# A_alternating



## Chapter description

Score-generation project built around odd-meter rhythmic combinatorics (7/8, 9/8, 11/8, 13/8...). This is the book's expository chapter: a systemic survey of every accent grouping across the 5 odd meters (5/8, 7/8, 9/8, 11/8, 13/8) that structure the rest of the book. Each meter's eighth notes are partitioned into every strong-beat grouping the piece will later draw on, and each pattern is notated twice — first as plain accents, then with the underlying alternating right/left sticking spelled out beneath the notes.

**Accent groupings notated in this chapter**

| | |
|---|---|
| 5/8 | 5, 2+3 |
| 7/8 | 4+3, 3+4, 2+3+2 |
| 9/8 | 2+2+2+3, 2+2+3+2, 2+3+2+2 |
| 11/8 | 4+3+4, 3+3+2+3 |
| 13/8 | 4+5+4, 3+3+3+4 |

## Variations
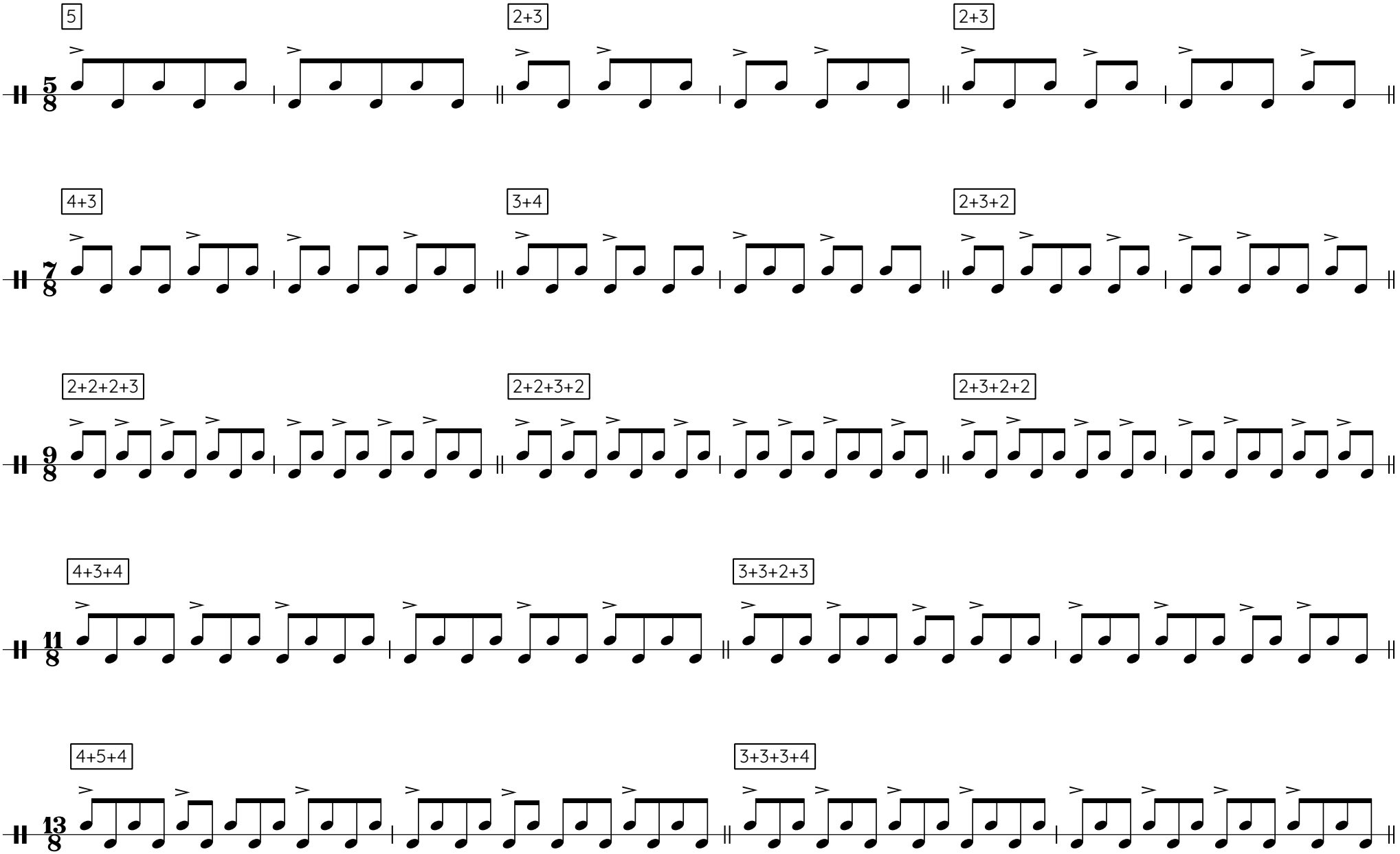
A second, orthogonal layer of combinatorics: on top of each chapter's own core technique, every chapter also carries a VARIATION — a further constraint that can be layered onto any chapter's material, not only its own. Each of the book's 11 chapters is assigned a different variation, and each variation is meant to be tried against every other chapter in turn.

**This chapter's variation:** `LIMBS`

This chapter notates its groupings for two alternating voices (R/L). LIMBS re-poses the same accent groupings as a limb-assignment problem: instead of two hands, distribute each grouping across three or four limbs (hands and feet), and enumerate every way of voicing it across the kit.
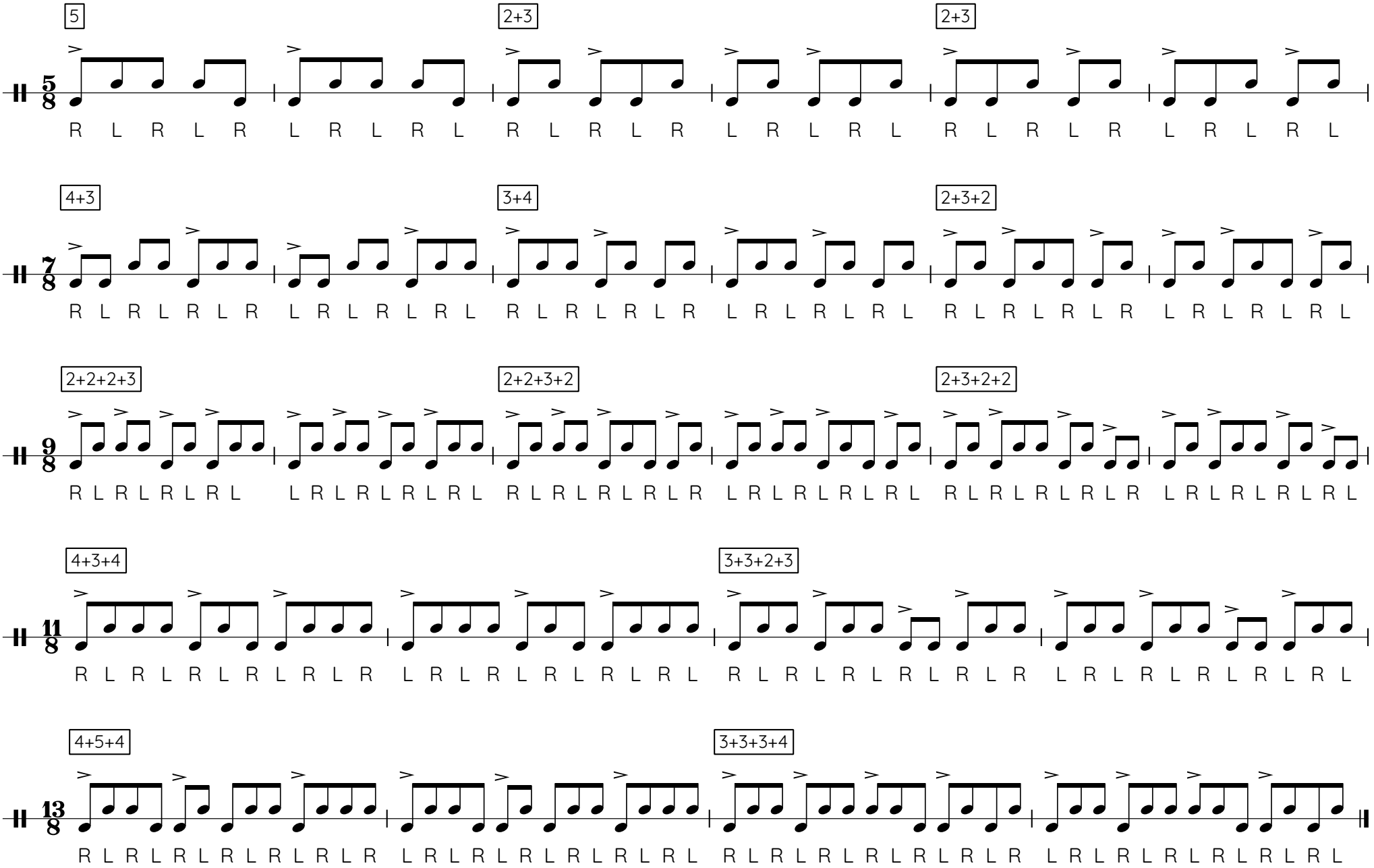
`#LIMBS_B #LIMBS_C #LIMBS_D #LIMBS_E #LIMBS_F #LIMBS_G #LIMBS_H #LIMBS_I #LIMBS_J #LIMBS_K`

Try LIMBS against all 10 other chapters before moving on to the next chapter's variation.




Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai

**A_alternating**


5
2+3
2+3
R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L
4+3
3+4
2+3+2
R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L

# B 5 accelerating

Chapter B of 11 (A-K)

---

### Chapter description

Small values become larger values in motion: semiquavers, dotted semiquavers, triplets, and quavers are set against the five-note cycle.

The chapter s figures are stretched and compressed while their accent skeleton remains audible.

### This chapter’s variation

## ACCELERATION

Try ACCELERATION against the other ten chapters before moving on to the next chapter’s variation. Each variation is an additional constraint that can be layered onto any chapter’s material.
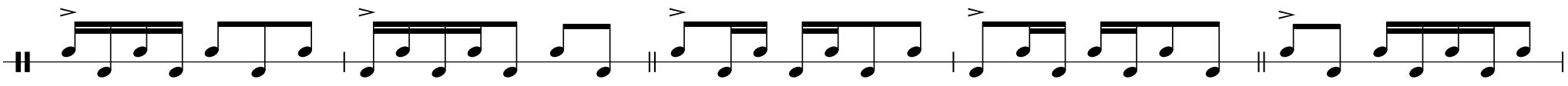
### Variations

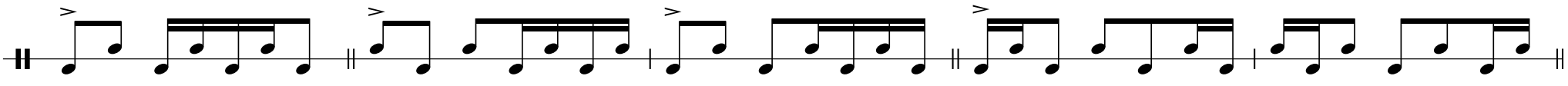
#LIMBS #ACCELERATION #EMBELLISHMENTS
#SWAPS #FLAMS #SKIPS
#MOVING #SHIFTING #BUNCHING
#SPARSING #GROOVING

The score that follows is the surviving rendered chapter material.
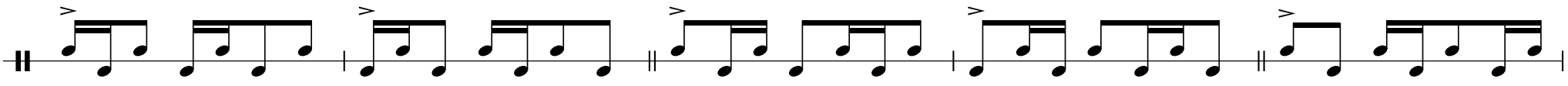
CFGOM_B.pdf ´• ENGINE SKETCHES MASTER SCORES

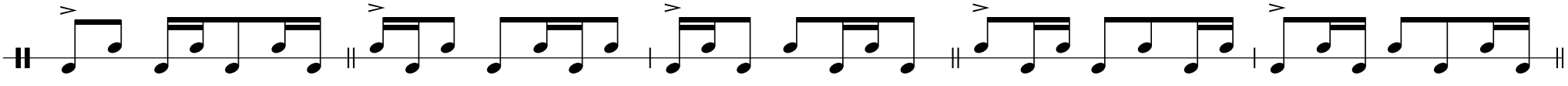
quad
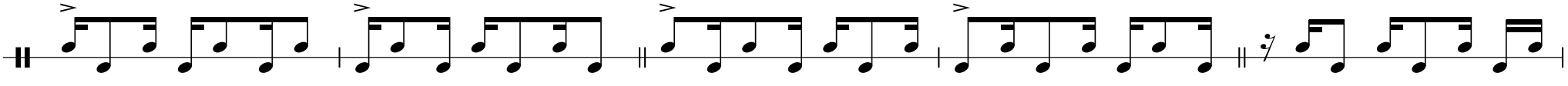




doubles
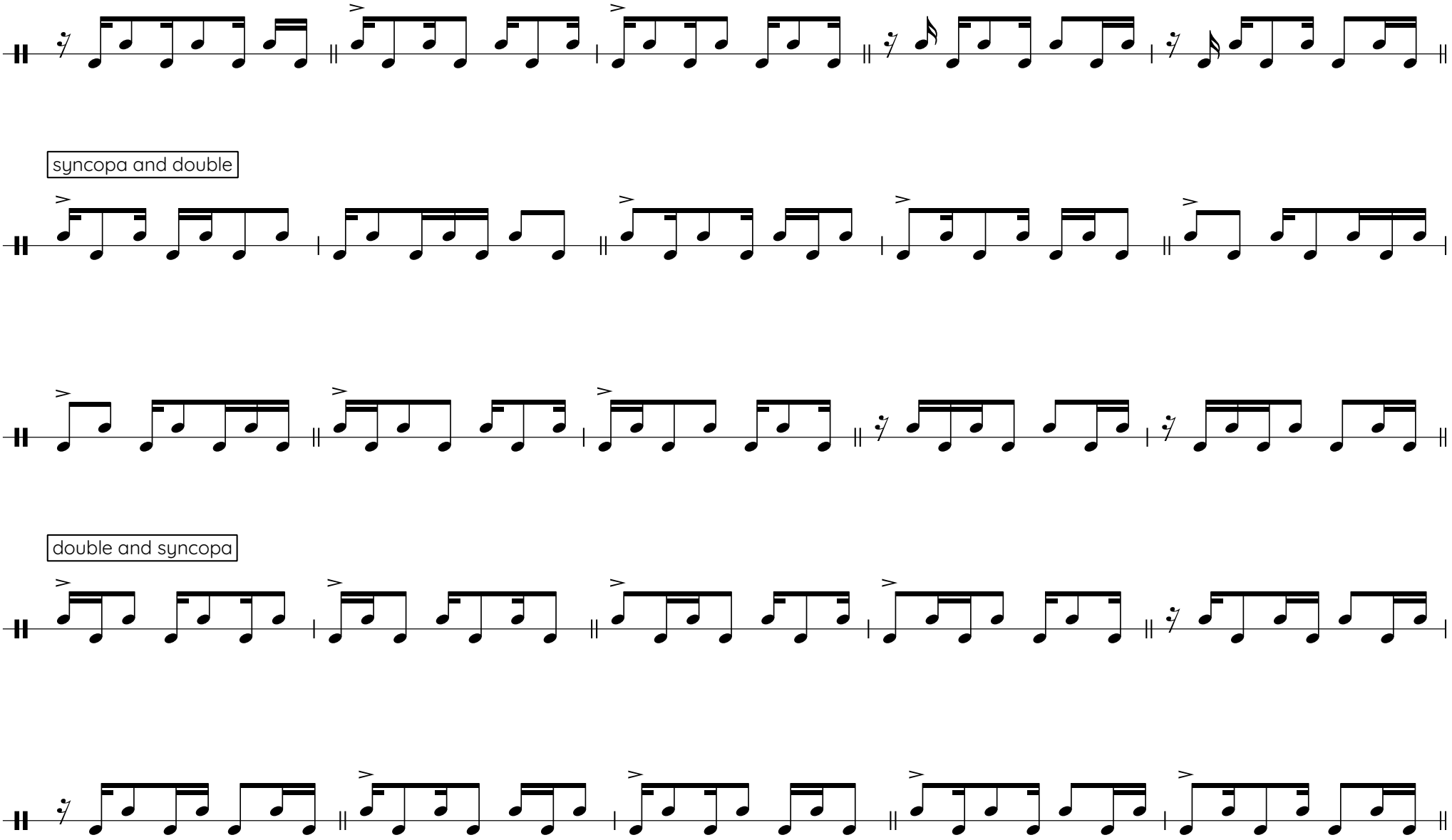




syncopas




(C) 2022 Zlatko Baracskai
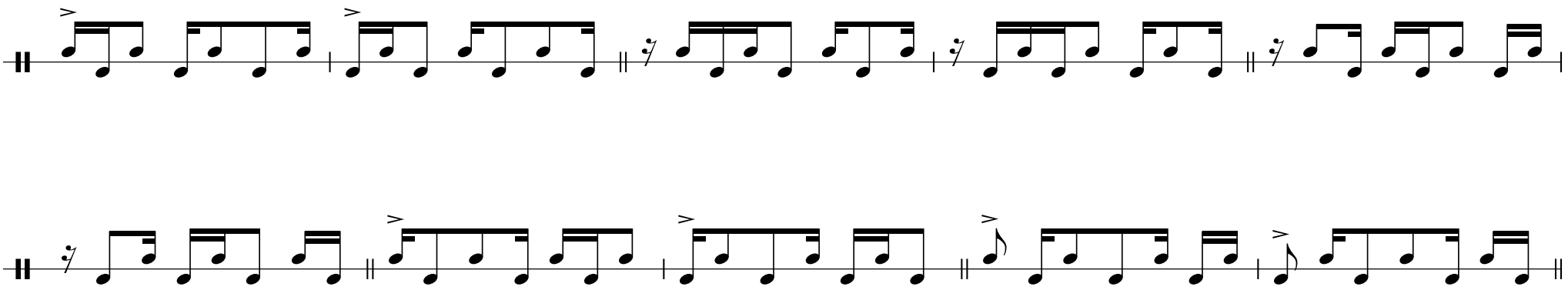
**B_5_accelerations**



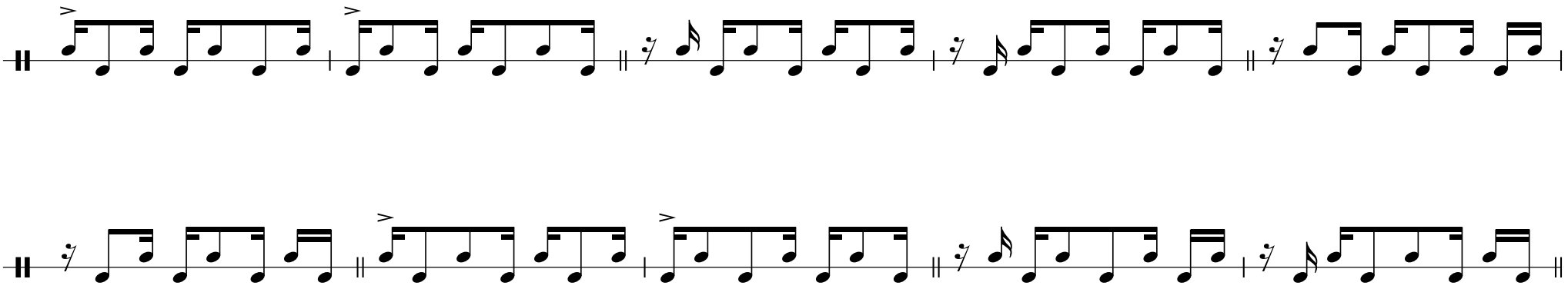


(C) 2022 Zlatko Baracskai
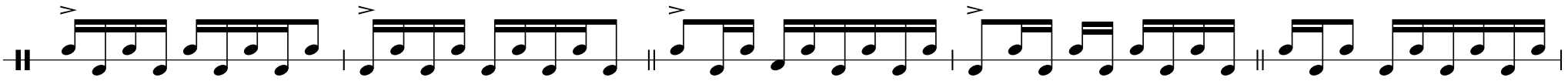
double and loncopa



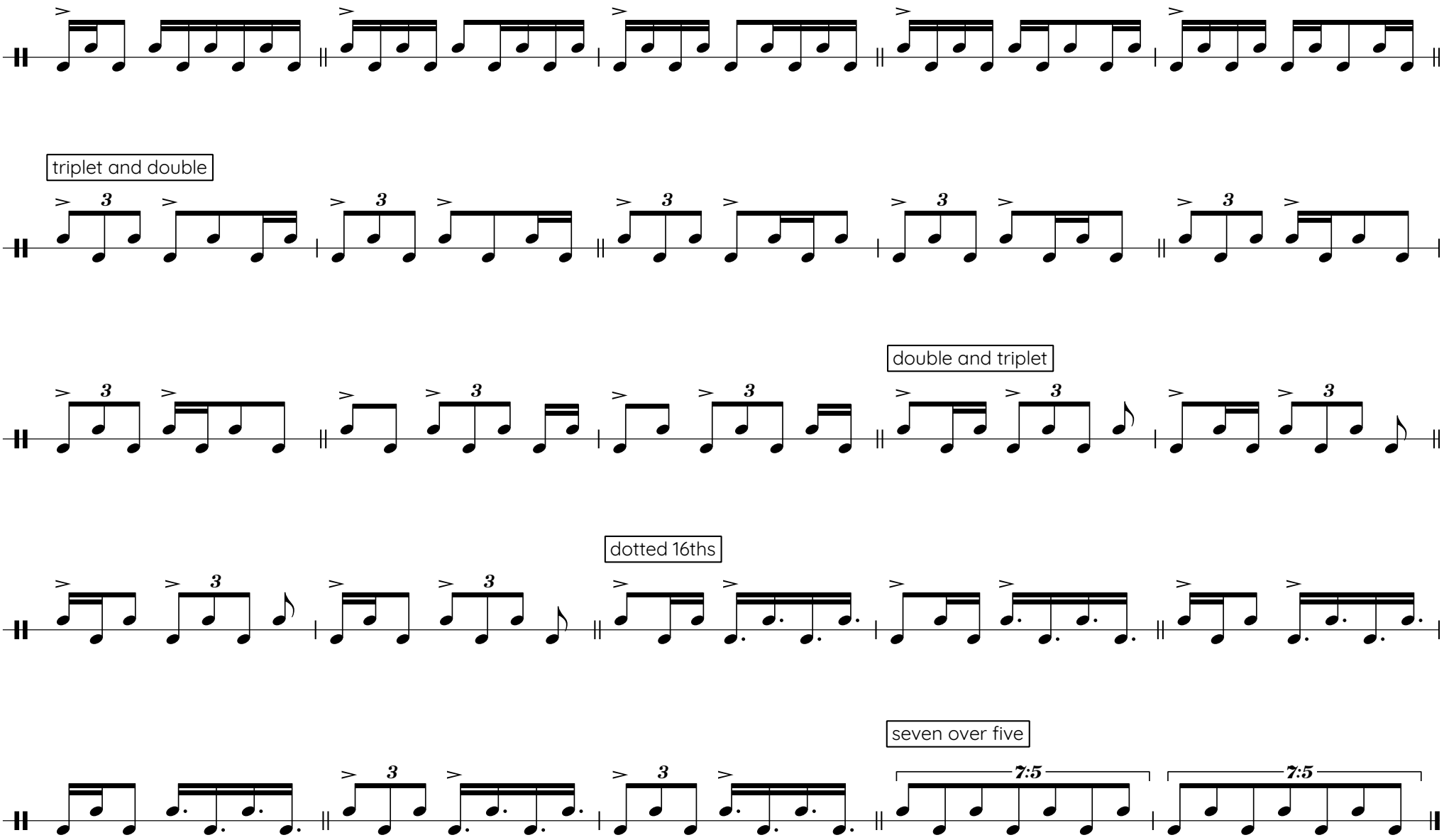
syncopa and loncopa



octa




(C) 2022 Zlatko Baracskai





(C) 2022 Zlatko Baracskai

# C 7 embellishing

Chapter C of 11 (A-K)

---

### Chapter description

A seven-note field is ornamented by moving the embellishing hand around the accented skeleton.

The accent remains structural; the sixteenth-note decoration changes position, density, and direction around it.

### This chapter's variation

## EMBELLISHMENTS

Try EMBELLISHMENTS against the other ten chapters before moving on to the next chapter's variation. Each variation is an additional constraint that can be layered onto any chapter's material.
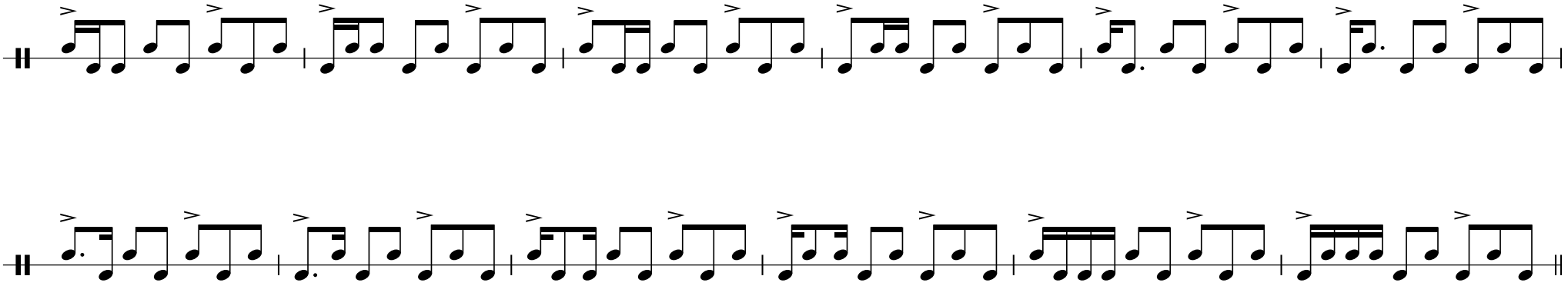
### Variations

#LIMBS #ACCELERATION #EMBELLISHMENTS
#SWAPS #FLAMS #SKIPS
#MOVING #SHIFTING #BUNCHING
#SPARSING #GROOVING

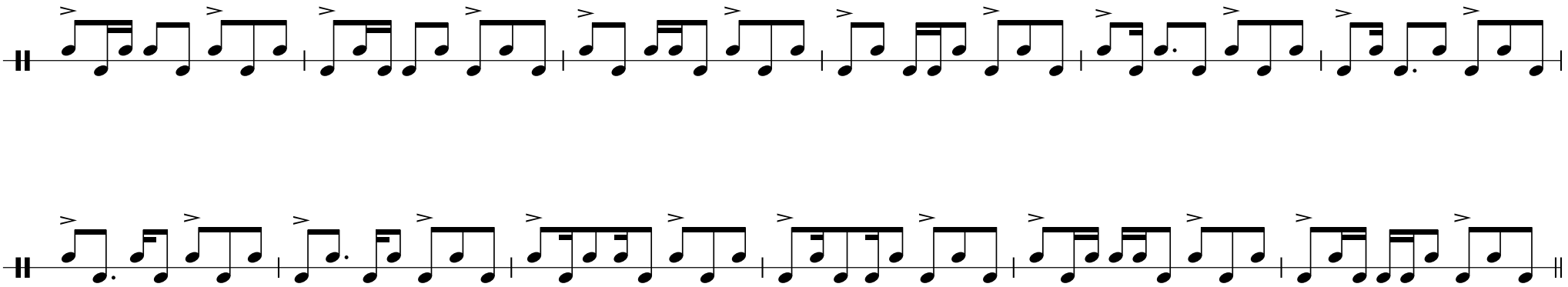
The score that follows is the surviving rendered chapter material.

CFGOM_C.pdf ´• ENGINE SKETCHES MASTER SCORES

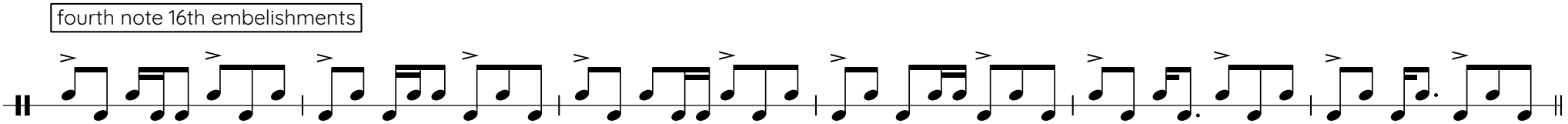
second note 16th embelishments
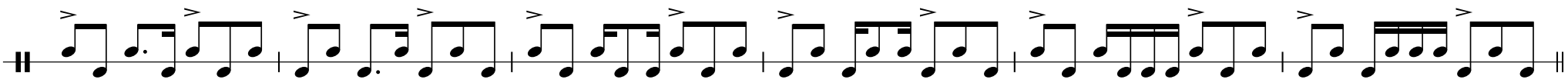


third note 16th embelishments
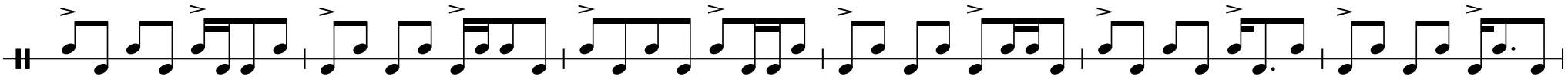


fourth note 16th embelishments

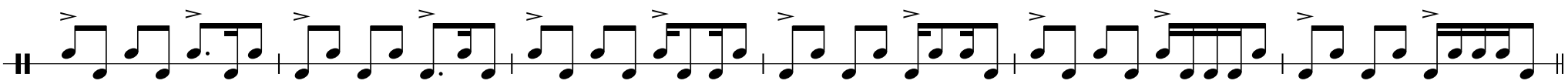


Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai
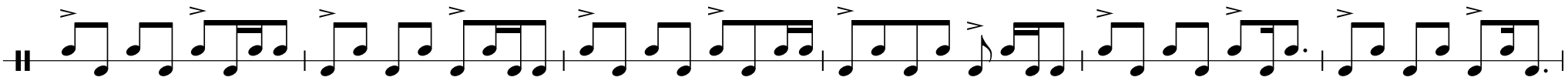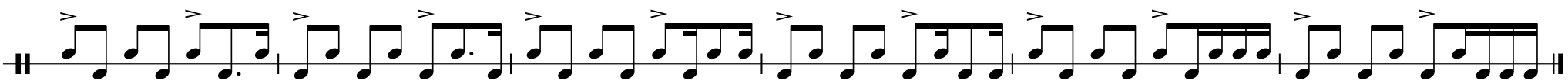


sixth note 16th embelishments





seventh note 16th embelishments






(C) 2022 Zlatko Baracskai

# D 9 swapping

Chapter D of 11 (A-K)

---

### Chapter description

Nine-note patterns are recombined through singles, doubles, triples, and mixed stroke groups.

The same rhythmic cell changes identity when its stroke groups trade places, exposing symmetry and its breaks.

### This chapter’s variation

## SWAPS

Try SWAPS against the other ten chapters before moving on to the next chapter’s variation. Each variation is an additional constraint that can be layered onto any chapter’s material.

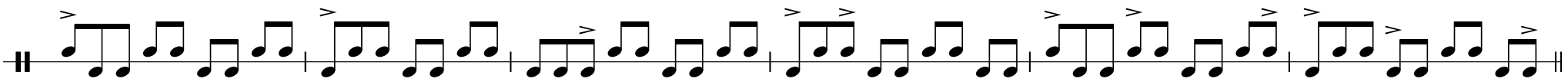
### Variations

#LIMBS #ACCELERATION #EMBELLISHMENTS
#SWAPS #FLAMS #SKIPS
#MOVING #SHIFTING #BUNCHING
#SPARSING #GROOVING

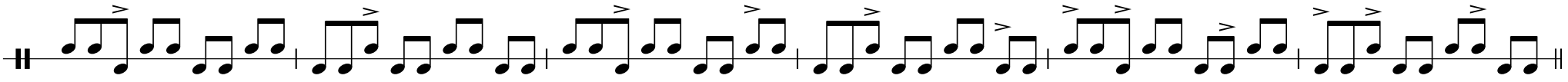
The score that follows is the surviving rendered chapter material.

CFGOM_D.pdf ´• ENGINE SKETCHES MASTER SCORES

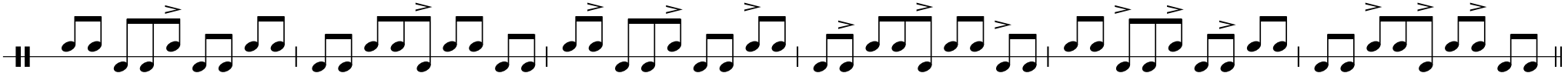
single on 1st



single on 3rd



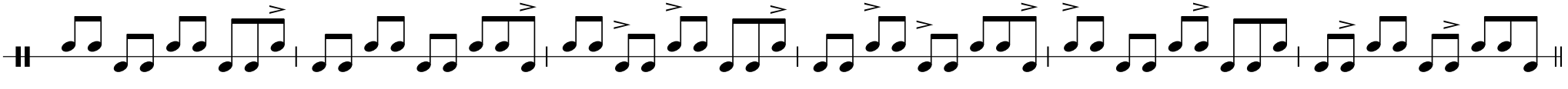
single on 5th



single on 7th

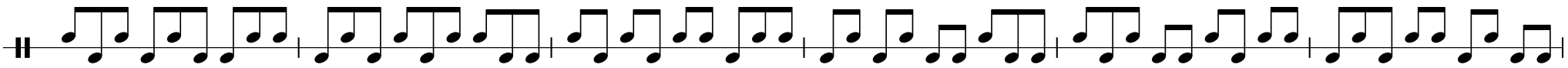


single on 9th




(C) 2022 Zlatko Baracskai

doubles on 6th & 8th



doubles on 5th & 8th



doubles on 4th & 8th



doubles on 3rd & 8th



doubles on 2nd & 8th



doubles on 1st & 8th



doubles on 1st & 7th



doubles on 1st & 6th



doubles on 1st & 5th



doubles on 1st & 4th



doubles on 1st & 3rd



doubles on 2nd & 4th



doubles on 2nd & 5th



doubles on 2nd & 6th
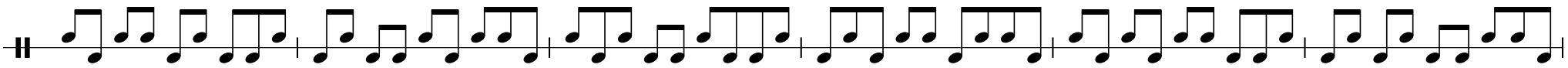


doubles on 2nd & 7th




(C) 2022 Zlatko Baracskai

doubles on 3rd & 7th



doubles on 4th & 7th



doubles on 5th & 7th



doubles on 4th & 6th



doubles on 3rd & 6th



doubles on 3rd & 5th



triples on 1st & 4th
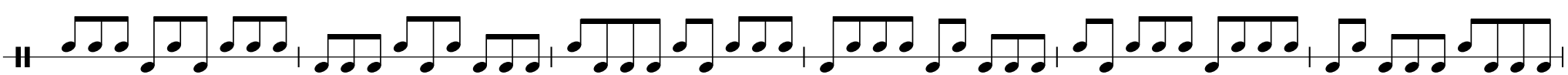


triples on 1st & 5th



triples on 1st & 6th



triples on 1st & 7th
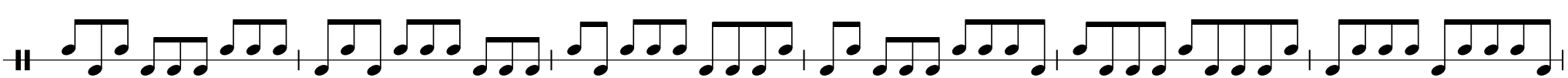


triples on 2nd & 7th



triples on 3rd & 7th



triples on 4th & 7th



triples on 3rd & 6th
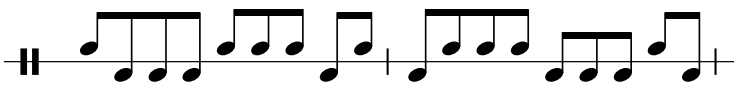


triples on 2nd & 6th
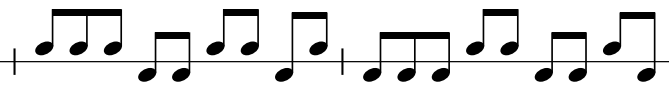



(C) 2022 Zlatko Baracskai
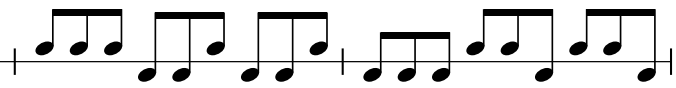
triples on 2nd & 5th



triple on 1st doubles on 4th & 6th
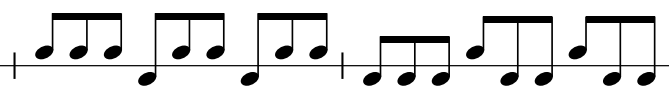


triple on 1st doubles on 4th & 7th



triple on 1st doubles on 4th & 8th
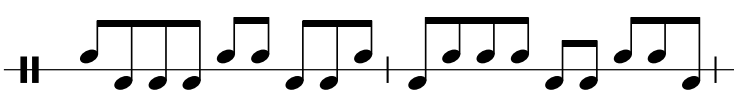


triple on 1st doubles on 5th & 8th
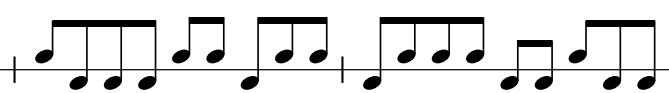


triple on 1st doubles on 5th & 7th



triple on 2nd doubles on 5th & 7th



triple on 2nd doubles on 5th & 8th
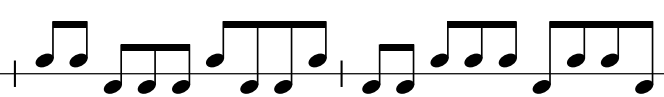


triple on 2nd doubles on 6th & 8th



triple on 3rd doubles on 1st & 6th



triple on 3rd doubles on 1st & 7th
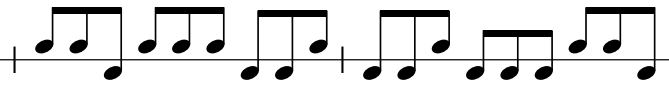


triple on 3rd doubles on 1st & 8th



triple on 3rd doubles on 6th & 8th



triple on 4th doubles on 1st & 7th

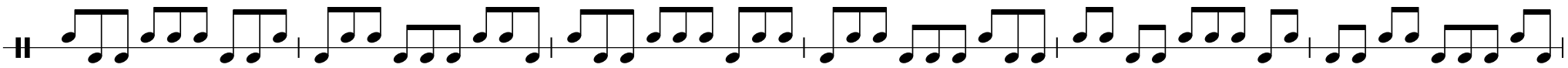


triple on 4th doubles on 1st & 8th




(C) 2022 Zlatko Baracskai

triple on 4th doubles on 2nd & 7th



triple on 4th doubles on 2nd & 8th



triple on 5th doubles on 1st & 2nd



triple on 5th doubles on 1st & 8th
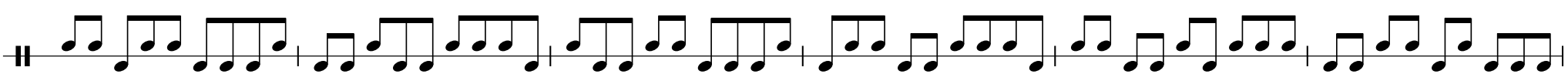


triple on 5th doubles on 2nd & 8th



triple on 6th doubles on 1st & 3rd



triple on 6th doubles on 1st & 4th
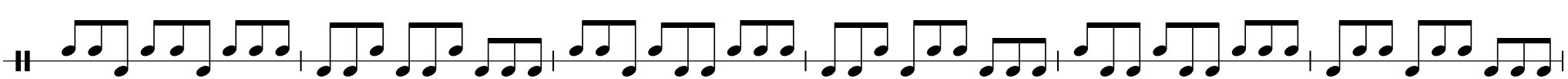


triple on 6th doubles on 2nd & 4th



triple on 7th doubles on 1st & 3rd



triple on 7th doubles on 1st & 4th



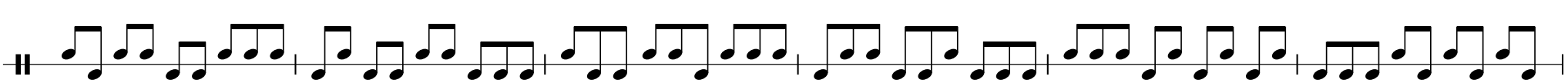
triple on 7th doubles on 1st & 5th



triple on 7th doubles on 2nd & 5th



triple on 7th doubles on 3rd & 5th



triple on 7th doubles on 2nd & 4th



triple on 1st... then shift it on.... then with 3 doubles




(C) 2022 Zlatko Baracskai

# E 11 flamming

Chapter E of 11 (A-K)

---

### Chapter description

Eleven-note patterns carry two indispensability fields and a changing number of flams.

Grace notes move through the metric field in sets of two, four, and six, sharpening the difference between pulse and attack.

### This chapter’s variation

## FLAMS

Try FLAMS against the other ten chapters before moving on to the next chapter’s variation. Each variation is an additional constraint that can be layered onto any chapter’s material.
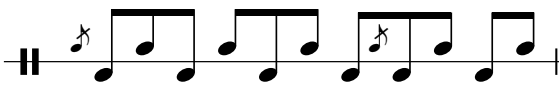
### Variations

#LIMBS #ACCELERATION #EMBELLISHMENTS
#SWAPS #FLAMS #SKIPS
#MOVING #SHIFTING #BUNCHING
#SPARSING #GROOVING
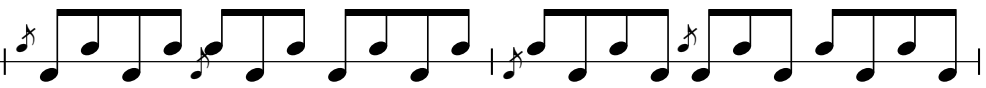
The score that follows is the surviving rendered chapter material.

CFGOM_E.pdf ´• ENGINE SKETCHES MASTER SCORES
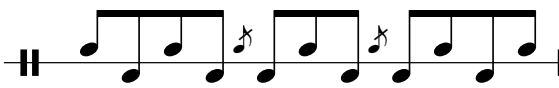
1st & 8th flams



1st & 5th flams
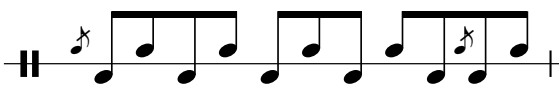


5th & 8th flams



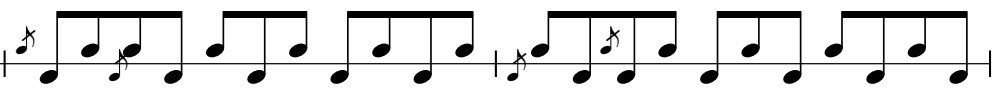
8th & 10th flams
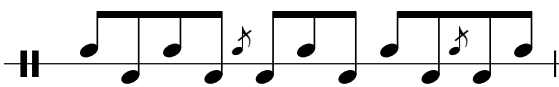


1st & 10th flams



1st & 3rd flams



5th & 10th flams



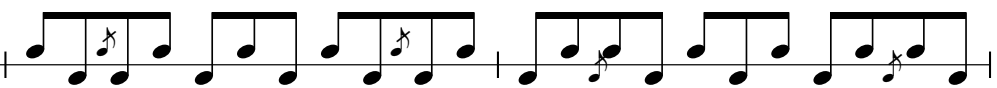
3rd & 5th flams



3rd & 8th flams
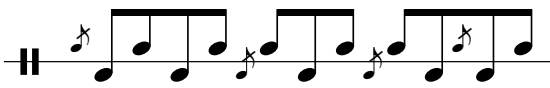


3rd & 10th flams
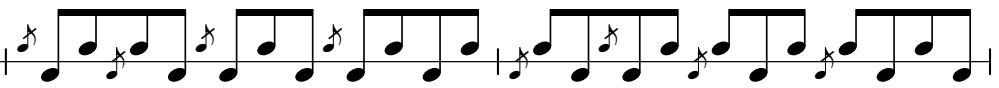



(C) 2022 Zlatko Baracskai
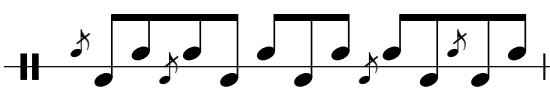
1st, 5th, 8th & 10th flams



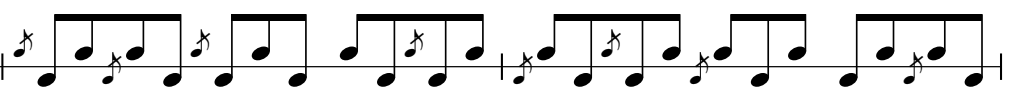
1st, 3rd, 5th & 8th flams
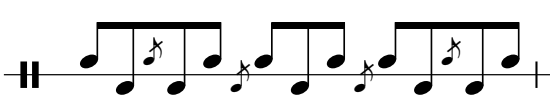


1st, 3rd, 8th & 10th flams
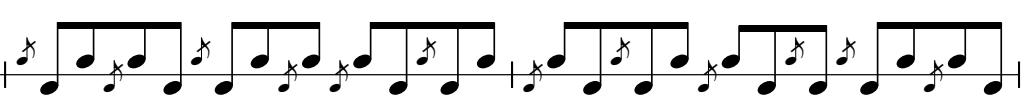


1st, 3rd, 5th & 10th flams
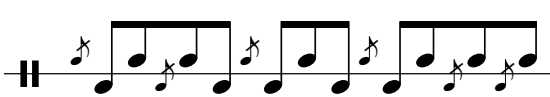


3rd, 5th, 8th & 10th flams
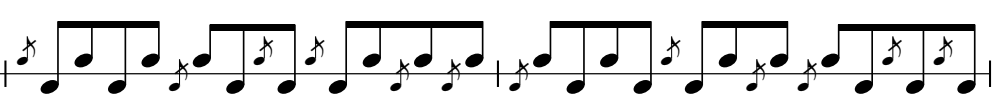


1st, 3rd, 5th, 7th, 8th & 10th flams
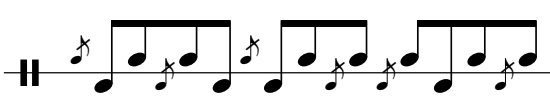


1st, 3rd, 5th, 8th, 10th & 11th flams
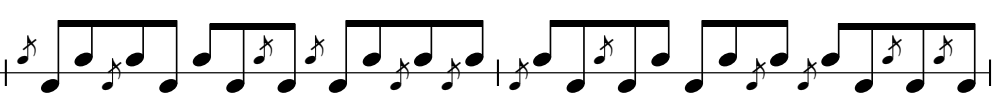


1st, 5th, 7th, 8th, 10th & 11th flams



1st, 3rd, 5th, 7th, 8th & 11th flams
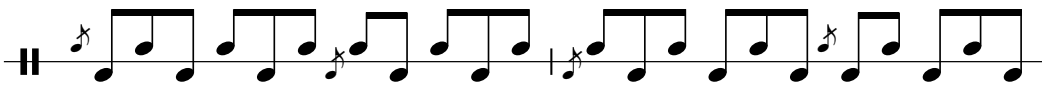


1st, 3rd, 7th, 8th, 10th & 11th flams
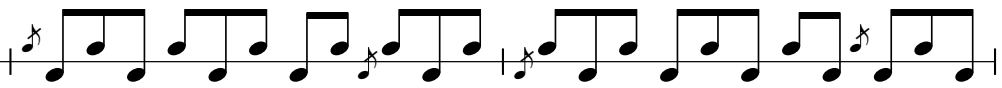



(C) 2022 Zlatko Baracskai

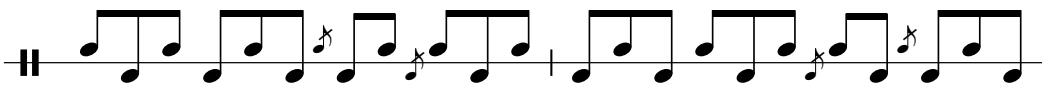
1st & 7th flams



1st & 9th flams
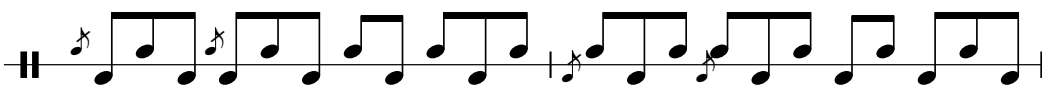


7th & 9th flams



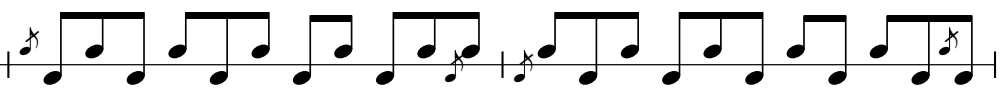
4th & 7th flams
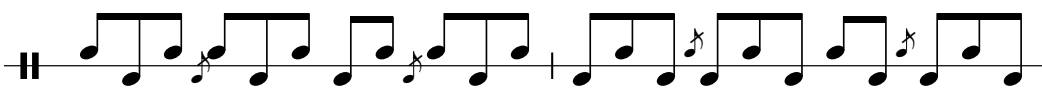


1st & 4th flams



1st & 11th flams
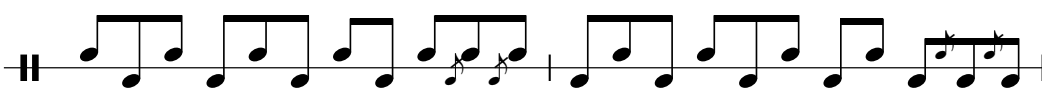


4th & 9th flams
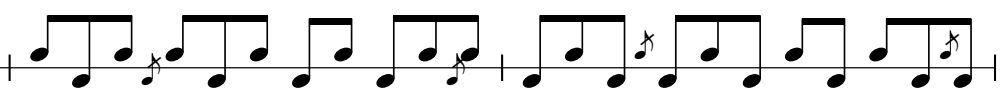


9th & 11th flams



10th & 11th flams
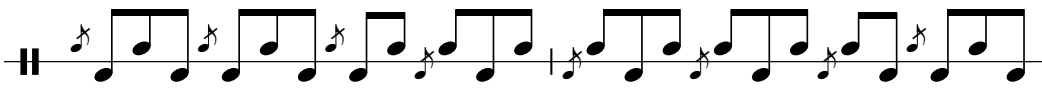


4th & 11th flams
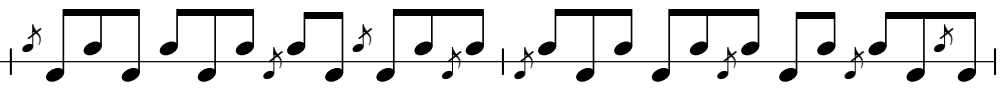


Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai
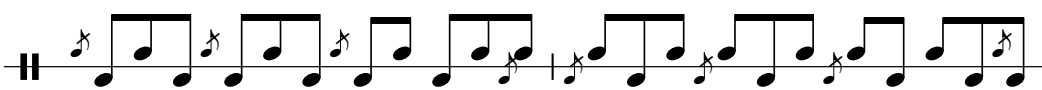
1st 4th 7th & 9th flams
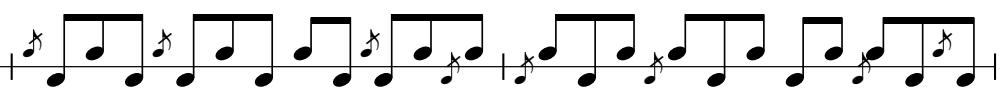


1st 7th 9th & 11th flams
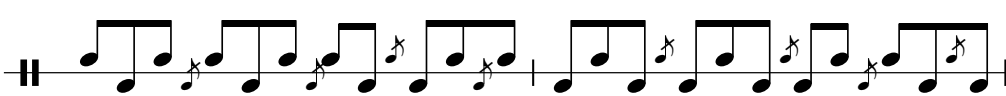


1st 4th 7th & 11th flams
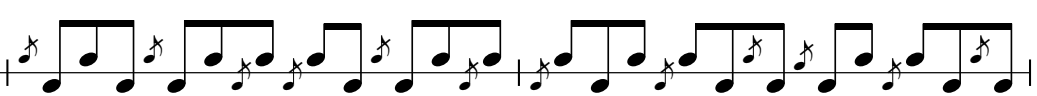


1st 4th 9th & 11th flams
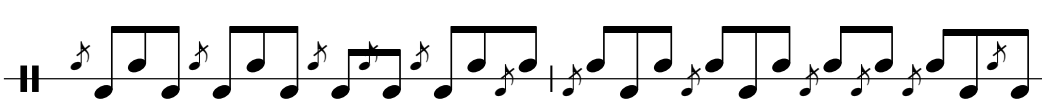


4th 7th 9th & 11th flams
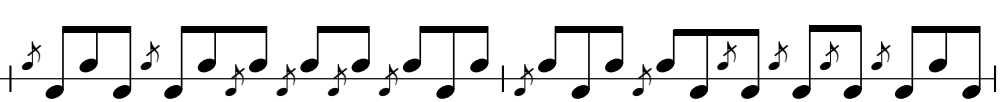


1st 4th 6th 7th 9th & 11th flams
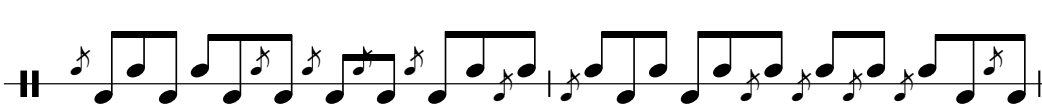


1st 4th 7th 8th 9th & 11th flams
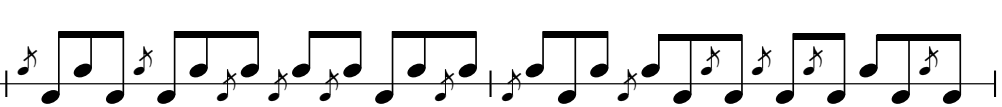


1st 4th 6th 7th 8th & 9th flams



1st 6th 7th 8th 9th & 11th flams



1st 4th 6th 7th 8th & 11th flams




(C) 2022 Zlatko Baracskai

# F 13 skipping

Chapter F of 11 (A-K)

---

### Chapter description

Thirteen-note patterns are punctured by skips chosen from an inverse indispensability order.

Selected notes disappear from the surface while the underlying thirteen-step cycle continues underneath.

### This chapter’s variation

## SKIPS

Try SKIPS against the other ten chapters before moving on to the next chapter’s variation. Each variation is an additional constraint that can be layered onto any chapter’s material.

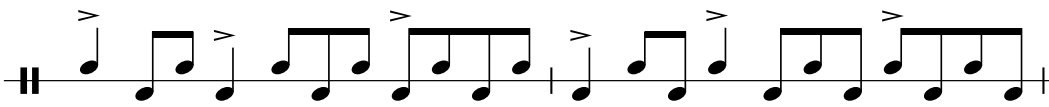
### Variations

#LIMBS #ACCELERATION #EMBELLISHMENTS
#SWAPS #FLAMS #SKIPS
#MOVING #SHIFTING #BUNCHING
#SPARSING #GROOVING

The score that follows is the surviving rendered chapter material.

CFGOM_F.pdf ´• ENGINE SKETCHES MASTER SCORES
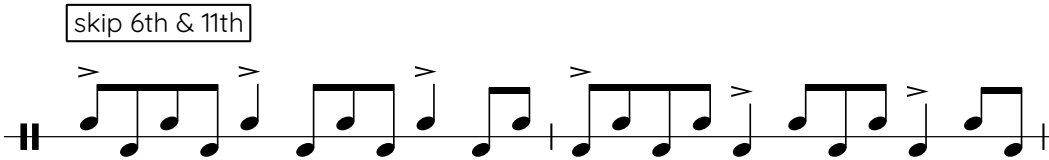
skip 2nd & 6th



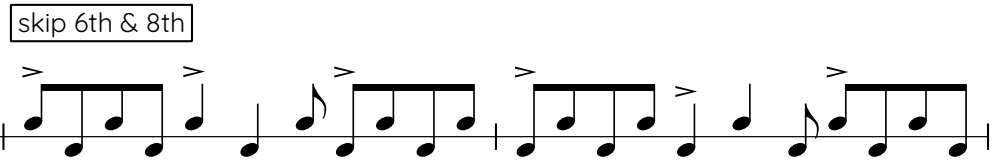
skip 2nd & 11th



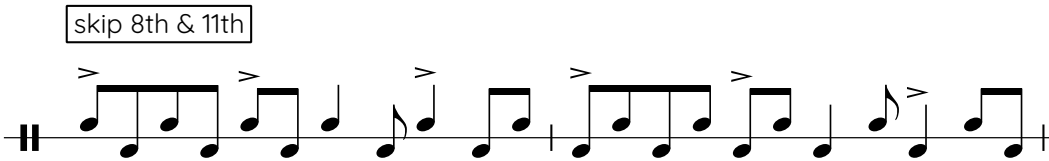
skip 6th & 11th



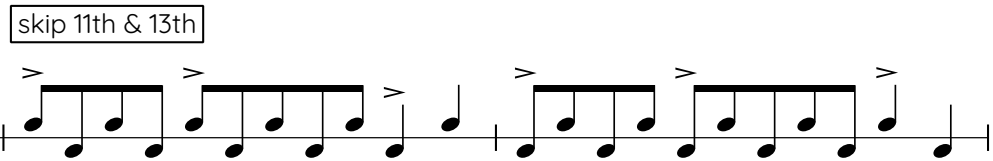
skip 6th & 8th



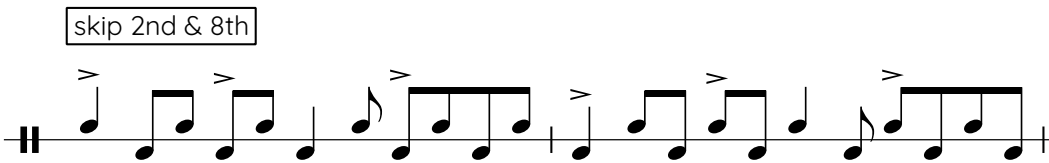
skip 8th & 11th



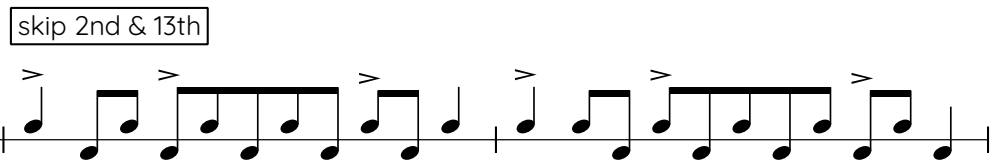
skip 11th & 13th
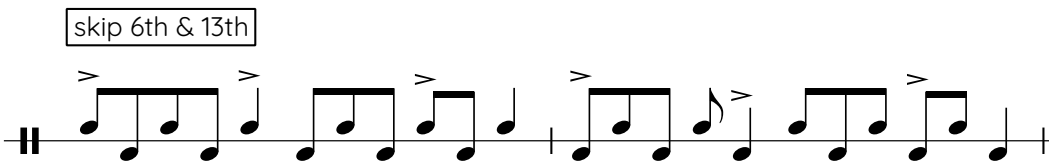


skip 2nd & 8th



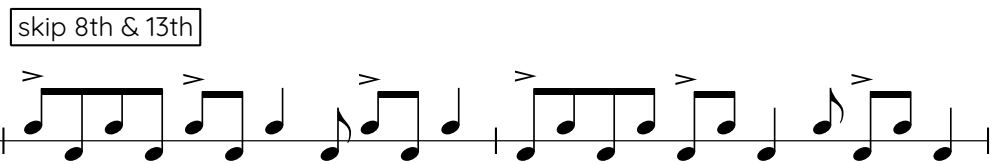
skip 2nd & 13th



skip 6th & 13th
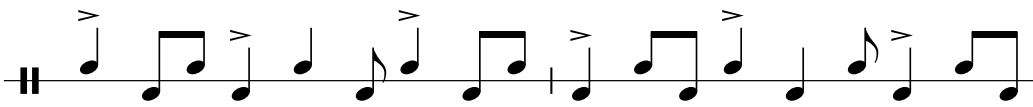


skip 8th & 13th




(C) 2022 Zlatko Baracskai
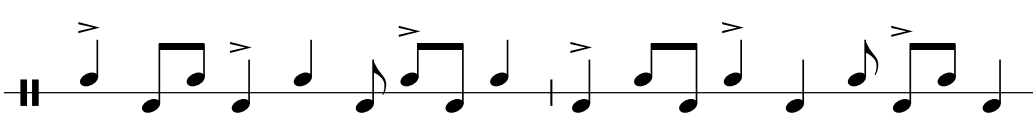
skip 2nd, 6th, 8th & 11th



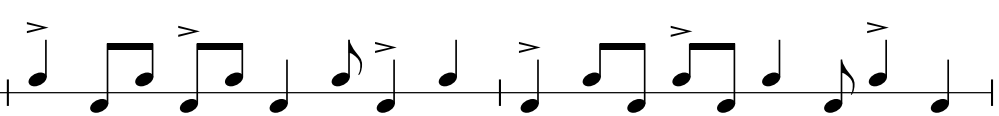
skip 2nd, 6th, 11th & 13th



skip 2nd, 6th, 8th & 13th



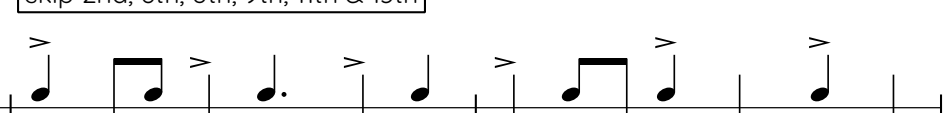
skip 2nd, 8th, 11th & 13th



skip 6th, 8th, 11th & 13th



skip 2nd, 6th, 8th, 9th, 11th & 13th



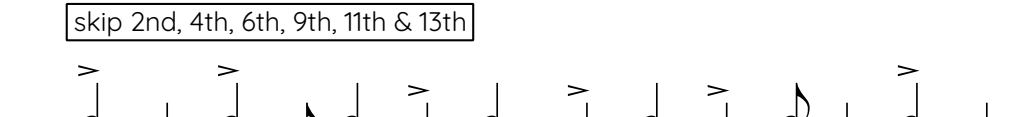
skip 2nd, 4th, 6th, 8th, 11th & 13th



skip 2nd, 4th, 6th, 8th, 9th & 11th



skip 2nd, 4th, 6th, 9th, 11th & 13th

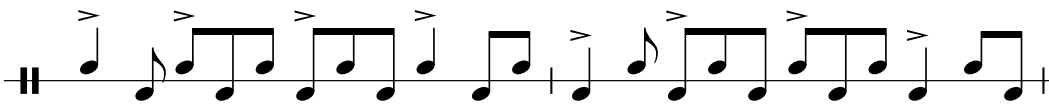


skip 2nd, 4th, 6th, 8th, 9th & 13th




(C) 2022 Zlatko Baracskai

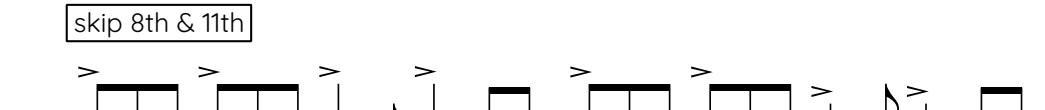
skip 2nd & 11th



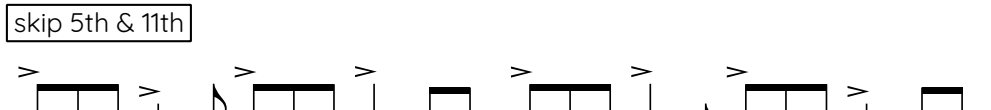
skip 2nd & 8th



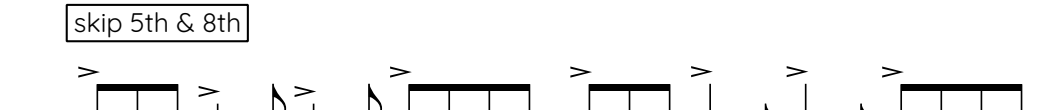
skip 8th & 11th



skip 5th & 11th



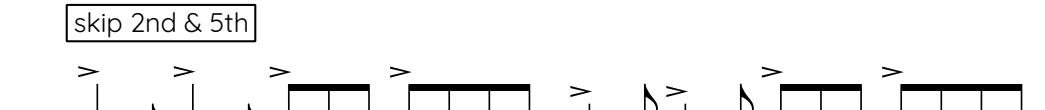
skip 5th & 8th



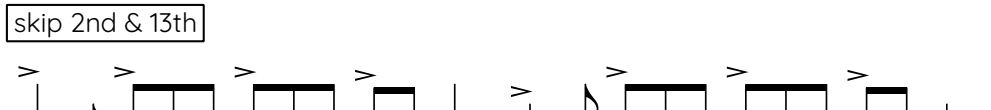
skip 8th & 13th



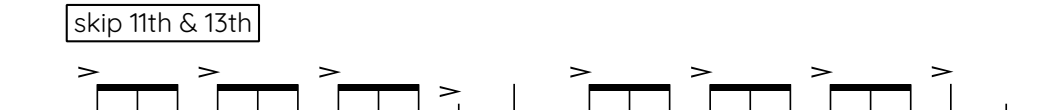
skip 2nd & 5th



skip 2nd & 13th



skip 11th & 13th
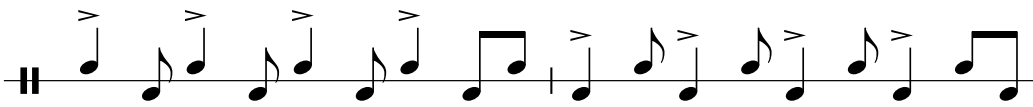


skip 5th & 13th




(C) 2022 Zlatko Baracskai

skip 2nd, 5th, 8th & 11th



skip 2nd, 8th & 11th, 13th



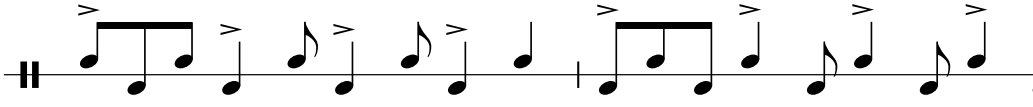
skip 2nd, 5th, 11th & 13th



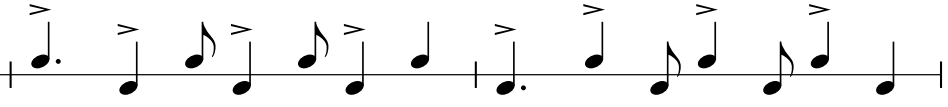
skip 2nd, 5th, 8th & 13th



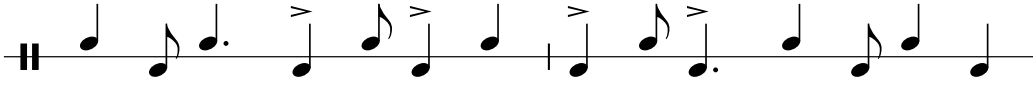
skip 5th, 8th & 11th & 13th



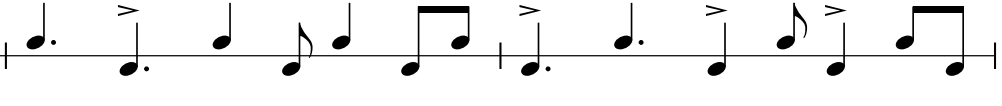
skip 2nd, 3rd, 5th, 8th, 11th & 13th



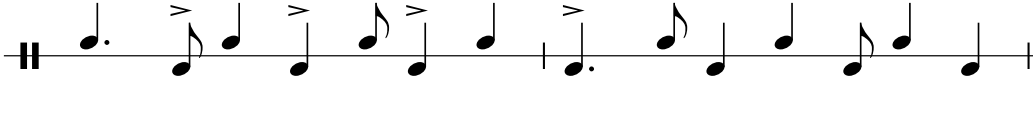
skip 2nd, 5th, 6th, 8th, 11th & 13th



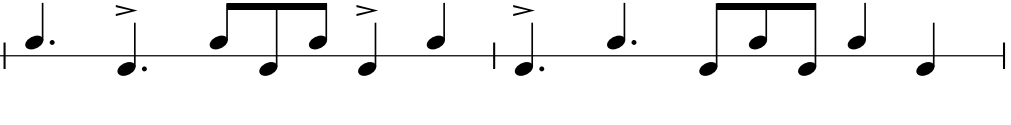
skip 2nd, 3rd, 5th, 6th, 8th & 11th



skip 2nd, 3rd, 6th, 8th, 11th & 13th



skip 2nd, 3rd, 5th, 6th, 11th & 13th




(C) 2022 Zlatko Baracskai

# G 5 moving

Chapter G of 11 (A-K)

---

### Chapter description

Five-note patterns move through overlapping singles, doubles, and triples, with the overlap itself treated as material.

A moving hand, a held hand, and their crossings create several readings of one compact cell.

### This chapter’s variation

## MOVING
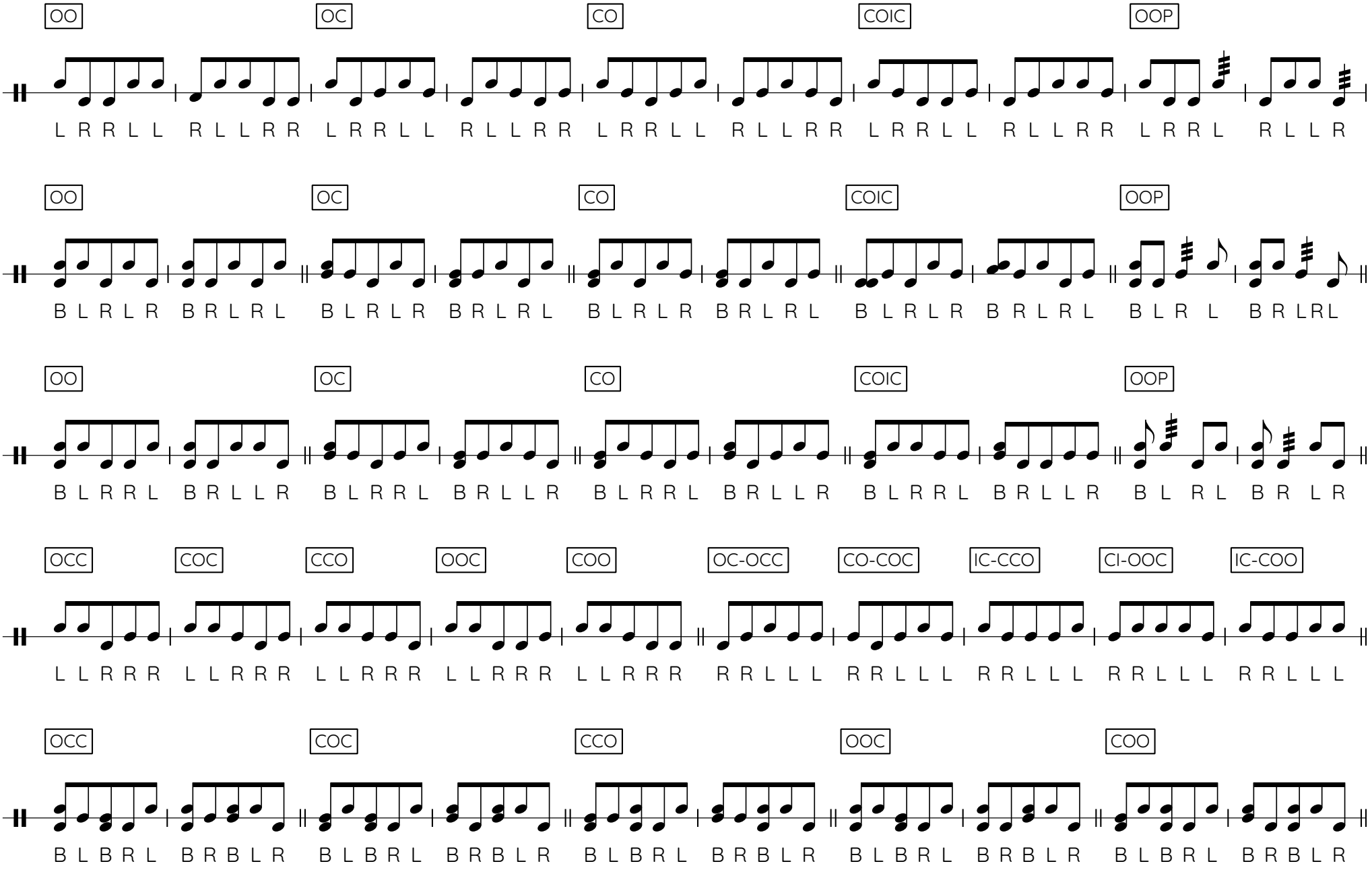
Try MOVING against the other ten chapters before moving on to the next chapter’s variation. Each variation is an additional constraint that can be layered onto any chapter’s material.

### Variations

#LIMBS #ACCELERATION #EMBELLISHMENTS
#SWAPS #FLAMS #SKIPS
#MOVING #SHIFTING #BUNCHING
#SPARSING #GROOVING
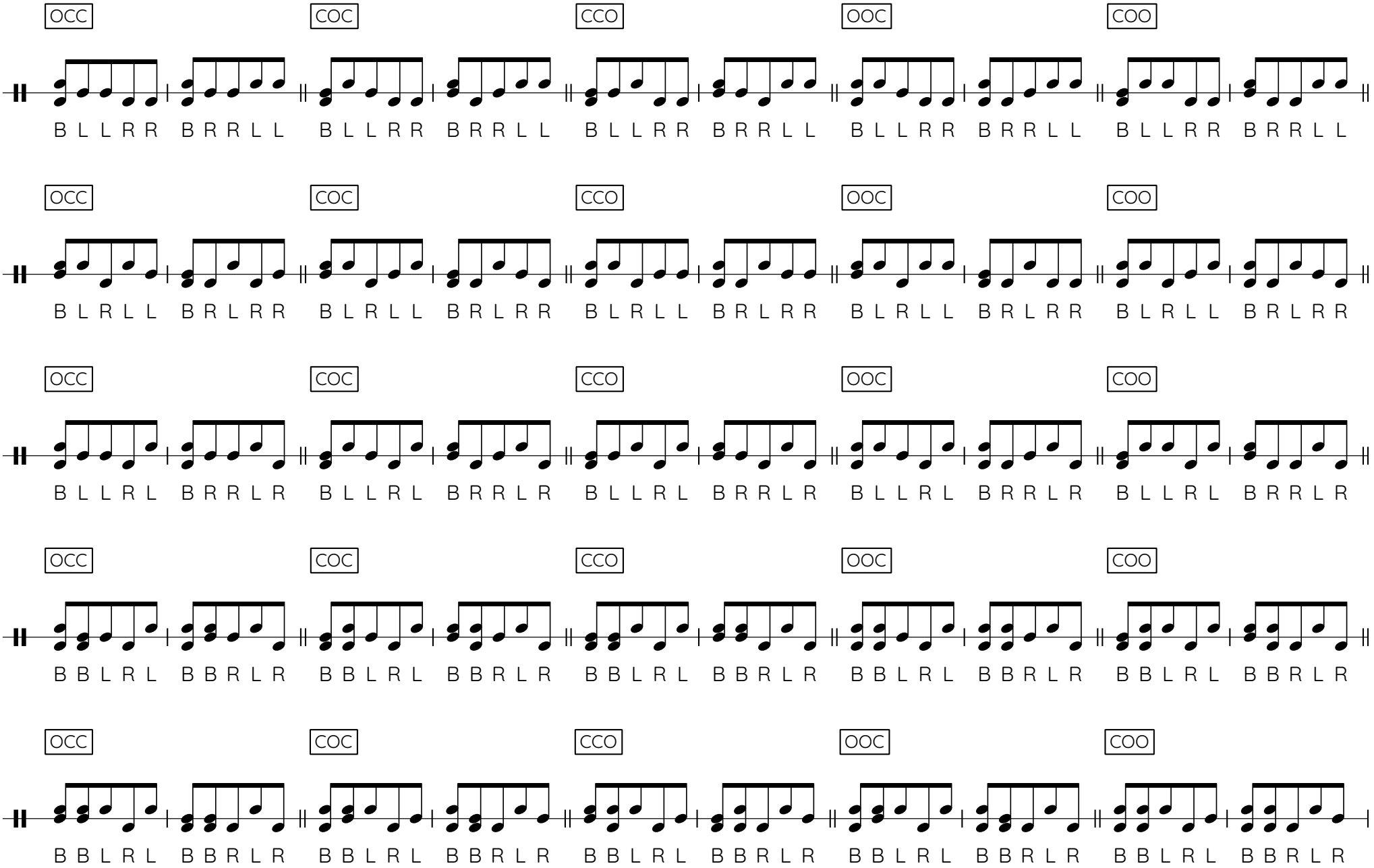
The score that follows is the surviving rendered chapter material.

CFGOM_G.pdf ´• ENGINE SKETCHES MASTER SCORES




Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai

**G_5_moves**




Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai

**G_5_moves**

# H 7 hop, bop & fill

Chapter H of 11 (A-K)

---

### Chapter description

Seven-note patterns shift through single, double, triple, and longer stroke groups, from hop to bop to fill.

A stroke group migrates through the bar while density and accent remain in dialogue.

### This chapter's variation

## SHIFTING

Try SHIFTING against the other ten chapters before moving on to the next chapter's variation. Each variation is an additional constraint that can be layered onto any chapter's material.

### Variations

#LIMBS #ACCELERATION #EMBELLISHMENTS
#SWAPS #FLAMS #SKIPS
#MOVING #SHIFTING #BUNCHING
#SPARSING #GROOVING

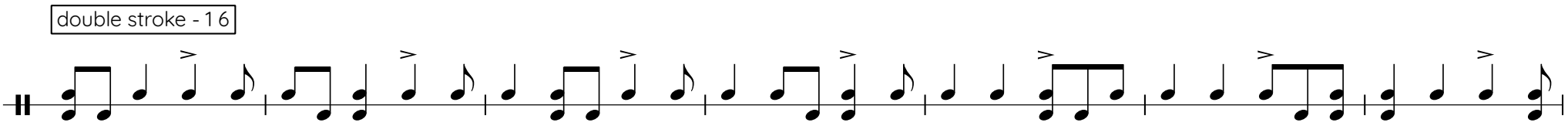
The score that follows is the surviving rendered chapter material.

CFGOM_H.pdf ´• ENGINE SKETCHES MASTER SCORES

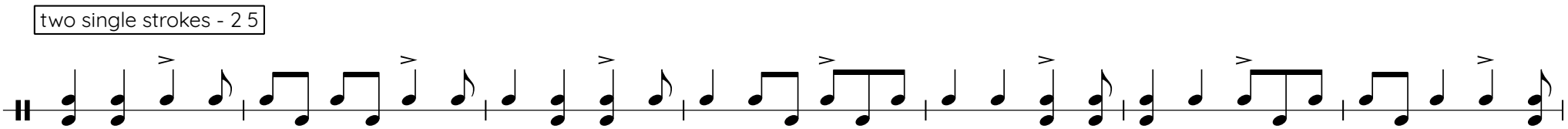
single stroke - 7



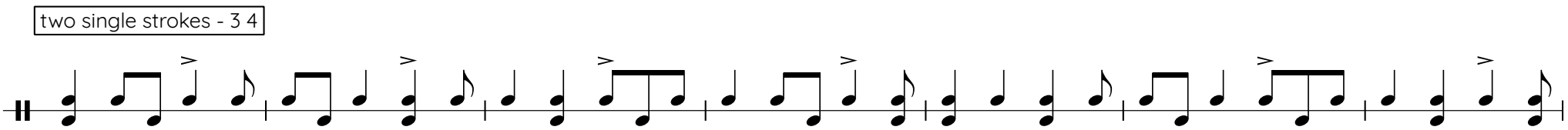
double stroke - 1 6
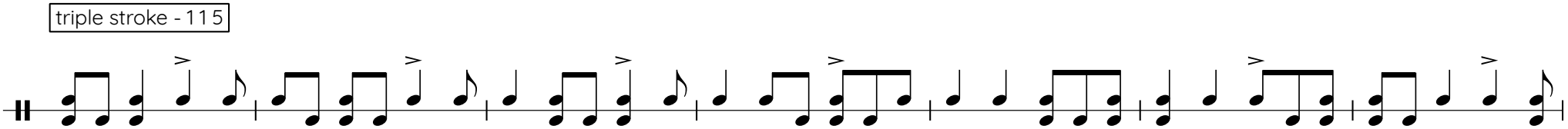


two single strokes - 2 5



two single strokes - 3 4



triple stroke - 1 1 5




(C) 2022 Zlatko Baracskai

**H_7_hop**

single-double strokes - 2 1 4
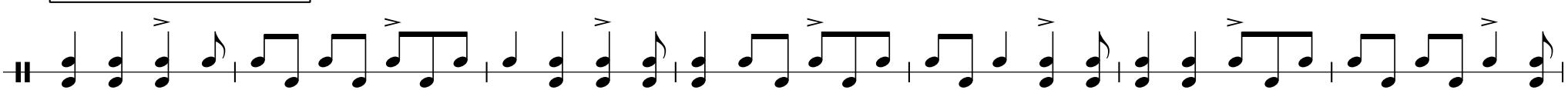


single-double strokes - 1 2 4
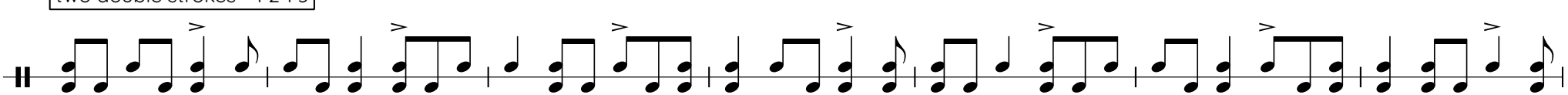


single-double strokes - 3 1 3



three single strokes - 2 2 3



two double strokes - 1 2 1 3



Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai

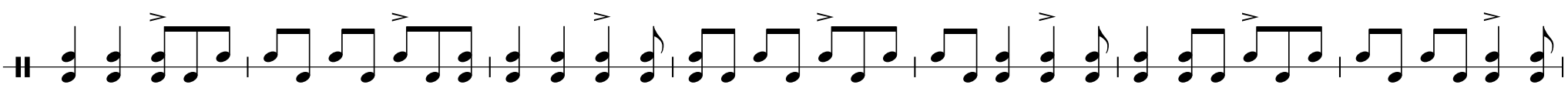
single-triple stroke - 2 1 1 3
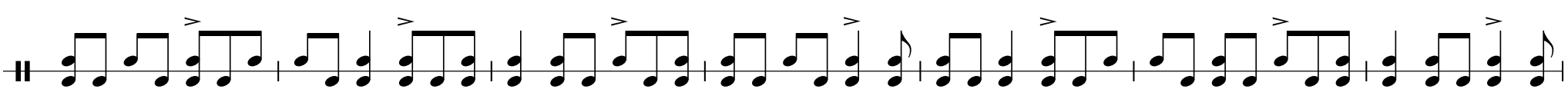


single-triple stroke - 3 1 1 2
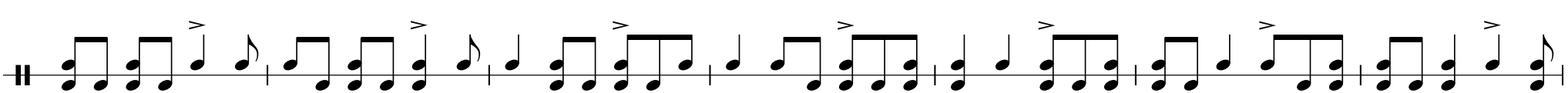


two singles and a double stroke - 2 2 1 2



double-triple stroke - 1 2 1 1 2



four-stroke - 1 1 1 4
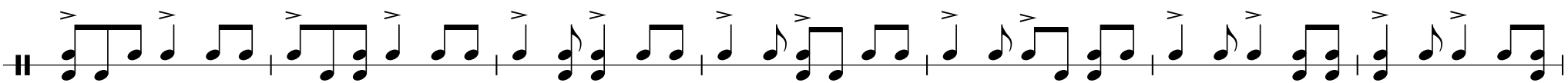



(C) 2022 Zlatko Baracskai

single stroke - 7



double stroke - 1 6
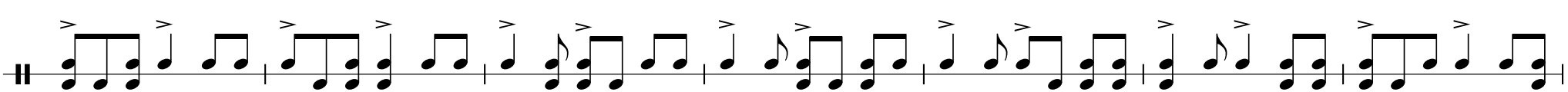


two single strokes - 2 5



two single strokes - 3 4



triple stroke - 1 1 5

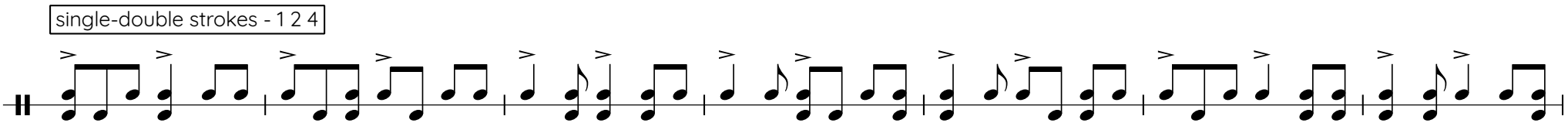



(C) 2022 Zlatko Baracskai

single-double strokes - 2 1 4



single-double strokes - 1 2 4



single-double strokes - 3 1 3



three single strokes - 2 2 3



two double strokes - 1 2 1 3

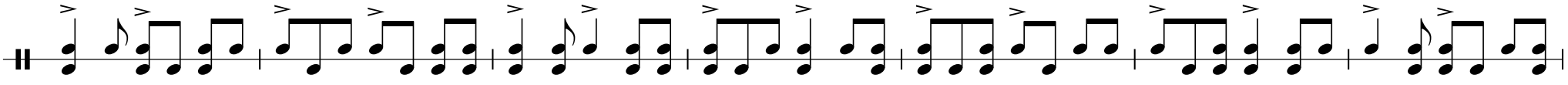


Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai
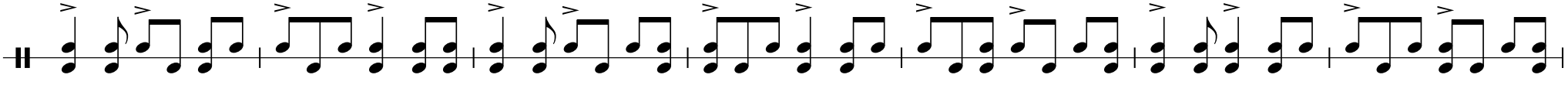
single-triple stroke - 2 1 1 3



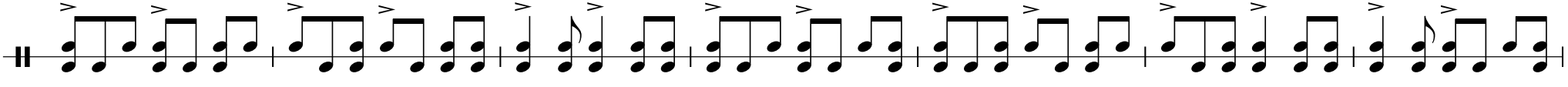
single-triple stroke - 3 1 1 2
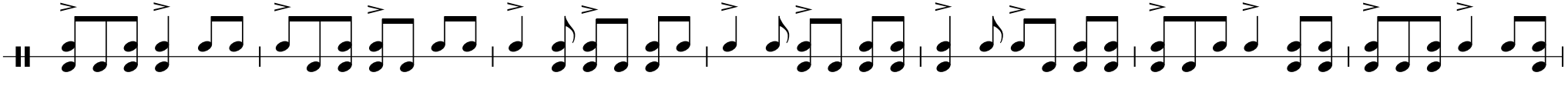


two singles and a double stroke - 2 2 1 2



double-triple stroke - 1 2 1 1 2

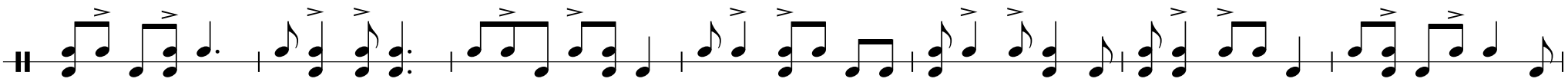


four-stroke - 1 1 1 4

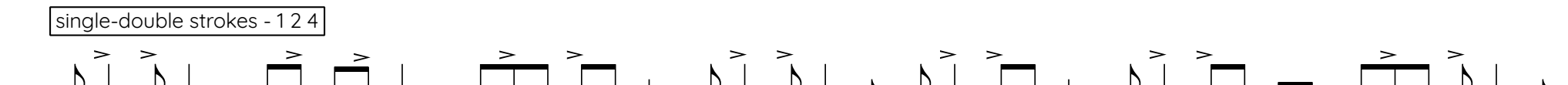



(C) 2022 Zlatko Baracskai

single-double strokes - 2 1 4



single-double strokes - 1 2 4
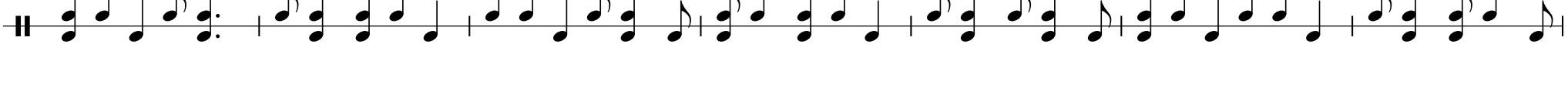


single-double strokes - 3 1 3



three single strokes - 2 2 3

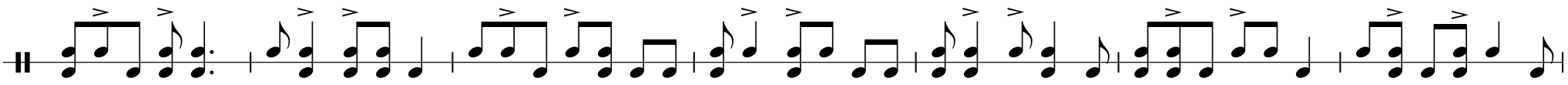


two double strokes - 1 2 1 3

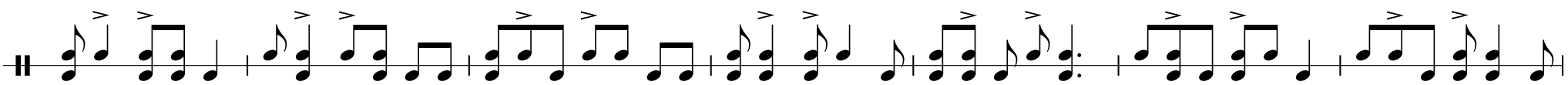



(C) 2022 Zlatko Baracskai
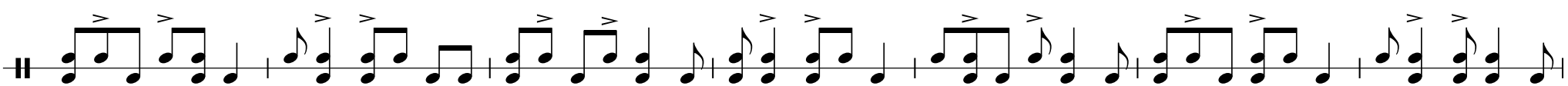
single-triple stroke - 2 1 1 3
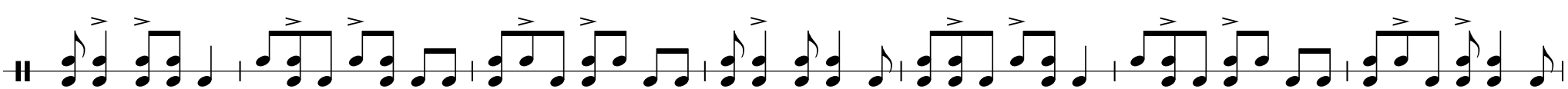


single-triple stroke = 3 1 1 2
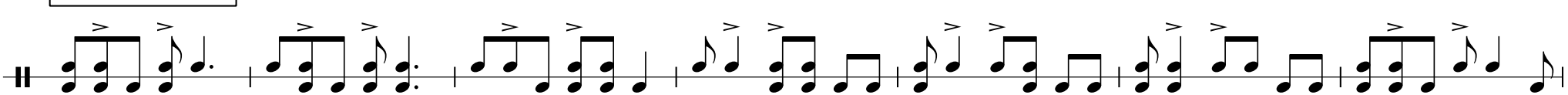


two singles and a double stroke - 2 2 1 2



double-triple stroke - 1 2 1 1 2



four-stroke - 1 1 1 4




(C) 2022 Zlatko Baracskai

# I 9 bunching

Chapter I of 11 (A-K)

---

### Chapter description

Nine-note figures keep a fixed density and are ordered from low entropy toward greater concentration.

Equal amounts of activity are gathered into different shapes, making density perceptible without changing its total.

### This chapter’s variation

## BUNCHING
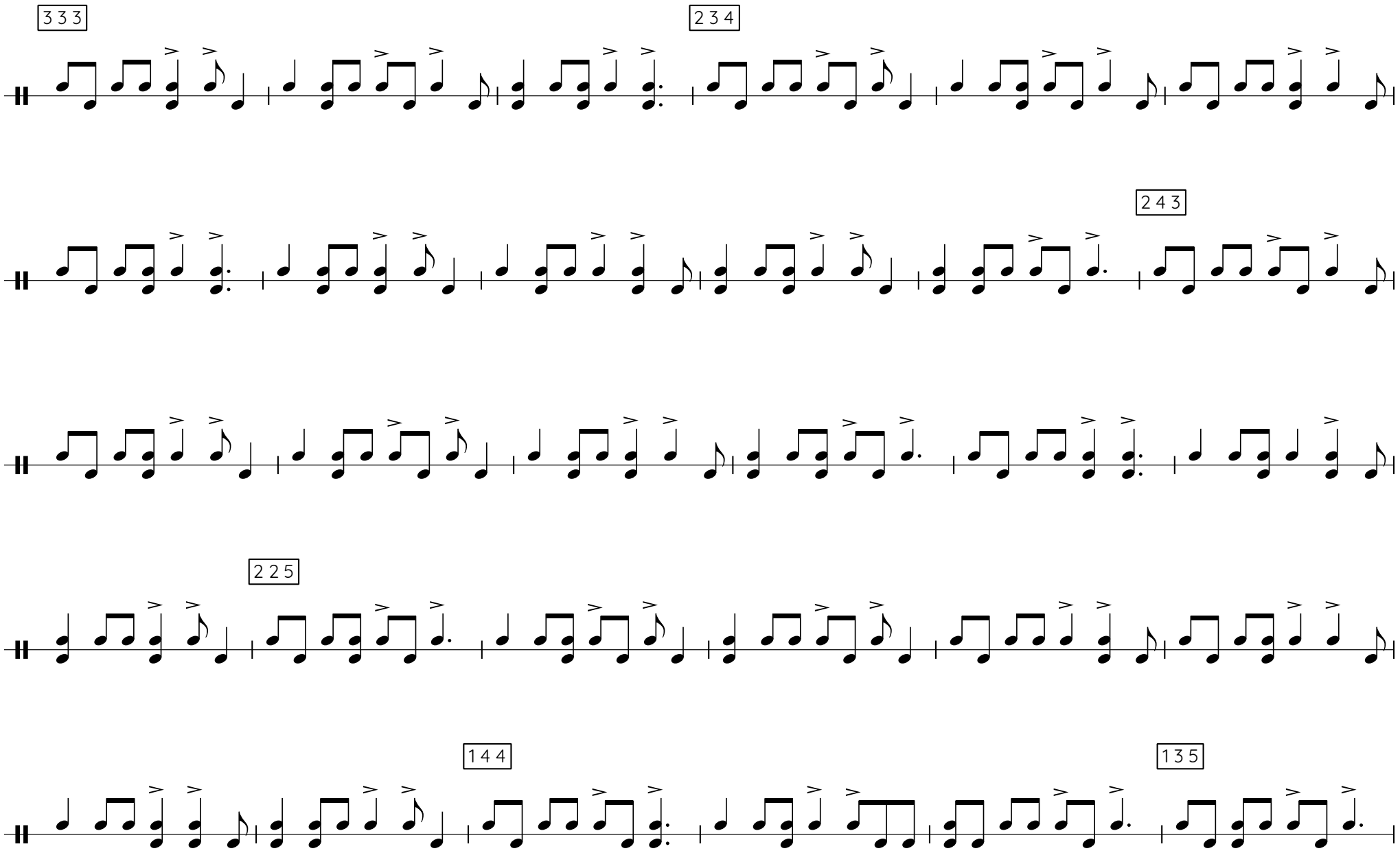
Try BUNCHING against the other ten chapters before moving on to the next chapter’s variation. Each variation is an additional constraint that can be layered onto any chapter’s material.

### Variations

#LIMBS #ACCELERATION #EMBELLISHMENTS
#SWAPS #FLAMS #SKIPS
#MOVING #SHIFTING #BUNCHING
#SPARSING #GROOVING

The score that follows is the surviving rendered chapter material.

CFGOM_I.pdf ´• ENGINE SKETCHES MASTER SCORES
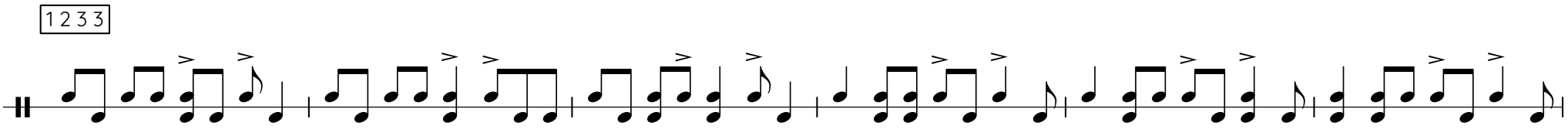



Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai

**I_9_brass**
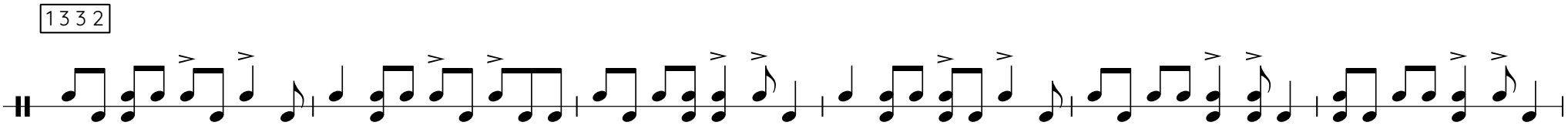
2 2 2 3



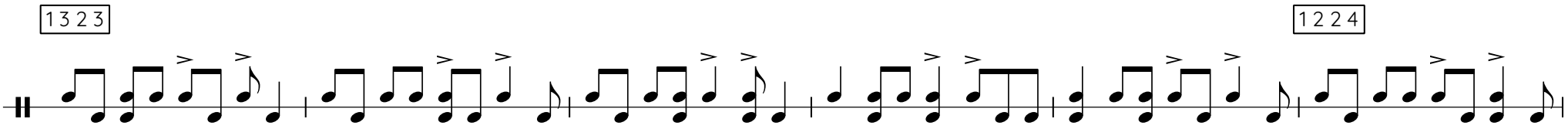
1 2 3 3



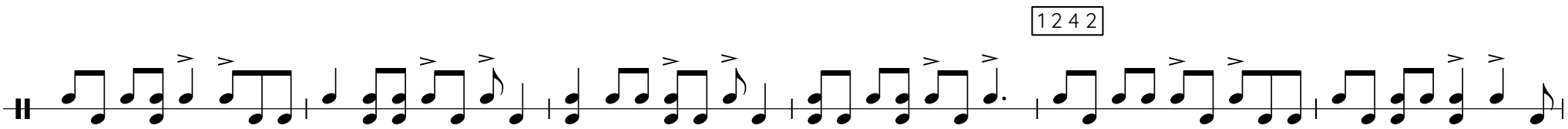
1 3 3 2



1 3 2 3



1 2 2 4



1 2 4 2



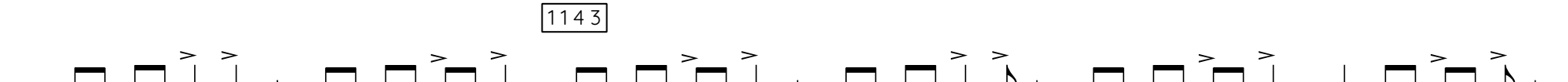

(C) 2022 Zlatko Baracskai

**I_9_brass**

1422



1143



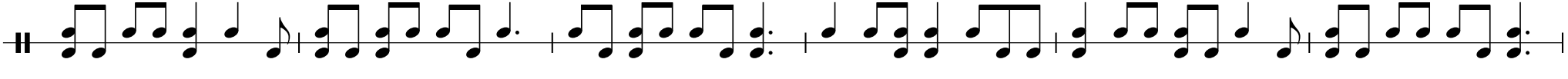
1134



1314

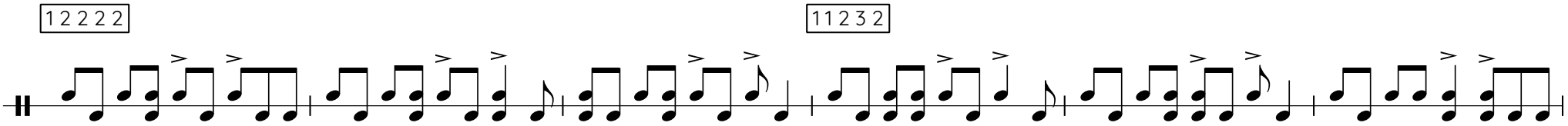


1125




(C) 2022 Zlatko Baracskai
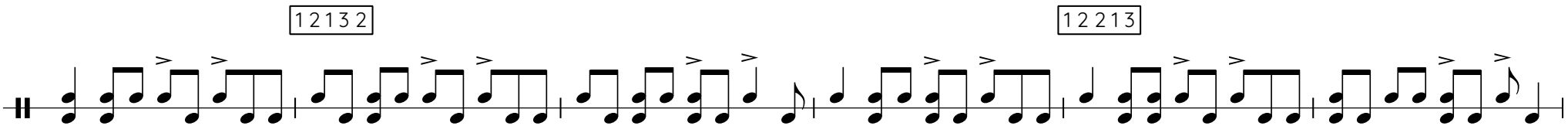
12222



11232
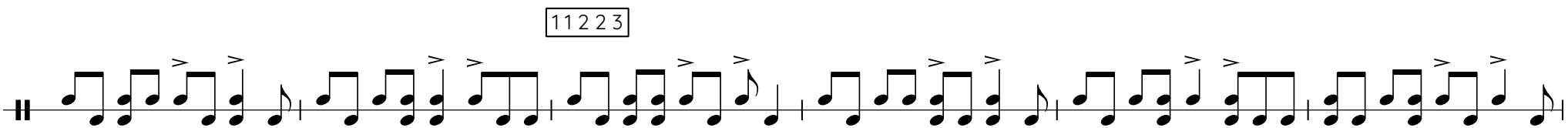


12132



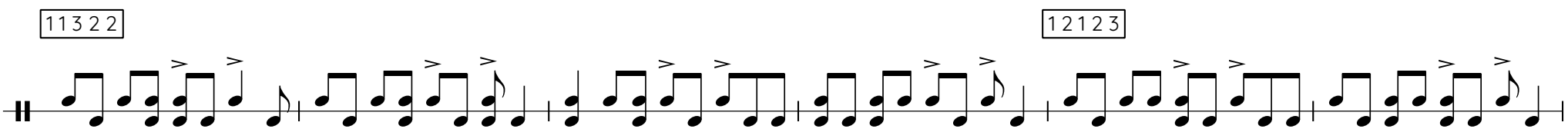
12213



11223



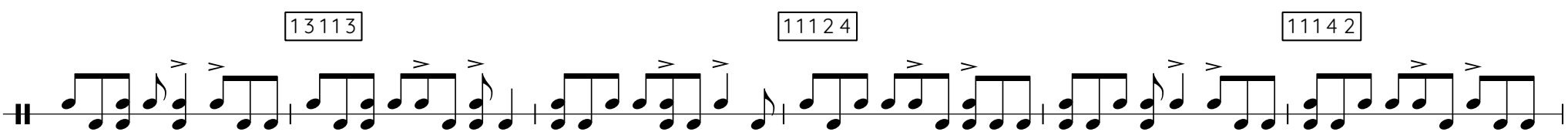
11322



12123



13113



11124



11142



Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai

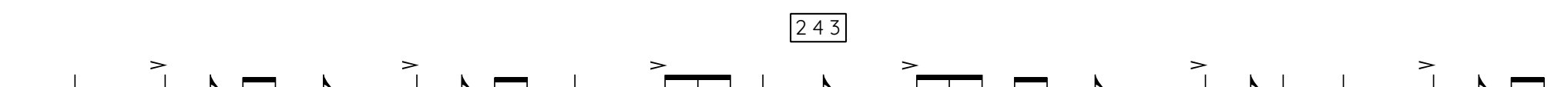
3 3 3



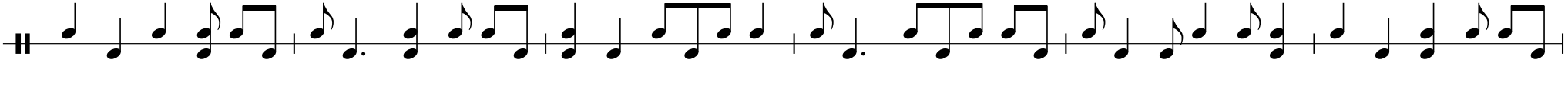
2 3 4



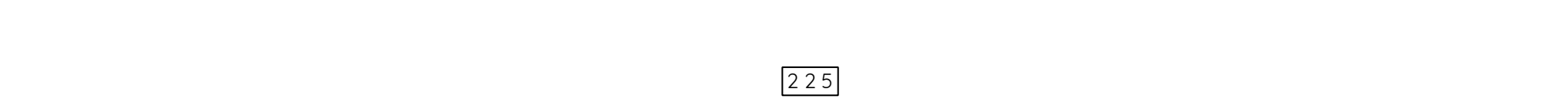
2 4 3
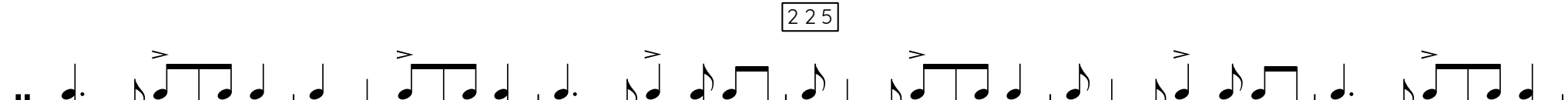


2 2 5



1 4 4
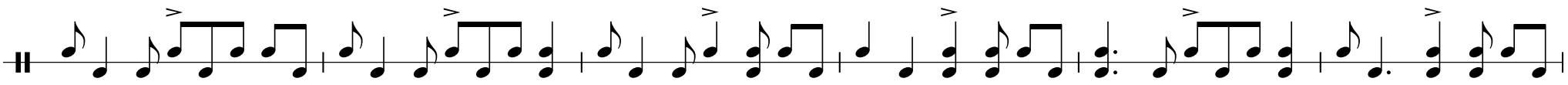


1 3 5
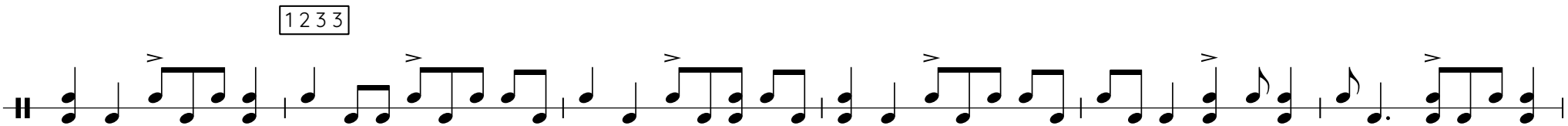



(C) 2022 Zlatko Baracskai

**I_9_turk**
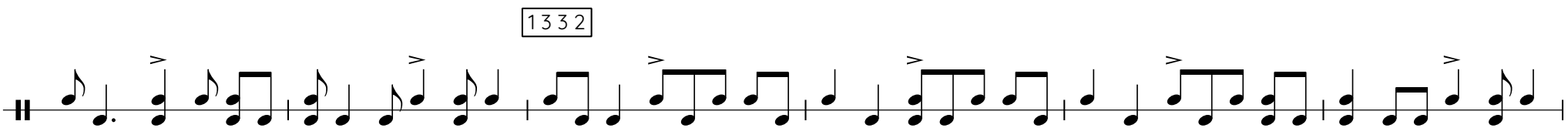
2 2 2 3



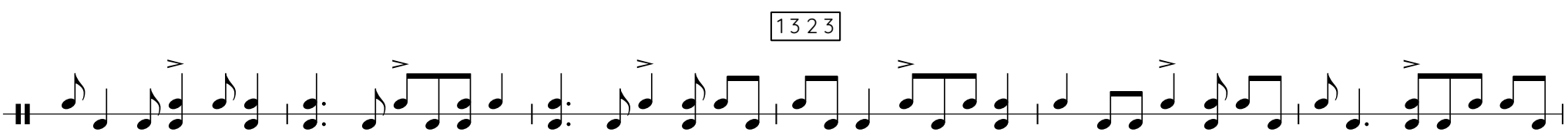
1 2 3 3
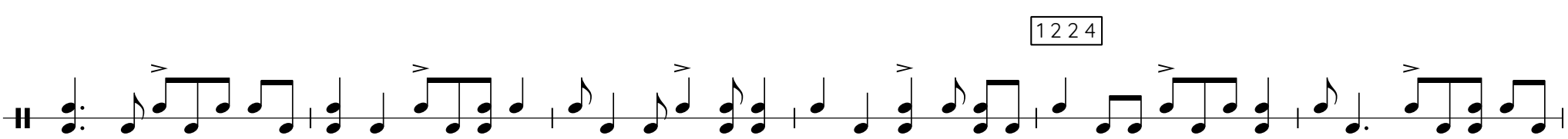


1 3 3 2



1 3 2 3

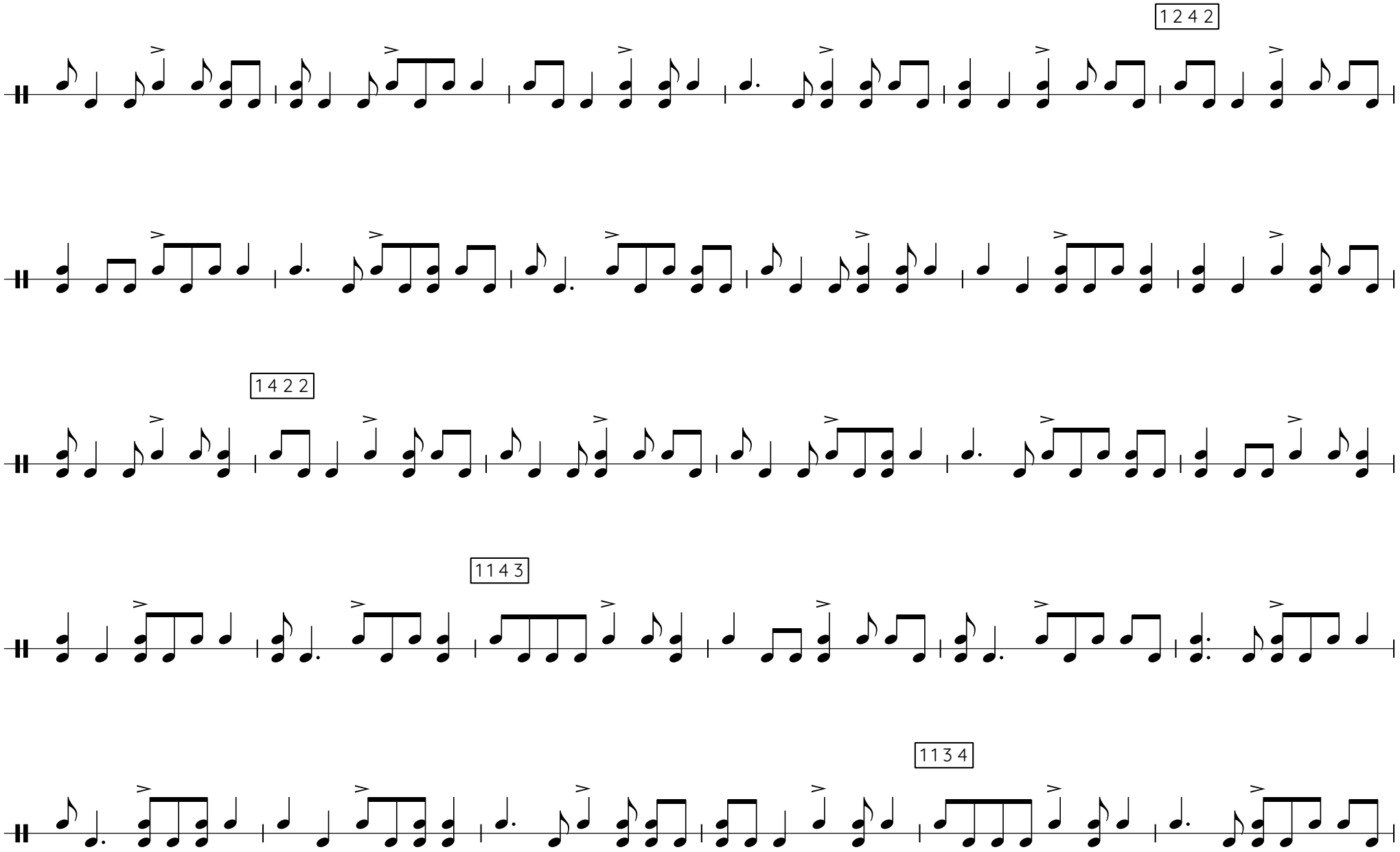


1 2 2 4




(C) 2022 Zlatko Baracskai
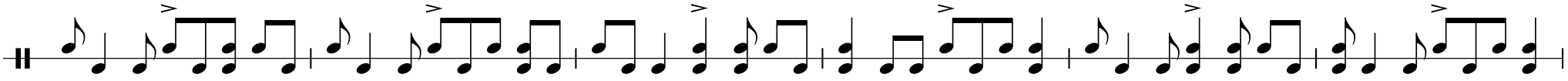
**I_9_turk**
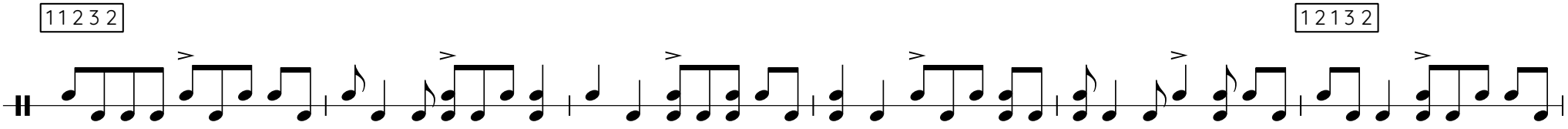



Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai

**I_9_turk**
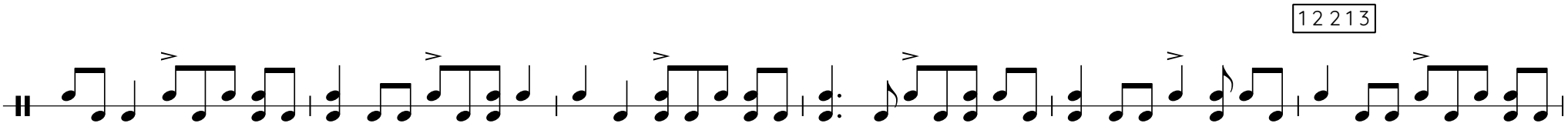
1 2 2 2 2
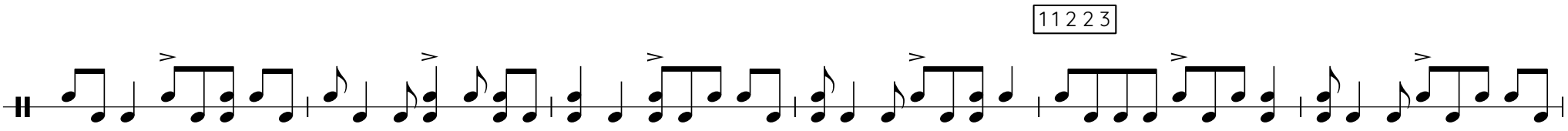


1 1 2 3 2



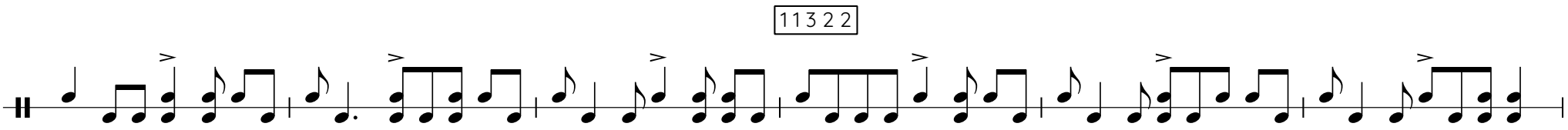
1 2 1 3 2



1 2 2 1 3



1 1 2 2 3



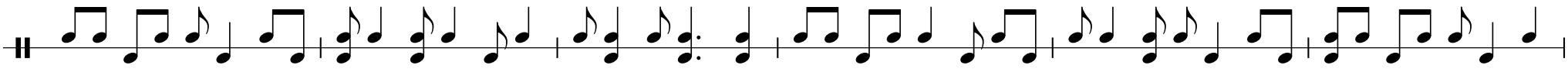
1 1 3 2 2



Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai

**I_9_turk**

3 3 3



2 3 4



2 4 3



2 2 5



1 4 4



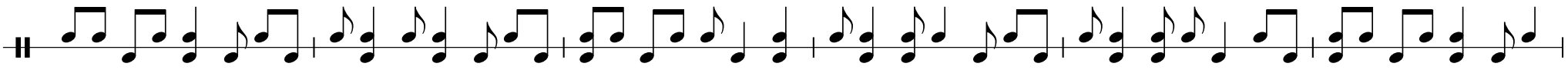
1 3 5




(C) 2022 Zlatko Baracskai

**I_9_syncopa**

2 2 2 3



1 2 3 3
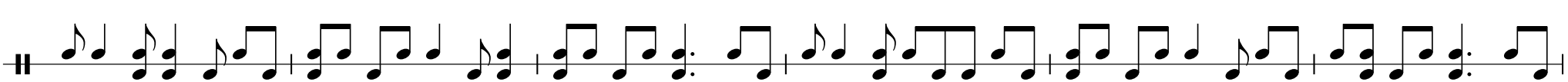


1 3 3 2



1 3 2 3
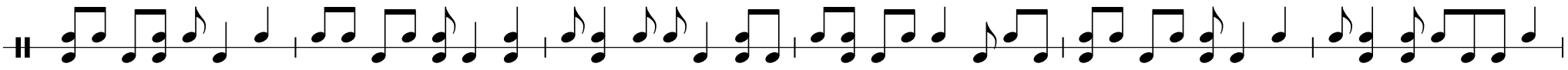


1 2 2 4

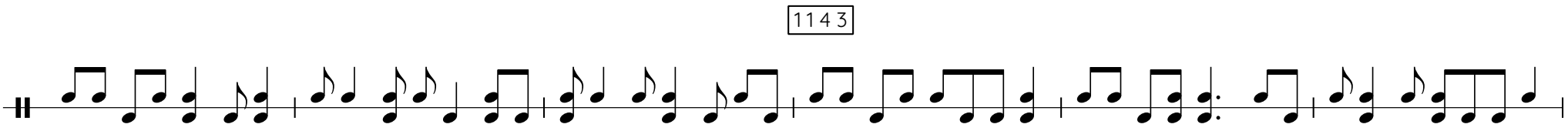


1 2 4 2

1 4 2 2



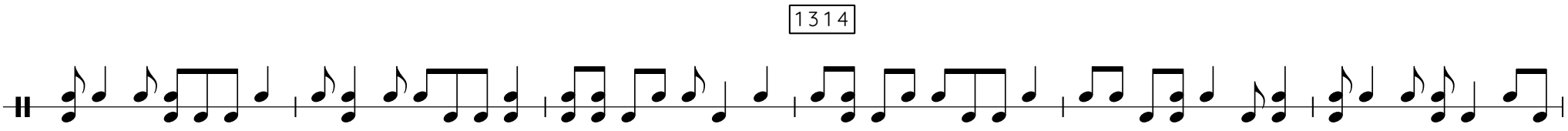
1 1 4 3
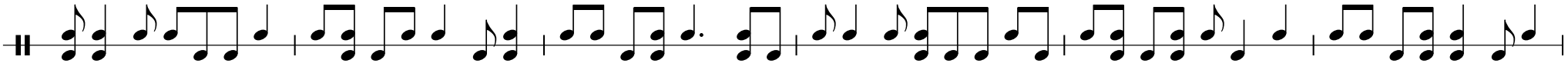


1 1 3 4



1 3 1 4
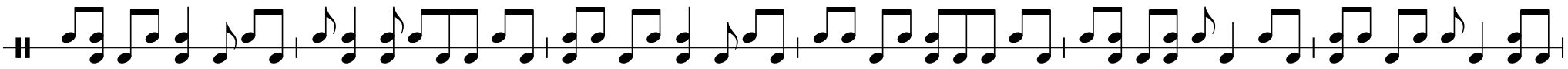


1 1 2 5




(C) 2022 Zlatko Baracskai

**I_9_syncopa**

1 2 2 2 2



1 1 2 3 2



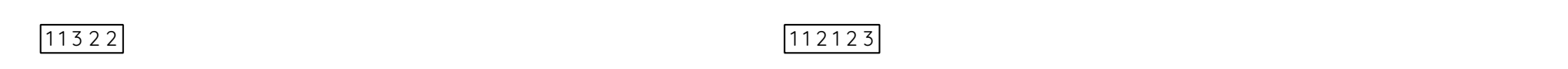
1 2 1 3 2



1 2 2 1 3



1 1 2 2 3



1 1 3 2 2



1 1 2 1 2 3



1 1 1 3 3



1 1 3 1 3




(C) 2022 Zlatko Baracskai

**I_9_syncopa**

# J 11 sparsing

Chapter J of 11 (A-K)

---

### Chapter description

Eleven-note figures keep a fixed density and are ordered from high entropy toward increasingly distinct gaps.

Silence becomes the mobile element: the same number of attacks is redistributed across the cycle.

### This chapter's variation

## SPARSING

Try SPARSING against the other ten chapters before moving on to the next chapter's variation. Each variation is an additional constraint that can be layered onto any chapter's material.

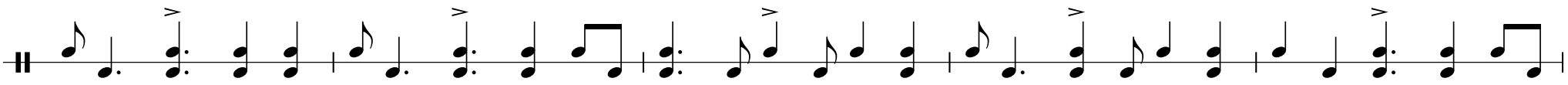
### Variations

#LIMBS #ACCELERATION #EMBELLISHMENTS
#SWAPS #FLAMS #SKIPS
#MOVING #SHIFTING #BUNCHING
#SPARSING #GROOVING

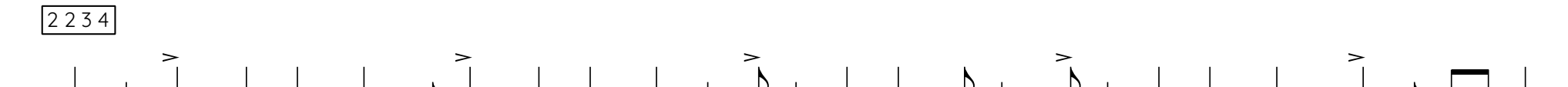
The score that follows is the surviving rendered chapter material.

CFGOM_J.pdf ´• ENGINE SKETCHES MASTER SCORES

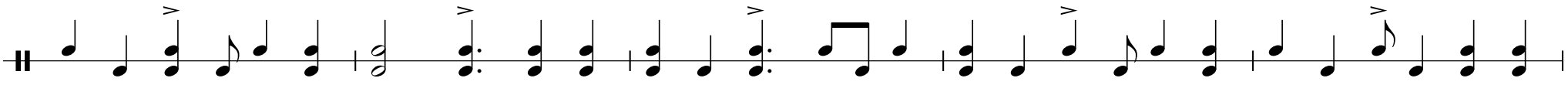
2 3 3 3



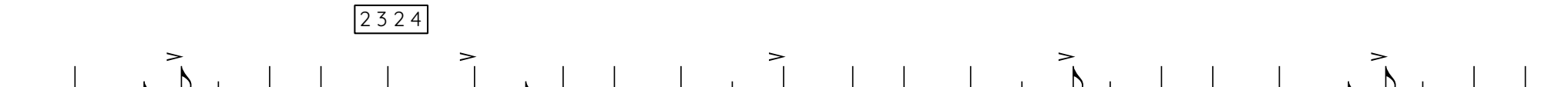
2 2 3 4



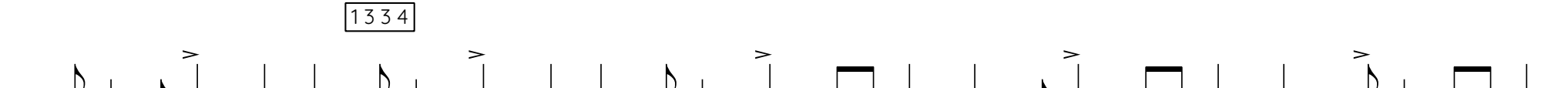
2 2 4 3



2 3 2 4



1 3 3 4




(C) 2022 Zlatko Baracskai

2 2 2 2 3

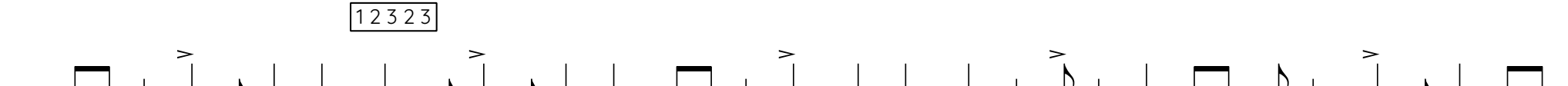


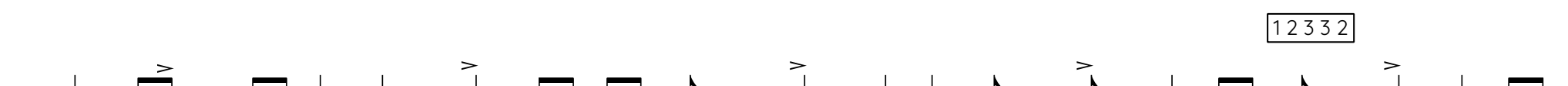
1 2 2 3 3





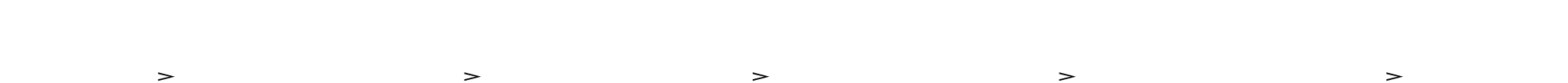
1 2 3 2 3





1 2 3 3 2

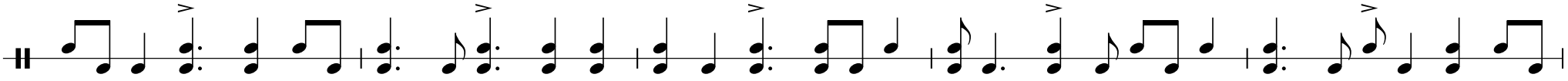




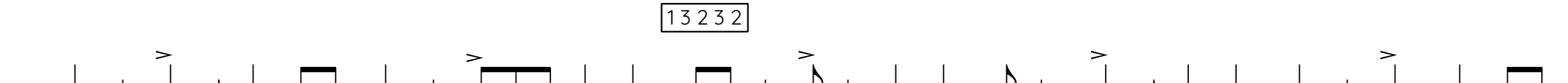
Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai

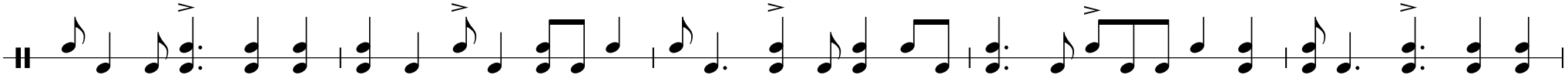
**J_11_folk**

13223
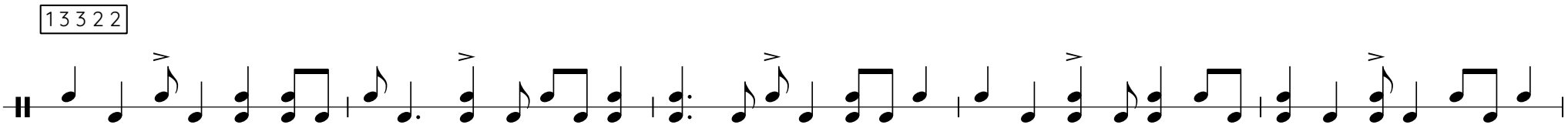


13232

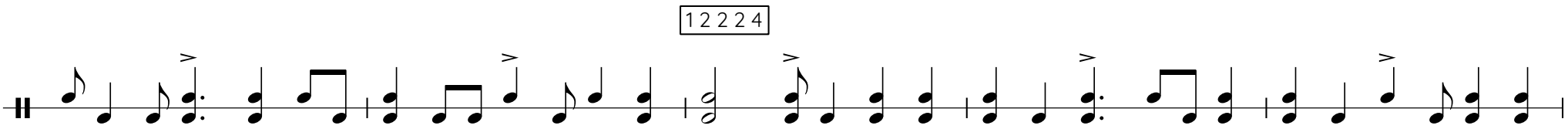




13322
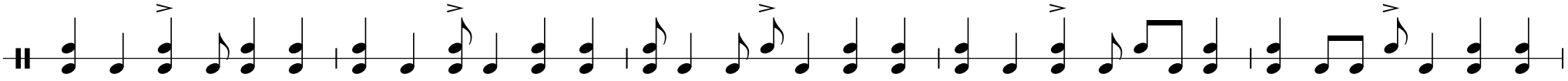


12224
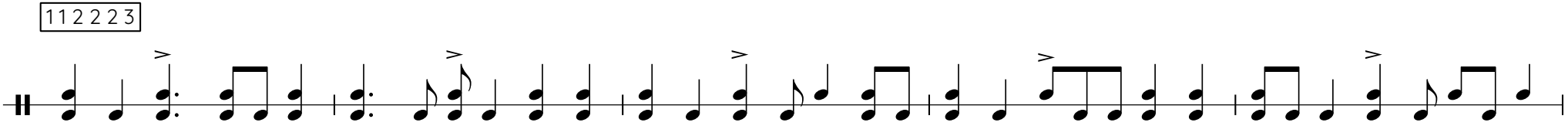



(C) 2022 Zlatko Baracskai

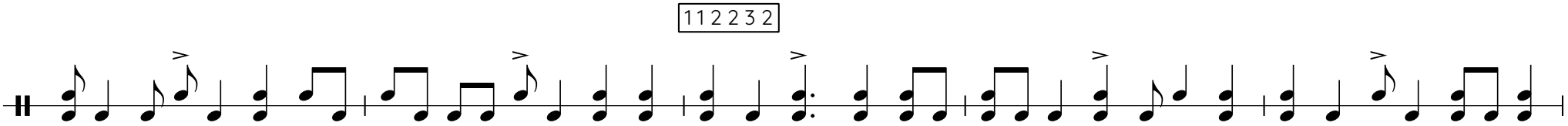
1 2 2 2 2 2



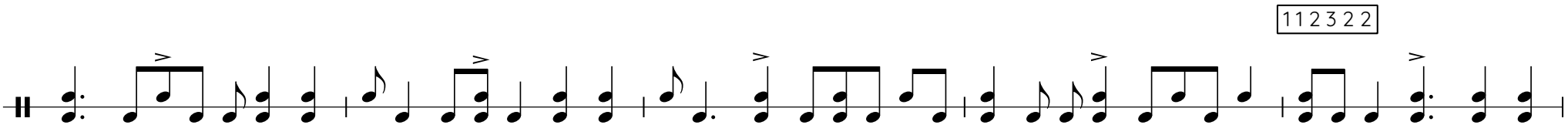
1 1 2 2 2 3
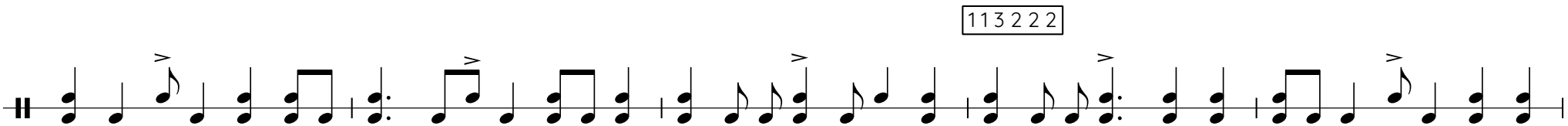


1 1 2 2 3 2



1 1 2 3 2 2



1 1 3 2 2 2



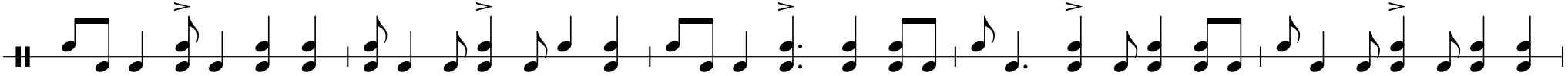
Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai

**J_11_folk**

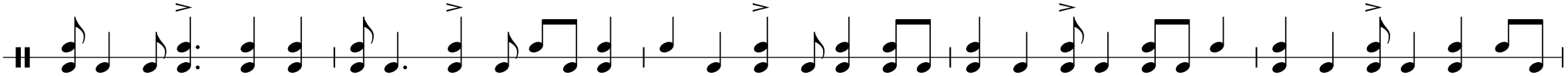
1 2 1 2 2 3



1 2 1 2 3 2



1 2 1 3 2 2

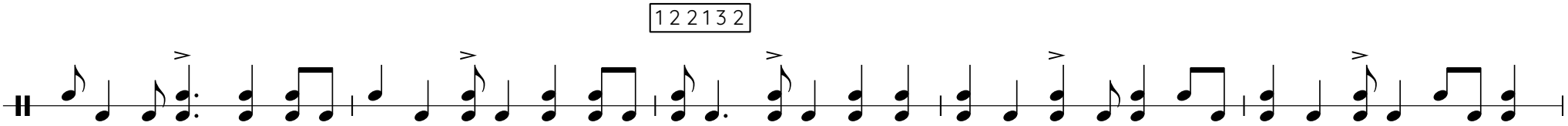


1 2 2 1 2 3
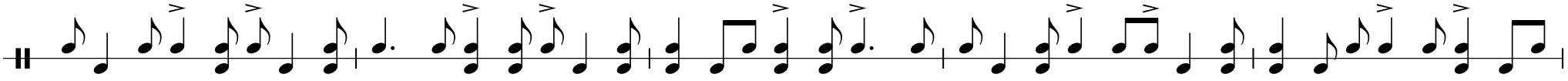
1 2 2 1 3 2



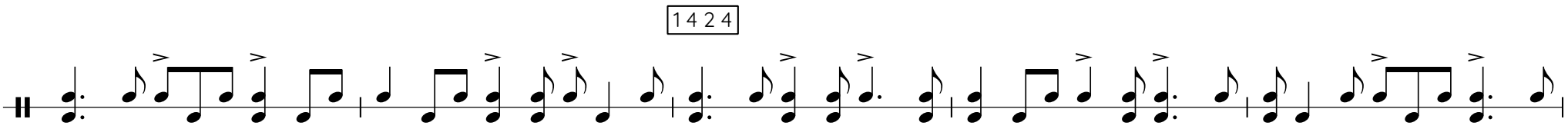
1 2 2 1 3 2



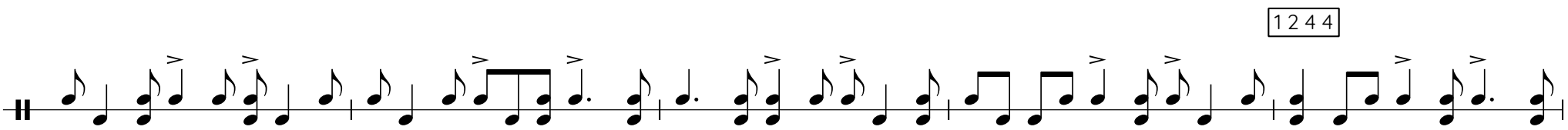
2 2 2 5
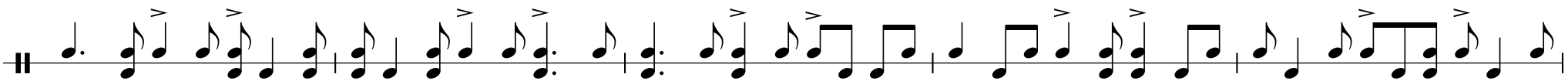


1 4 2 4
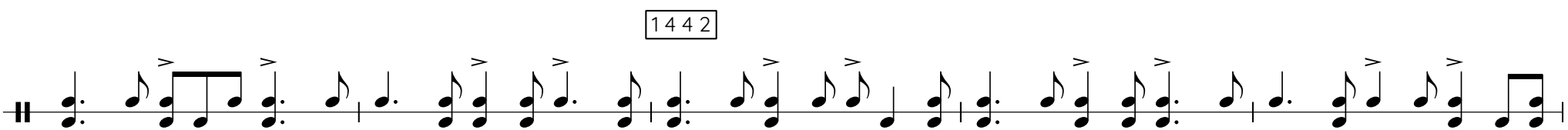


1 2 4 4



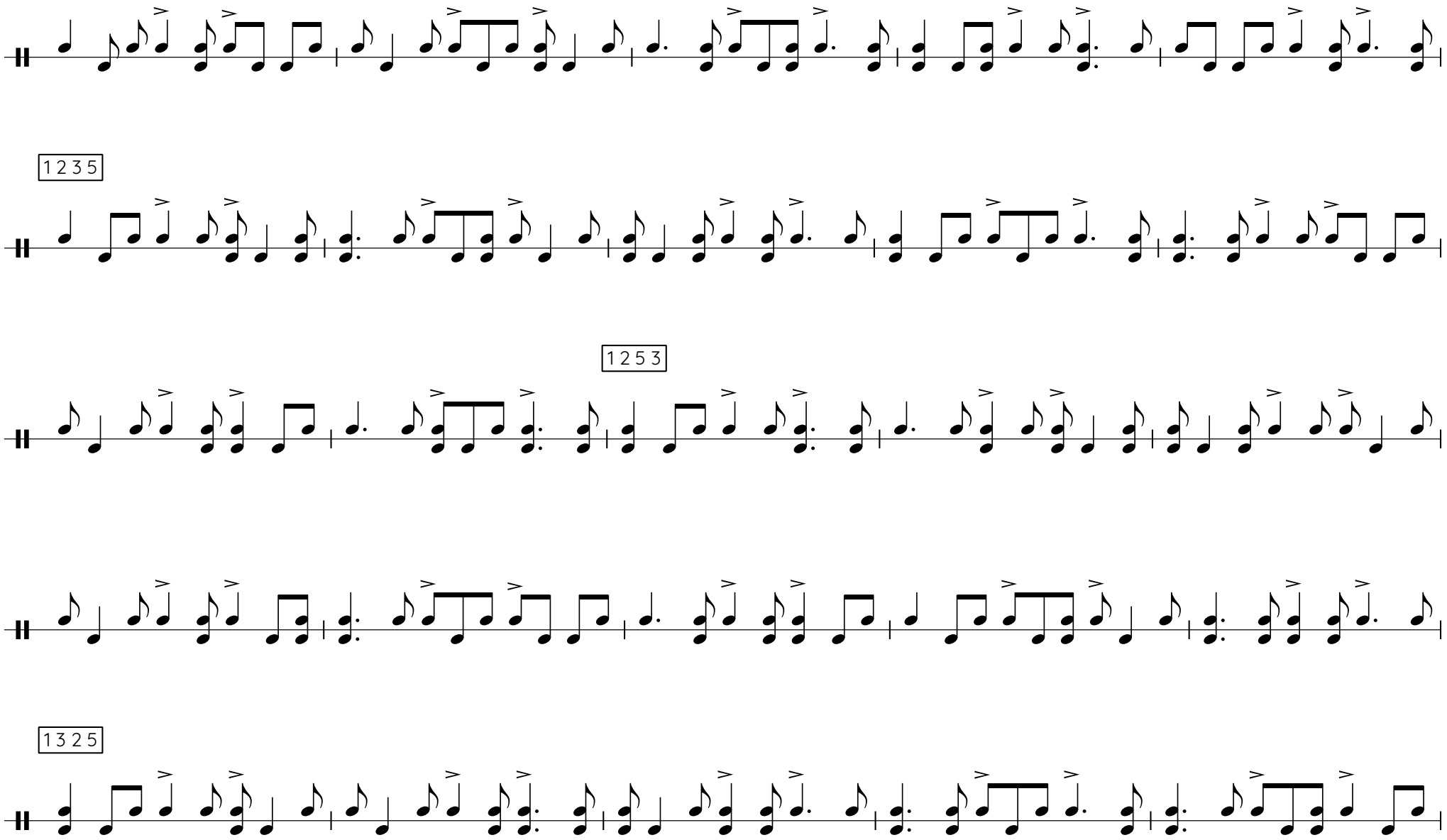


1 4 4 2



Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai

**J_11_bop**
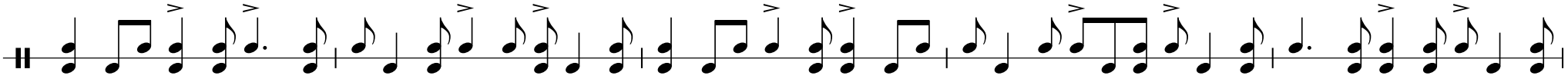




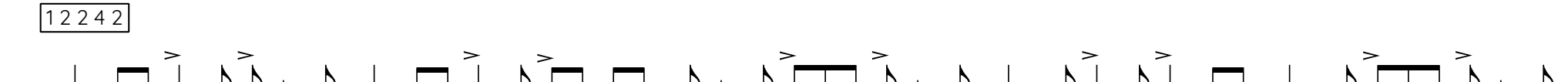
(C) 2022 Zlatko Baracskai

**J_11_bop**

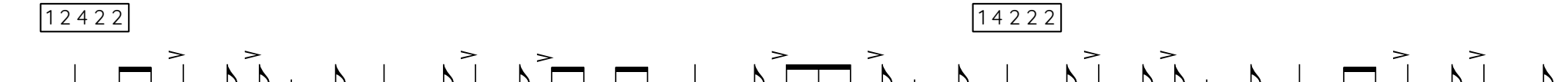
1 2 2 2 4



1 2 2 4 2



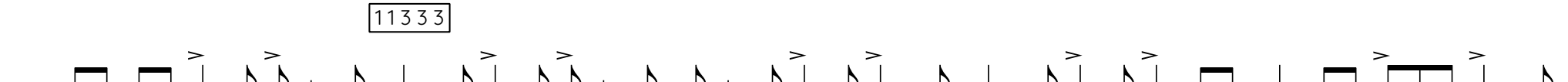
1 2 4 2 2



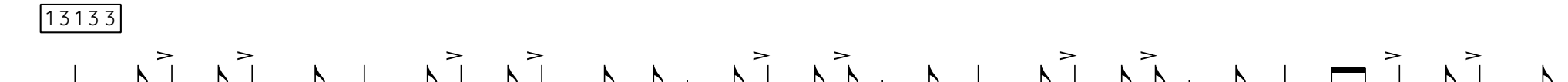
1 4 2 2 2



1 1 3 3 3

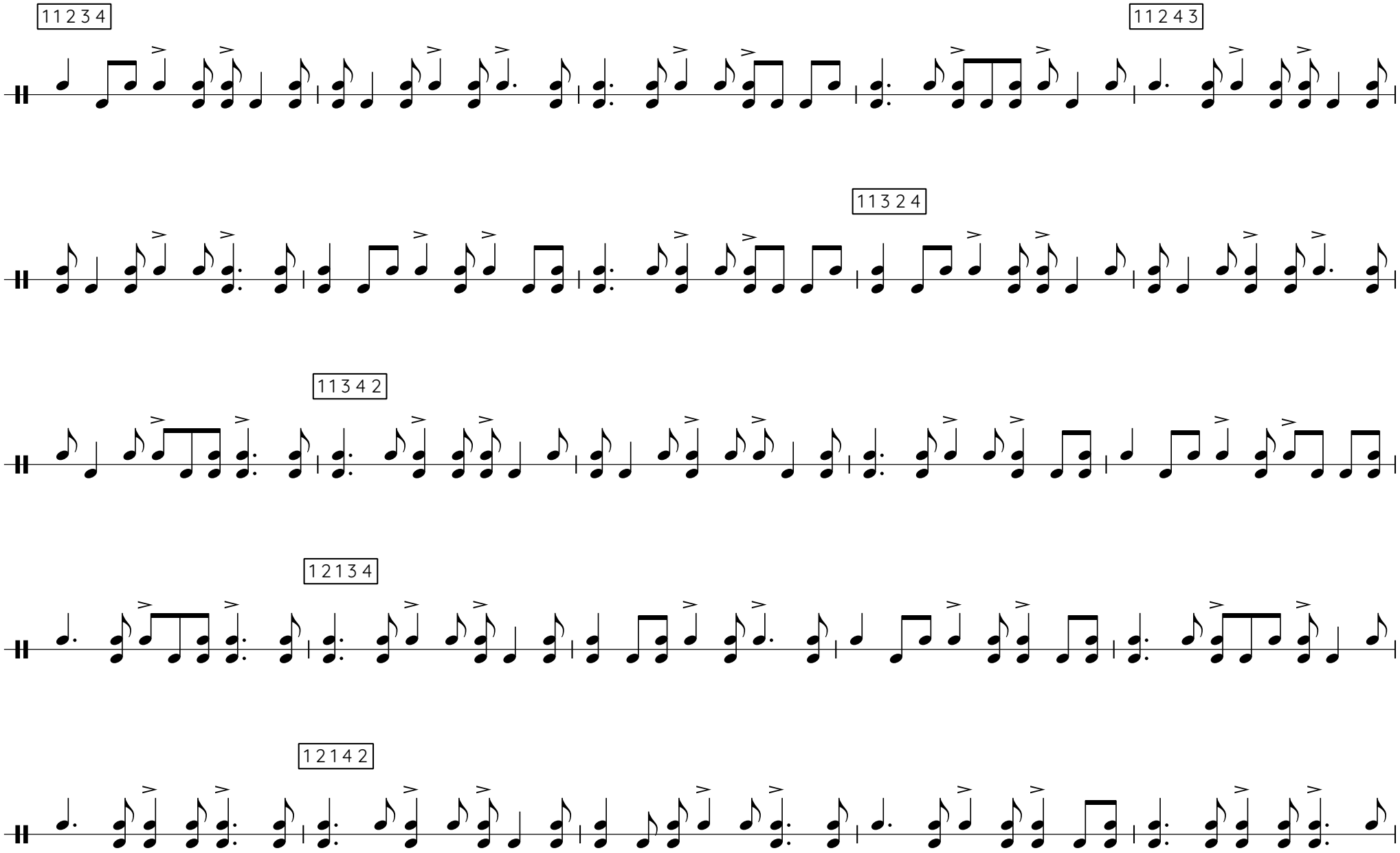


1 3 1 3 3



Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai
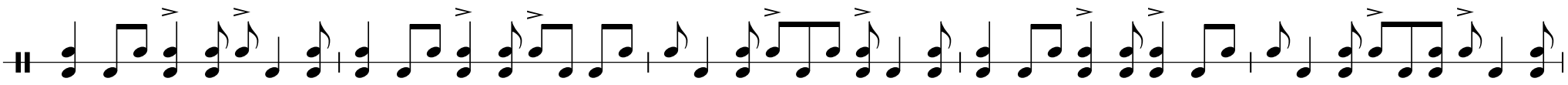
**J_11_bop**



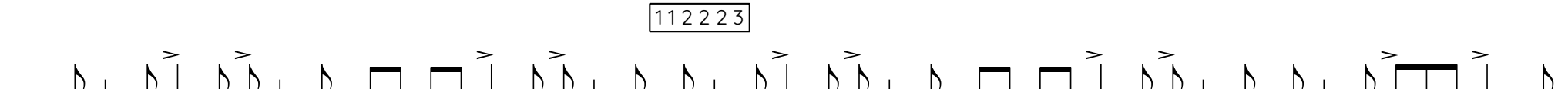

Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai
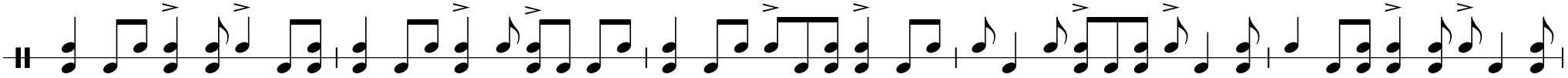
**J_11_bop**

1 2 2 2 2 2
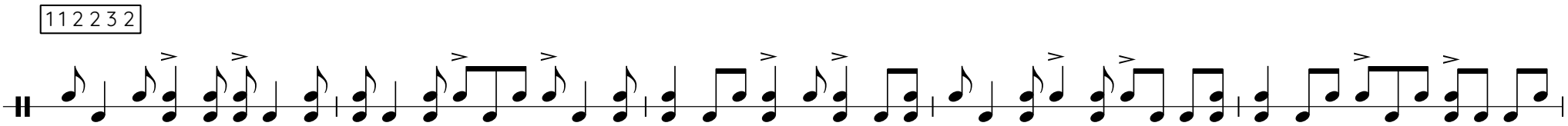


1 1 2 2 2 3
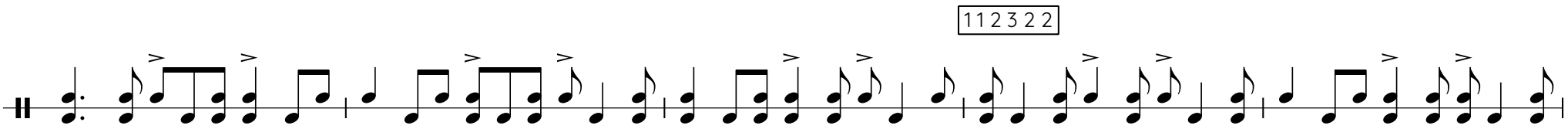




1 1 2 2 3 2



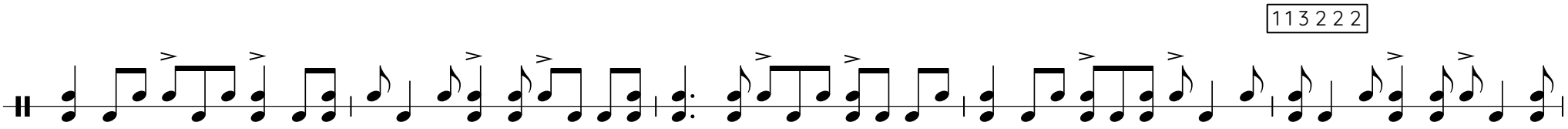
1 1 2 3 2 2
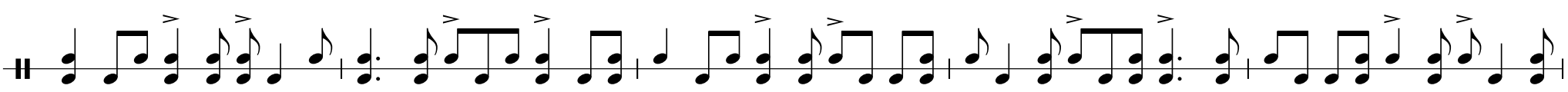


Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai

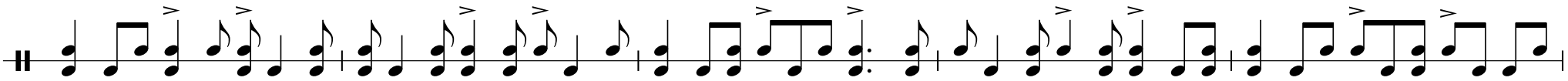
**J_11_bop**

1 1 3 2 2 2
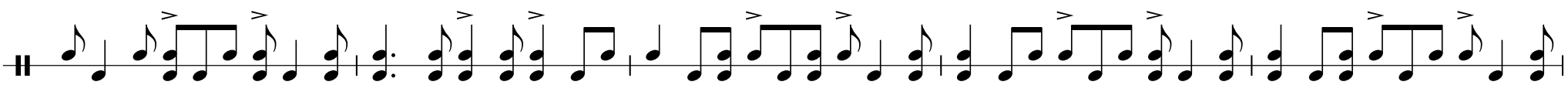


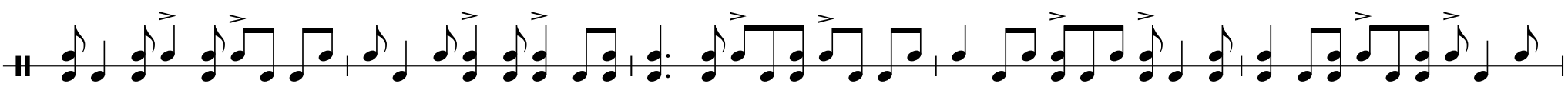


1 2 1 2 2 3



1 2 1 2 3 2
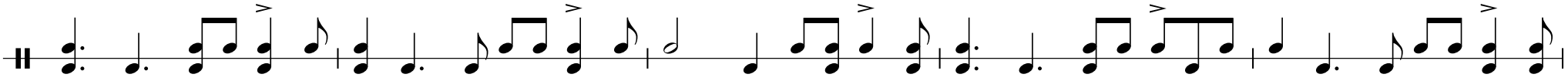




Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai

**J_11_bop**

2 3 3 3

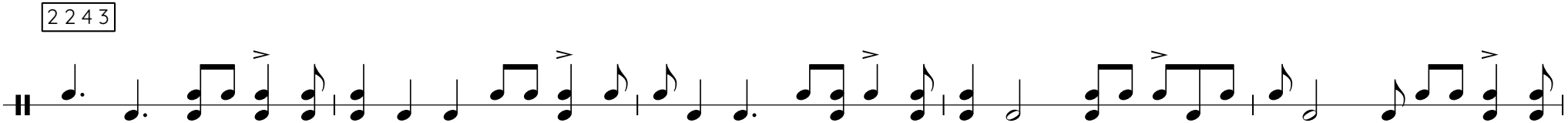


2 2 3 4
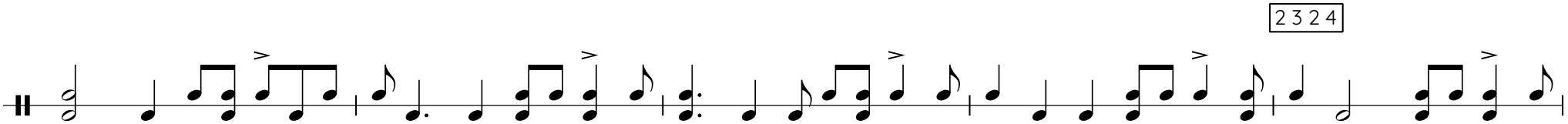




2 2 4 3



2 3 2 4

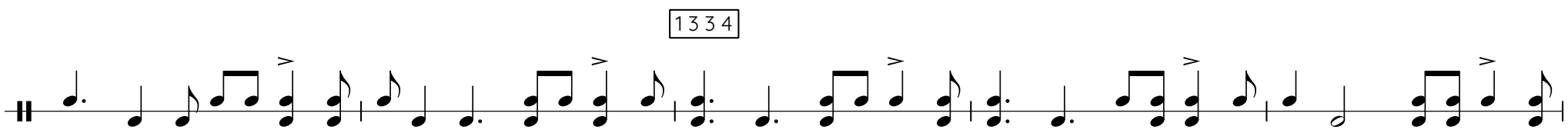


Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai
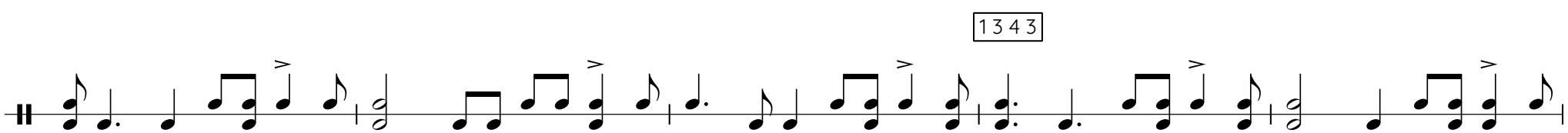
**J_11_waltz**
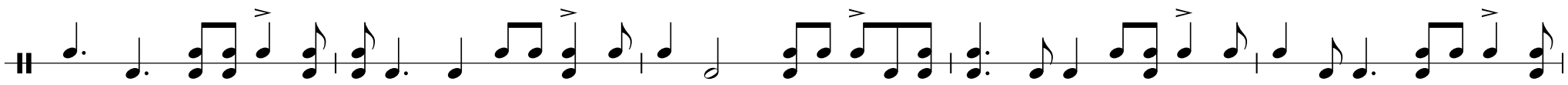


1 3 3 4



1 3 4 3
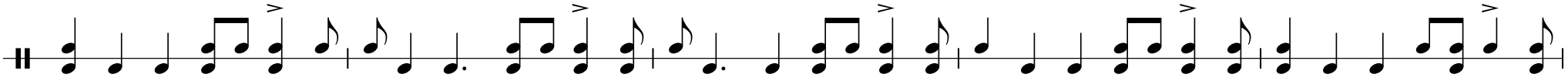




1 4 3 3



Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai

2 2 2 2 3



1 2 2 3 3



1 2 3 2 3



1 2 3 3 2



1 3 2 2 3
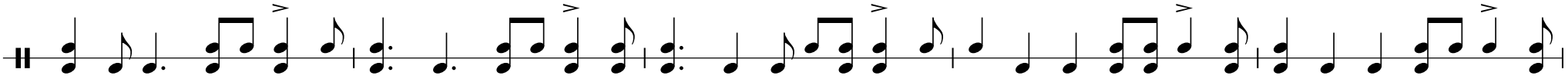


1 3 2 3 2



Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai

**J_11_waltz**

13322
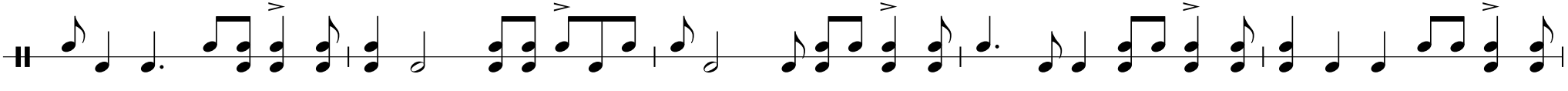


12224



12242



12422
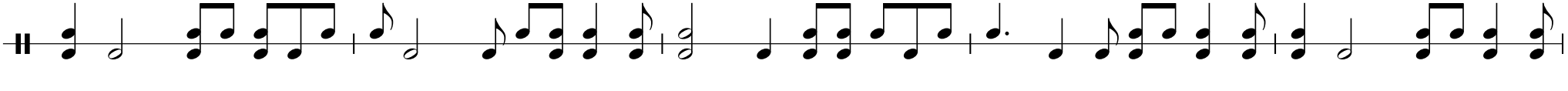


14222



11333
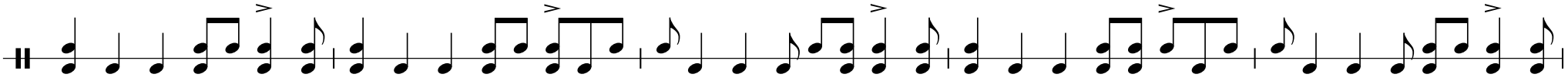


13133
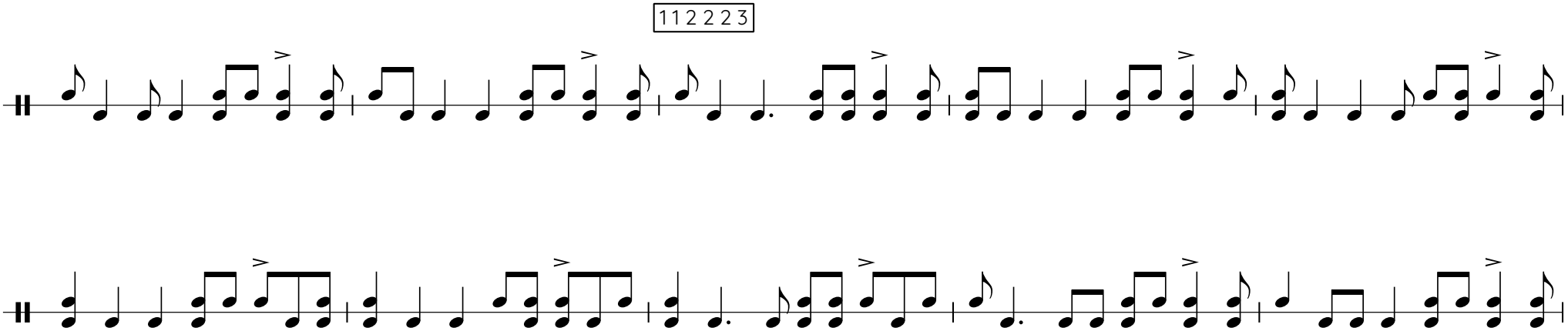


Combinatorics for Groovy Odd Metrics
(C) 2022 Zlatko Baracskai
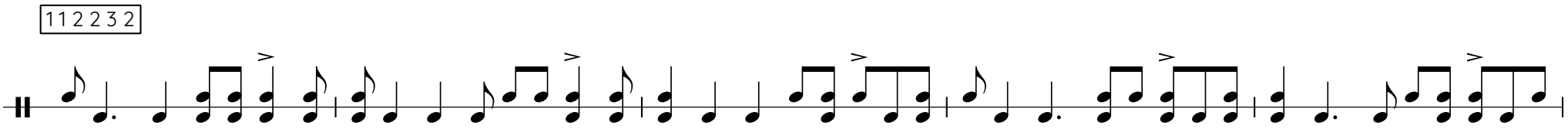
1 2 2 2 2 2



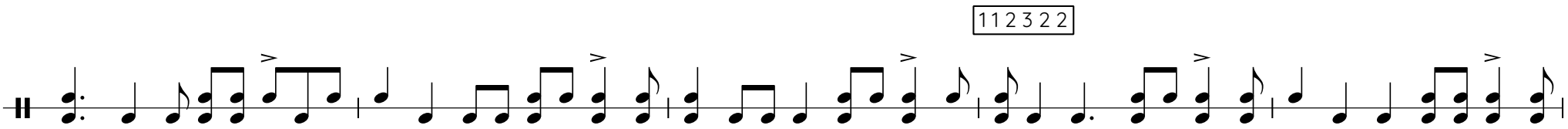
1 1 2 2 2 3



1 1 2 2 3 2
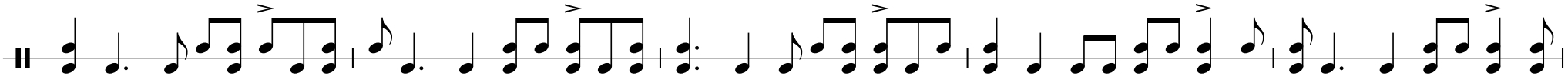


1 1 2 3 2 2
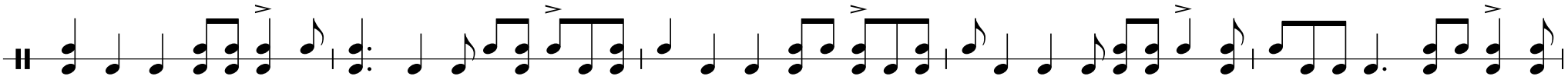



(C) 2022 Zlatko Baracskai
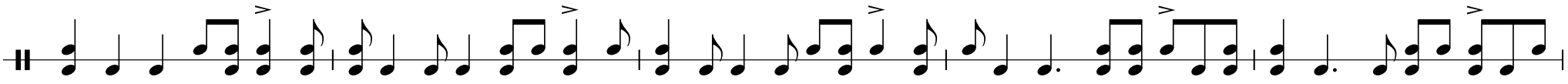
**J_11_waltz**

1 1 3 2 2 2
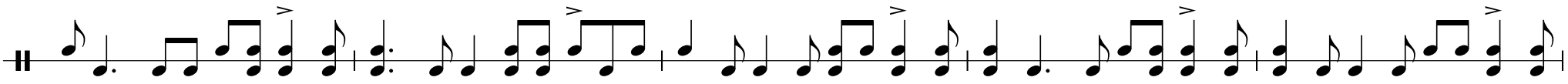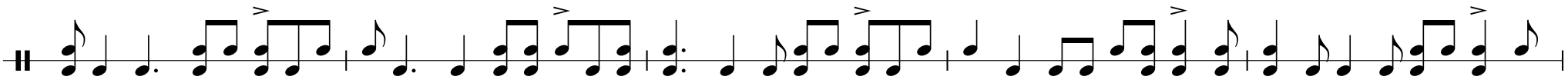




1 2 1 2 2 3



1 2 1 2 3 2






(C) 2022 Zlatko Baracskai

**J_11_waltz**

# K 13 grooving

Chapter K of 11 (A-K)

---

### Chapter description

Thirteen-note figures are ordered by both entropy and indispensability, bringing the system into a groove.

The final variation combines distribution and weight: a groove is shaped by where events occur and how necessary they feel.

### This chapter's variation

## GROOVING

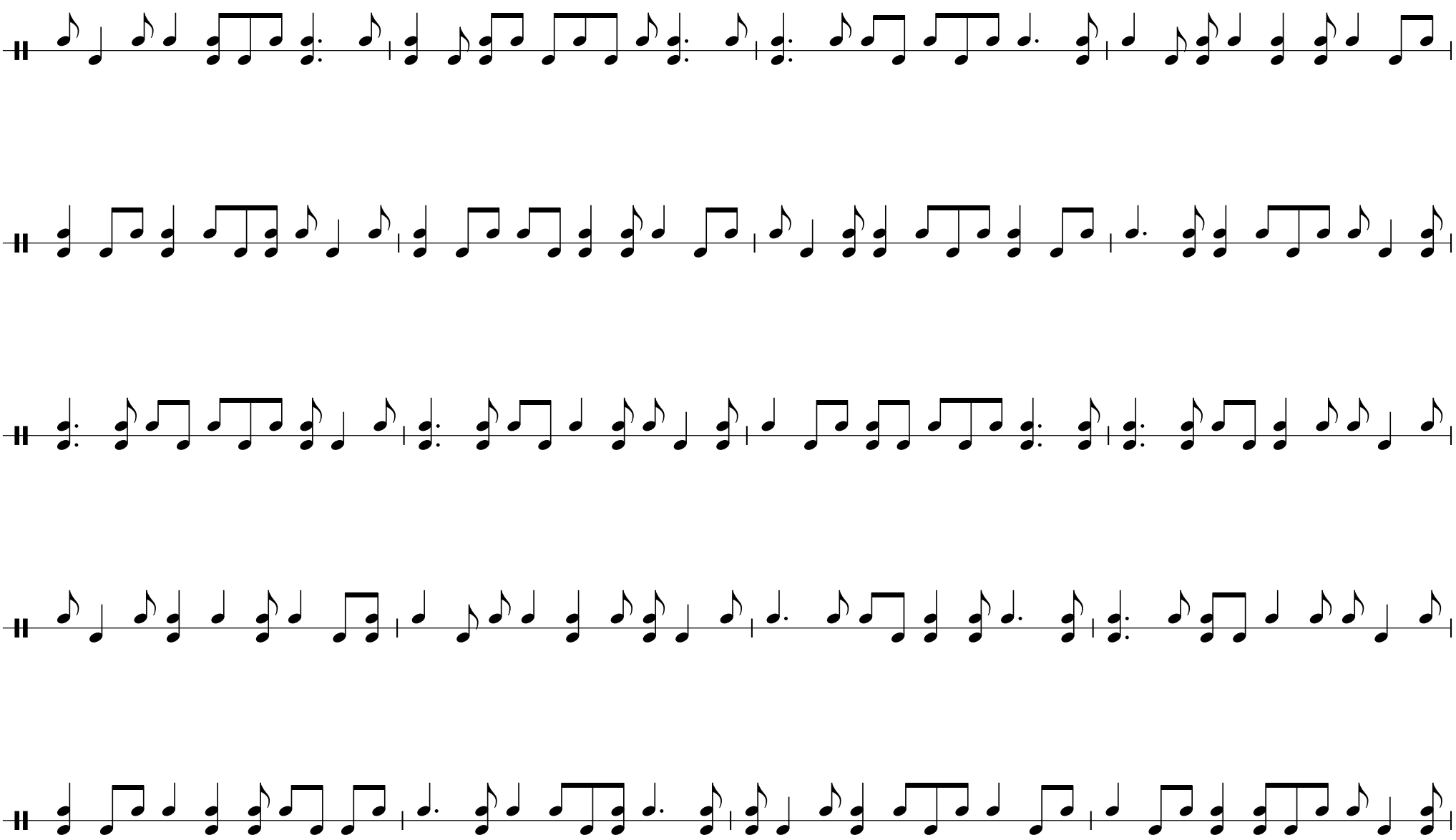
Try GROOVING against the other ten chapters before moving on to the next chapter's variation. Each variation is an additional constraint that can be layered onto any chapter's material.

### Variations

#LIMBS #ACCELERATION #EMBELLISHMENTS
#SWAPS #FLAMS #SKIPS
#MOVING #SHIFTING #BUNCHING
#SPARSING #GROOVING

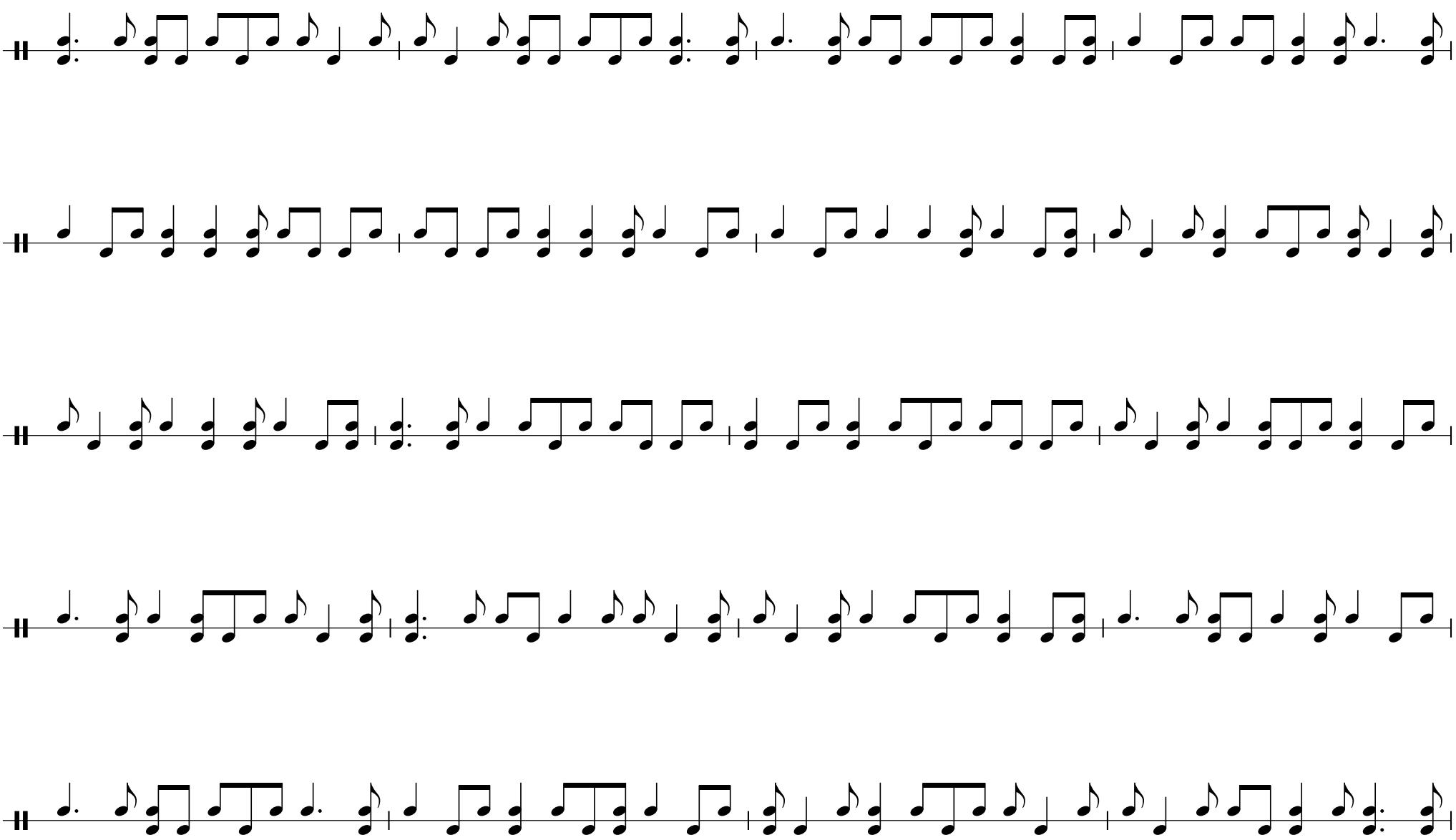
The score that follows is the surviving rendered chapter material.

CFGOM_K.pdf ´• ENGINE SKETCHES MASTER SCORES
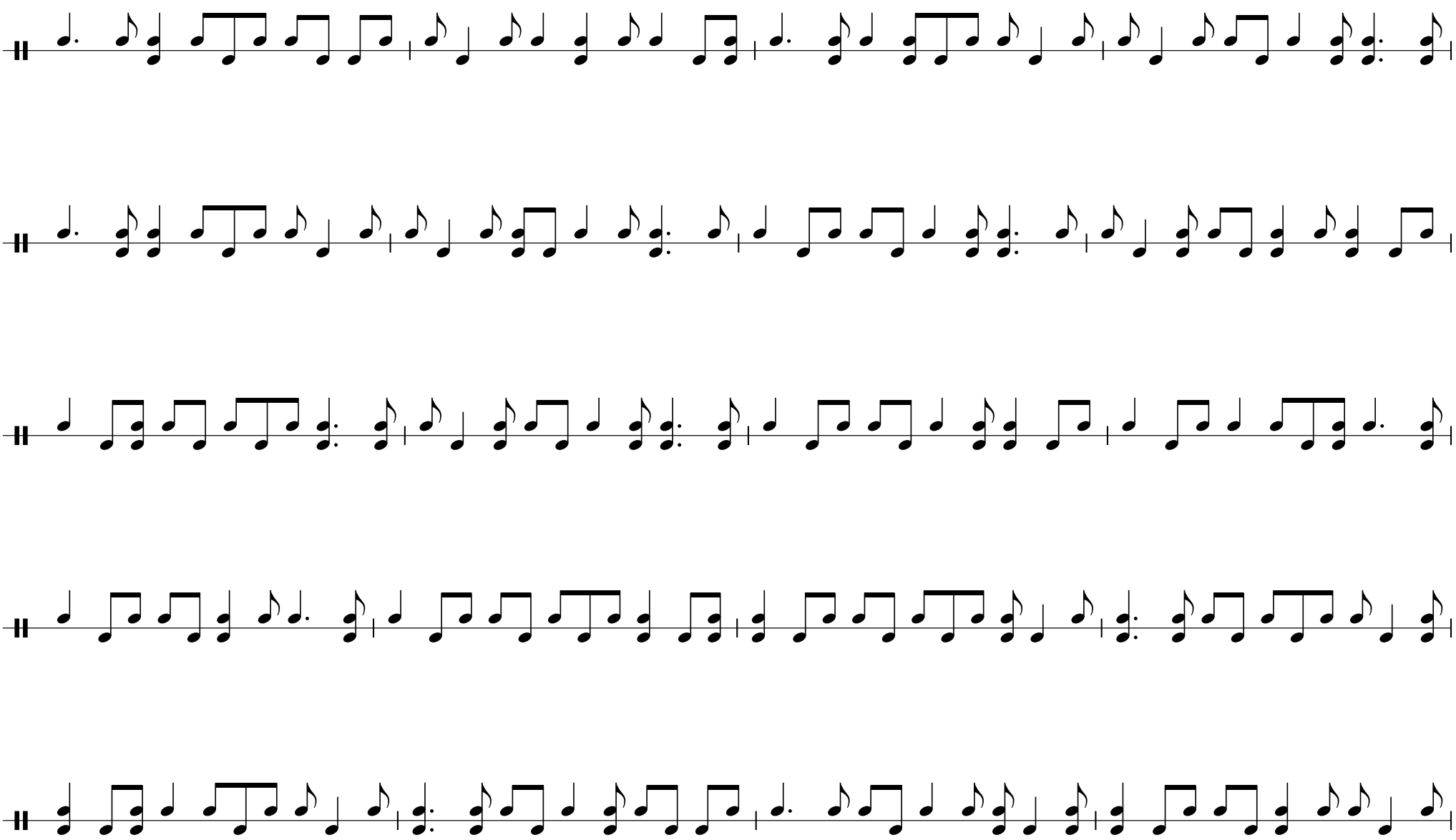



(C) 2022 Zlatko Baracskai

**K_13_bump**



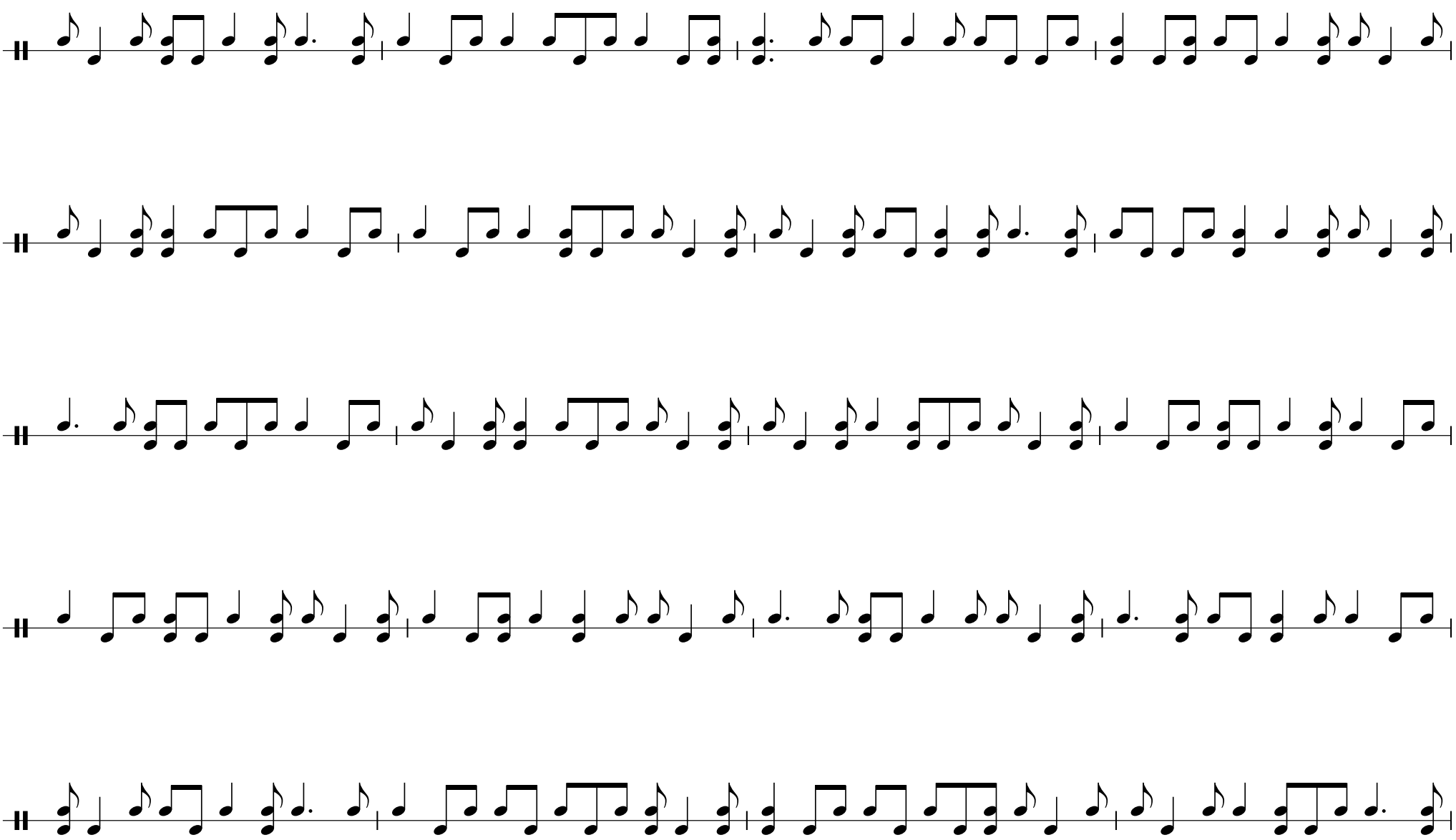

(C) 2022 Zlatko Baracskai

**K_13_bump**



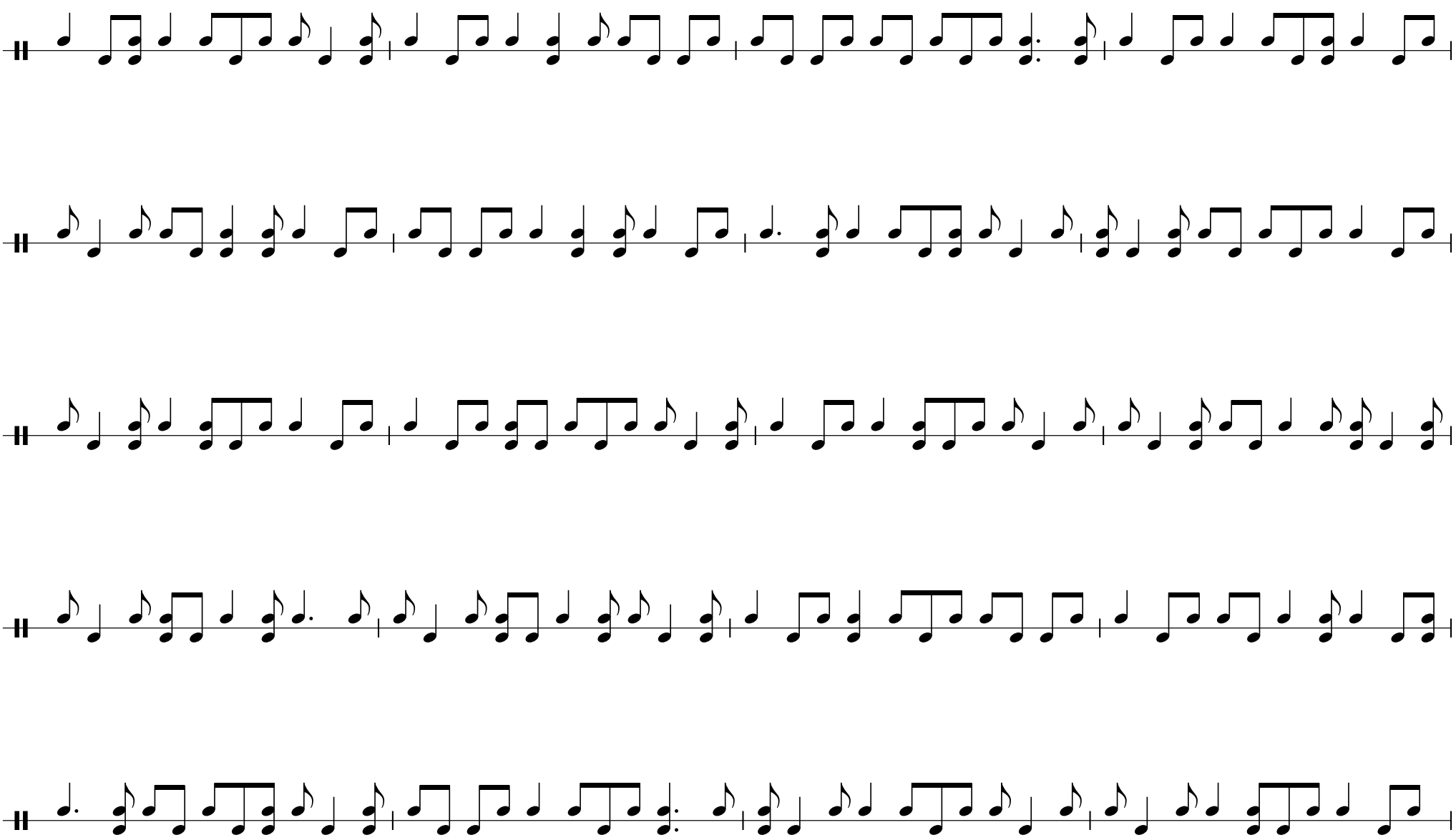

(C) 2022 Zlatko Baracskai

**K_13_bump**
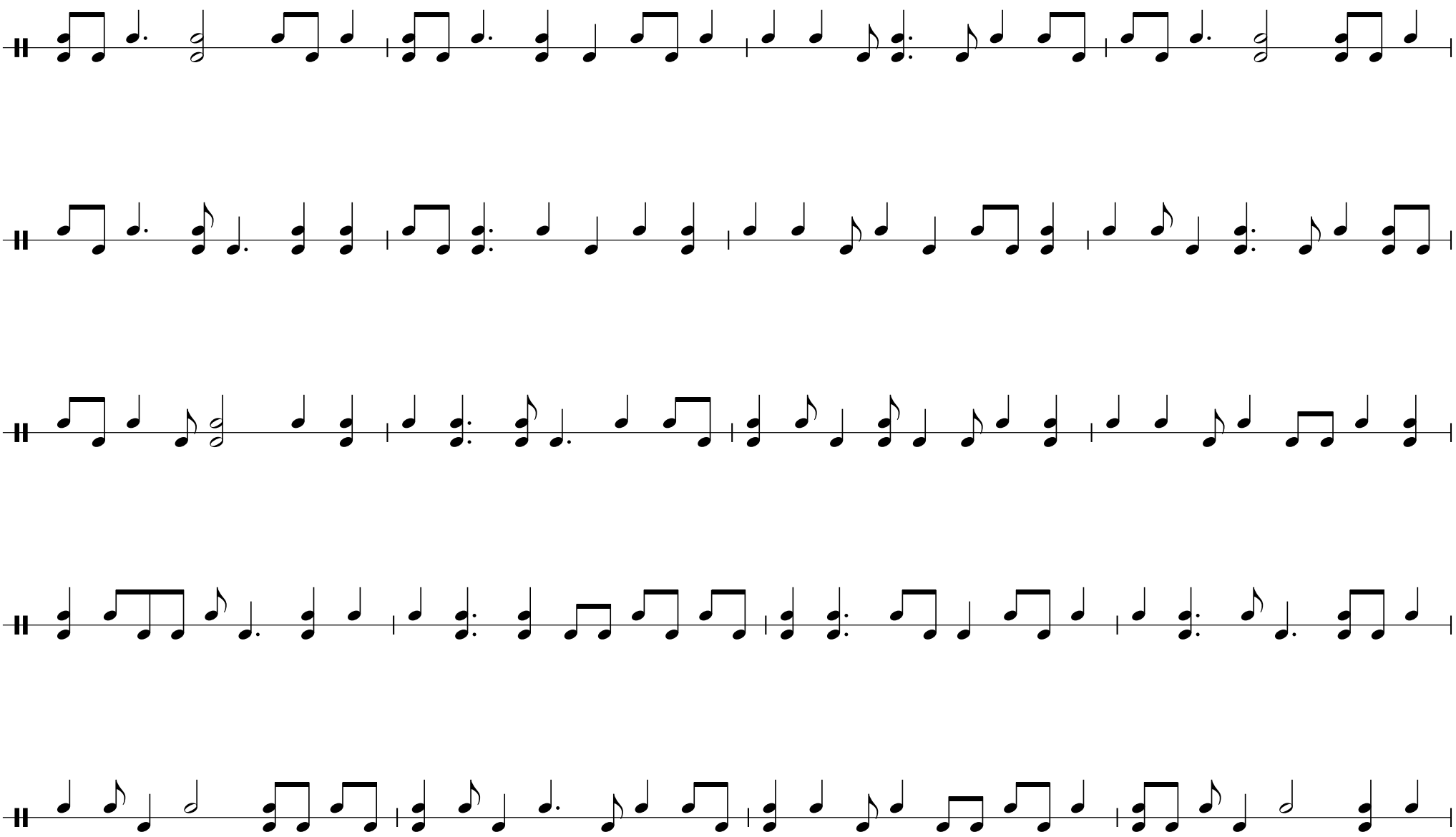



(C) 2022 Zlatko Baracskai

**K_13_bump**
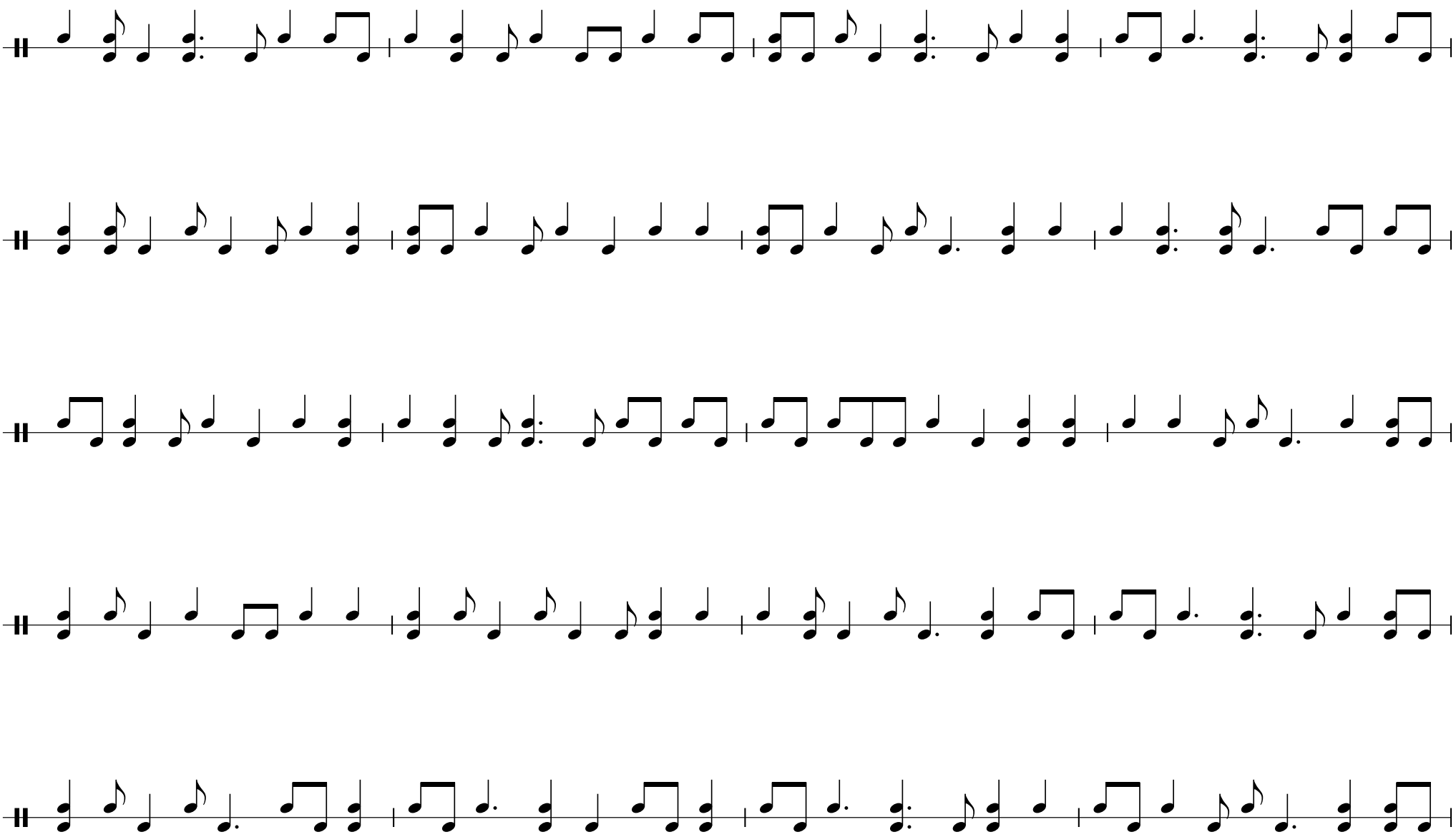



(C) 2022 Zlatko Baracskai

**K_13_bump**
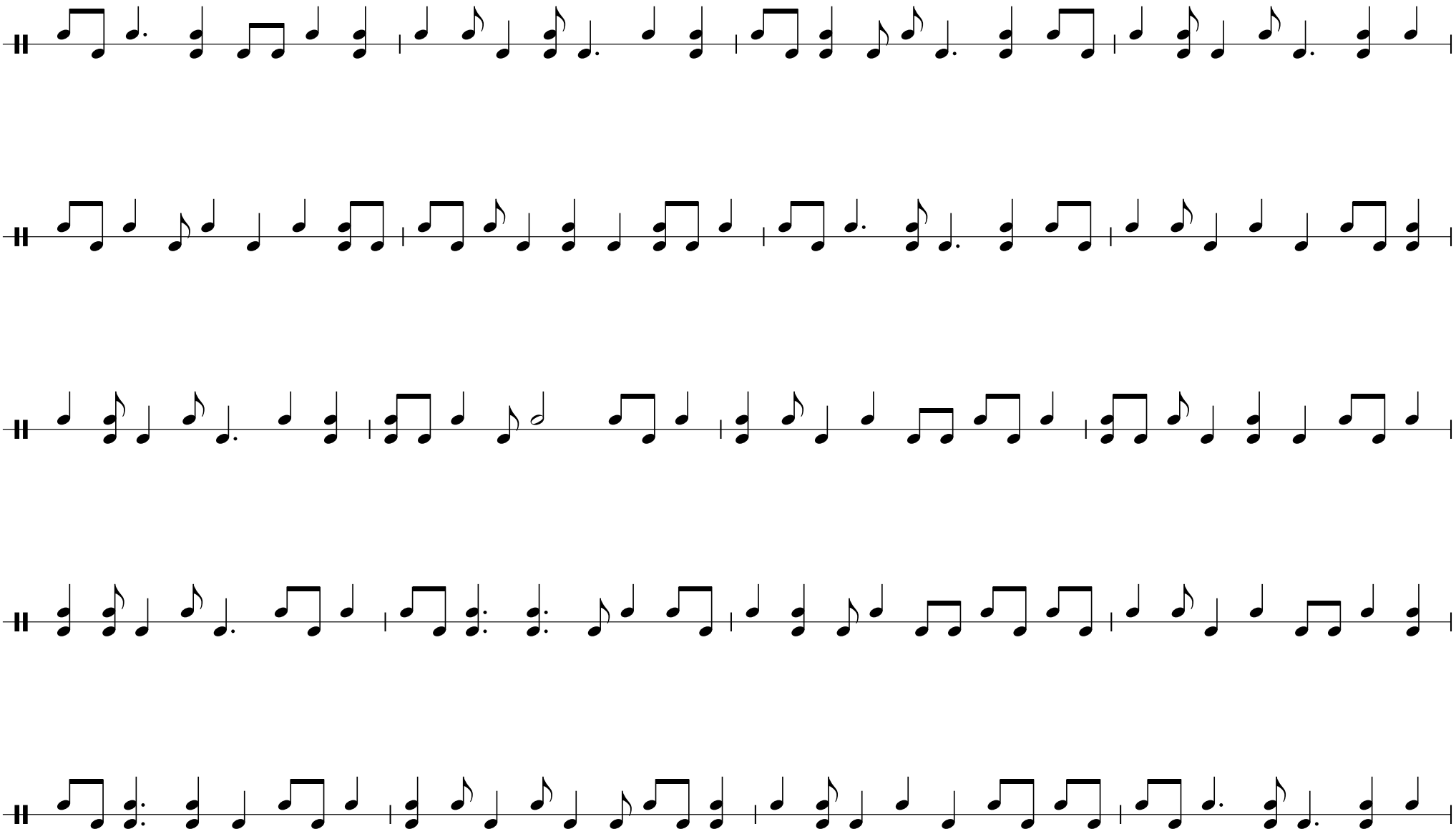



(C) 2022 Zlatko Baracskai

**K_13_launch**
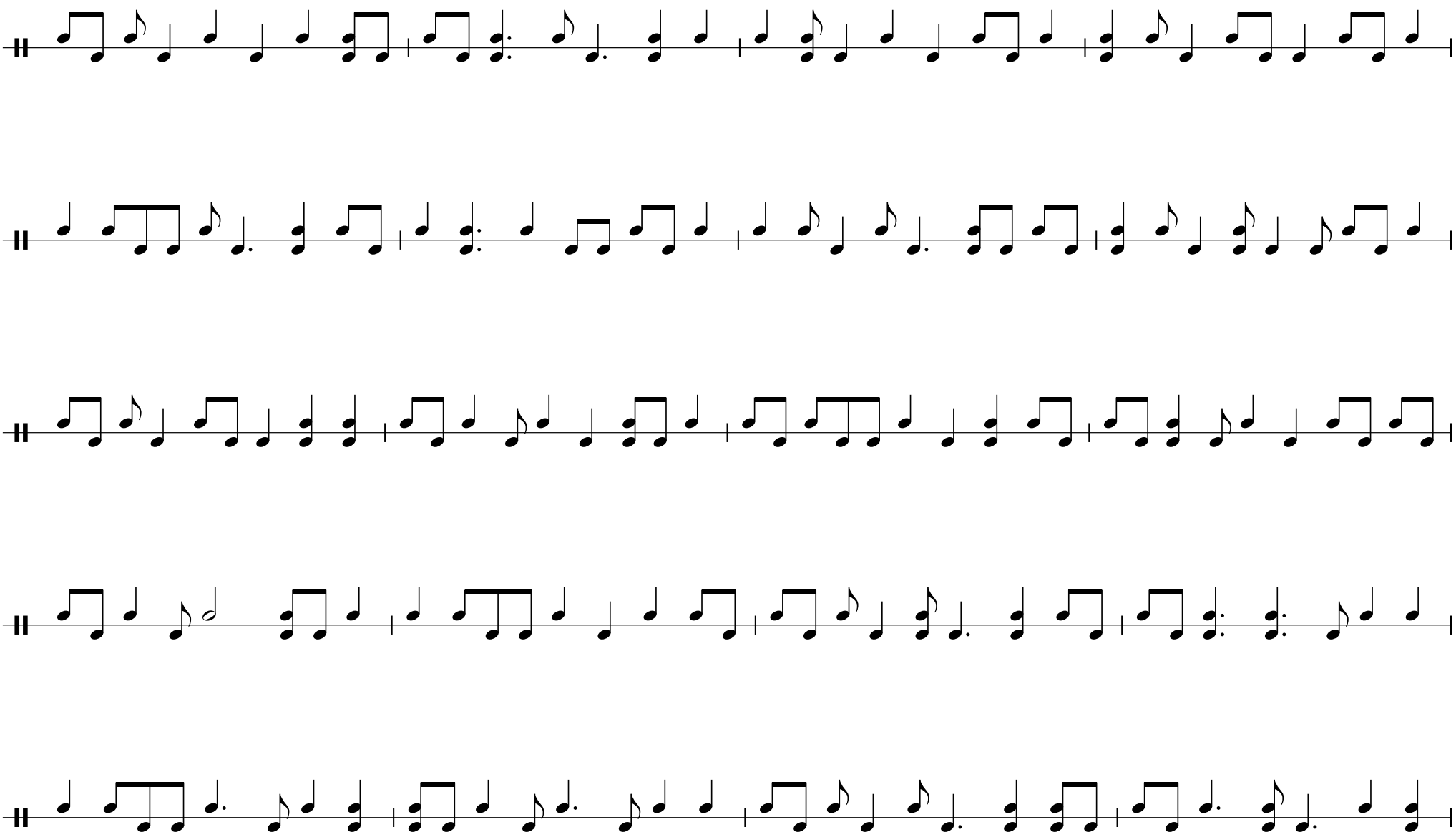



(C) 2022 Zlatko Baracskai

**K_13_launch**



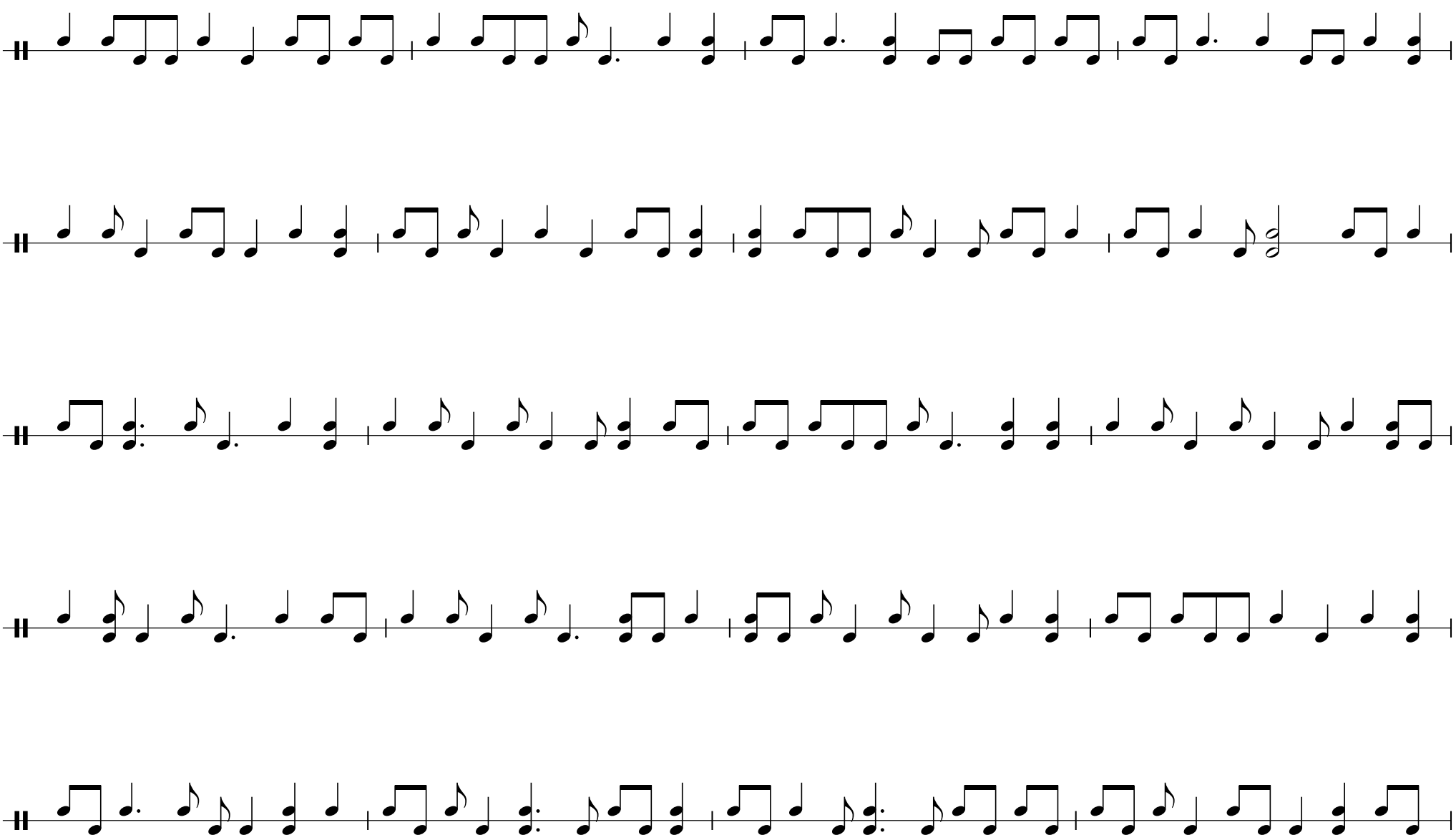

(C) 2022 Zlatko Baracskai

**K_13_launch**
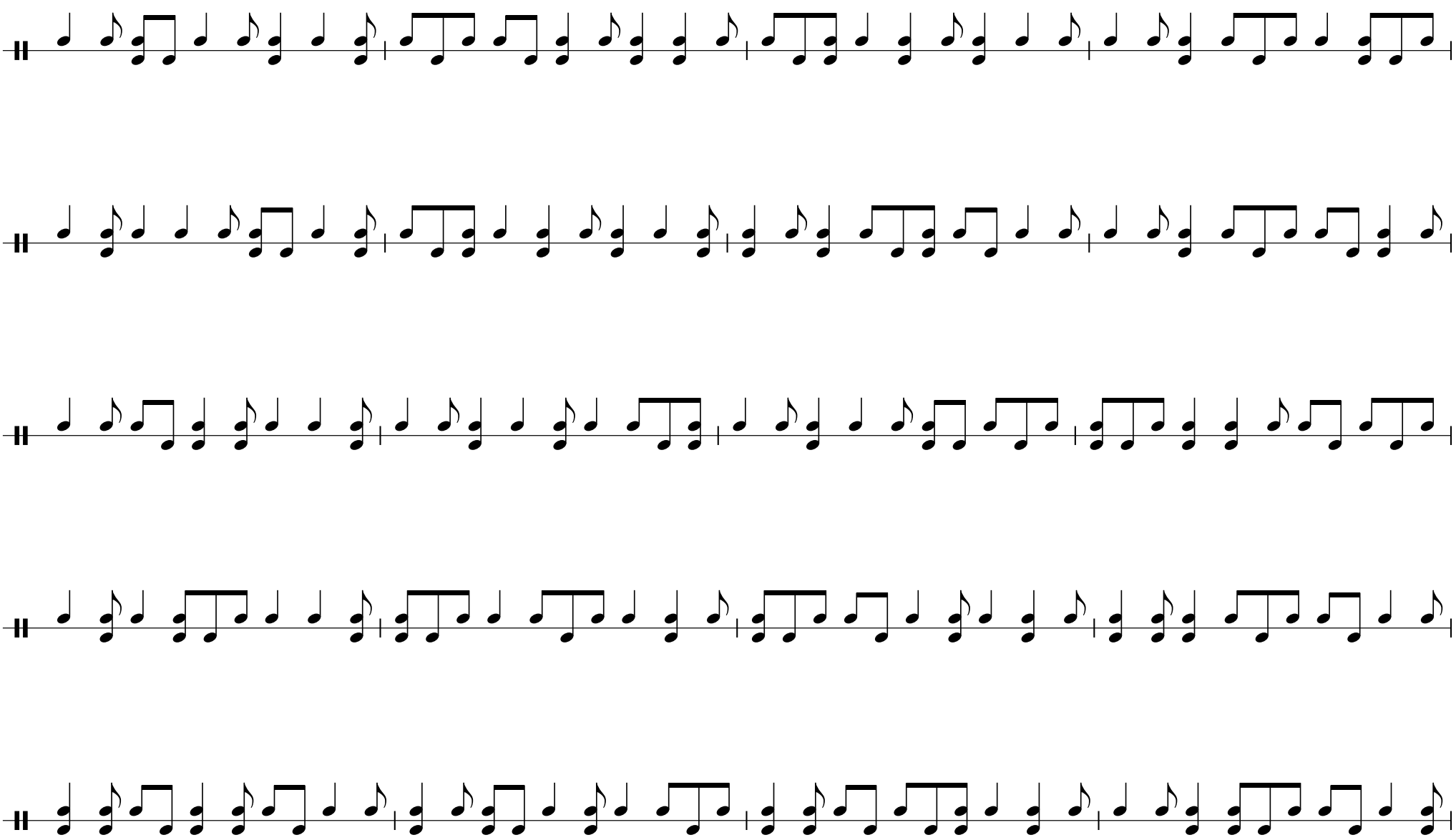



(C) 2022 Zlatko Baracskai

**K_13_launch**
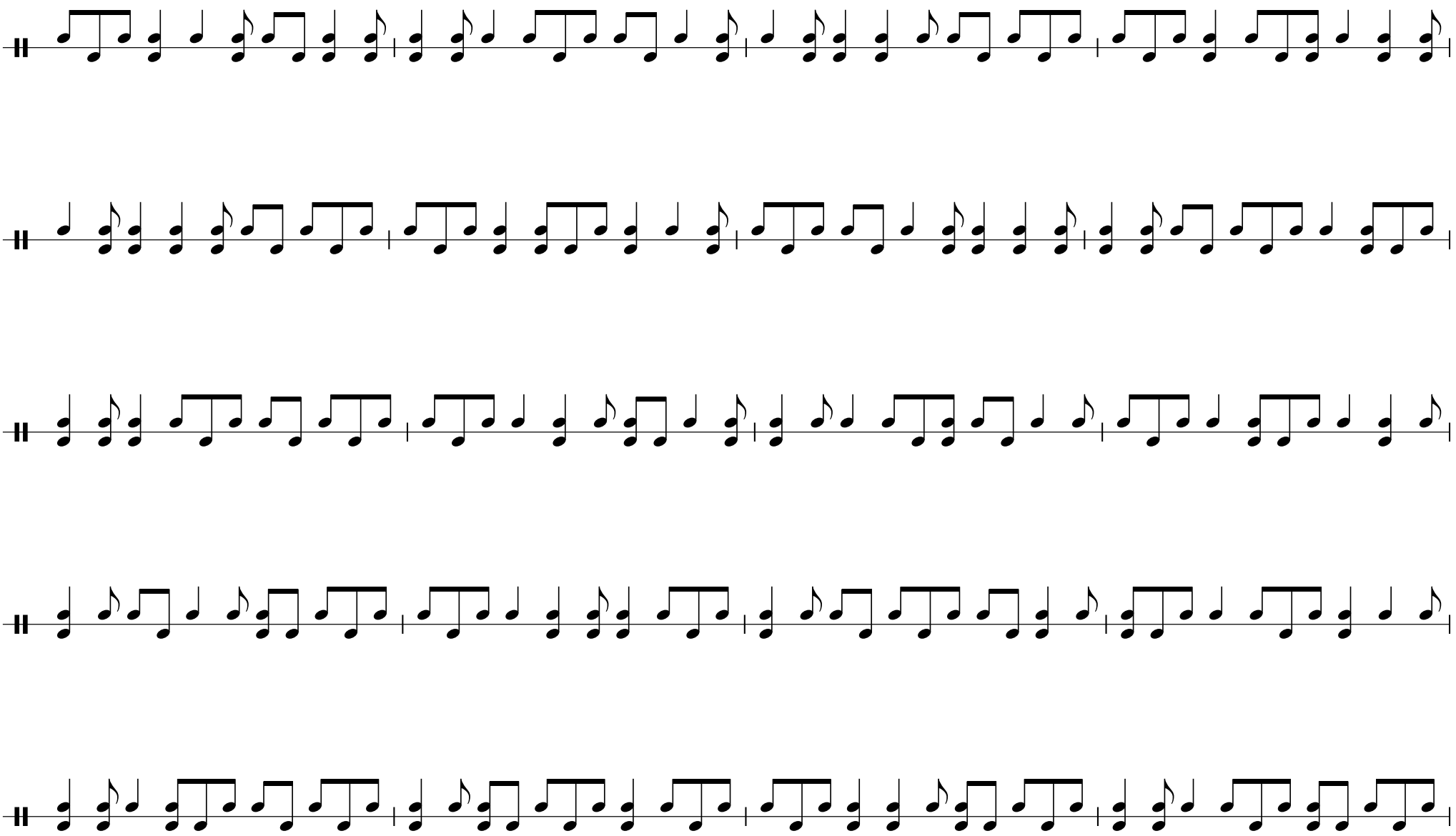



(C) 2022 Zlatko Baracskai

**K_13_launch**
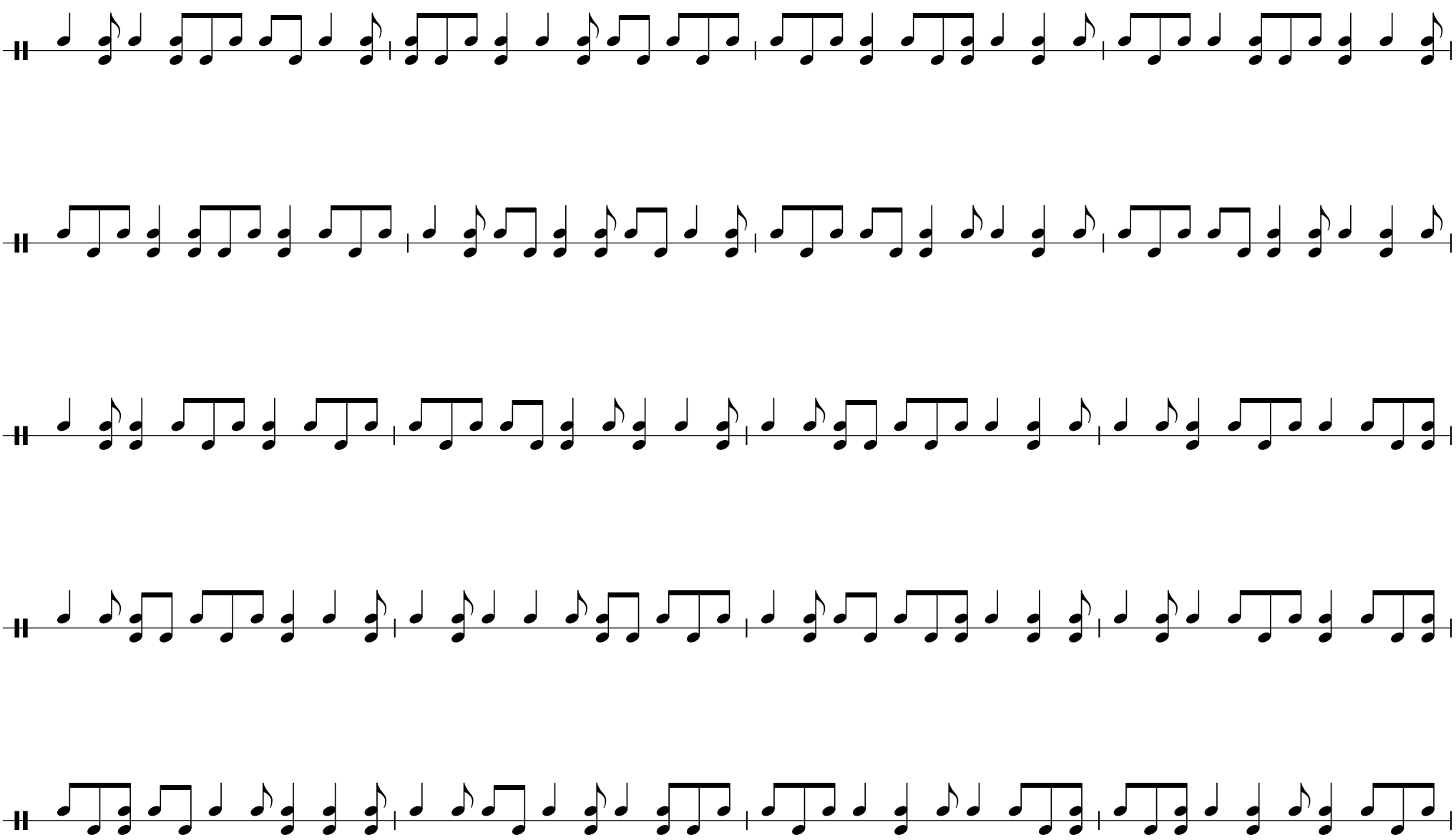



(C) 2022 Zlatko Baracskai

**K_13_flake**



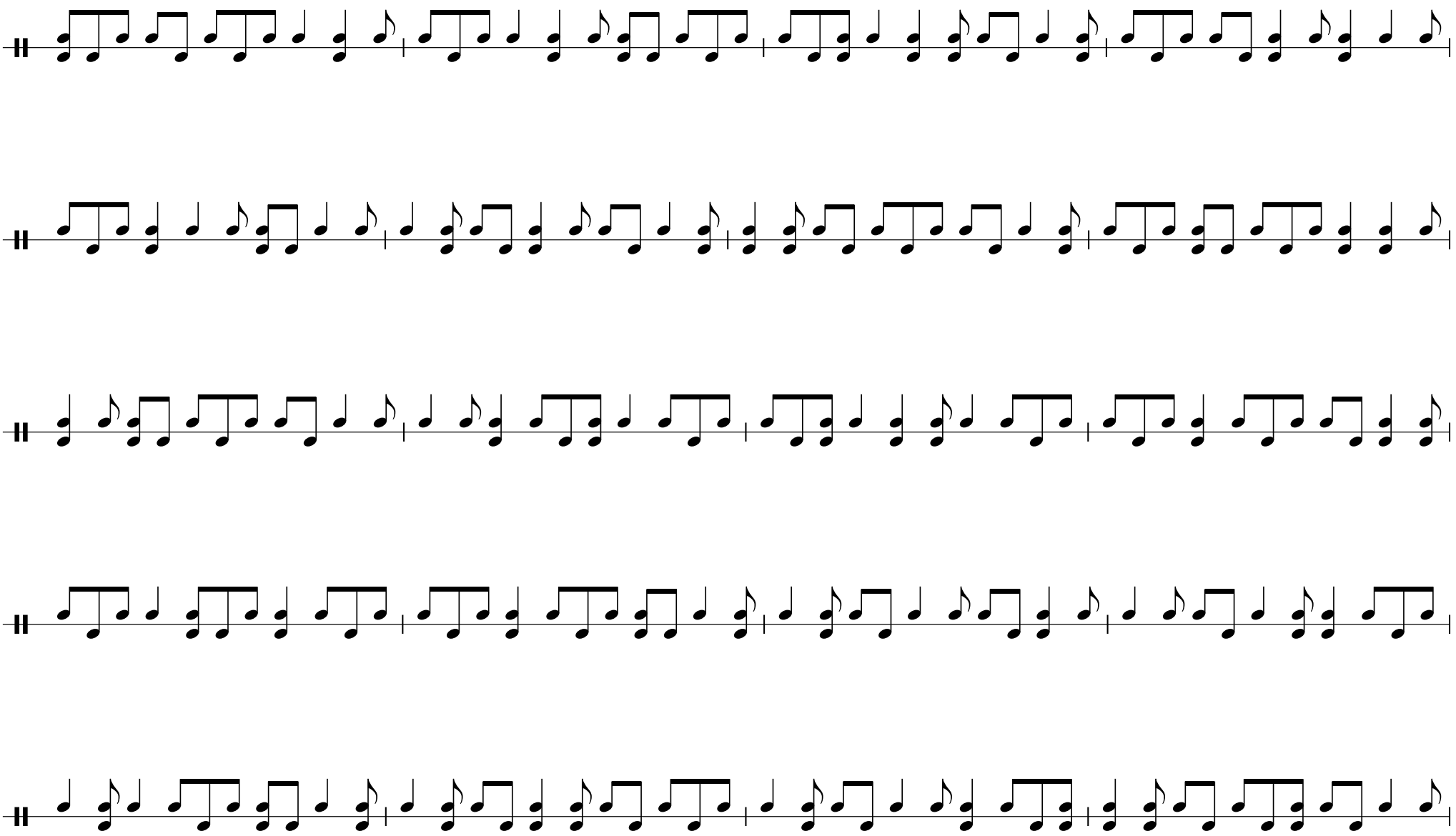

(C) 2022 Zlatko Baracskai

**K_13_flake**
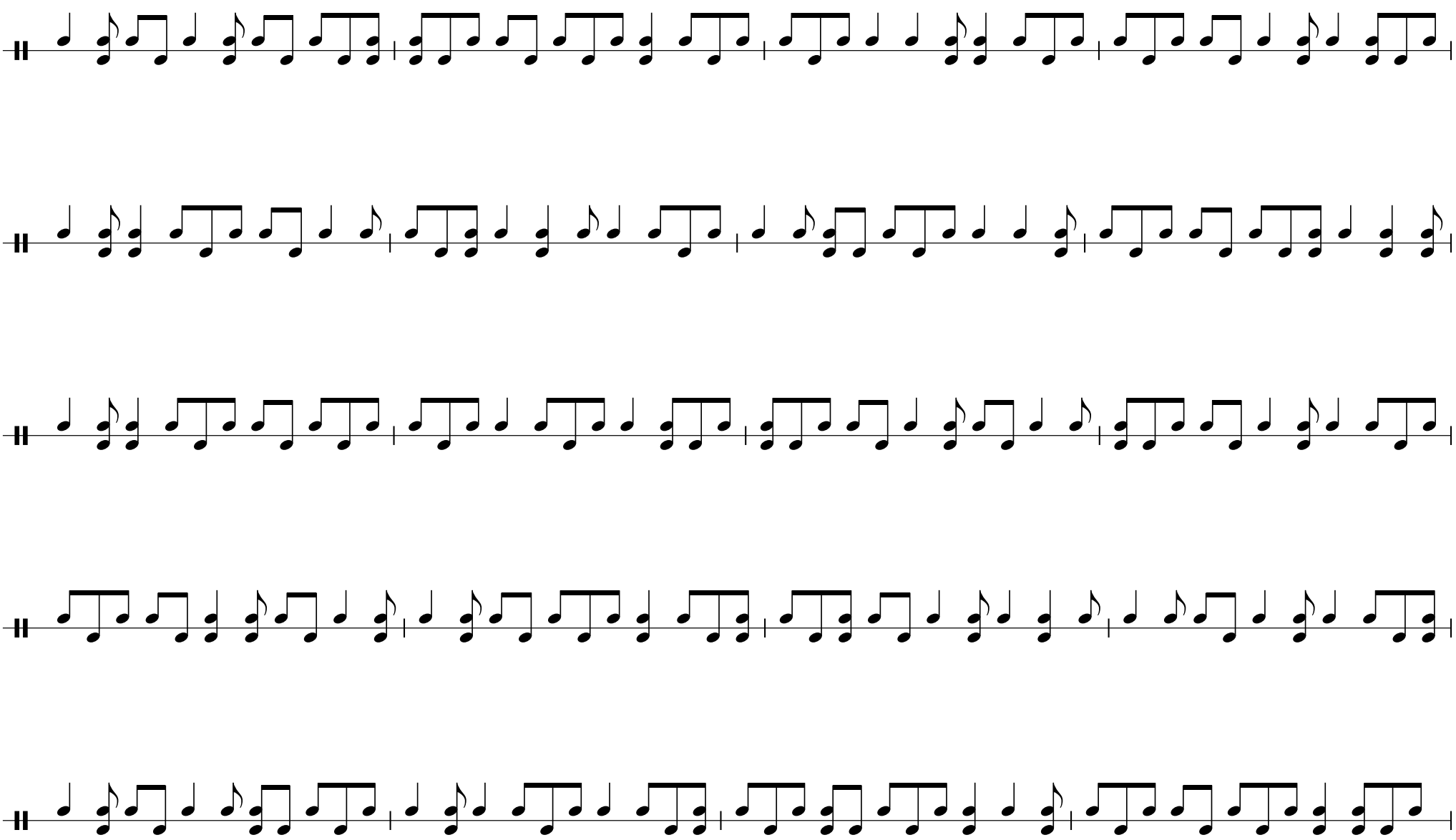



(C) 2022 Zlatko Baracskai

**K_13_flake**
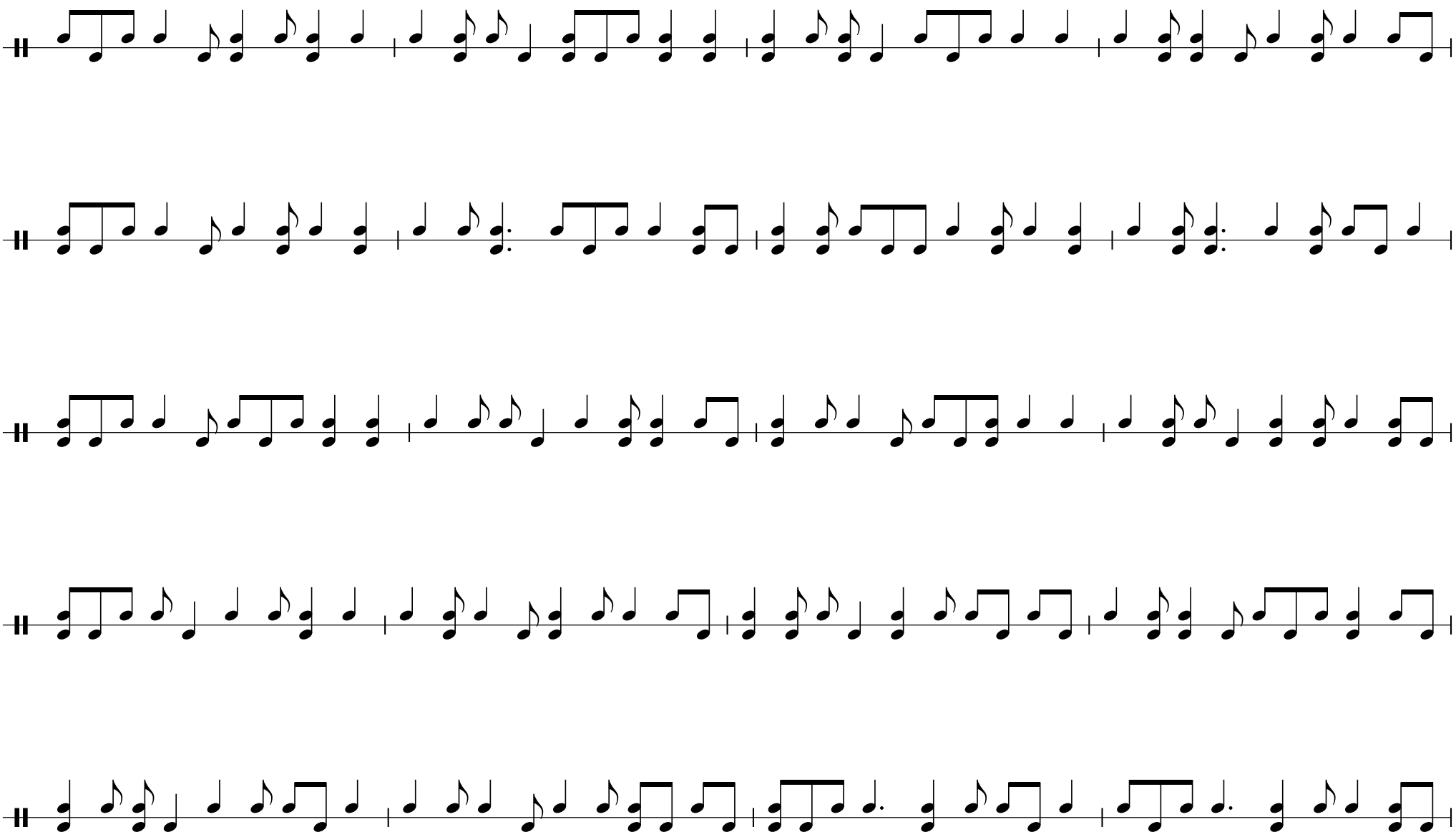



(C) 2022 Zlatko Baracskai

**K_13_flake**
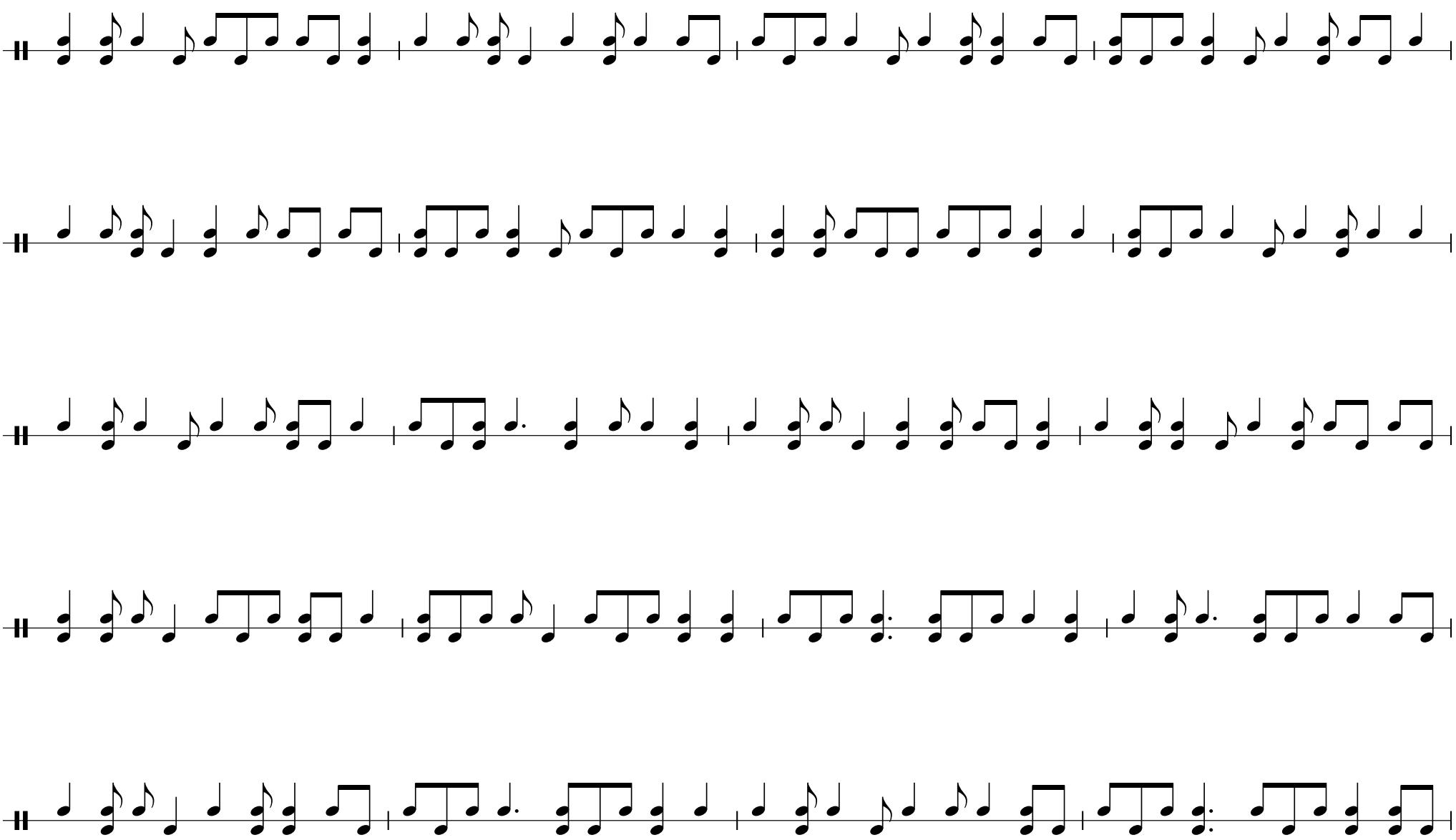



(C) 2022 Zlatko Baracskai

**K_13_flake**
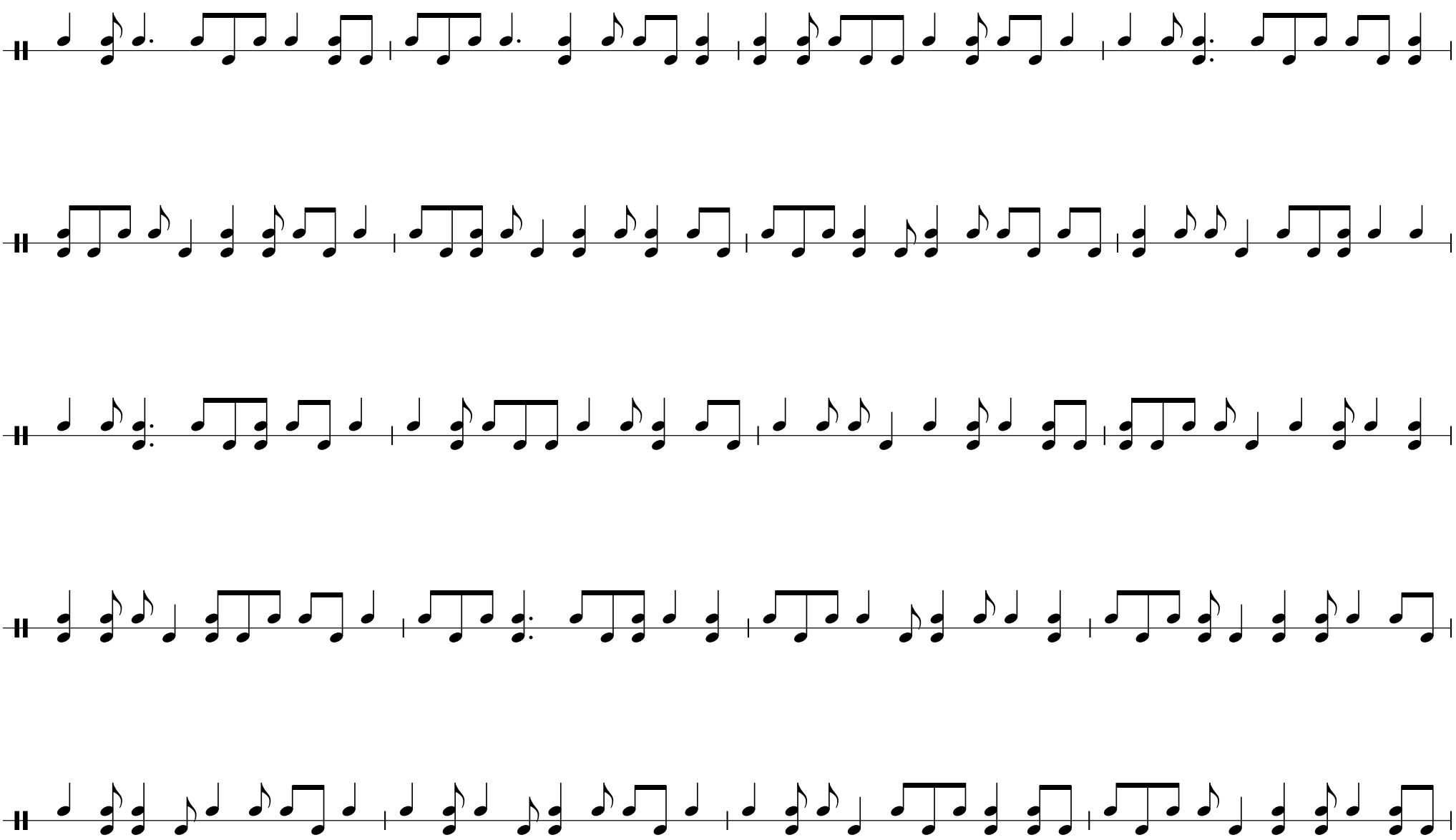



(C) 2022 Zlatko Baracskai

K_13_waltz
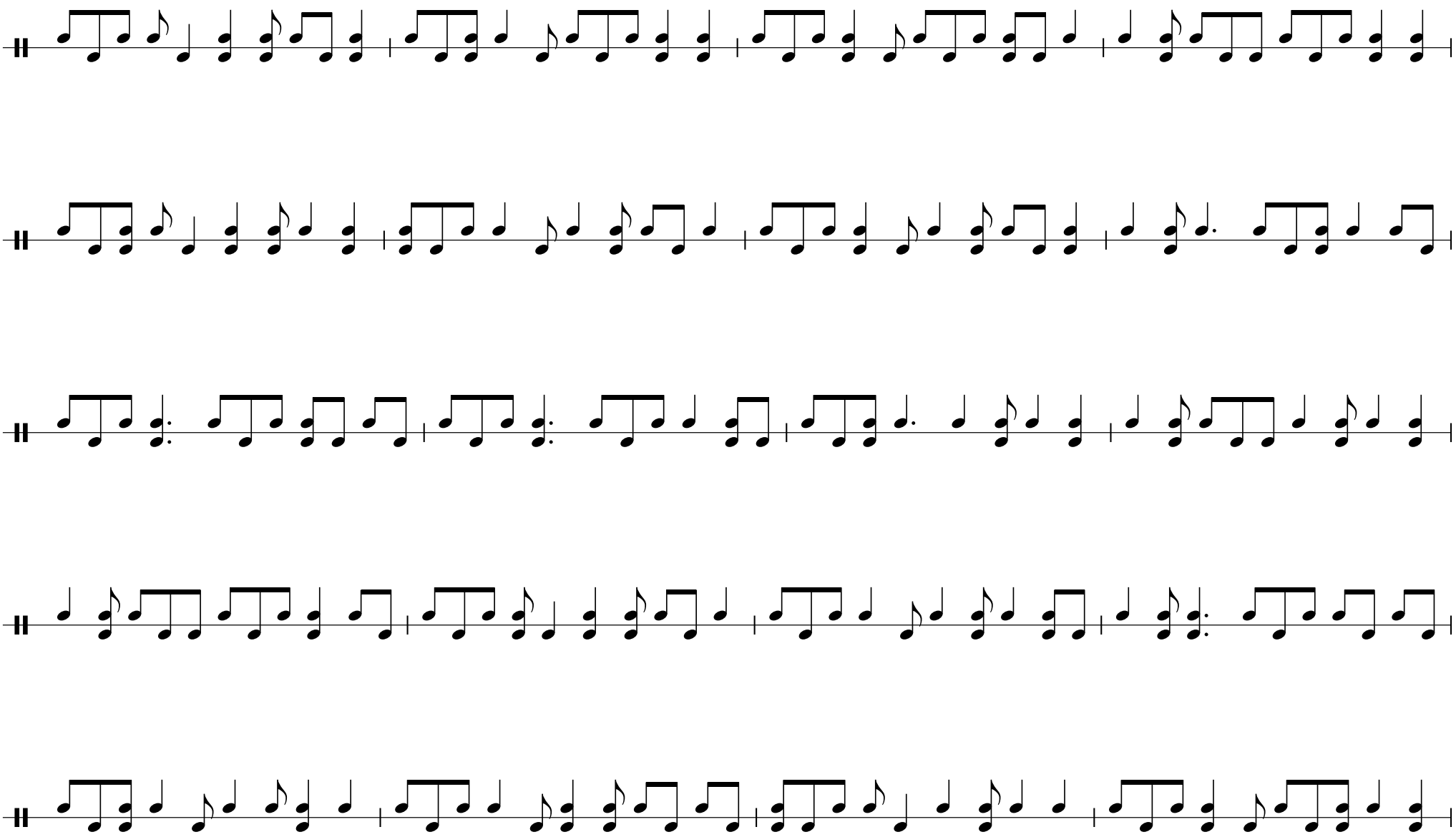



(C) 2022 Zlatko Baracskai

K_13_waltz



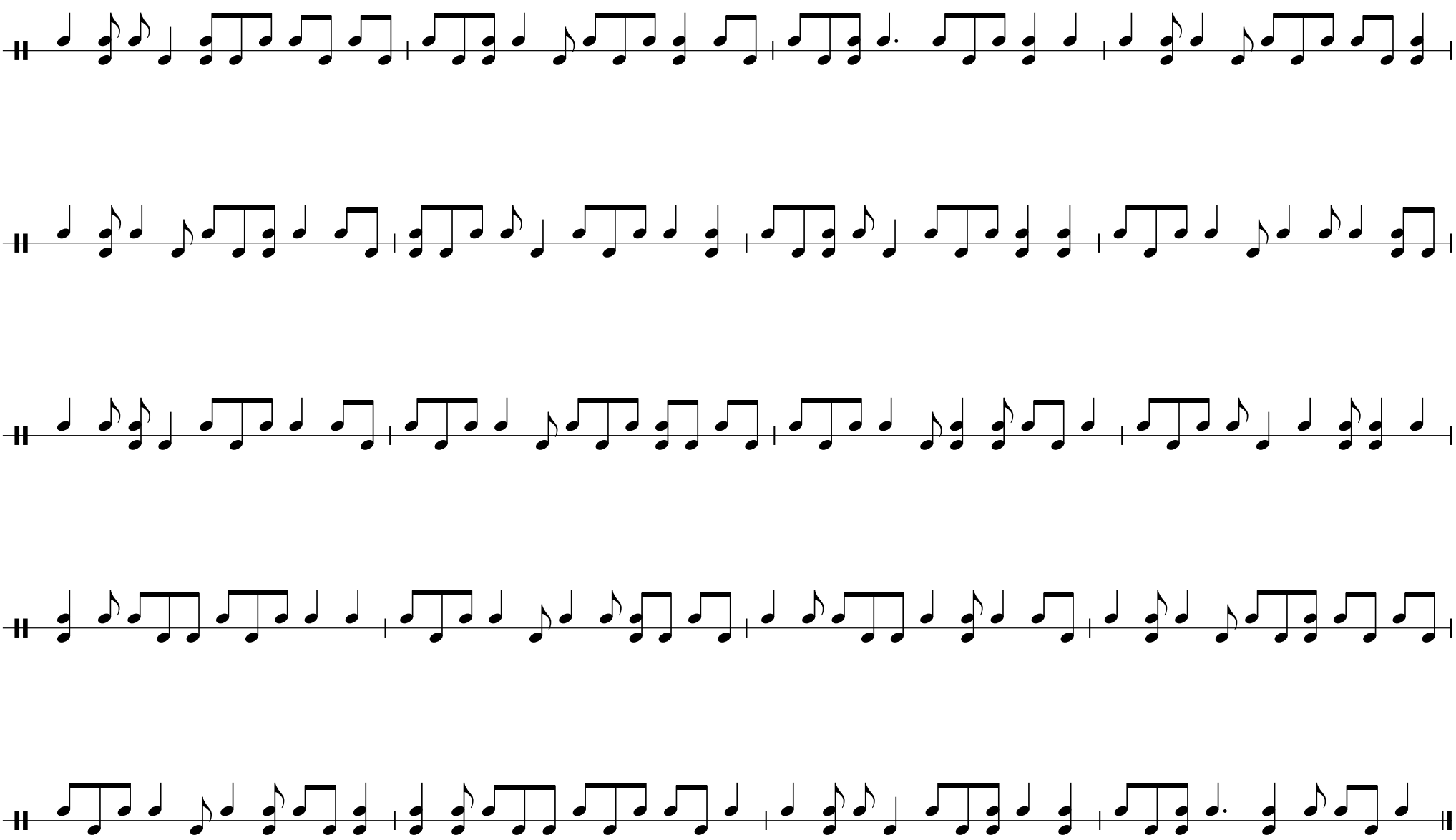

(C) 2022 Zlatko Baracskai

K_13_waltz




(C) 2022 Zlatko Baracskai

K_13_waltz




(C) 2022 Zlatko Baracskai

K_13_waltz