

TEST

TEST

Historical Shifts in the Rhythmic Organization of Popular Music: A Corpus Study of Meter in R&B

Trevor de Clercq



Music and Discourse Series
Belmont University
March 13, 2024

I. Meter in Popular Music, generally

I. Meter in Popular Music,
generally

II. History of Meter in
R&B Music, specifically

What is Meter?

The Musician's Guide to

Theory and Analysis

Fourth Edition

JANE PIPER CLENDINNING | ELIZABETH WEST MARVIN



Jean Dutilleul



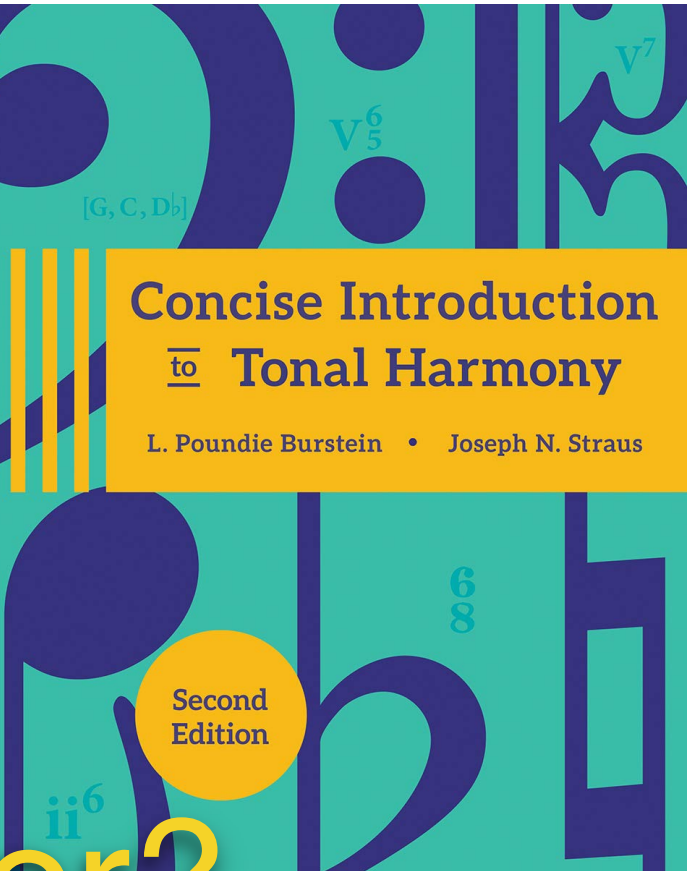
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What is Meter?

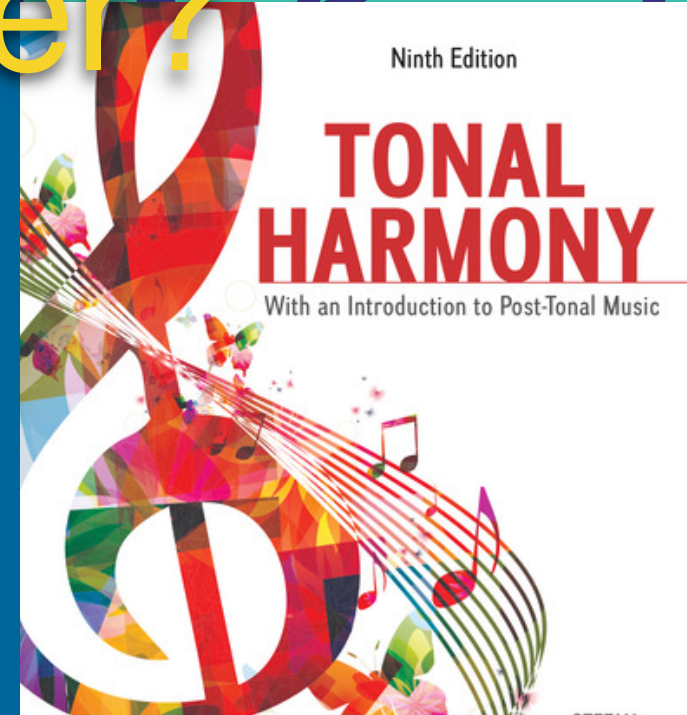
HARMONY in CONTEXT



Ninth Edition

TONAL HARMONY

With an Introduction to Post-Tonal Music



What is Meter?

- Duple meter
- Triple meter
- Quadruple meter

What is Meter?

- Duple meter $\frac{2}{4}$ $\frac{6}{8}$ $\frac{2}{2}$
- Triple meter $\frac{3}{4}$ $\frac{9}{8}$ $\frac{3}{8}$
- Quadruple meter $\frac{4}{4}$ $\frac{12}{8}$

What is Meter?

Beats in Bar

Divisions of Beat

	Duple	Triple	Quadruple
Simple	$\frac{2}{4}$	$\frac{3}{4}$	$\frac{4}{4}$
Compound	$\frac{6}{8}$	$\frac{9}{8}$	$\frac{12}{8}$

**“Teardrops on My Guitar”
(Taylor Swift 2006)**

**“Teardrops on My Guitar”
(Taylor Swift 2006)**

“Teardrops on My Guitar” (Taylor Swift 2006)

0:57

B \flat F/A Gm E \flat

Vox

He's the rea-son for the tear drops on my gui-tar, the on-ly thing that keeps me wish-in' on a wish-in' star.

Kick/
Snare

The image shows a musical score for the song 'Teardrops on My Guitar' by Taylor Swift. It features two staves: a vocal line and a drum line. The vocal line is in 4/4 time, starting at 0:57, and is written in B-flat major. The lyrics are: 'He's the rea-son for the tear drops on my gui-tar, the on-ly thing that keeps me wish-in' on a wish-in' star.' The drum line shows a simple pattern of quarter notes and rests, with a slash indicating a snare drum hit. The tempo is indicated as approximately 100 BPM.

~ 100 BPM

“Teardrops on My Guitar” (Taylor Swift 2006)

0:57

B \flat F/A Gm E \flat

Vox

He's the rea-son for the tear drops on my gui-tar, the on-ly thing that keeps me wish-in' on a wish-in' star.

Kick/
Snare

Detailed description: This block contains a musical score for the song 'Teardrops on My Guitar'. It features two staves: a vocal line and a drum line. The vocal line is in 4/4 time, starting at 0:57. The key signature is B-flat major. The melody consists of eighth and quarter notes, with a slur over the first two measures and another slur over the last two measures. The lyrics are: 'He's the rea-son for the tear drops on my gui-tar, the on-ly thing that keeps me wish-in' on a wish-in' star.' The drum line shows a simple pattern of eighth notes in the first measure, followed by three measures with a slash and a dot, indicating a rest or a specific drum sound.

“pop” version

~ 100 BPM

“Teardrops on My Guitar” (Taylor Swift 2006)

album version

“Teardrops on My Guitar” (Taylor Swift 2006)

album version

“Teardrops on My Guitar” (Taylor Swift 2006)

Vox

B \flat F/A Gm E \flat

He's the rea son for the tear drops on my gui tar, the on-ly thing that keeps me wish-in' on a wish-in' star.

Kick/
Snare

Detailed description: The image shows a musical score for the song 'Teardrops on My Guitar'. The top staff is for the vocal line, labeled 'Vox'. It features a melody with a slur over the first four measures and another slur over the last four measures. The lyrics are: 'He's the rea son for the tear drops on my gui tar, the on-ly thing that keeps me wish-in' on a wish-in' star.' Above the staff, the chords B \flat , F/A, Gm, and E \flat are indicated. The bottom staff is for the drum accompaniment, labeled 'Kick/Snare'. It shows a simple rhythmic pattern with quarter notes and rests.

album version

“Teardrops on My Guitar” (Taylor Swift 2006)

Vox

Kick/
Snare

2

B \flat F/A Gm E \flat

He's the rea son for the tear drops on my gui tar, the on-ly thing that keeps me wish-in' on a wish-in' star.

The image shows a musical score for the album version of 'Teardrops on My Guitar'. It features two staves: the top staff for the vocal line and the bottom staff for the kick and snare drum accompaniment. The vocal line is written in a treble clef with a key signature of one flat (B-flat major). The lyrics are: 'He's the rea son for the tear drops on my gui tar, the on-ly thing that keeps me wish-in' on a wish-in' star.' The drum accompaniment is in a 4/4 time signature, featuring a simple pattern of quarter notes and rests. A large number '2' is written vertically on the left side of the score. Above the vocal staff, the chords B \flat , F/A, Gm, and E \flat are indicated.

album version

“Teardrops on My Guitar” (Taylor Swift 2006)

HALF-TIME FEEL

Vox **4**

Kick/
Snare **4**

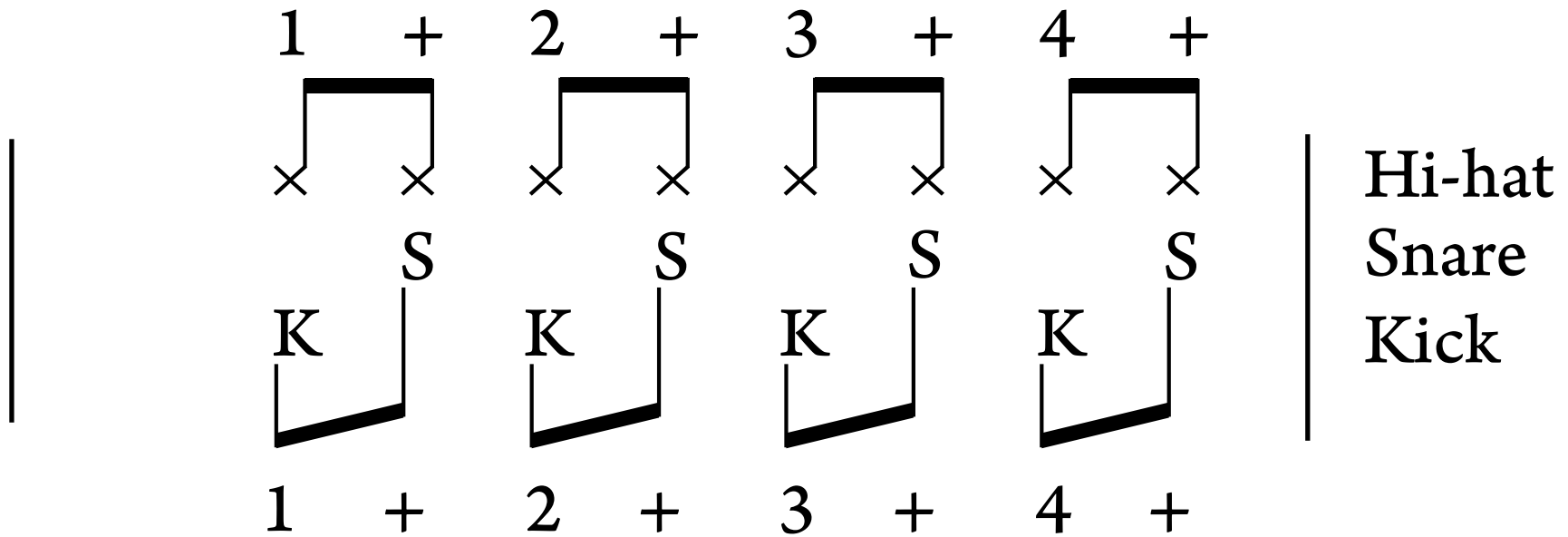
B \flat F/A Gm E \flat

He's the rea son for the tear drops on my gui tar, the on-ly thing that keeps me wish-in' on a wish-in' star.

album version

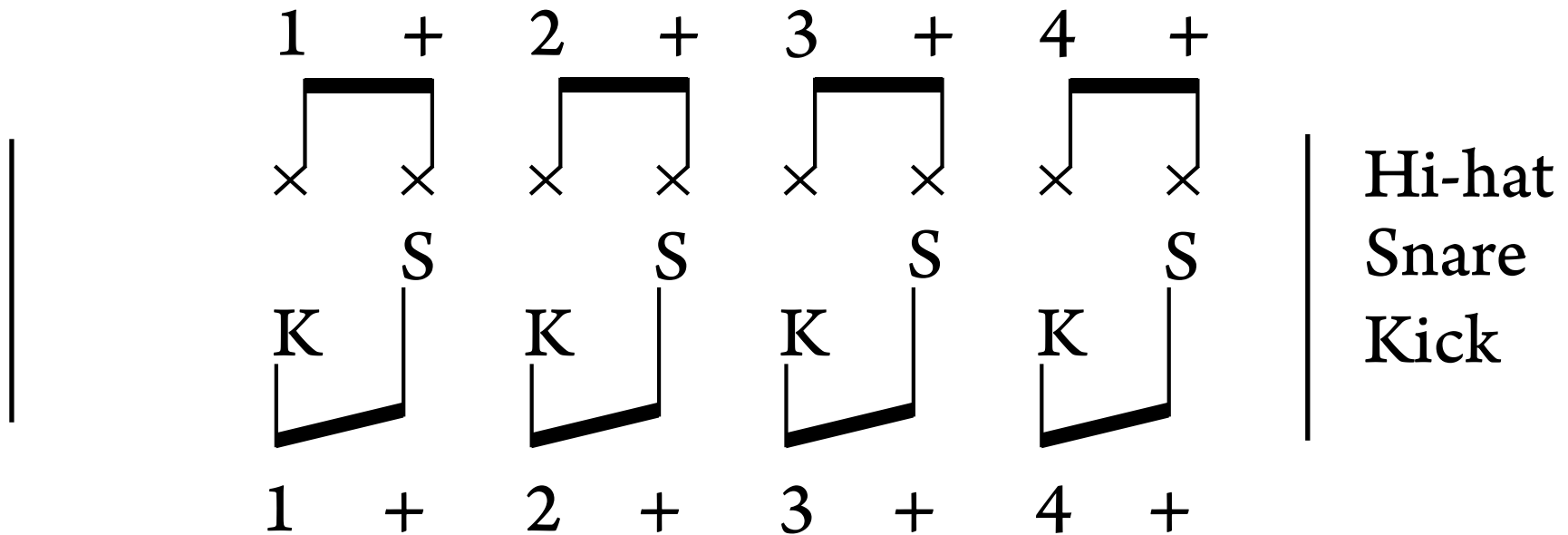
“Mama’s Broken Heart” (Miranda Lambert 2011)

DOUBLE-TIME FEEL



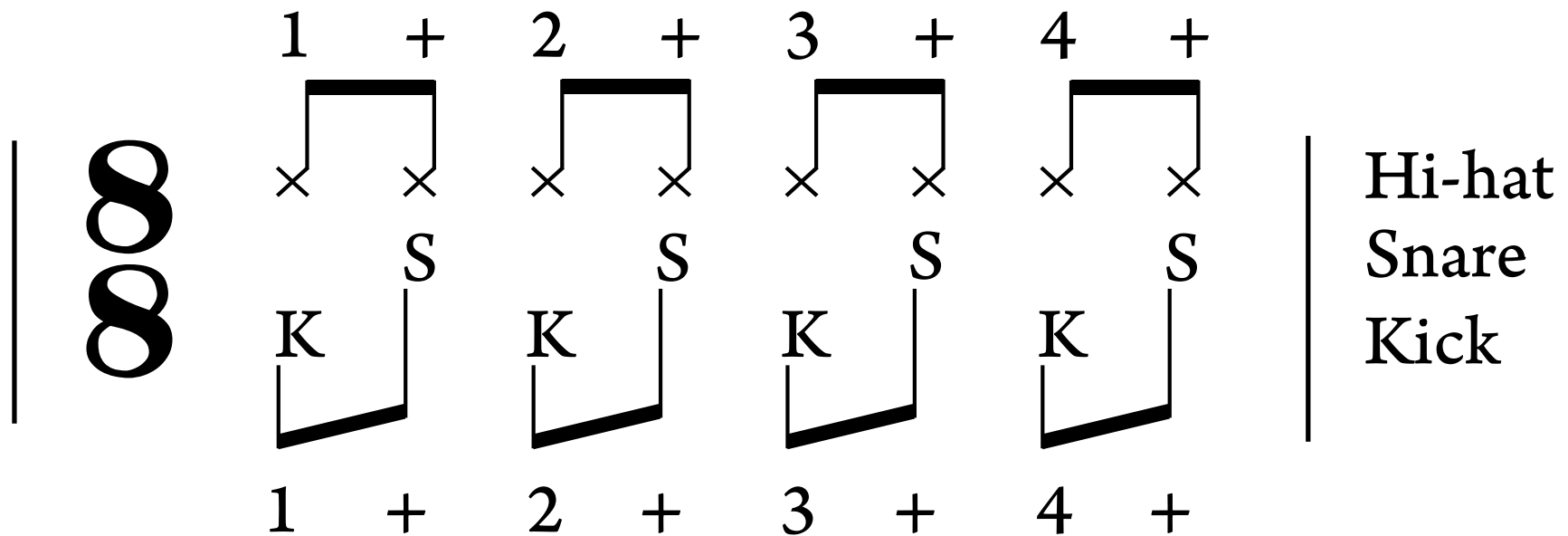
“Mama’s Broken Heart” (Miranda Lambert 2011)

DOUBLE-TIME FEEL



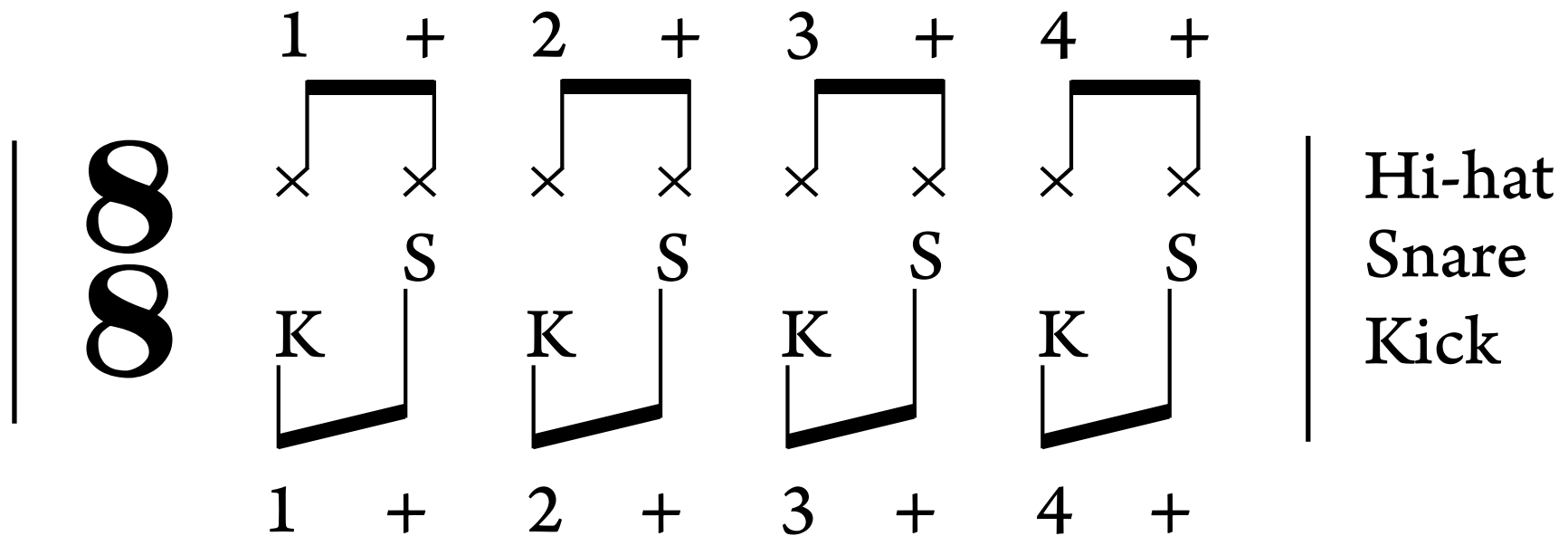
“Mama’s Broken Heart” (Miranda Lambert 2011)

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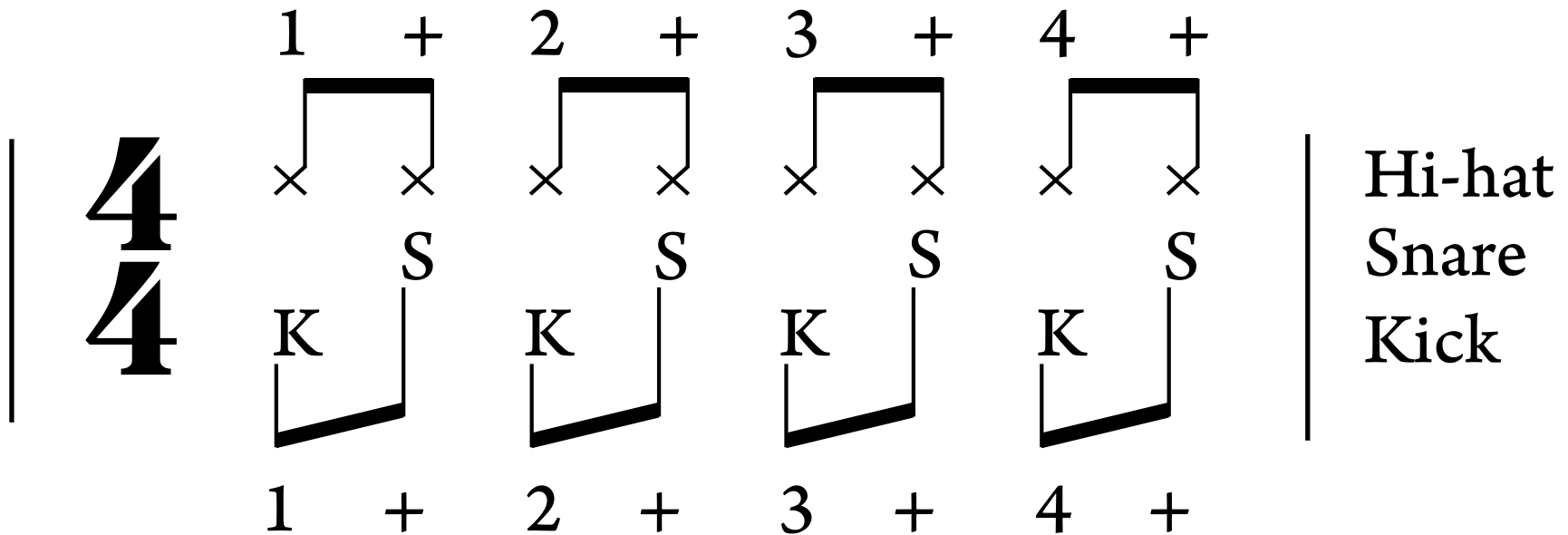
“Mama’s Broken Heart” (Miranda Lambert 2011)

DOUBLE-TIME FEEL



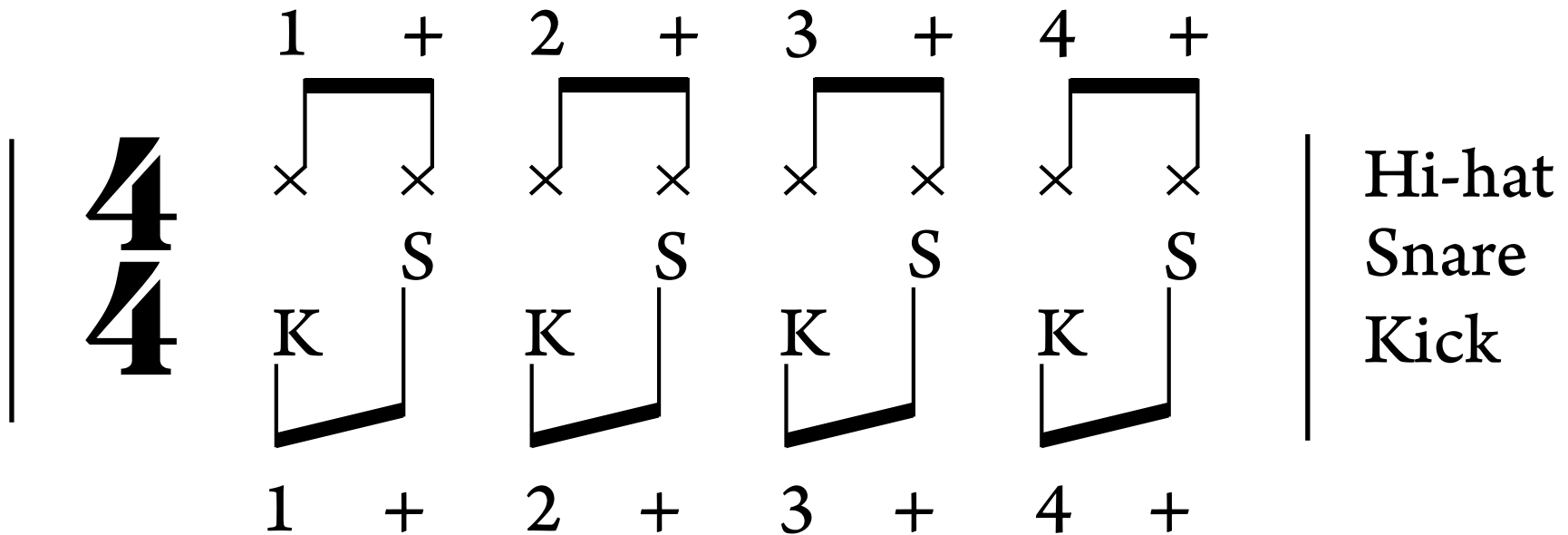
“Mama’s Broken Heart” (Miranda Lambert 2011)

DOUBLE-TIME FEEL



“Mama’s Broken Heart” (Miranda Lambert 2011)

DOUBLE-TIME FEEL



**“Higher Ground”
(Stevie Wonder 1973)**

**“Higher Ground”
(Stevie Wonder 1973)**

“Higher Ground”

(Stevie Wonder 1973)

$\frac{12}{8}$?

HIGHER GROUND

Words and Music by
STEVIE WONDER

Moderate Shuffle

E \flat 7(3)



G \flat



A \flat



E \flat 7(3)



G \flat



A \flat



First system of musical notation. Treble clef, 4/4 time signature. Dynamic marking *mf*. The bass line features a shuffle rhythm with triplets and eighth notes. The treble line has chords and eighth notes.

E \flat 7(3)



G \flat



A \flat



E \flat 7(3)



Second system of musical notation. Treble clef, 4/4 time signature. The bass line continues with triplets and eighth notes. The treble line has chords and eighth notes.

G \flat



A \flat



E \flat 7(3)



G \flat



A \flat



Third system of musical notation. Treble clef, 4/4 time signature. The system ends with a double bar line and a repeat sign. Lyrics are provided below the staff.

Peo - ple, —
Pow - ers.

“Girl They Won’t Believe It” (Joss Stone 2007)

SWING EIGHTHS (HARD SWING)

“Girl They Won’t Believe It” (Joss Stone 2007)

SWING EIGHTHS (HARD SWING)

“Chuck E.’s in Love” (Rickie Lee Jones 1979)

SWING EIGHTHS

**4
4**

NORMAL FEEL

(chorus)



SWING EIGHTHS

**4
4**

HALF-TIME FEEL

(outro)

“Chuck E.’s in Love” (Rickie Lee Jones 1979)

SWING EIGHTHS

**4
4**

NORMAL FEEL

(chorus)



SWING EIGHTHS

**4
4**

HALF-TIME FEEL

(outro)

“Poison”

(Bell Biv DeVoe 1990)

**4
4**

NORMAL FEEL

“Poison”

(Bell Biv DeVoe 1990)

**4
4**

NORMAL FEEL

“Poison”

(Bell Biv DeVoe 1990)

SWING SIXTEENTHS

**4
4**

NORMAL FEEL

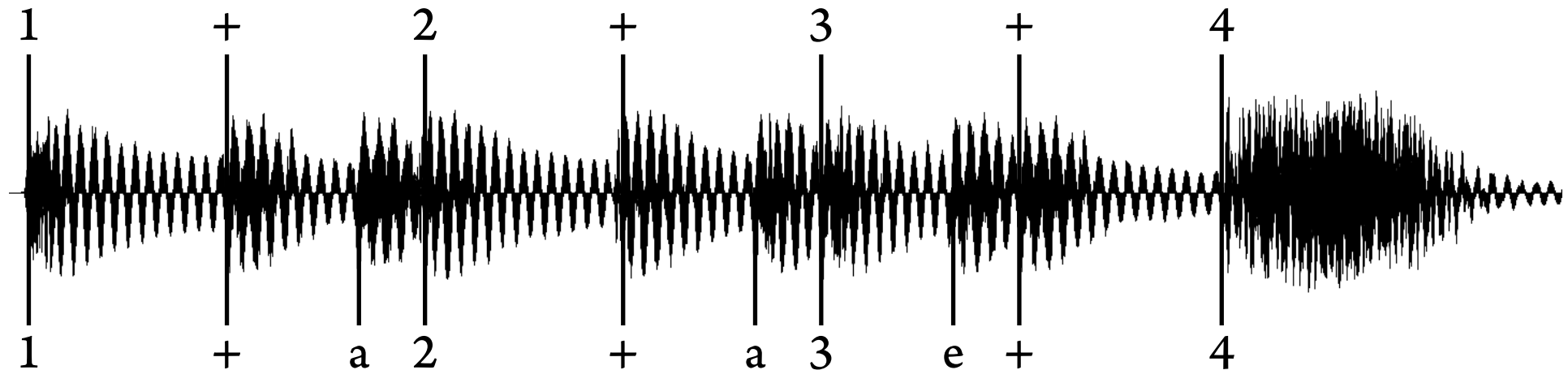
“Poison”

(Bell Biv DeVoe 1990)

SWING SIXTEENTHS

4
4

NORMAL FEEL



“Poison”

(Bell Biv DeVoe 1990)

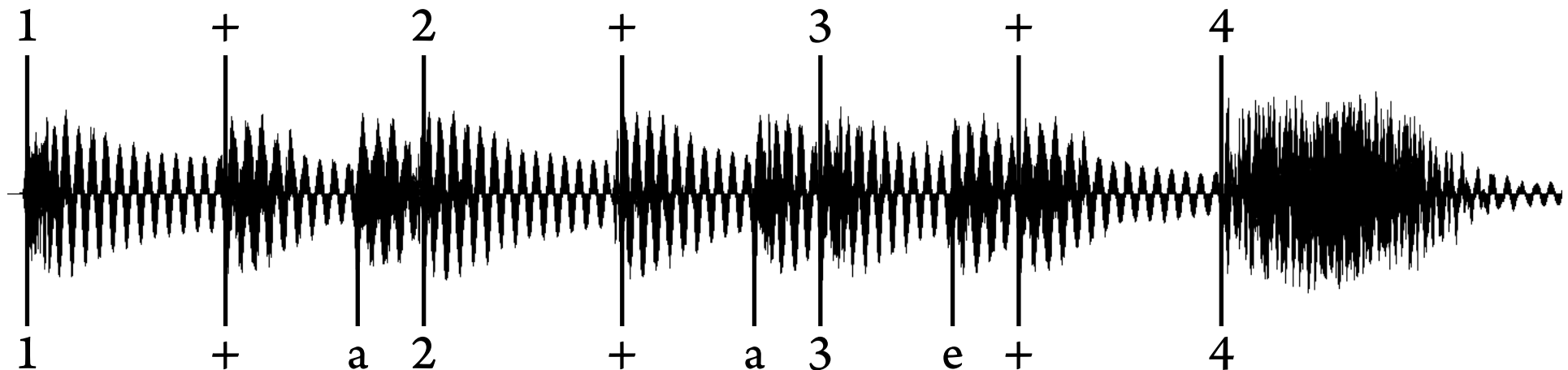
SWING SIXTEENTHS

$\frac{4}{4}$



$\frac{24}{16}$?

NORMAL FEEL



“Redneck Woman”

(Gretchen Wilson 2004)

SWING SIXTEENTHS

**4
4**

DOUBLE-TIME FEEL

“Redneck Woman”

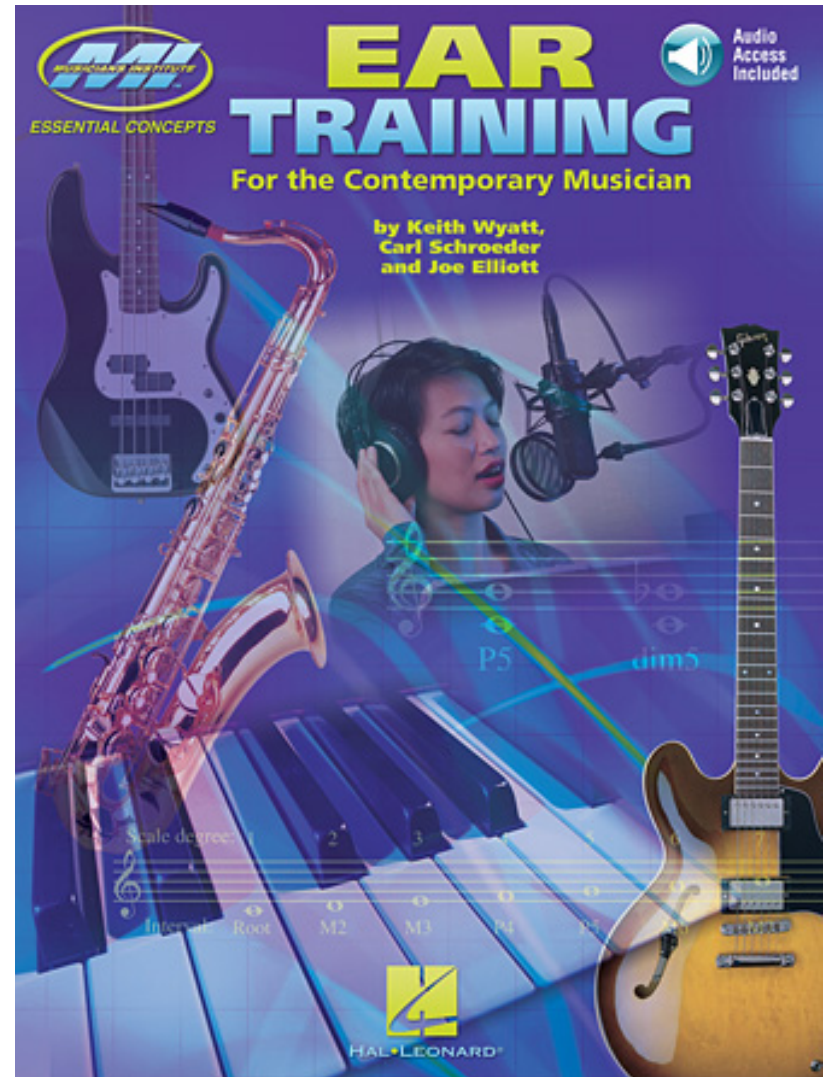
(Gretchen Wilson 2004)

SWING SIXTEENTHS

**4
4**

DOUBLE-TIME FEEL

“In popular music, compound meter is generally used only at slower tempos; when the tempo picks up, the triplet feeling is better defined as *shuffle* or *swing*.”
(Wyatt, Schroeder, and Elliott 2005, p. 77)



**“A Wolf at the Door”
(Radiohead 2003)**

**6
8**

“A Wolf at the Door” **(Radiohead 2003)**

SWING SIXTEENTHS

6
8

“A Wolf at the Door” **(Radiohead 2003)**

SWING SIXTEENTHS

6
8

“A Wolf at the Door” (Radiohead 2003)

SWING SIXTEENTHS

**6
8**



**18
16 ?**

I. Meter in Popular Music,
generally

II. History of Meter in
R&B Music, specifically

I. Background

II. Methodology

III. Statistical Analysis

IV. Discussion



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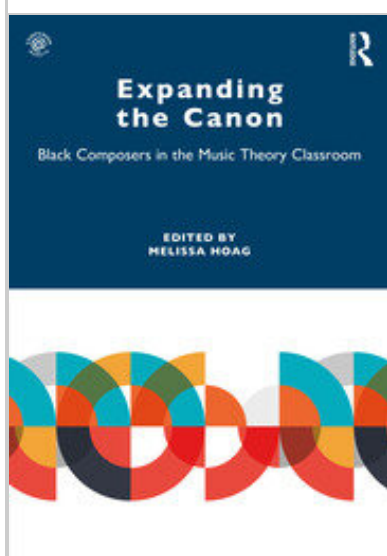
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16 Developing Contemporary Rhythm Skills Through Contemporary R&B

Trevor de Clercq

Introduction

If the contents of current music theory textbooks reflect the structure of the modern-day music theory classroom, then an outsized majority of teaching is currently devoted to topics related to pitch as compared to rhythm. This emphasis on pitch is especially pronounced in textbooks that focus on European art music of the extended common-practice period (i.e., classical music).¹ Yet it persists in textbooks that include a good, if not great, deal of popular music as well.² One factor may be that rhythm is normally considered more of a skill than a concept, and so its teaching is relegated to dedicated skills-based courses. This distinction between skill-based and conceptual topics may represent tradition more than anything else, however.³ And even in textbooks devoted specifically to aural skills, the imbalance between pitch and rhythm remains.⁴

As a counterbalance, I offer in this chapter some classroom activities that shift students' attention away from pitch and toward aspects of rhythm. Specifically, I suggest ways to help students develop contemporary rhythm skills in the context of contemporary R&B music. Although conventional approaches to teaching rhythm may be adequate for developing the skills needed for understanding classical music, these approaches do not adequately address

Early R&B (1960s)

SWING EIGHTHS

4
4

NORMAL FEEL

Early R&B (1960s)

SWING EIGHTHS

$\frac{4}{4}$

NORMAL FEEL

“Baby Love”
(The Supremes 1964)

Early R&B (1960s)

SWING EIGHTHS

$\frac{4}{4}$

NORMAL FEEL

“Baby Love”
(The Supremes 1964)

Contemporary R&B (mid-1980s to present)

~~SWING EIGHTHS~~

~~$\frac{4}{4}$~~

~~NORMAL FEEL~~

SWING SIXTEENTHS

$\frac{4}{4}$

NORMAL FEEL

The research question:

“What is the prevalence of swing through the history of R&B music?”

The research question:

“What is the prevalence of swing through the history of R&B music?”



.... a corpus study!

I. Background

II. Methodology

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Motown discography, 1961–2005

Year	Artist	Album
1961	The Marvelettes	<i>Please Mr. Postman</i>
1963	Martha and the Vandellas	<i>Heat Wave</i>
1967	The Four Tops	<i>Reach Out</i>
1970	The Jackson 5	<i>ABC</i>
1971	Marvin Gaye	<i>What's Going On</i>
1976	Stevie Wonder	<i>Songs in the Key of Life</i>
1981	Rick James	<i>Street Songs</i>
1983	Lionel Richie	<i>Can't Slow Down</i>
1985	DeBarge	<i>Rhythm of the Night</i>
1990	Johnny Gill	<i>Johnny Gill</i>
1994	Boyz II Men	<i>II</i>
1999	Brian McKnight	<i>Back at One</i>
2003	Erykah Badu	<i>Worldwide Underground</i>
2005	India Arie	<i>Testimony, vol. 1</i>

Motown discography, 1961–2005

205 studio albums*

- * no soundtrack albums
- * no holiday albums
- * no compilation albums
- * no greatest hits albums
- * no live albums
- * no “rock operas”
- * no television specials
- * no unreleased albums

Motown discography, 1961–2005

50 songs per 5-year period (“pentade”)

Pentade

1961-1965

1966-1970

1971-1975

1976-1980

1981-1985

1986-1990

1991-1995

1996-2000

2001-2005

Motown discography, 1961–2005

50 songs per 5-year period (“pentade”)

Pentade

1961-1965

1966-1970

1971-1975

1976-1980

1981-1985

1986-1990

1991-1995

1996-2000

2001-2005

Funk
Girl Groups
Uptown Soul
Psychedelic Soul
Disco
Post-Disco
Quiet Storm
New Jack Swing
Contemporary R&B
Neo-Soul

Motown discography, 1961–2005

50 songs per 5-year period (“pentade”)

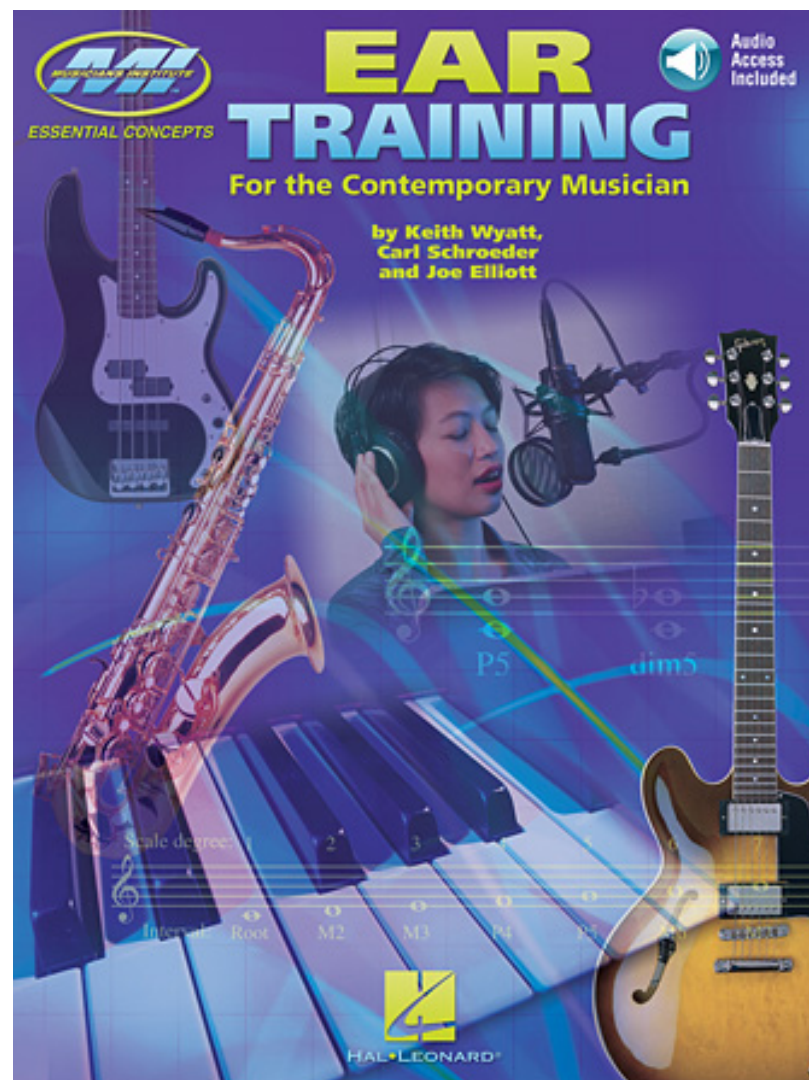
Pentade

1961-1965
1966-1970
1971-1975
1976-1980
1981-1985
1986-1990
1991-1995
1996-2000
2001-2005

Funk
Girl Groups
Uptown Soul
Psychedelic Soul
Disco
Post-Disco
Quiet Storm
New Jack Swing
Contemporary R&B
Neo-Soul

450 songs total (50 songs x 9 pentades)

“In popular music, compound meter is generally used only at slower tempos; when the tempo picks up, the triplet feeling is better defined as *shuffle* or *swing*.”
(Wyatt, Schroeder, and Elliott, 2005, p. 77)



Meter Categorization Strategy

Kick / Snare = “Beat”

Meter Categorization Strategy

Kick / Snare = “Beat”



Divides into
2 equal parts



Does NOT divide
into 2 equal parts

(e.g., 6/8, 12/8, swing 8ths)

Meter Categorization Strategy

Kick / Snare = “Beat”

Divides into
2 equal parts

Does NOT divide
into 2 equal parts

(e.g., 6/8, 12/8, swing 8ths)

Divides into
2 equal parts

Does NOT divide
into 2 equal parts

(e.g., swing 16ths)

I. Background

II. Methodology

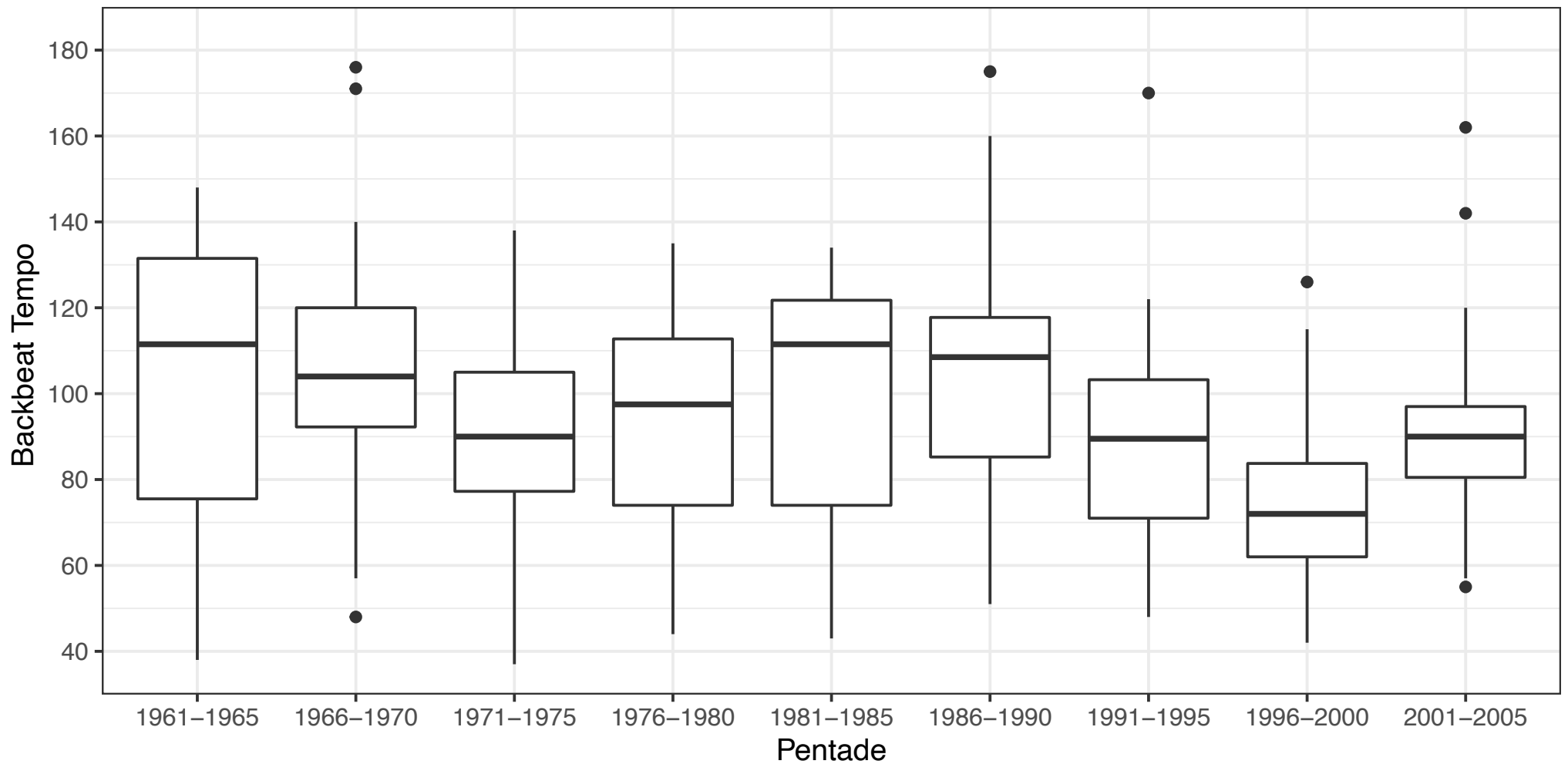
III. Statistical Analysis

IV. Discussion

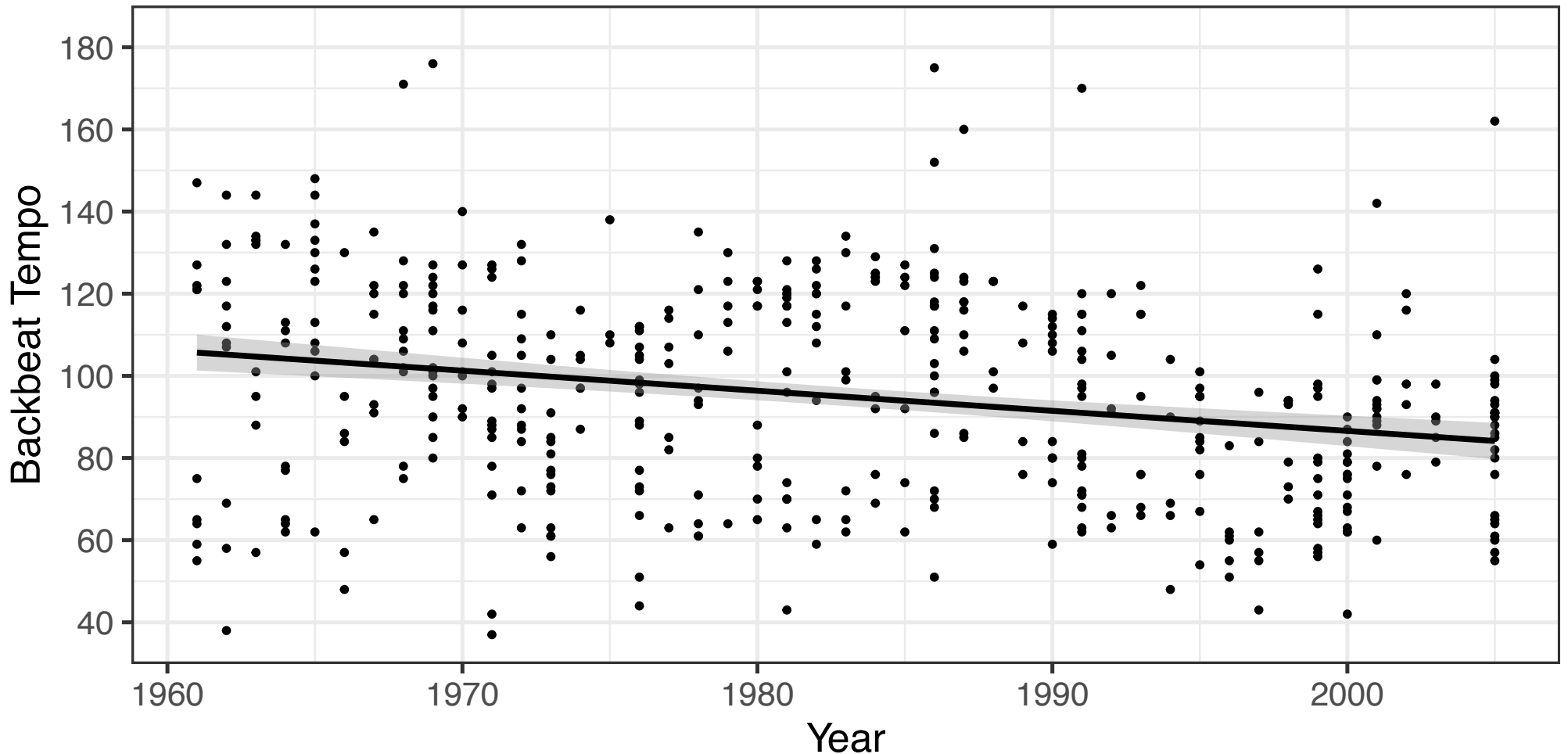
Average Kick-Snare Rates in BPM (e.g., drum tempo) for all songs

Pentade	n	Median	Mean
1961-1965	50	112	104
1966-1970	50	104	106
1971-1975	50	90	92
1976-1980	50	98	94
1981-1985	50	112	101
1986-1990	50	109	105
1991-1995	50	90	89
1996-2000	50	72	74
2000-2005	50	90	90

Average Kick-Snare Rates (in BPM) for all songs



Average Kick-Snare Rates (in BPM) for all songs

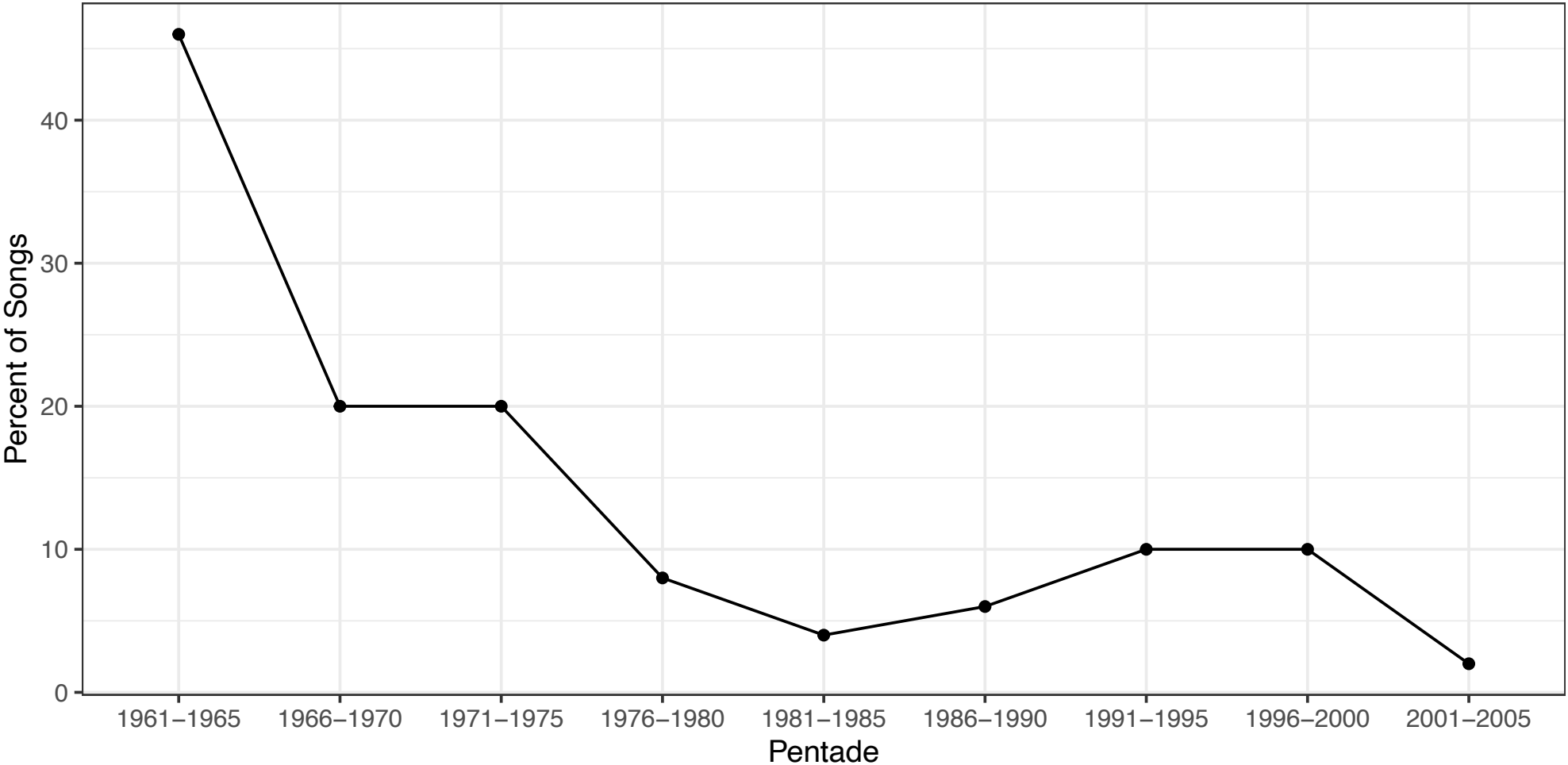


$p < .001, r^2 = .065$

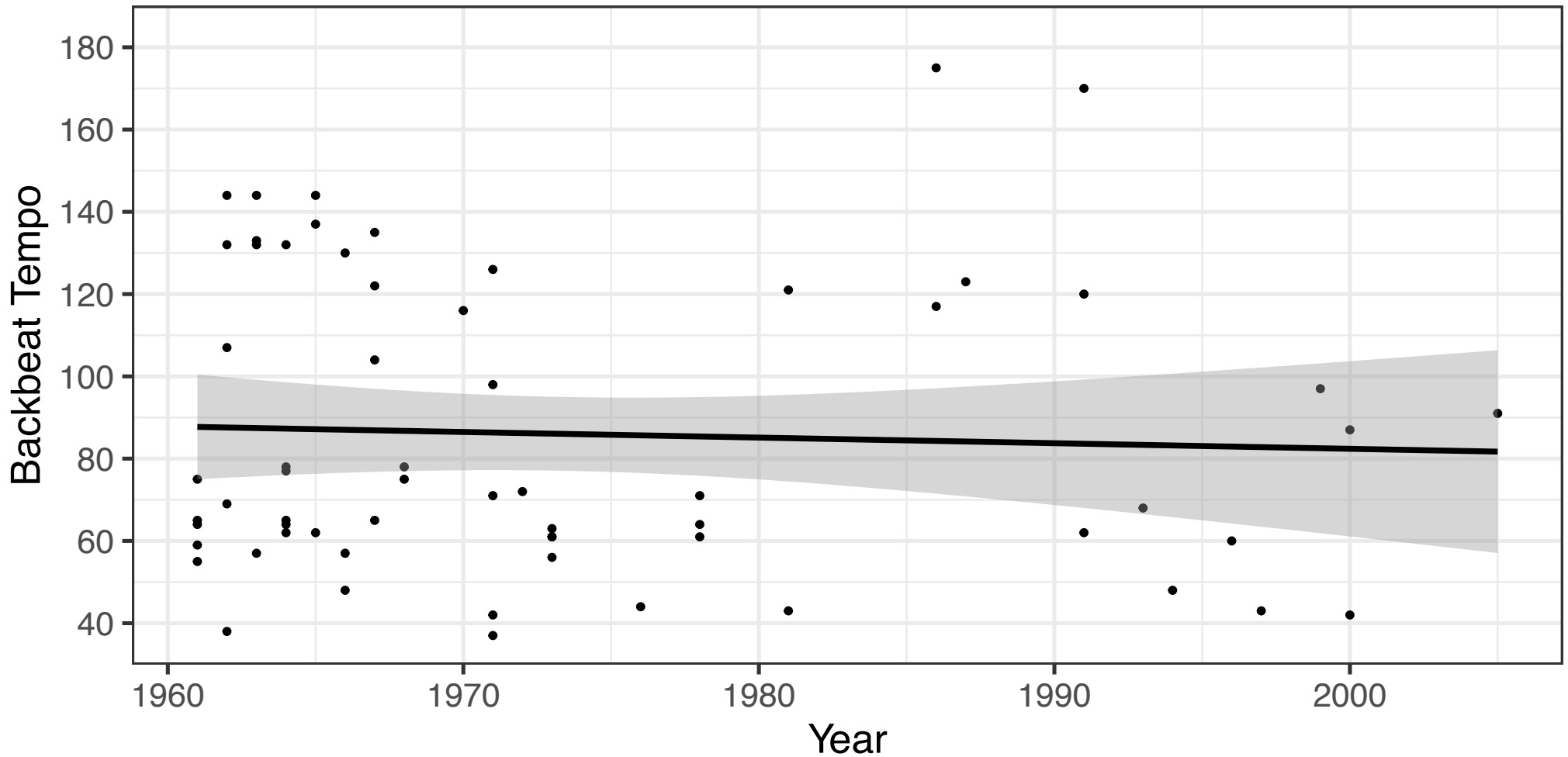
Average Kick-Snare Rates (in BPM) for songs **without** duple 8ths

Pentade	n	Median	Mean
1961-1965	23	75	91
1966-1970	10	91	93
1971-1975	10	62	69
1976-1980	4	63	60
1981-1985	2	82	82
1986-1990	3	123	138
1991-1995	5	68	94
1996-2000	5	60	66
2000-2005	1	91	91

Percent of songs **without** duple 8ths

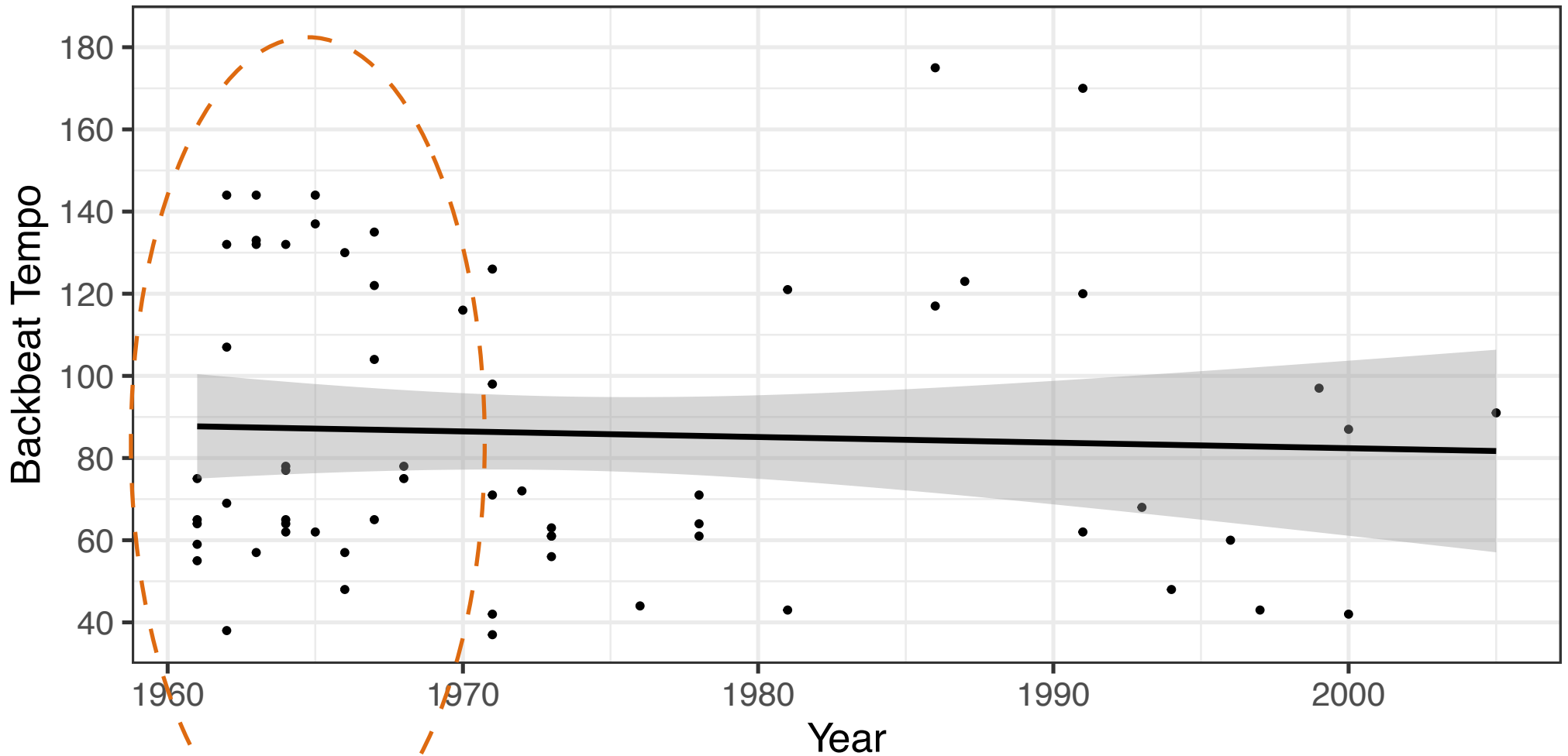


Average Kick-Snare Rates (in BPM) for songs **without** duple 8ths



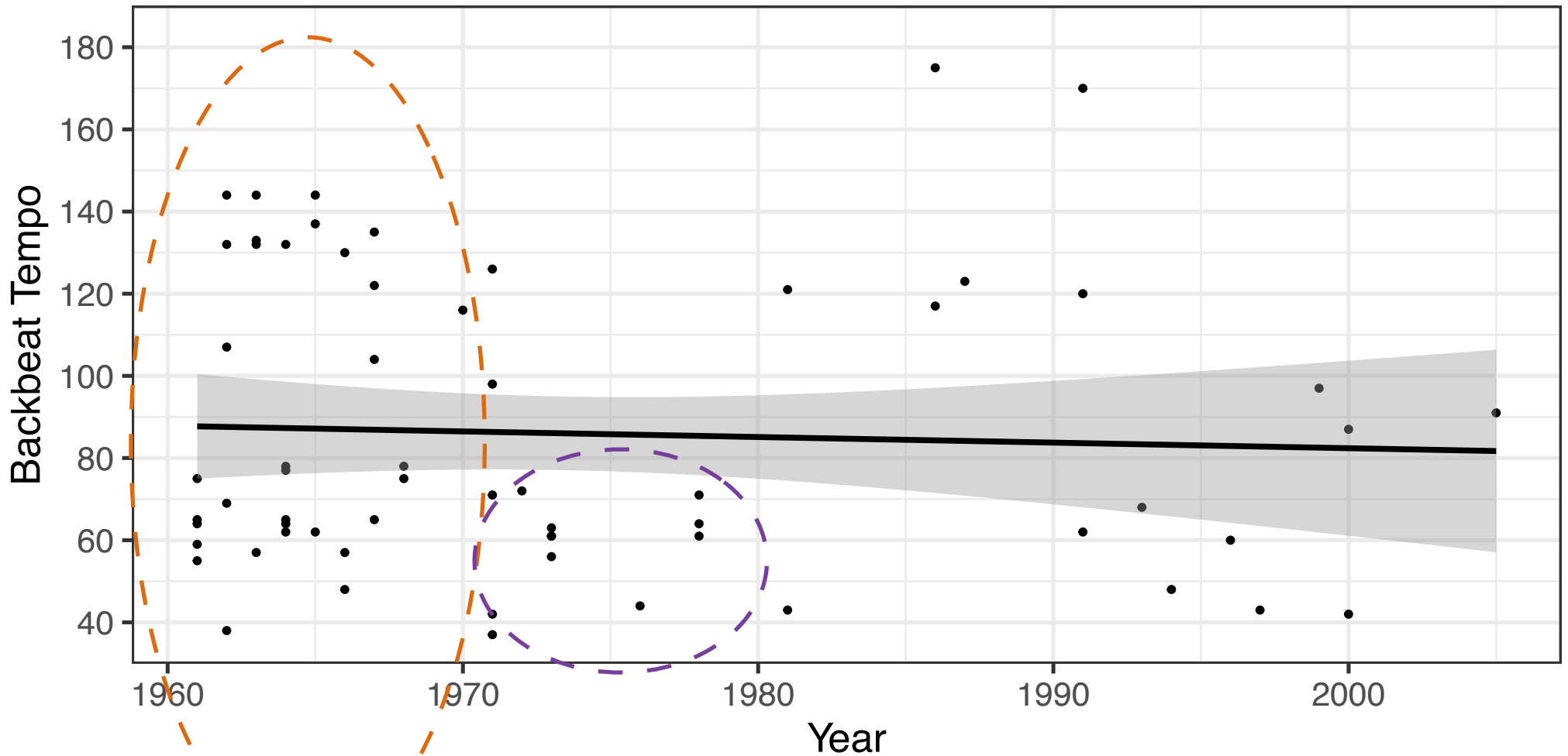
$$p = .71, r^2 = .002$$

Average Kick-Snare Rates (in BPM) for songs **without** duple 8ths



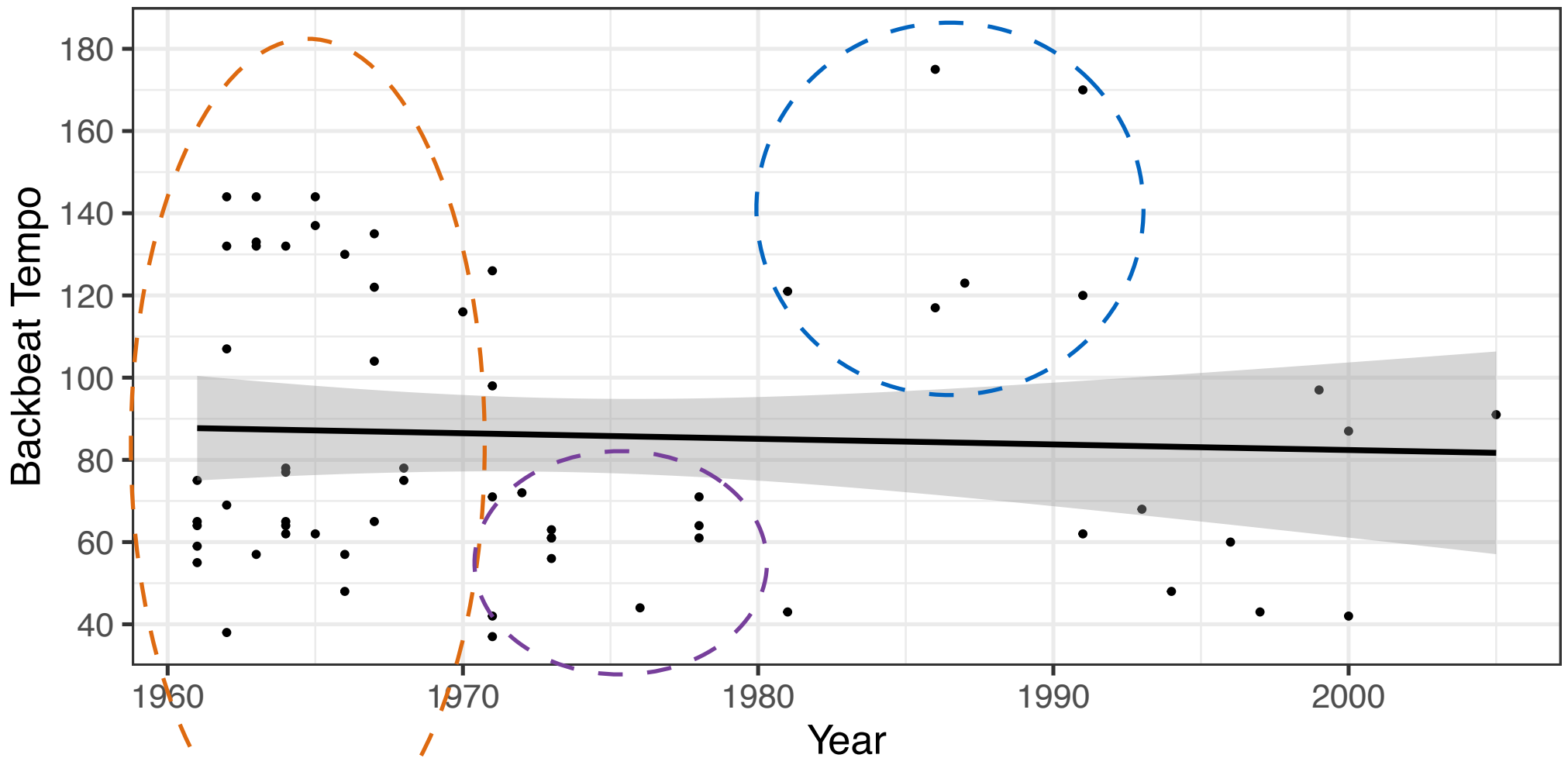
$$p = .71, r^2 = .002$$

Average Kick-Snare Rates (in BPM) for songs **without** duple 8ths



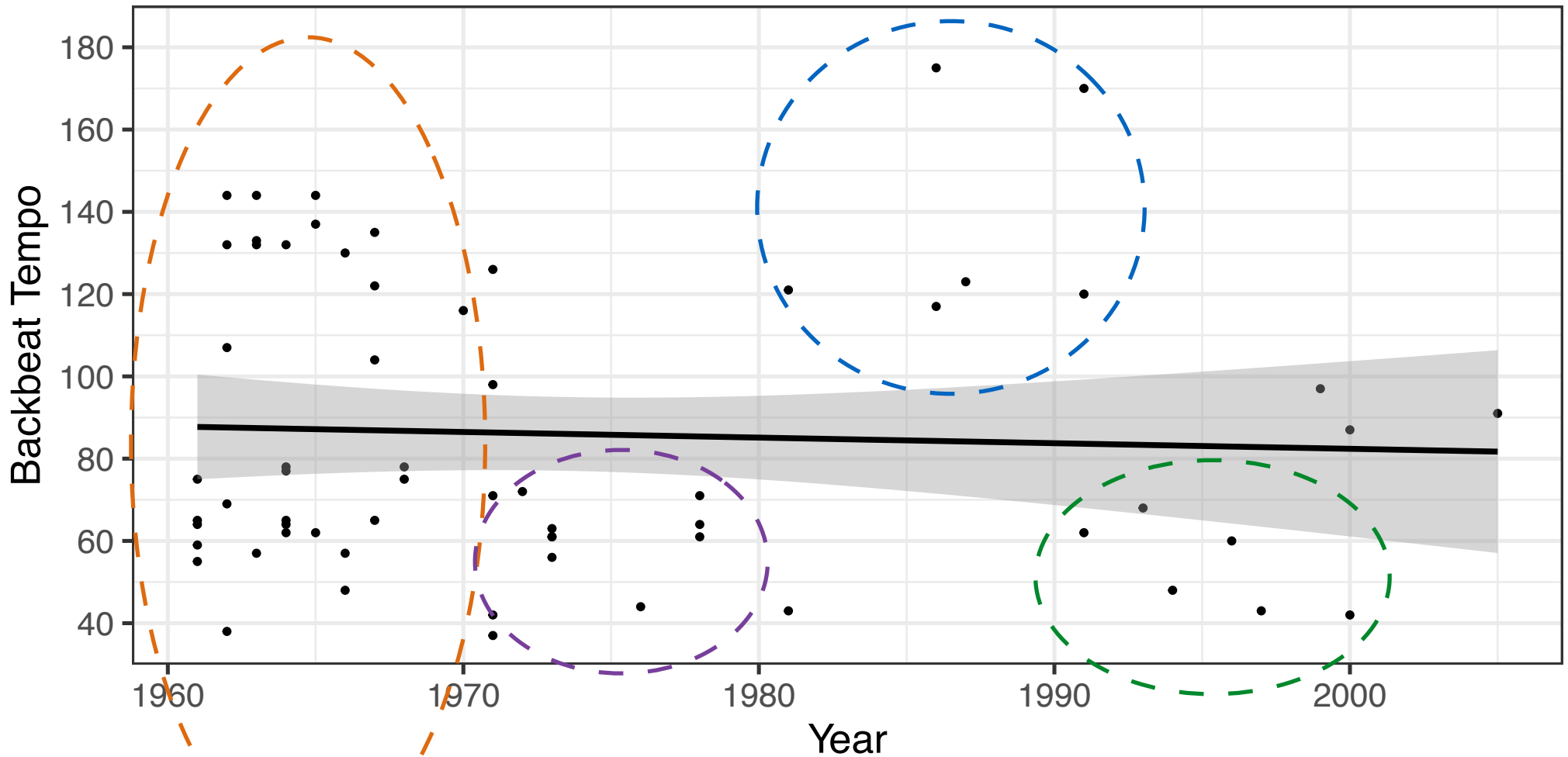
$$p = .71, r^2 = .002$$

Average Kick-Snare Rates (in BPM) for songs **without** duple 8ths



$$p = .71, r^2 = .002$$

Average Kick-Snare Rates (in BPM) for songs **without** duple 8ths

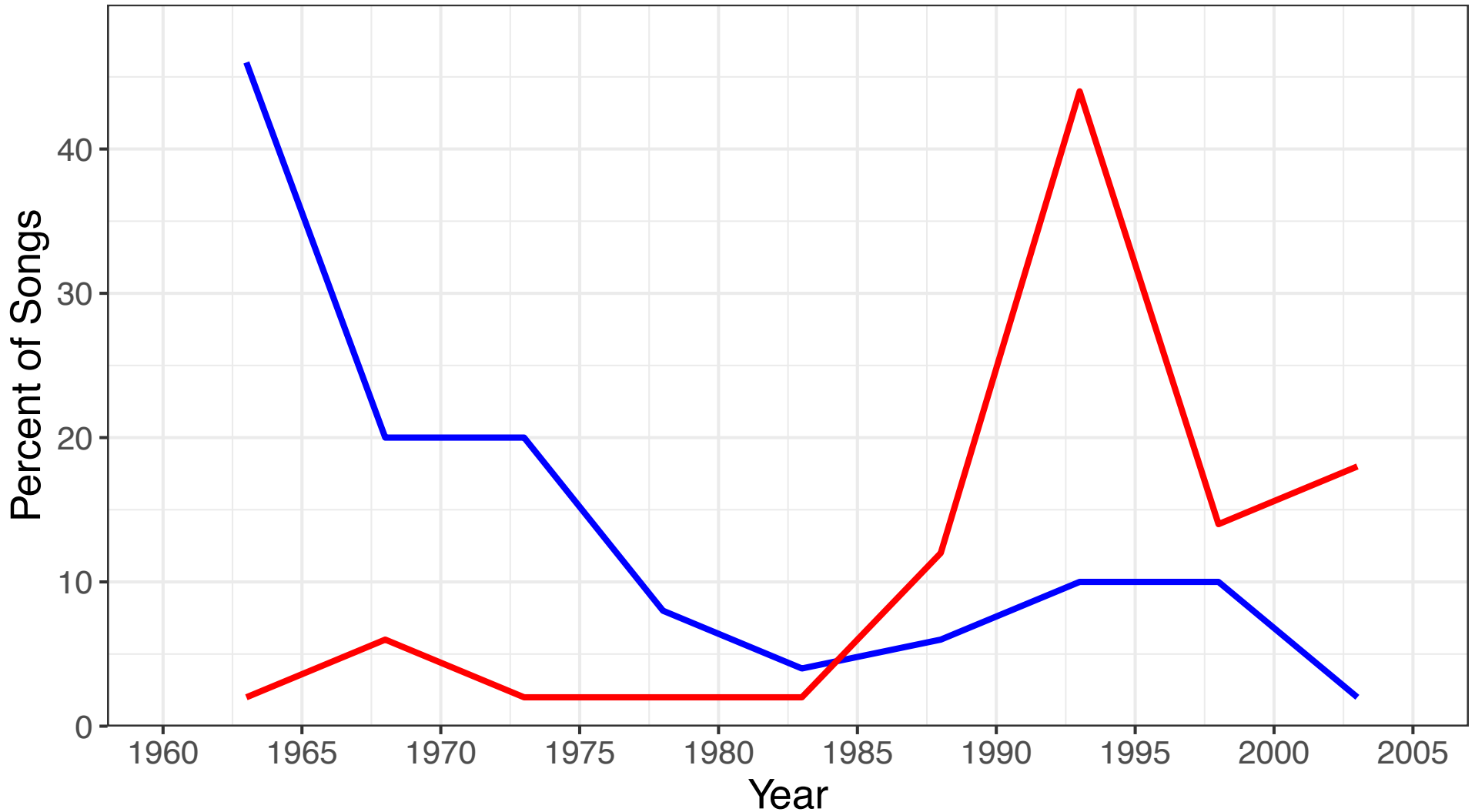


$$p = .71, r^2 = .002$$

Percent of songs **with** duple 8ths but **without** duple 16ths



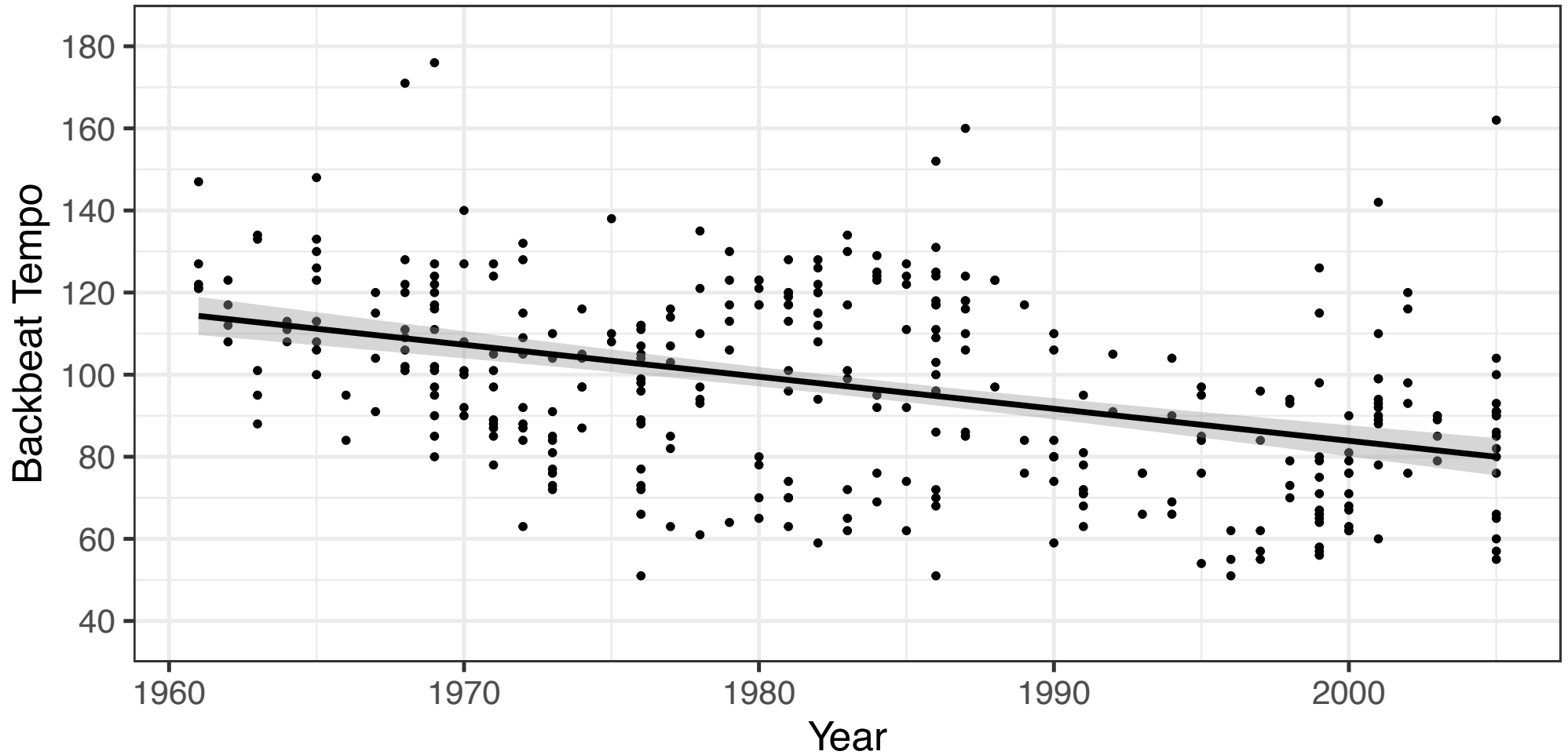
Songs **without** simple 8ths VS. songs **with** simple 8ths but **without** simple 16ths



■ Songs **without**
simple 8ths

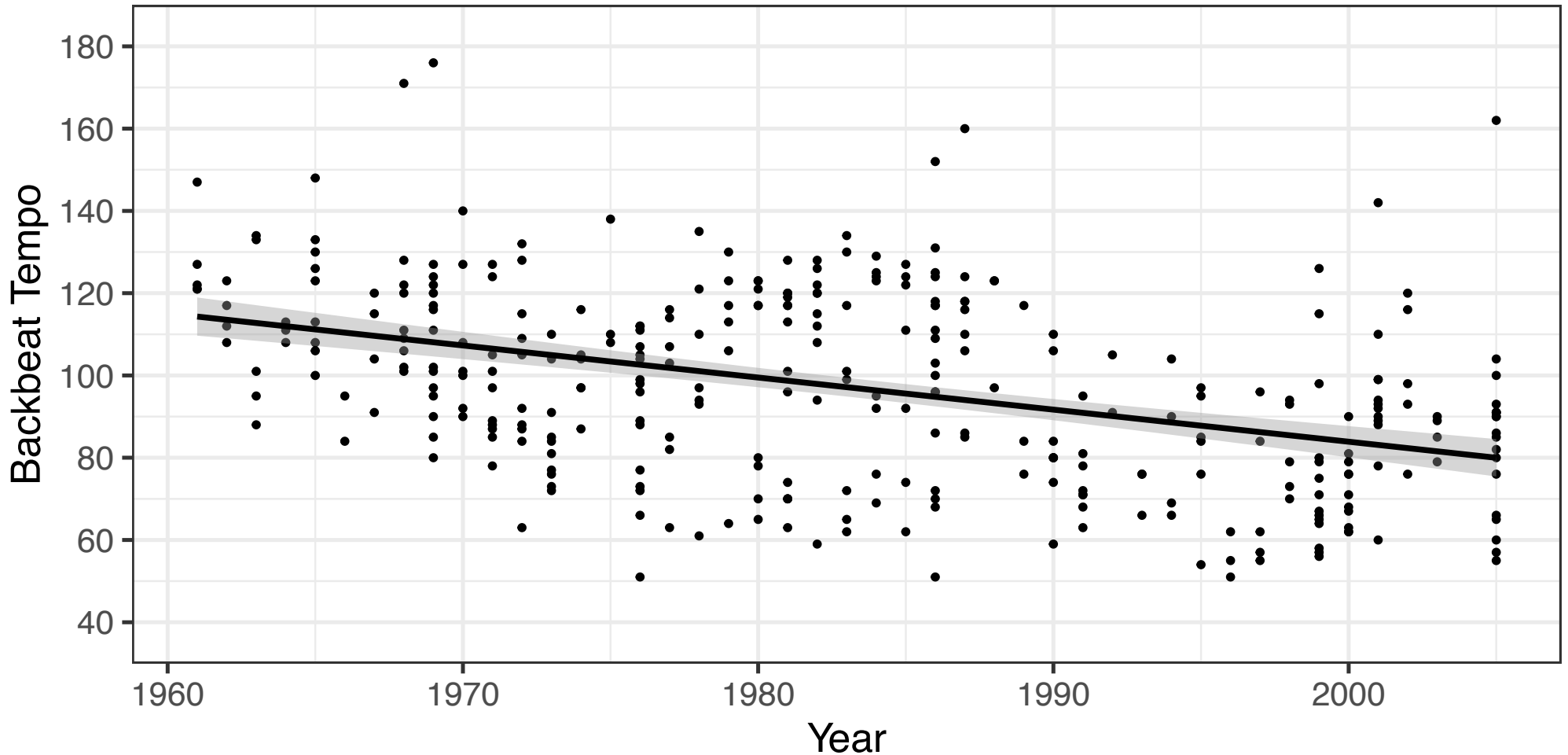
■ Songs **with** simple 8ths but
without simple 16ths

Average Kick-Snare Rates (in BPM) for songs with duple 8ths and with duple 16ths



$$p < .001, r^2 = .175$$

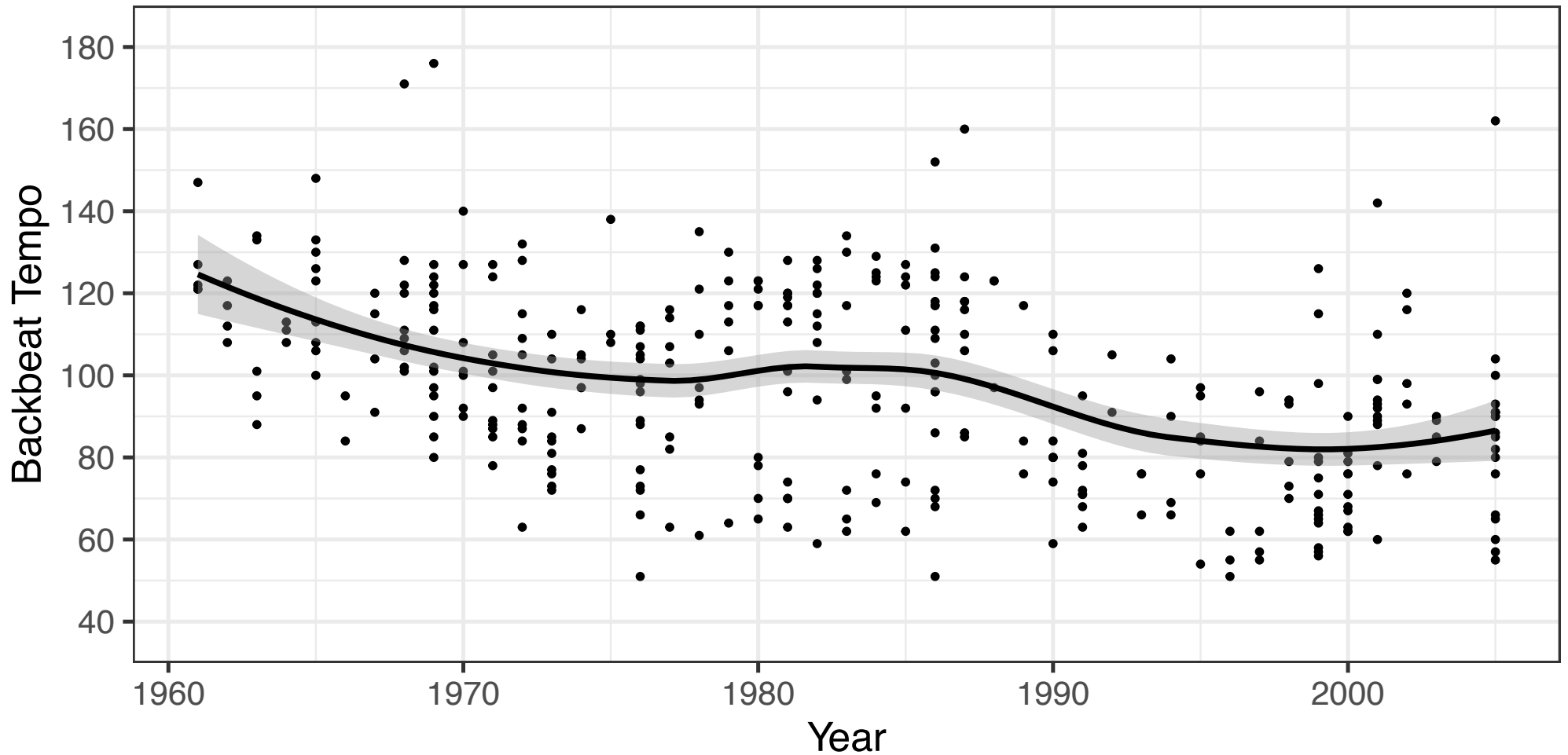
Average Kick-Snare Rates (in BPM) for songs with duple 8ths and with duple 16ths



$$p < .001, r^2 = .175$$

similar results as Schellenberg and von Scheve (2012)

Average Kick-Snare Rates (in BPM) for songs with duple 8ths and with duple 16ths



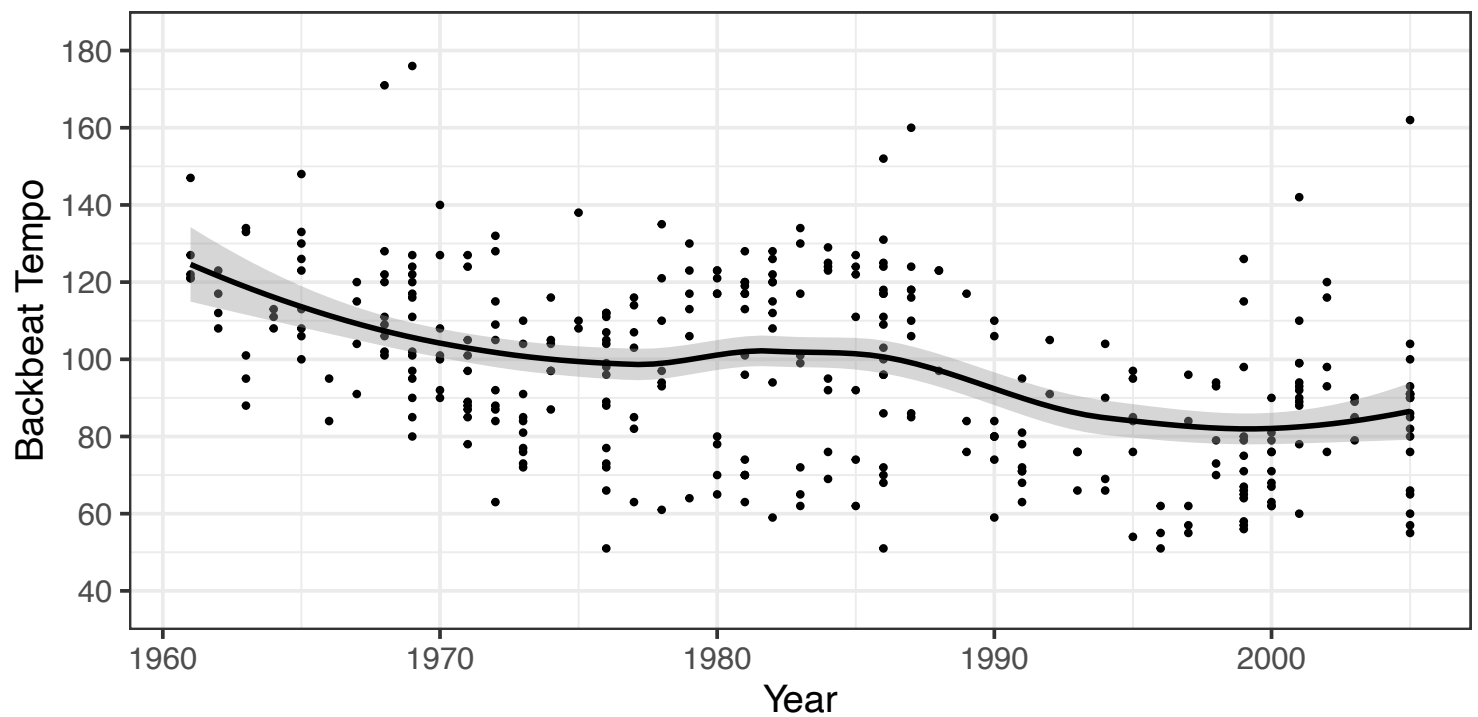
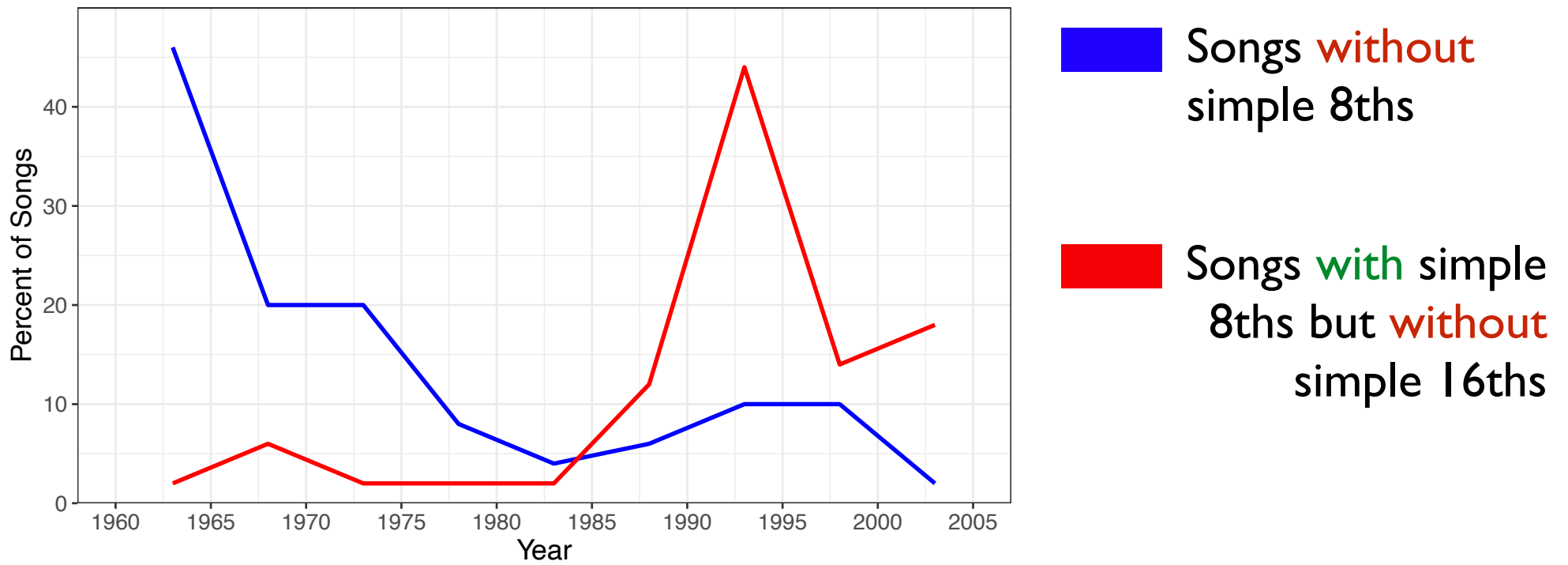
local polynomial regression (LOESS)

I. Background

II. Methodology

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IV. Discussion



THANK YOU!

Select Bibliography

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