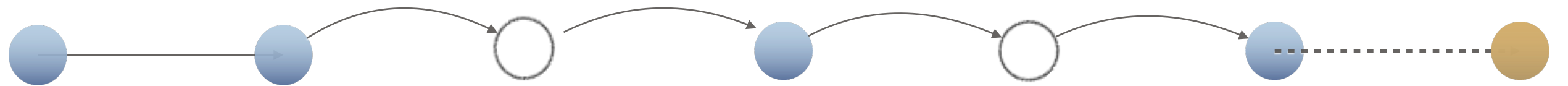


Rhythm As Prediction (body maths)

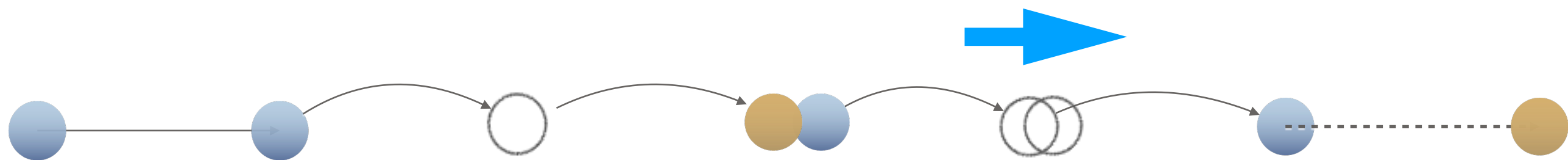






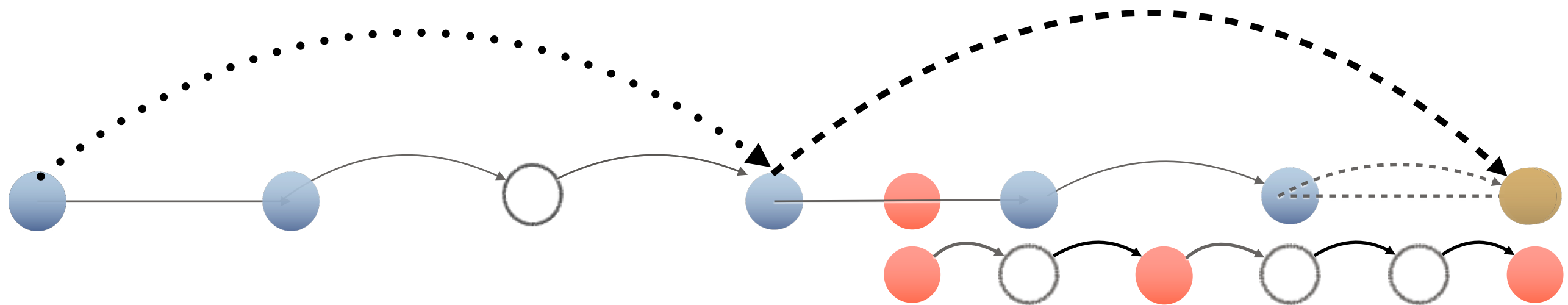
● *Actual*
● *Predicted*



- *Actual*
- *Predicted*
- *Gap*



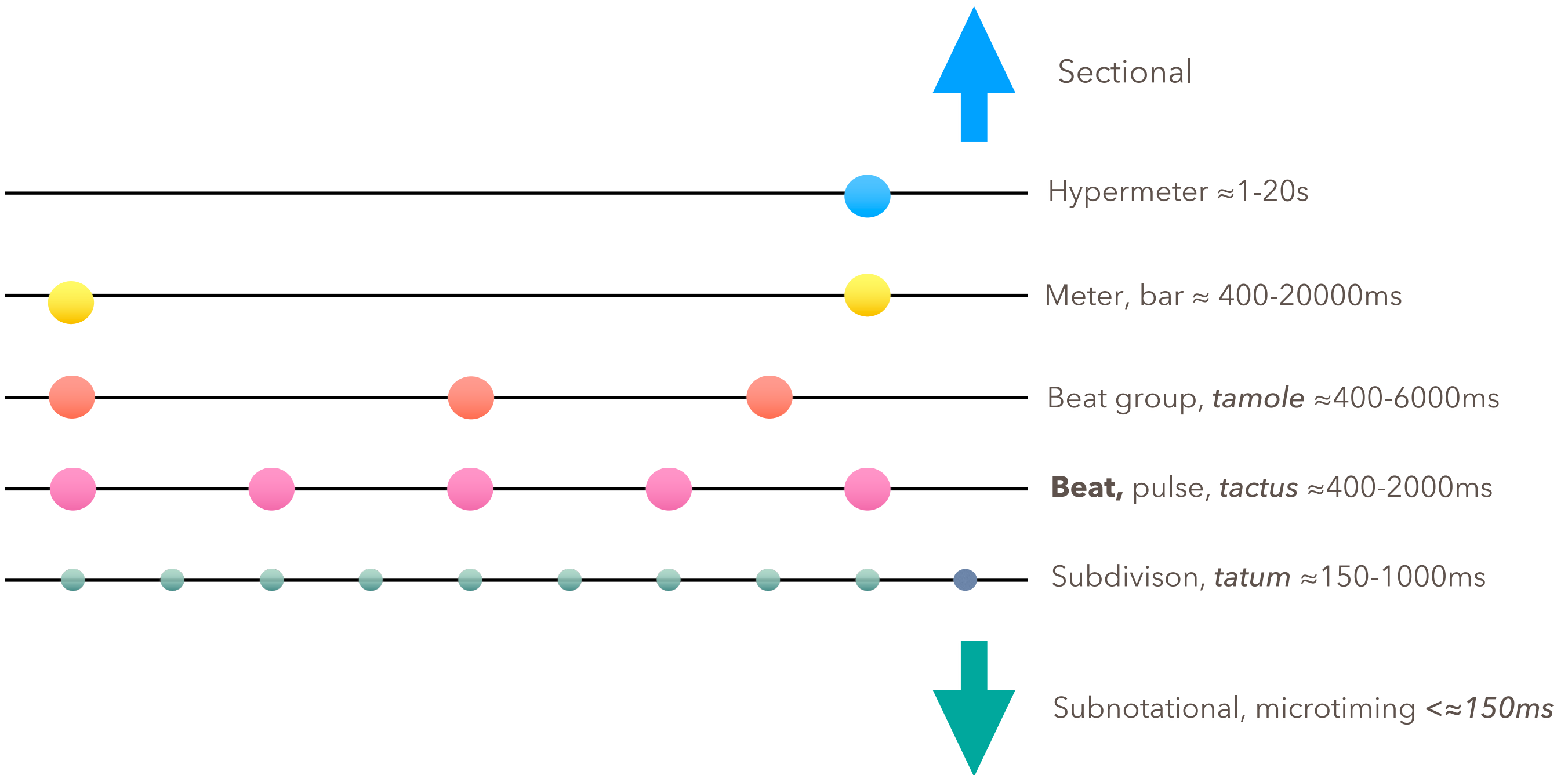
-  *Actual*
-  *Predicted*
-  *Gap*

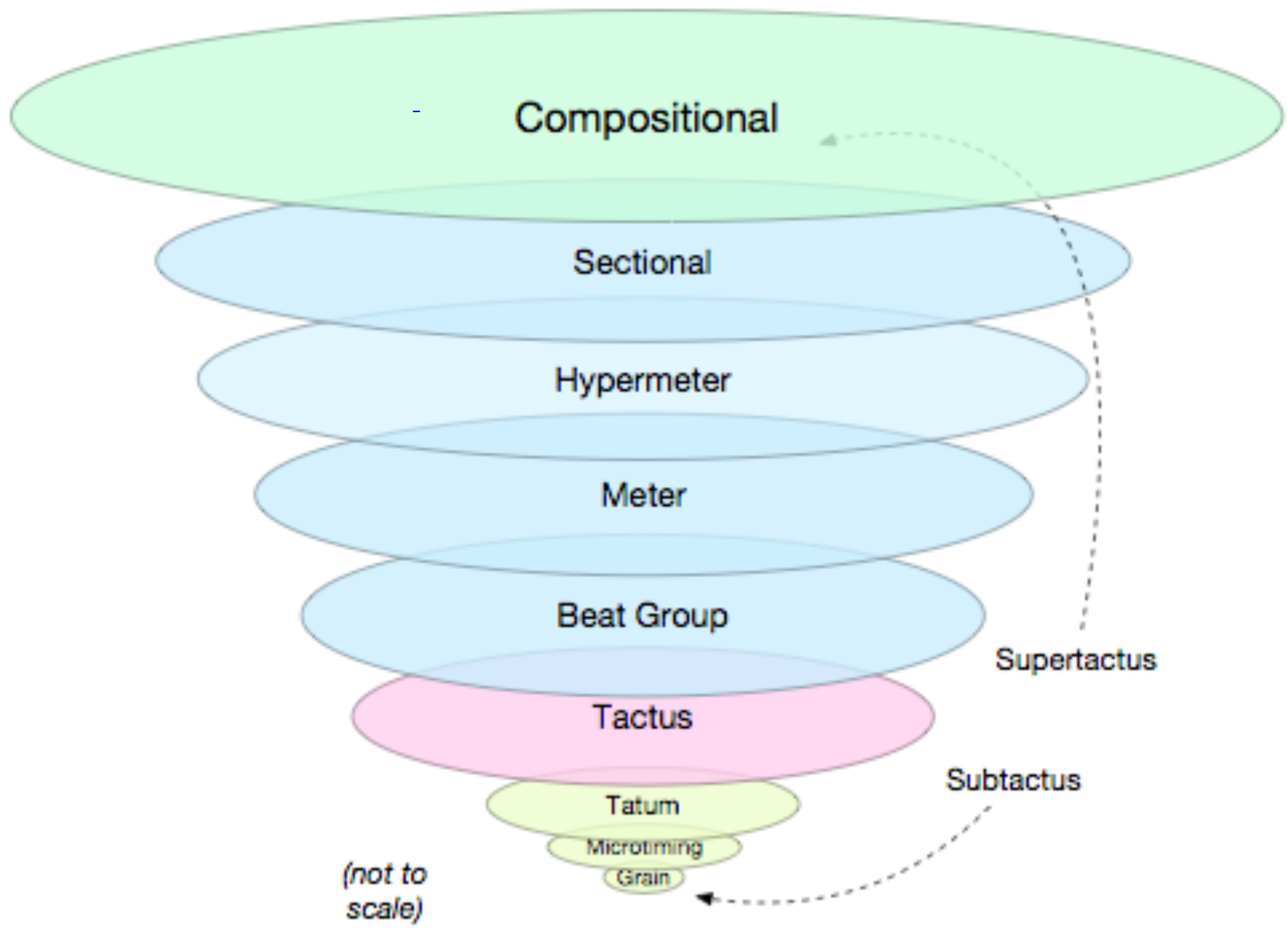


-  *Actual*
-  *Predicted*
-  *Gap*
-  *Novel*



Levels of Musical Time





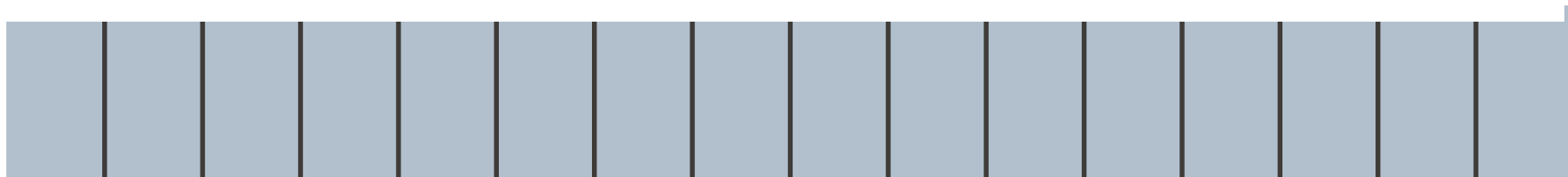
Displacement Dissonance





The Binary Default

Every 1



'strong'

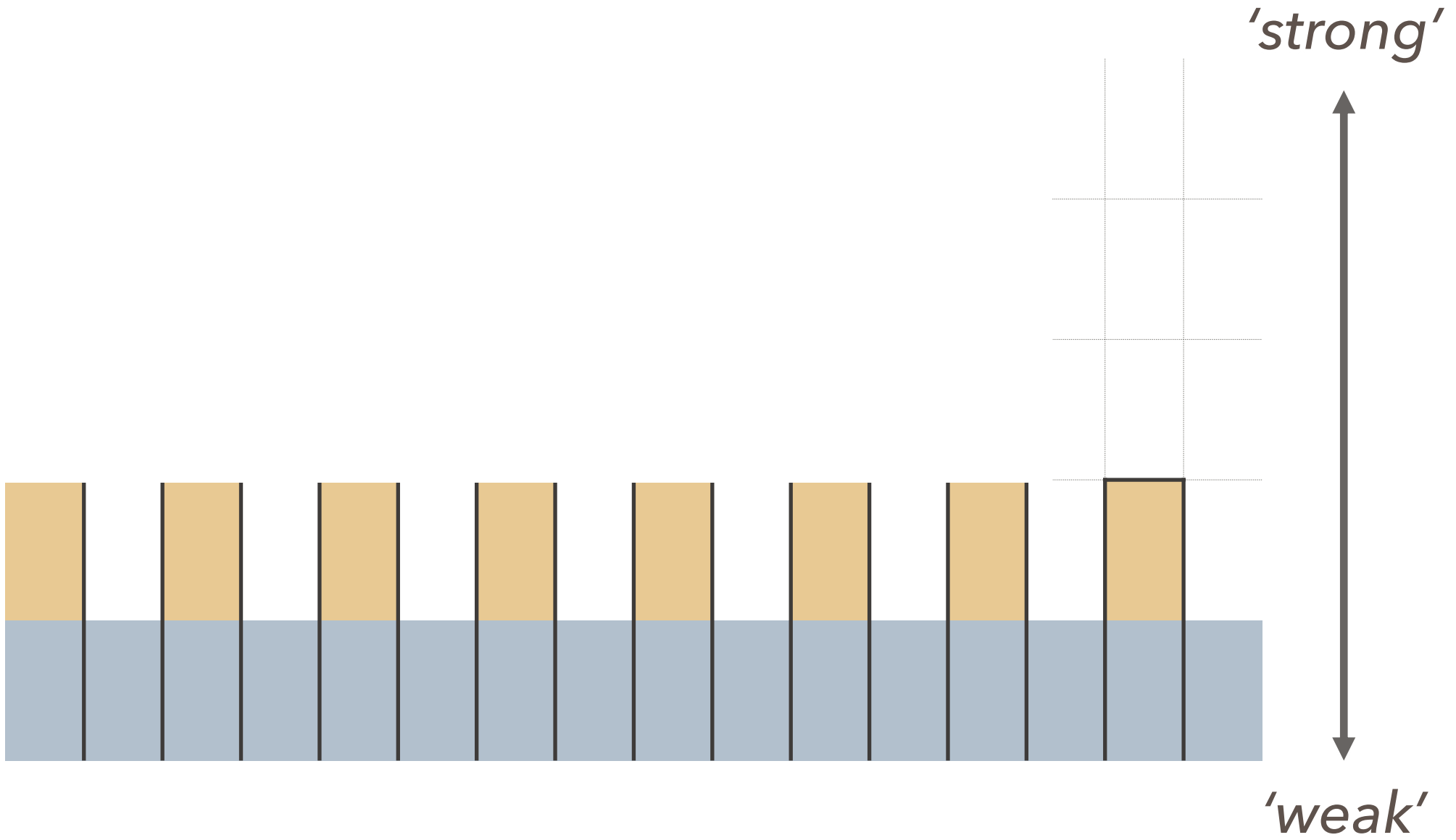


'weak'

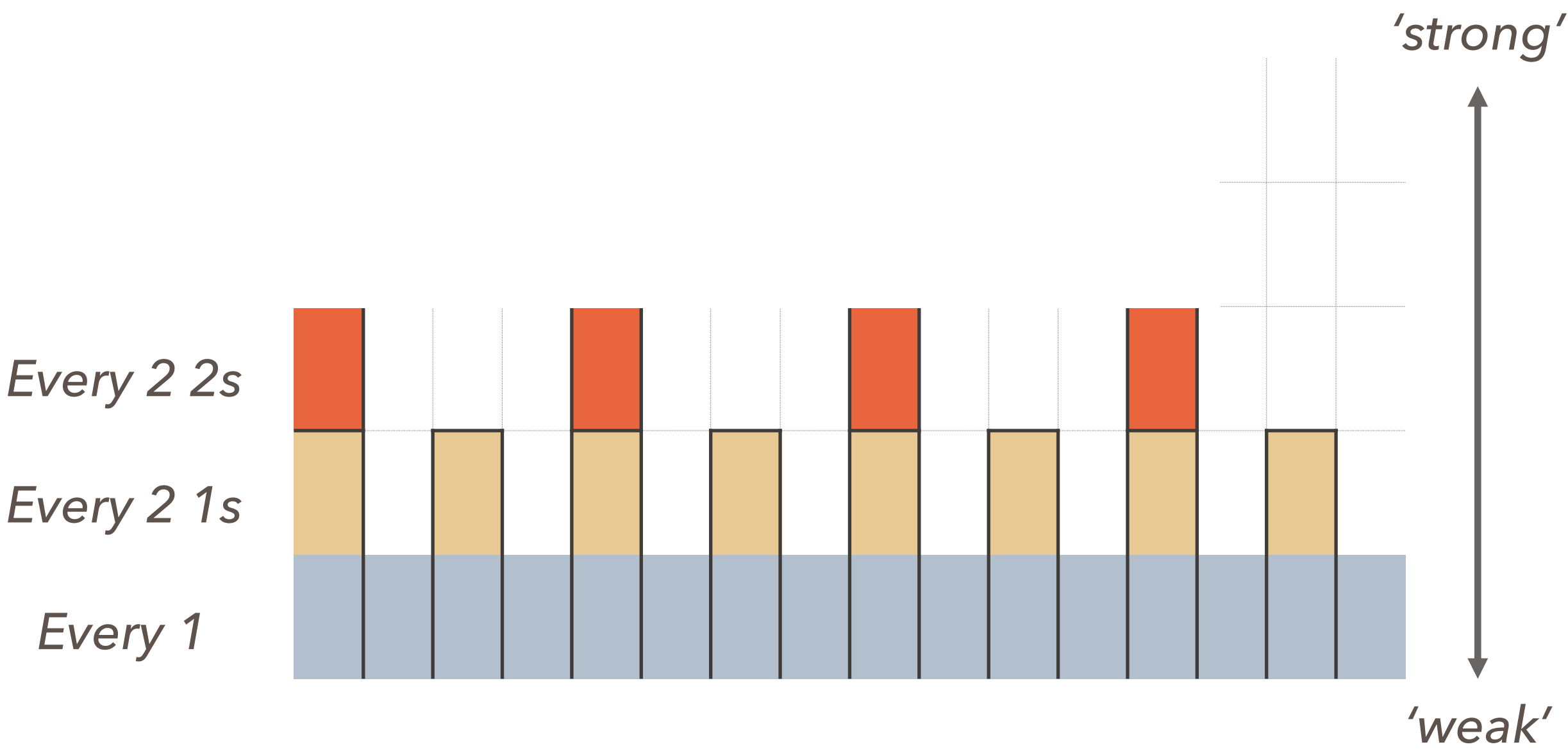
2 by 2 by 2

Every 2 1s

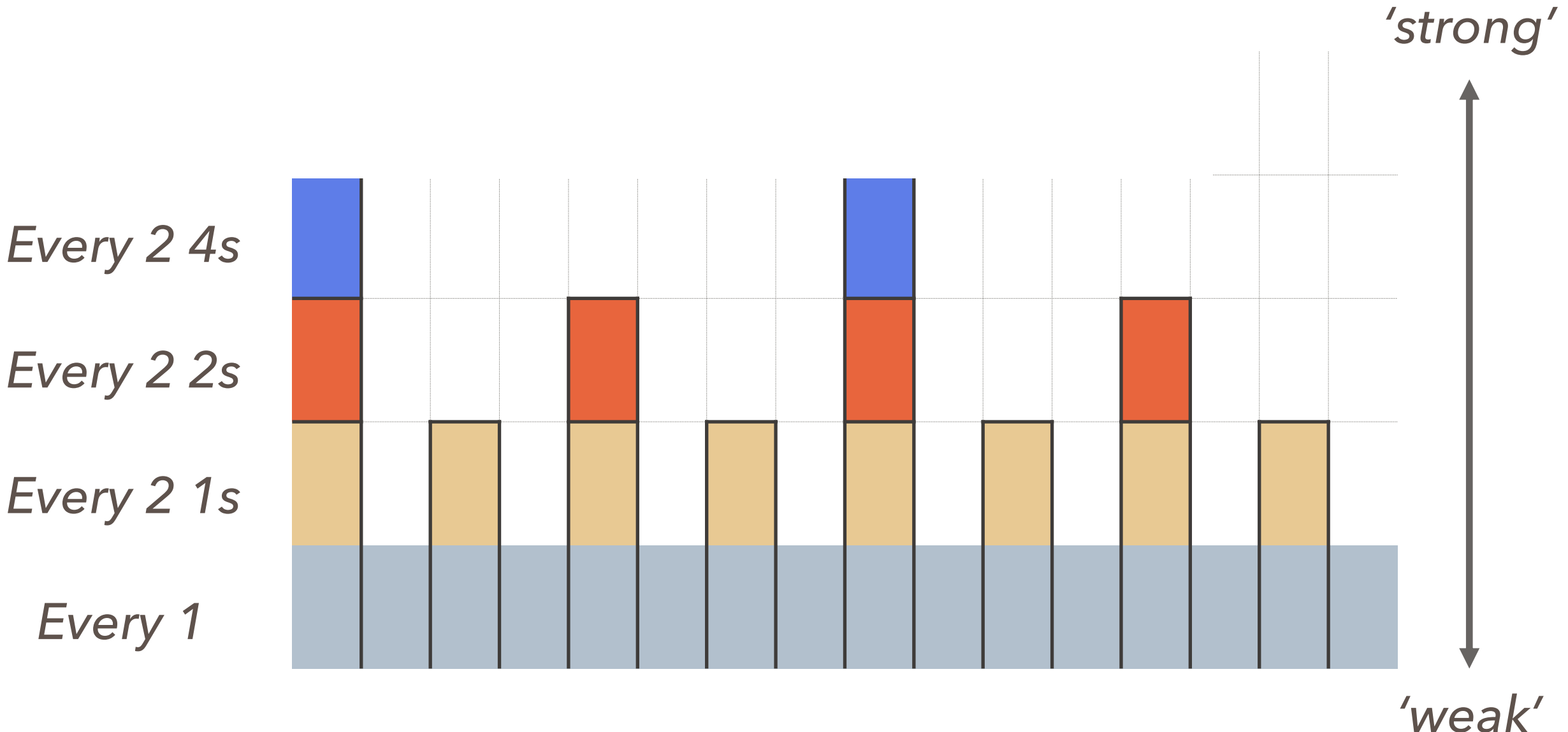
Every 1



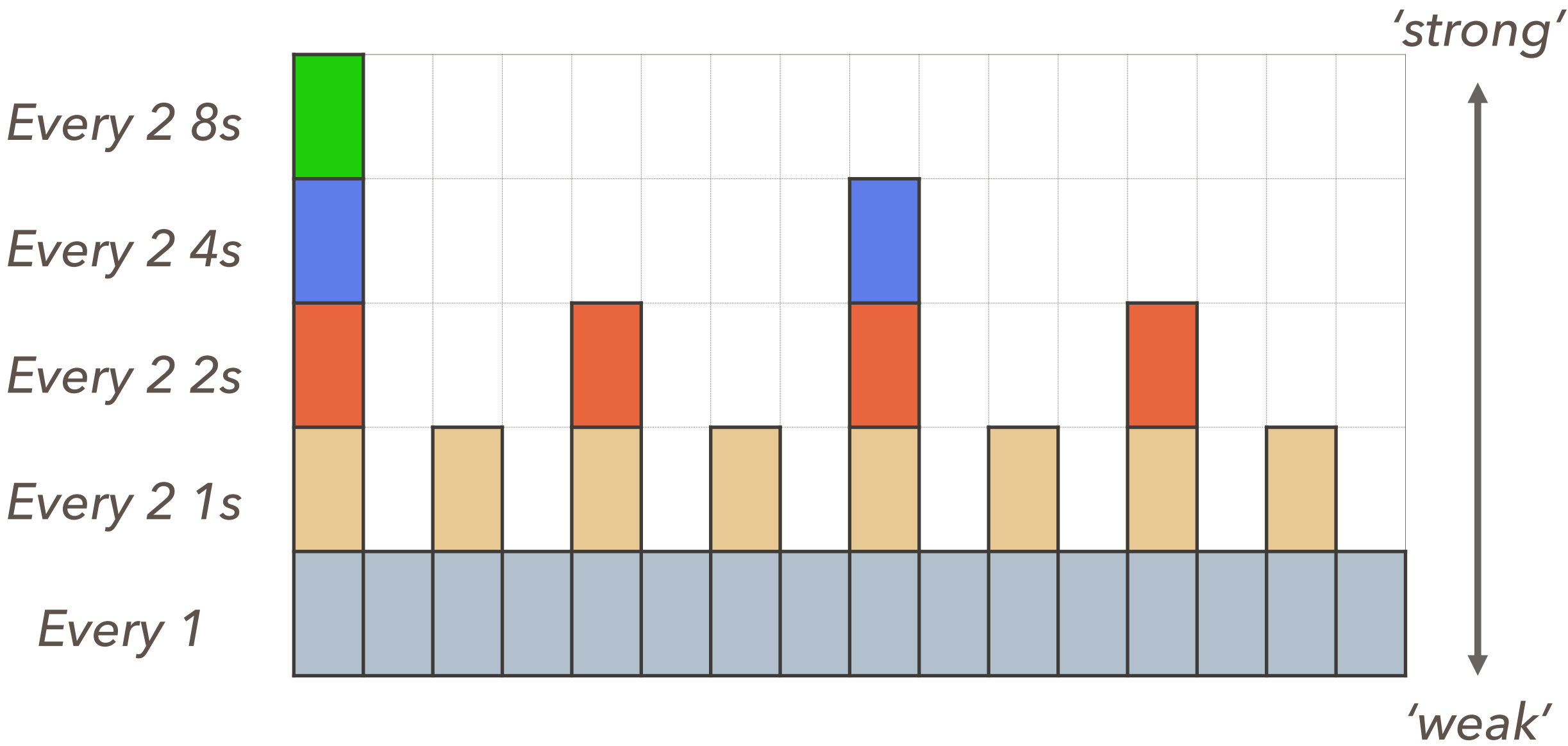
2 by 2 by 2



2 by 2 by 2



2 by 2 by 2



2 by 2 by 2

SYNCOPIATION

(AKA DISPLACEMENT DISSONANCE)



POWER THE WEAK
WEAKEN THE STRONG

Jazz Rhythm as Beat Democracy

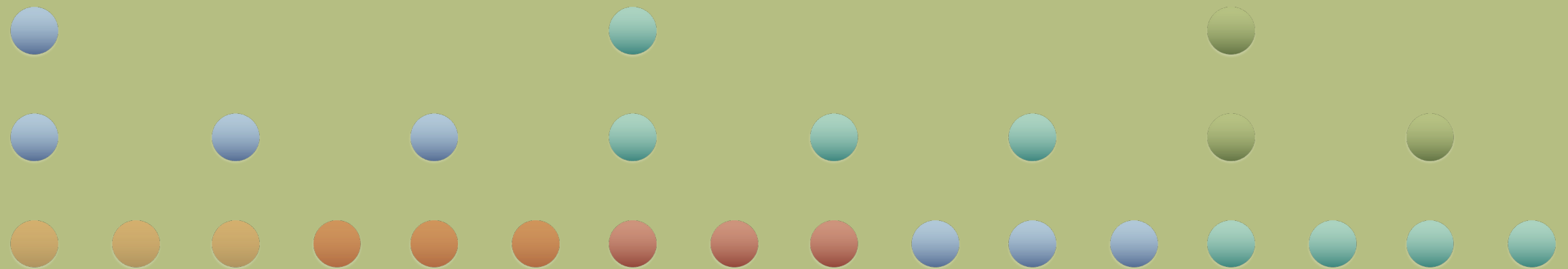
single pitch throughout.]

Example I:22R

The image displays three staves of musical notation in treble clef, illustrating a rhythmic exercise. The notation is written on a single pitch throughout. The first staff begins with a series of eighth notes, followed by a quarter note, a half note, and a quarter note, then a series of eighth notes, and finally a quarter note. The second staff starts with a quarter note, followed by a series of eighth notes, a quarter note, a half note, a quarter note, a series of eighth notes, a quarter note, a series of eighth notes, and a quarter note. The third staff begins with a quarter note, followed by a series of eighth notes, a quarter note, a series of eighth notes, a quarter note, a series of eighth notes, a quarter note, a series of eighth notes, and a quarter note. A triplet of eighth notes is indicated by a '3' below the notes in the second staff. Accents (>) are placed above various notes in all three staves. The notation ends with 'etc.' in the bottom right corner.

Hal Crook *How To Improvise*

GROUPING DISSONANCE



THE TRESILLO, DOUBLE TRESILLO & BEYOND

TRESILLO

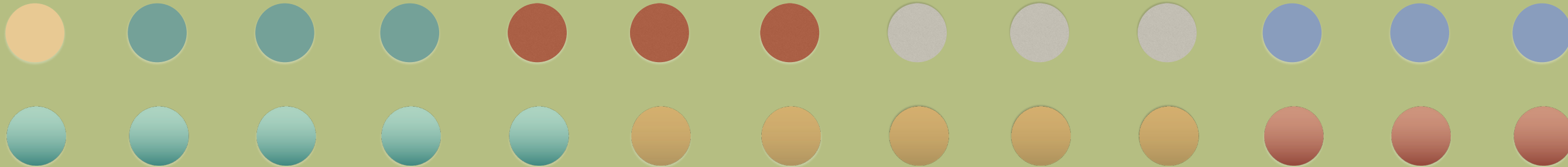
1	2	3	4	5	6	7	8

DOUBLE TRESILLO



THE TRESILLO, DOUBLE TRESILLO & BEYOND

ENDLESS THREES



Low-Prime Phrase Grouping

Play/Rest Combinations

I. Even-bar phrasing (easy)

Play (bars)	→	Rest (bars)	→	Total (bars)
1	→	1	→	2
2	→	2	→	4
3	→	1	→	4
1	→	3	→	4
4	→	2	→	6
2	→	4	→	6
2	→	6	→	8

(etc.)

Higher-Prime Phrase Grouping

II. Odd-bar phrasing (more difficult)

Play (bars)	Rest (bars)	Total (bars)
1	2	3
2	1	3
3	2	5
2	3	5
4	1	5
1	4	5

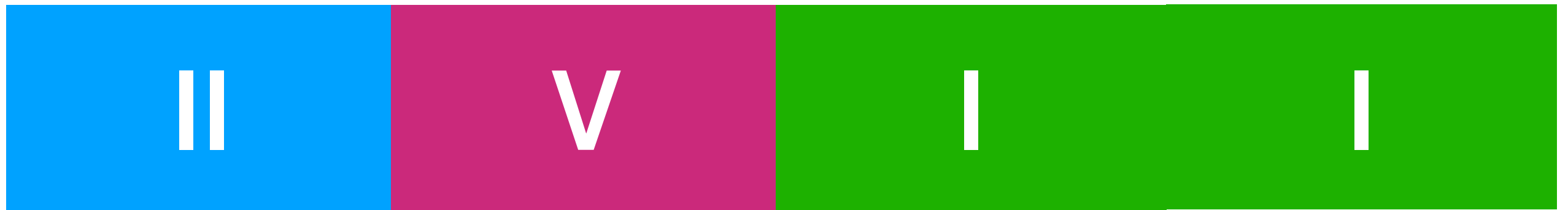
(etc.)

Multi-level Grouping Dissonance

Jazz Taboo #1

Harmonic Rhythm

The II-V-I

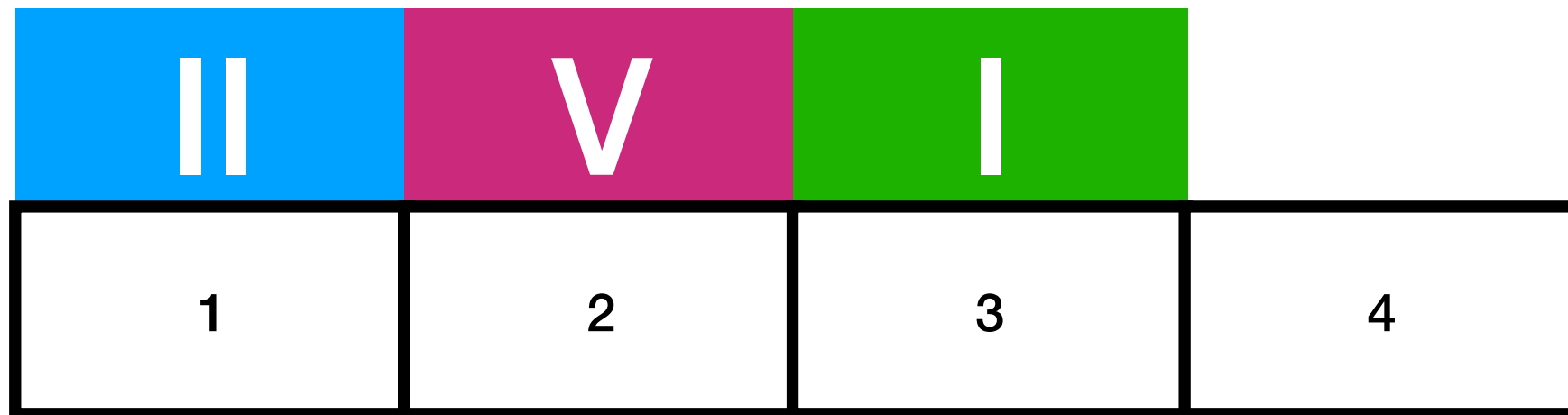


4 Bars

2 Bars or

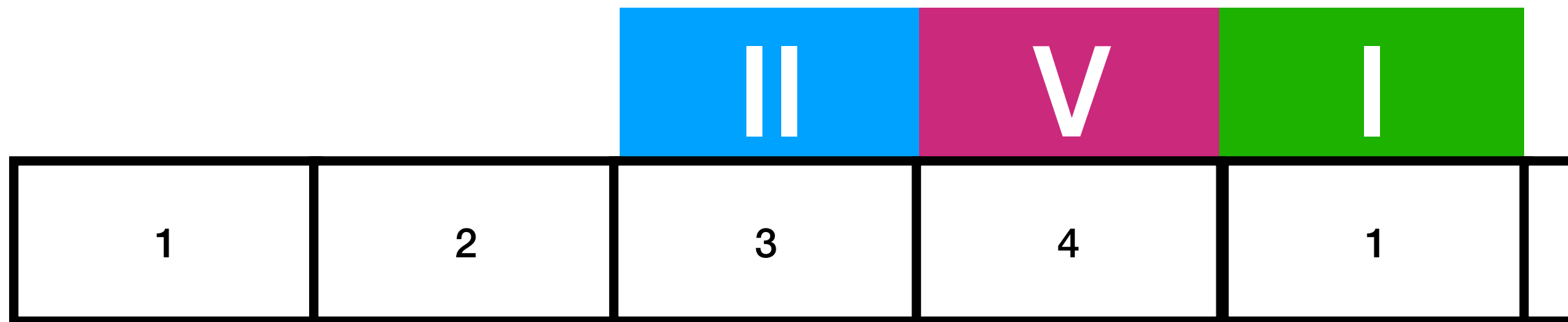
1 Bar

The II-V



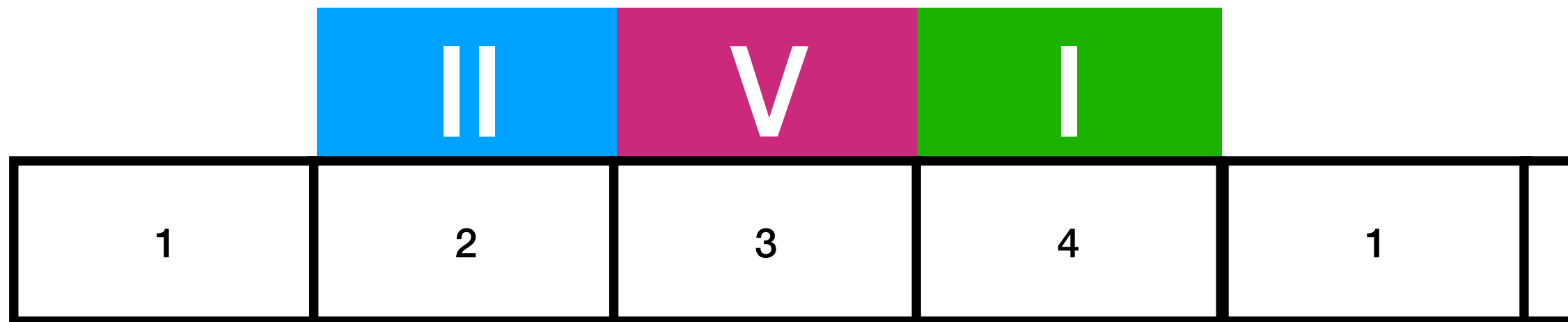
‘weak’

The II-V



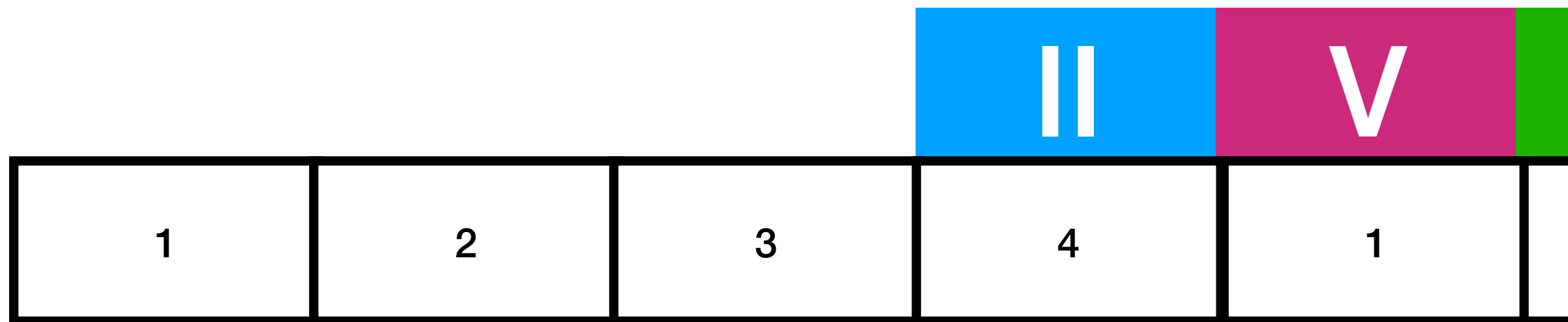
'strong'

The II-V



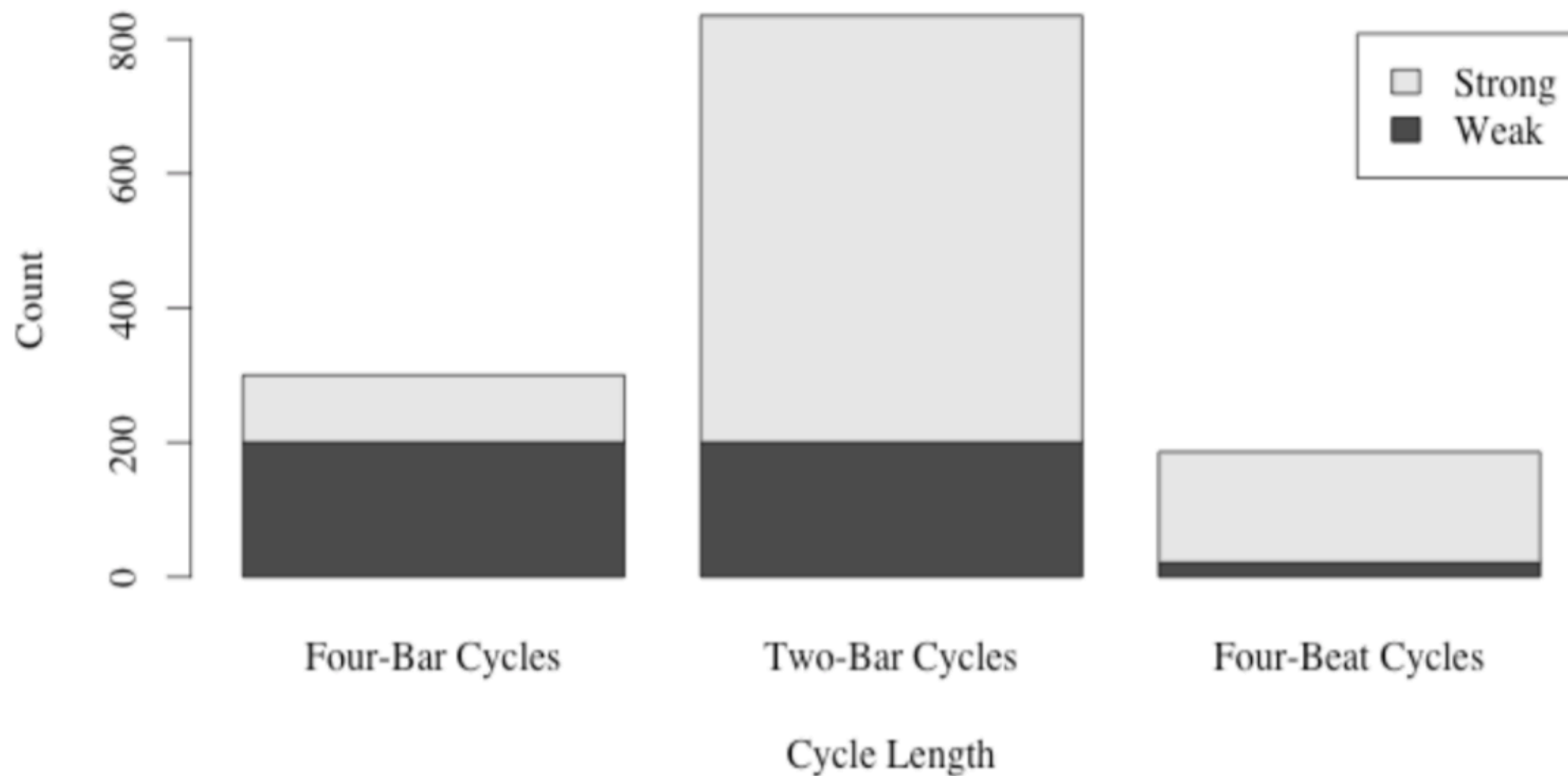
**Rare, and only when a bar per chord
(*All the Things You Are, Fly Me to the Moon* etc.)**

The II-V



Implausible

Figure 3. Comparing the prominence of strong and weak cycles at four-bar, two-bar, and four-beat levels.



A. Standard setting.

A musical staff in 4/4 time with a treble clef. The staff contains two measures of music, each with four diagonal slashes representing notes. Above the first measure are the Roman numerals II and V, and above the second measure is the Roman numeral I.

B. Implausible settings.

A musical staff in 4/4 time with a treble clef. The staff contains two measures of music, each with four diagonal slashes representing notes. Above the first measure are the Roman numerals I, II, and V, and above the second measure is the Roman numeral I.

A musical staff in 4/4 time with a treble clef. The staff contains two measures of music, each with four diagonal slashes representing notes. Above the first measure are the Roman numerals I and II, and above the second measure are the Roman numerals V and I.

A musical staff in 4/4 time with a treble clef. The staff contains two measures of music, each with four diagonal slashes representing notes. Above the first measure is the Roman numeral I, and above the second measure are the Roman numerals II, V, and I.

A. Standard settings.

II V I

Less common

I II V I

Very common

B. Implausible settings.

I II V I

I II V I

Jazz Taboo #2

Breaking the
Binary Backdrop

Moonlight In Vermont

Music by Karl Suessdorf
Lyric by John Blackburn

Med. Ballad

A

Chords: Eb6 Cmi7 Fmi7 Bb7 Eb6 Cmi7 Db9

Pen - nies in a stream, Fall - ing leaves, a sy - ca - more,

Chords: Fmi7 Bb9sus Eb6 (Bb9sus) Eb6 Cmi7 Fmi7 Bb7

Moon - light in Ver - mont. I - cy fin - ger waves,

Chords: Eb6 Cmi7 Db9 Fmi7 Bb9sus Eb6

Ski trails on a moun - tain - side, Snow - light in Ver - mont.

B

Chords: Ami7 D7 GMA7 EMI7

Tel - e - graph ca - bles, they sing down the high - way and

Chords: Ami7 D7 GMA7 Bbmi7 Eb7

trav - el each bend _____ in the road, Peo - ple who meet _____ in this

2. D. SWAN

A FOGGY DAY

- GERSHWIN

Handwritten musical score for guitar, featuring ten systems of music. Each system consists of a staff with notes and a line of chord symbols below it. The chords are: Fmaj7, A-7b5, D7b9, G-7, C7, F6, D-7b5, G7, G-7, C7, Fmaj7, C-7, F7, Bb6, Bb-6, Fmaj7, A-7, D7, G7, G-7, C7, Fmaj7, Ab-7, G-7, C7, F6, D-7b5, G7, G-7, C7, C-7, F7, Bb6, Eb7, F6, G-7, A-7, Bb-6, A-7, D-7, G-7, C7.

The final system is highlighted in blue and includes the word "FINE" written below the staff. The chord symbols for this system are F6 and (G-7 C7).

Med. Swing

Stablemates

Benny Golson

$\text{♩} = 162$

A E_{MI}^7 A^7 E_{bMI}^7 A_{b7} D_{bMA}^7

(trp. w/ ten. 8va b.)

$C^{7(+5)}$ A_{bMI}^7 D_{b7}

G_{bMA}^7 $G_{MI}^{7(b5)}$ C^7 F_{MI}^7 $B_{b7(+9)(+5)}$ break

(Latin) E_{bMI}^7 $A_{b7(+5)}$ D_{bMA}^7

(trp. ten.)

B (Swing) F_{MI}^7 G_{b13} $G^{7(+5)}$ C^7

(trp. w/ ten. 8va b.)

$(F\#_{MI}^7 B^7 F_{MI}^7 B_{b7} E_{MI}^7 A^7 E_{bMI}^7 A_{b7})$

$B^7 B_{b7} A^7 A_{b7}$ break

C E_{MI}^7 A^7 E_{bMI}^7 A_{b7} D_{bMA}^7 $C^{7(+5)}$ A_{bMI}^7

D_{b7} G_{bMA}^7 $G_{MI}^{7(b5)}$ C^7 F_{MI}^7 $B_{b7(+9)(+5)}$

(Latin) E_{bMI}^7 $A_{b7(+5)}$ D_{bMA}^7

break (trp. ten.) fine

Piano lays out for the head. Chords in parentheses at B are used for solos. Solos swing, no breaks.

(Bass)

BLUE IN GREEN

MILES DAVIS

Handwritten musical notation for the first system of 'Blue in Green'. The system consists of two staves. The top staff is in treble clef with a 4/4 time signature. It contains four measures of music: a half note G4, a quarter note A4, a quarter note B4, and a half note C5. The bottom staff is in bass clef and contains four measures of chords: Bb7, A7, D-7(A), and C-7 F#7(A).

Handwritten musical notation for the second system of 'Blue in Green'. The system consists of two staves. The top staff is in treble clef with a 4/4 time signature. It contains four measures of music: a quarter note G4, a quarter note A4, a quarter note B4, and a quarter note C5. The bottom staff is in bass clef and contains four measures of chords: Bb7, A7(b9), and D-6(A).

Handwritten musical notation for the third system of 'Blue in Green'. The system consists of two staves. The top staff is in treble clef with a 4/4 time signature. It contains four measures of music: a half note G4, a quarter note A4, a quarter note B4, and a half note C5. The bottom staff is in bass clef and contains four measures of chords: E7, A-7(A), and D-7(A).

Someday My Prince Will Come

Music by Frank Churchill
Lyric by Larry Morey

Med. Jazz Waltz

A



Some - day my prince will come, Some



day I'll find my love, And how thrill - ing that mo - ment will



be, When the Prince of my dreams comes to me.

B



He'll whis - per, 'I love you,' And



steal a kiss or two, Though he's far a - way, I'll



find my love some day, Some day when my dreams come true.

420.

TAKE FIVE

— PAUL DESMOND

Eb- Bb-7 Eb- Bb-7

 Eb- Bb-7 Eb- Bb-7 Eb- Bb-7

 Eb- Bb-7 Eb- Bb-7 Eb- Bb-7

 Cb min7 Ab-6 Bb-7 Eb-7 Ab-7 Db7

 Gb min7 Cb min7 Ab-6 Bb-7 Eb-7

 Ab-7 Db7 F-7 Bb7 Eb- Bb-7

 Eb- Bb-7 Eb- Bb-7 Eb- Bb-7

BLUES CONNOTATION

ORNETTE COLEMAN

arr. Liam Noble

Fast swing

HEAD

Bb7 Eb7

Bb7 (E7(9)) Eb7

Bb7 Cm7

F7 Bb7 (2nd time) 1. Bb7 F7 2. Bb7

*For solos, time-no-changes
After solos, D.S. al Coda*

LAURVIN GLASLOWE

FROM THE 2013 ALBUM "ENTANGLEMENT"

ANT LAW
2011

INTRO STRAIGHT 8THS

Ebm⁹

Bm⁹

Ebm⁹

Bm⁹

Em⁹

The first system of musical notation consists of two staves. The top staff is in treble clef with a 7/8 time signature. It contains five measures of music, each with a chord symbol above it: Ebm⁹, Bm⁹, Ebm⁹, Bm⁹, and Em⁹. The notes are primarily eighth notes with stems pointing up. The bottom staff is in bass clef with a 7/8 time signature. It contains five measures of music, each with a chord symbol above it: Ebm⁹, Bm⁹, Ebm⁹, Bm⁹, and Em⁹. The notes are primarily eighth notes with stems pointing down. A blue highlight covers the first five measures of both staves.

5

Ebm⁹

Bm⁹

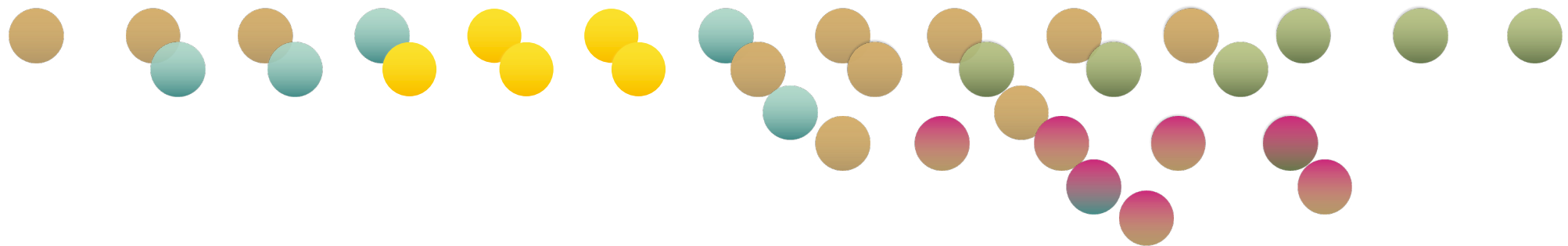
Ebm⁹

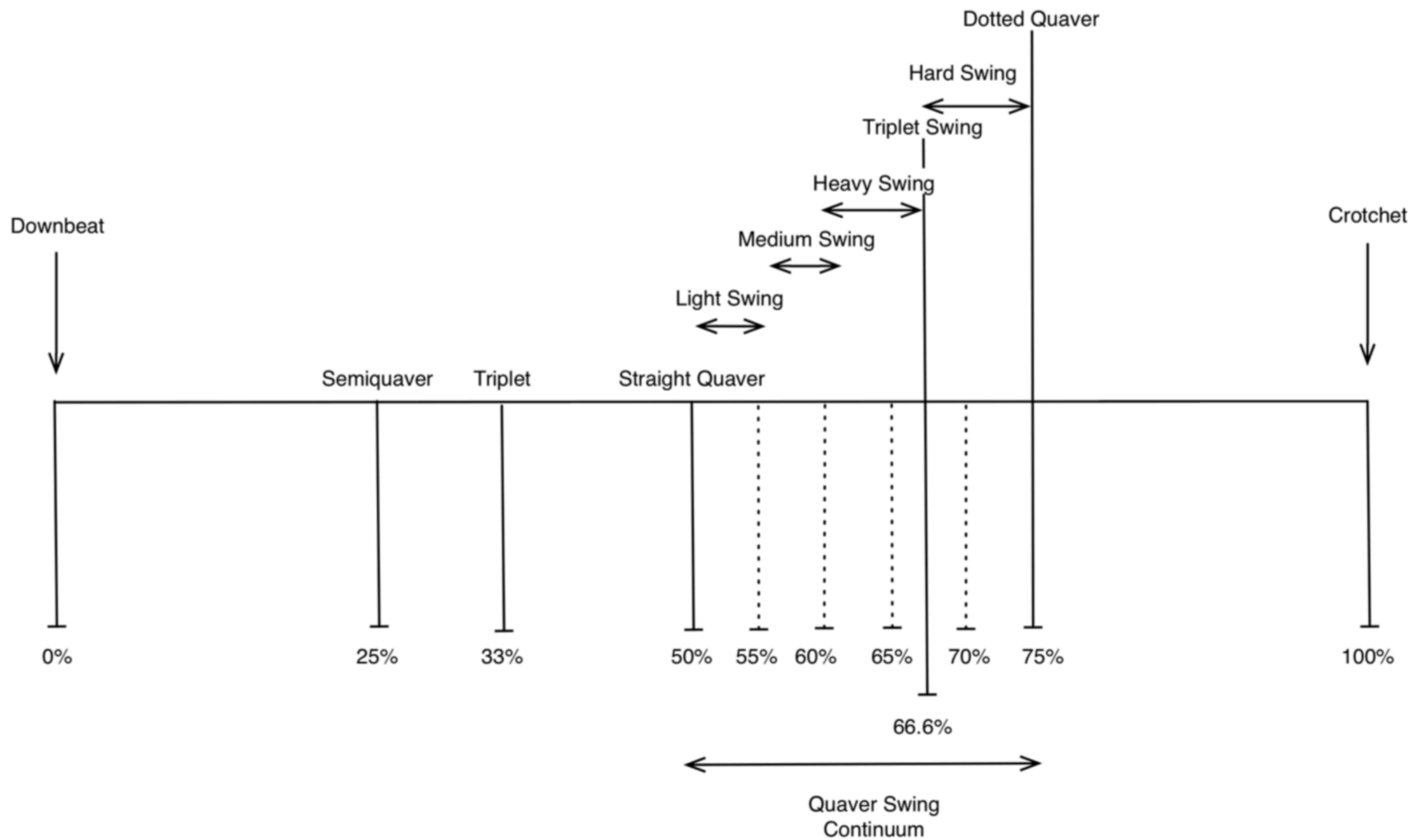
Bm⁹

Em⁹

The second system of musical notation consists of two staves. The top staff is in treble clef with a 7/8 time signature. It contains five measures of music, each with a chord symbol above it: Ebm⁹, Bm⁹, Ebm⁹, Bm⁹, and Em⁹. The notes are primarily eighth notes with stems pointing up. The bottom staff is in bass clef with a 7/8 time signature. It contains five measures of music, each with a chord symbol above it: Ebm⁹, Bm⁹, Ebm⁹, Bm⁹, and Em⁹. The notes are primarily eighth notes with stems pointing down. A blue highlight covers the first five measures of both staves.

(Sub-)Notational Expression





Crook's Time-Feel Exercise

EXERCISE 1. Using a single pitch.

Example II:1R

Metronome (♩=96)

Repeat indefinitely

Play (swing or even feel)

Dead center time ——— slight accell. ——— hold ——— ritard. ——— Play dead center
(or ritard.) new tempo (or accell.)

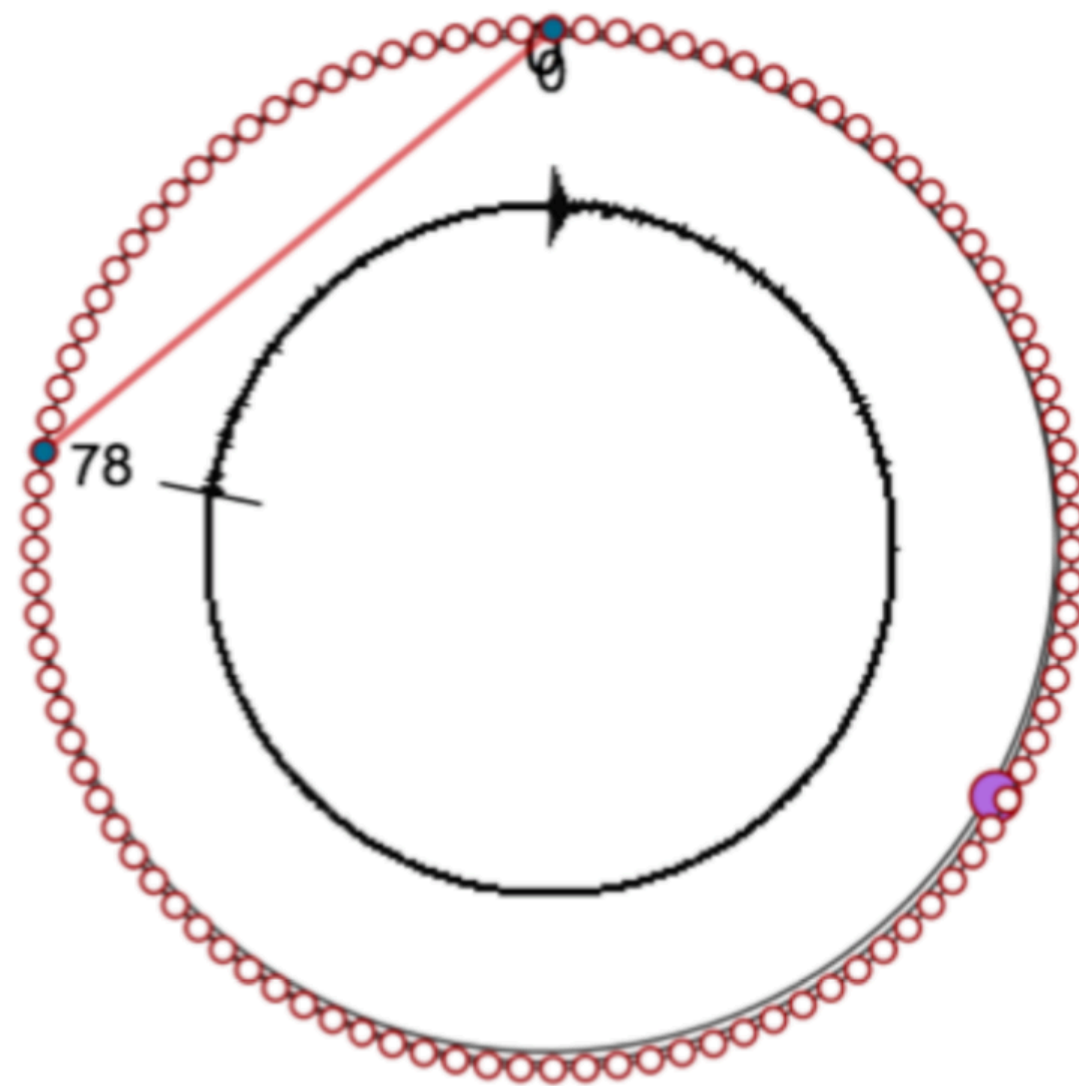
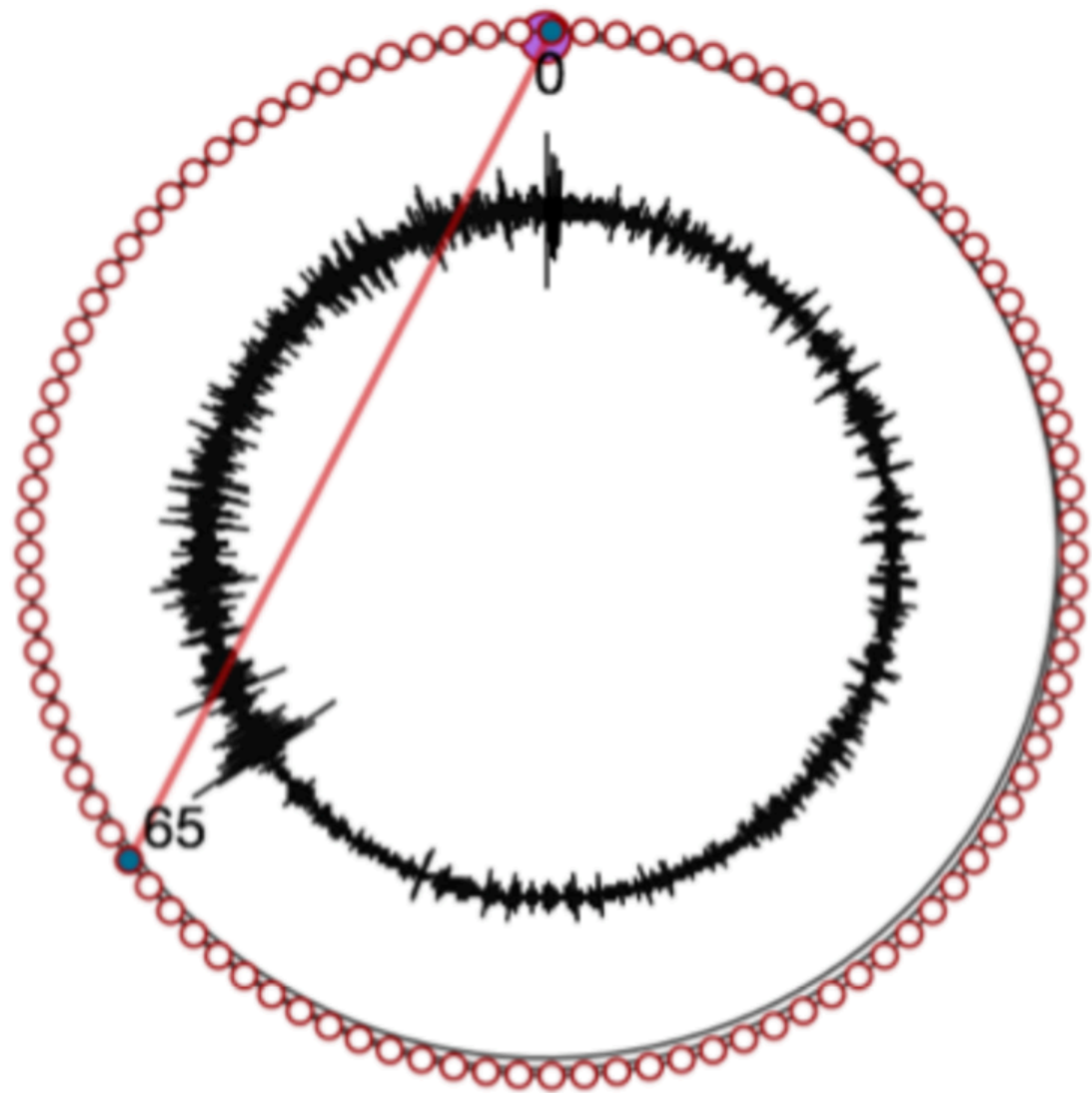
The musical notation shows two staves in common time. The top staff is a metronome track with a quarter note equal to 96 bpm. It contains a sequence of quarter notes with 'x' marks in the first four measures, followed by six measures with repeat signs. The bottom staff is for the player, starting with a quarter note on C4, followed by eighth notes in the first four measures, and then six measures with repeat signs. The piece ends with a quarter rest and a repeat sign.

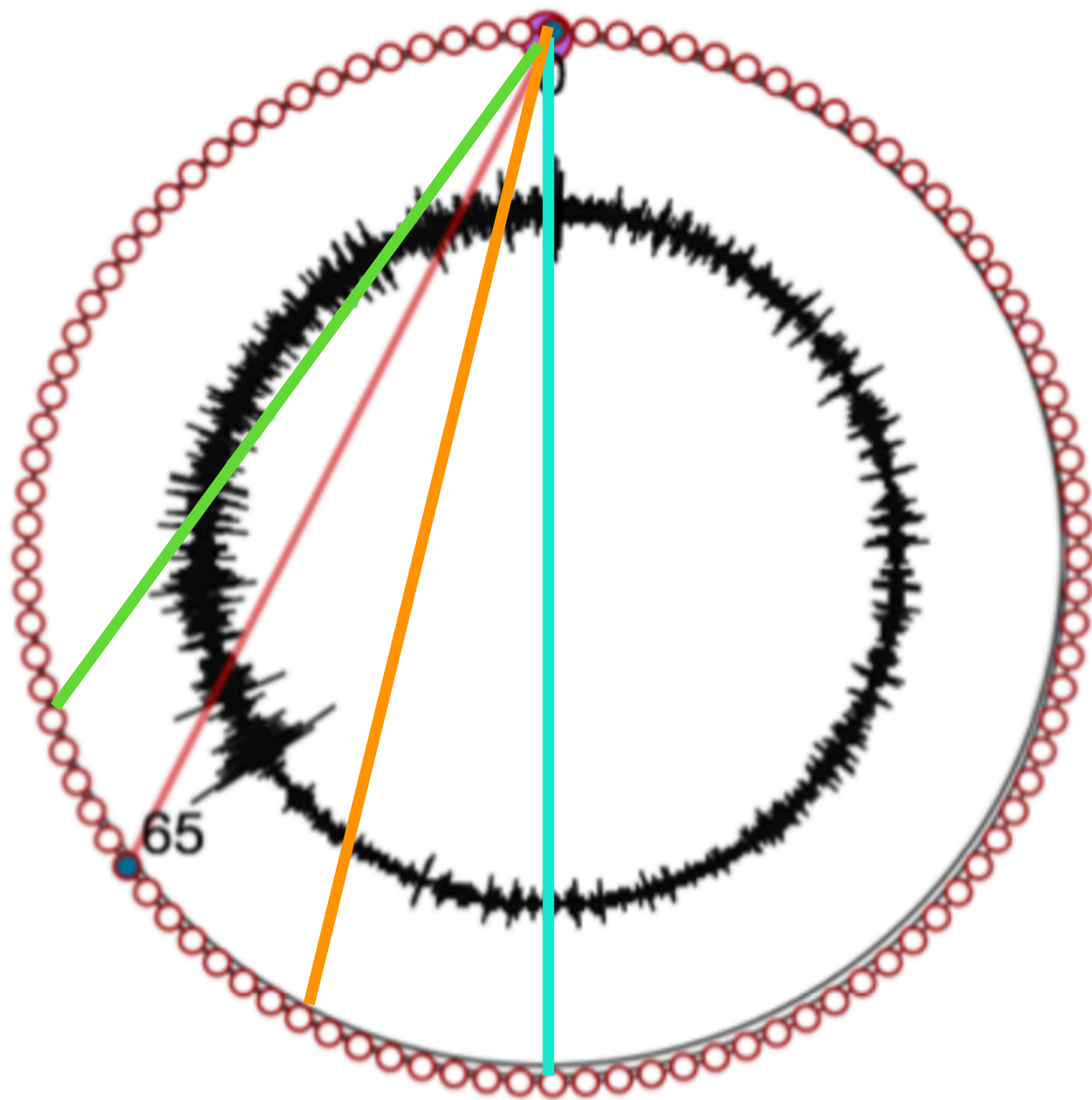
Slicing the Beat

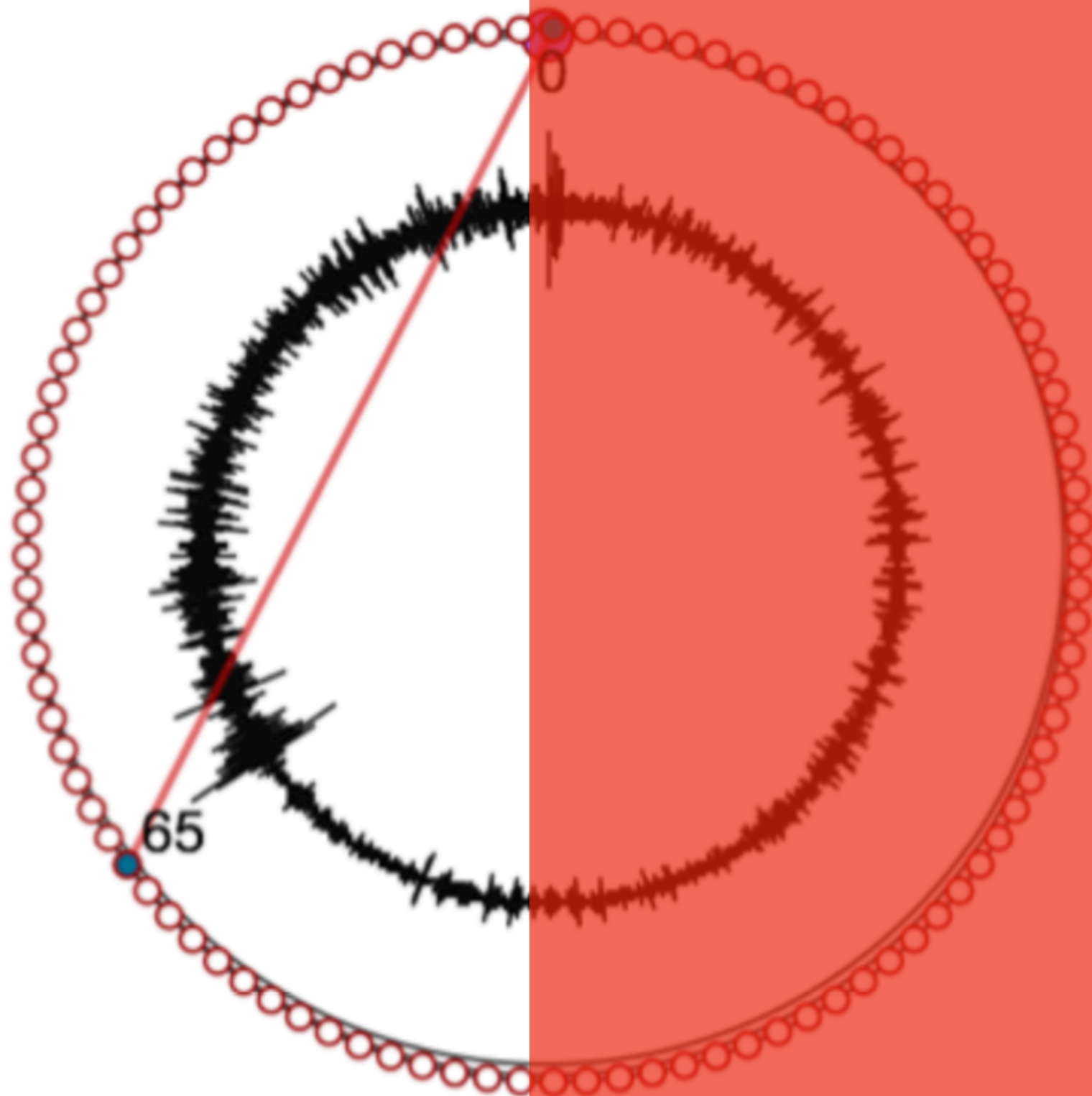
A 1:1 50% **B** 3:1 75% **C** 2:1 66.67%

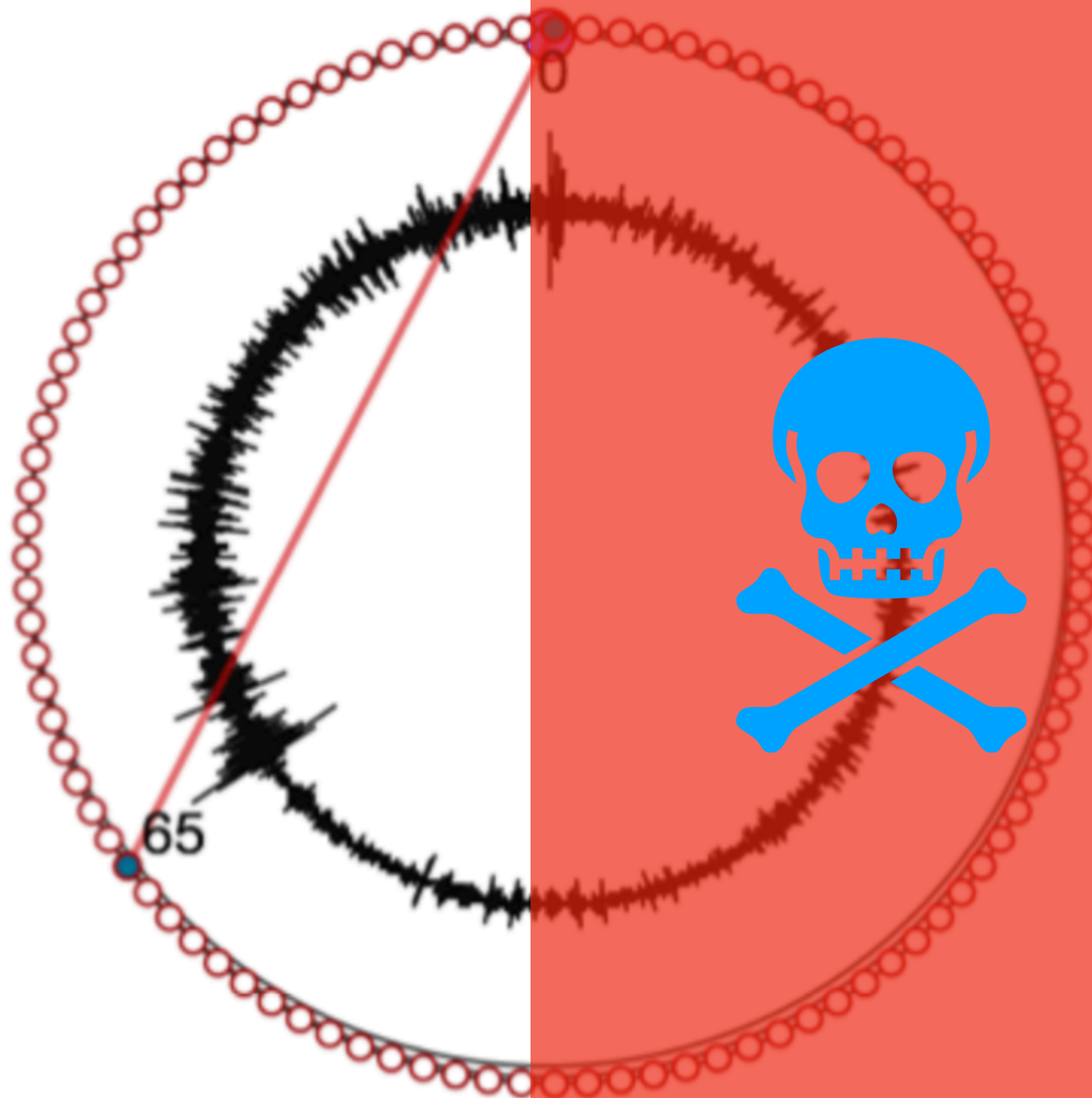
D 3:2 60% **E** 4:1 80%

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









Jazz Taboo #3

Forbidden Swing

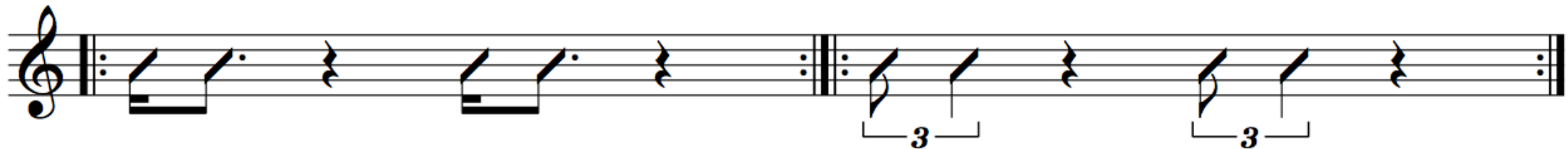
Inconceivable Swing

H

1:3 25%

I

1:2 33.33%



J

2:3 40%

K

1:4 20%



L

3:4 42.8%

M

2:5 28.5%





Predictions on Predictions

KANDA JHATI - 5/8 VERSION

FROM THE 2013 ALBUM "ENTANGLEMENT"

C
♩=174

ANT LAW
2011

A INTRO

1ST+2ND TIMES JUST GUITAR
3RD+4TH ADD BASS/DRUMS

Gm⁷

x4

5 Gm⁷ Bb⁶ Gm⁷ Am⁷ Bbmaj⁷

x2

KANDA JATHI - QUINTUPLET VERSION

FROM THE 2013 ALBUM "ENTANGLEMENT"

C
♩=72

ANT LAW
2011

A JUST GUITAR

Musical notation for guitar part A, featuring a 4/4 time signature and a key signature of one flat. The piece begins with a C major chord. The melody consists of quarter notes, with two groups of quintuplets (marked with a bracket and the number 5) occurring in measures 3 and 5. The piece concludes with a C major chord.

3

Musical notation for piano accompaniment, featuring a 4/4 time signature and a key signature of one flat. The piece begins with a C major chord. The right hand part consists of quarter notes, with two groups of quintuplets (marked with a bracket and the number 5) occurring in measures 3 and 5. The left hand part consists of quarter notes, with two groups of quintuplets (marked with a bracket and the number 5) occurring in measures 3 and 5. The instruction "ADD BASS + DRUMS" is written below the left hand part.





**INTERNATIONAL
GUITAR
RESEARCH
CENTRE**

Thank You

miltonline@me.com

surrey.ac.uk/guitar



**UNIVERSITY OF
SURREY**