way to learn any crossrhythm, and offers a comprehensive presentation of crossrhythms in 4/4, incorporating many exercises and examples from different musical genres. Crossrhythms are a powerfit tool to expand your vocabulary in performance and composing, and their study brings surprising

penefits, including greater depth and freedom in playing over harmonic forms.

Author **Rory Stuart** is a critically acclaimed jazz guitarist and composer who created and taught the rhythm curriculum at New School University since 1992. The recipient of awards from the National Endowment for the Arts, Meet the Composer, and the Fulbright Commission, he has directed and taught workshops and clinics around the world; a list of his former students reads like a "Who's Who' of rising young music stars."

"I think these are the best rhythm books I've ever seen. Thes books will become a standard; they are so detailed and well thought out. I'm looking forward to working with them."

- CHRISTIAN SALFELLNER

(Professor of Rhythm, University of Musik, Graz, Austria)

"Rory's rhythm lessons opened a lot of doors for me. As a veterar player, I had spent many years focused on harmony; the lessons got me to concentrate on rhythm. Rory showed me ideas I was able to add and immediately utilize in my playing to make the music feel fresher. The lessons really influenced, and continue to influence, my playing."

- MICHAEL WOLFF

(Pianist, USA. Performed w/ Sonny Rollins, Nancy Wilson, Cal Tjader, Airto Moreira, Cannonball Adderley, co-leader of Wolff & Clark Expedition)

- DAVE LIEBMAN

(2011 NEA Jazz Master, Artistic Director of IASJ, Saxophonist with Miles Davis and Elvin Jones)

check out all of the volumes in THE RHYTHM BOOK series:

Beginning Notation and Sight-Reading

Intermediate Notation and Sight-Reading

Rhythmic Development and Performance in 4/4

Crossrhythms on 4/4

Odd Meters and Changing Meters

Superimposition and Subdivision, Metric Modulation, Feel Modulation and Displacement

TheRhythmBooks.com







THE RHYTHM BOOK

CROSSRHYTHMS ON 4/4

BY RORY STUART

DRY STUA

THE RHYTHM BOOK CROSSRHYTHMS ON

FOR ALL INSTRUMENTS

"Rory's vast knowledge and long experience in teaching rhythm makes his material essential for any musician interested in developing their rhythmic ability!"

- ANDERS VESTERGÅRD

(Swedish percussionist and rhythm professor at Fridhems Flkhögskola)

"I have never seen a person get so much joy from dissecting complex rhythms as Rory!! He's not only a great teacher but he's BAD ASS!!!!!"

- ROBERT GLASPER

(Grammy Award Winning Pianist, USA)

"Rory Stuart has a great ability to present advanced rhythmic concepts in a very organized and comprehensible way. At the same time he is very aware of what music is really about: expression, emotions, spontaneity. His classes about rhythm not only expanded my knowledge of the theory of music but also they helped me to use the new rhythmic devices in a thoughtful and tasteful way and to become a better artist."

- RAFAL SARNECKI

(Jazz guitarist and composer from Poland)

"Endlessly organized, enthusiastic, and imaginative, Rory Stuart is one of the most gifted teachers I have ever encountered. In designing and teaching the rhythm curriculum at The New School, he has had a quiet impact on a whole generation of players in the city, and I consider myself lucky to have had the chance to study with him."

- JOHN ELLIS

(Saxophonist, USA)

"Before coming to NYC and meeting up with Rory Stuart I really had no idea how fascinating the world of rhythm was. Rory was like an open door to so many worlds of music, both in the sense of style and approaches of rhythm. Some things I take from his classes will always be a part of my music."

- ARI BRAGI KARASON

(Trumpeter from Iceland)

"Rory Stuart's versatility as a guitarist, composer and music researcher makes him one of the most original artists in contemporary music. His masterful ability to teach complicated rhythms in an understandable language has helped students and renowned jazz musicians from around the world to develop their unique voices. I feel honored that I had a chance to study with him. Rory showed me how rhythm goes beyond groove and feel, and this deeply changed my bass playing style."

- AMANDA RUZZA

(Bassist from Brazil)

"The rhythm books are great! I'm going to recommend them to students and use them as a reference for myself and my teaching. They are easy to understand and very thorough."

- TONY ROMANO

(Guitarist and Associate Professor at Five Towns College, USA)

"Rory Stuart, an internationally recognized guitarist, composer and educator, has worked with some of the foremost jazz musicians and taught many of the most important emerging young jazz stars of today, Rory has a lot of experience and information, especially in areas such as polyrhythmic compositional and improvisational techniques. He has worked long and hard to capture and convey this knowledge in this book series on rhythm, which expands the small number of works in this field. I've been waiting for these books for a long time - he knows about rhythm! It is a great contribution for all serious practitioners. Great job, Rory!"

- DR. MARCELO COEHLO

(Saxophonist and professor at Souza Lima, Sao Paolo Brazil; founder of International Rhythmic Studies Association)

"Rory Stuart has developed such a deep understanding of rhythm that he makes the most difficult material seem easy. As his student, I had the privilege to experience challenge, a clear method, new discoveries and fun."

- CAMILA MEZA

(Vocalist/Guitarist from Chile)

"In his Master Classes for students and teachers at Kazakh National University of Art, Rory Stuart carefully explained the basics of jazz rhythm and its development to an audience that was always engaged, tapping rhythms, singing parts, etc.... The students were inspired, and this much- anticipated workshop was so well attended that it was standing room only!"

- GULDANA ZHOLYMBETOVA

(Professor of Music, Kazakhstan)

"We were fortunate to get into a world of complex rhythmic possibilities for several days without speaking the same language and in the end left wanting more, Rory shows the rhythm with a captivating way with passion and boundless."

- CARLOS "CHARLIE" RUEDA

(Music educator, Aula Moderna de Musica y Sonido, Bucaramanga, Columbia)

"Some of today's musicians present their complex music in a way that causes anxiety and fear in both audiences and students. Rory Stuart presents his stuff with a smile, as if it were the most simple thing in the world, inviting others to follow."

- JAROMIR HONZAK

(Bassist, composer, head of jazz program at the Academy of Performing Arts (HAMU), Prague, Czech Republic)

"The depth of Rory Stuart's rhythmic teaching is as inspiring as it is humbling. By far, one of the clearest, most refreshing masters of this knowledge..."

- DANIEL DOR

(Drummer from Israel)

"As a fellow teacher who has studied rhythm with Rory, I can say he truly is a teacher's teacher. His precise and innovative instruction lifts my level of creativity and skill. His thorough coverage of rhythmic options allows for a massive expansion of concept, but he does it with an organizational structure in which it feels simple to learn and grow. Rory's method is genius and has taken so many young people to a new level that he has influenced a whole generation of jazz!"

- RACHEL Z

(Pianist, USA)

Copyright © 2019 Rhythm & Dues, LLC.

All rights reserved.

No part of this publication may be reproduced in any form or by any means without the prior written permission of the publisher.

ISBN: 978-1881993476

Library of Congress Control Number: 2019933978

Printed and bound in the United States of America. First printing: March 2019

Published by:



Rhythm & Dues, LLC Croton on Hudson, NY 10520

publisher contact: therhythmbooks@gmail.com author contact: roryweb@rorystuart.com www.TheRhythmBooks.com

Contents

Introduction to Crossrhythms on 4/4 • 1

What is a Crossrhythm? • I

Exercises on a 3/4 Crossrhythm • II

How to Practice Crossrhythms • 30

How to Identify and Name Crossrhythms • 34

Performance Problems and Solutions • 35

Case Study: 3/4 and 3/8 Crossrhythms • 46

How to Use Crossrhythms • 53

Rhythm Necklaces and Practice Efficiency • 58

A Systematic Look at 3/8, 3/4, 5/8, and 7/8 Crossrhythms • 59

Crossrhythm Shout Choruses • 76

Crossrhythms on 4/4, Part Two • 79

Concepts • 79
Practice Approaches • 81
Longer Crossrhythm Examples • 109
Crossrhythms at Superimposition Rates: An Introduction • 158
New Directions • 174

Conclusions • 202

Appendices • 203

Appendix II: Exercises for Piano • 203 Appendix II: Exercises for Drums • 205 Appendix III: Exercises for Guitar • 206

Appendix IV: for Horns, Voice, and other Single-note Instruments • 207 Appendix V: Incorporating Crossrhythms Into Scale Practice • 207

This book is for you if:

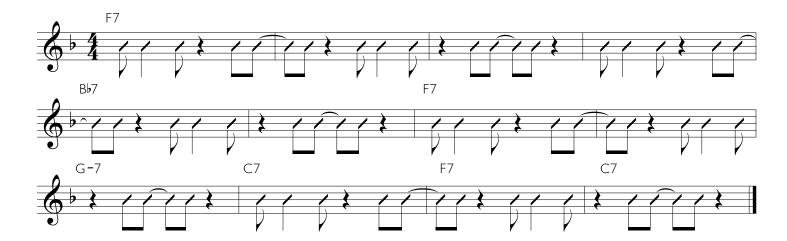
- You have completed THE RHYTHM BOOK—Beginning Notation and Sight-Reading and THE RHYTHM BOOK—Intermediate Notation and Sight-Reading; or you have enough command of rhythmic notation that it is not an obstacle. You have completed THE RHYTHM BOOK—Rhythmic Development and Performance in 4/4, or are already experienced and comfortable performing in 4/4.
- You want to learn all about crossrhythms and how to apply them in performance.
- You are any age, an adult or young learner.
- You are a vocalist, or play any instrument (including horns, piano, guitar, bass, strings—NOT just drums and percussion instruments!). This book, and the following books in the series, are unusual in showing how rhythmic ideas connect to harmony and song form.
- You are taking music classes, studying with a private instructor, or are teaching yourself.
- You are a music teacher, who wants to teach rhythmic ideas to your students.
- You compose or would like to compose music, or write arrangements for others, and would like to incorporate crossrhythms in 4/4 in your writing.
- You play or want to play any style of music. Although crossrhythms are found less commonly in some styles than others, and the examples used in this volume have somewhat of an orientation towards jazz and contemporary music (funk, pop, rock, hip-hop, Afro-Cuban, Brazilian, modern classical), a musician in any style can benefit from the study of crossrhythms on 4/4.

Please note: once you have completed this book, you will be ready for two other books in THE RHYTHM BOOK series: THE RHYTHM BOOK—Odd Meters and Changing Meters; and THE RHYTHM BOOK—Superimposition and Subdivision, Metric Modulation, Feel Modulation and Displacement.

This is a preview. The number of pages displayed is limited.

You probably found that it is a different experience than it was to repeat the pattern that lasts one bar over a blues; now, you have to concentrate more to keep track of where you are in the blues form, as the crossrhythm pattern you are playing keeps beginning at different places within the bar (in this example, it keeps shifting one beat earlier each time it is played). The chord changes therefore land at different places with respect to the rhythmic phrase. Here is a chorus of blues written out showing where the crossrhythm falls:

Exercise 4-008:



Sometimes the term "polymeter" is used instead of crossrhythm. In classical music, a distinction is made between "implicit" and "explicit" polymeter. Implicit polymeter is just another name for what we are calling crossrhythm: a figure or series of figures, written within the meter of the piece, takes a number of beats that does not divide the underlying meter, and continues to cross the bar lines as it repeats. Explicit polymeter sounds the same but is written so that different instruments in the ensemble are reading music written in different meters. For example, where we are looking at a 3/4 crossrhythm on 4/4, the classical composer might write one part with a 3/4 time signature, and the other part with a 4/4 time signature. Of course, the bar lines do not match up, and this makes it difficult for musicians in one meter to know "where they are" (their specific relationship in time) with respect to the other musicians, although it does make the crossrhythm simpler to notate, since there is no adjustment for bar lines or showing required beats. Because classical composers do this in the context of music that is through-composed, as long as all musicians accurately play their parts, it can work correctly in performance as the composer planned. However, in any musical style involving improvisation and spontaneous interaction between musicians, it is far preferable to write all the parts in the same time signature, as we have shown. This allows all the musicians to more easily keep track of the form and their rhythmic relationship to each other.

So far, we have looked at singing or playing the rhythm while feeling how it falls within the song form. But, if you play an instrument that produces pitch, or are a vocalist (i.e. everyone other than drummer/percussionists), there is also the issue of choosing notes that fit the harmony.

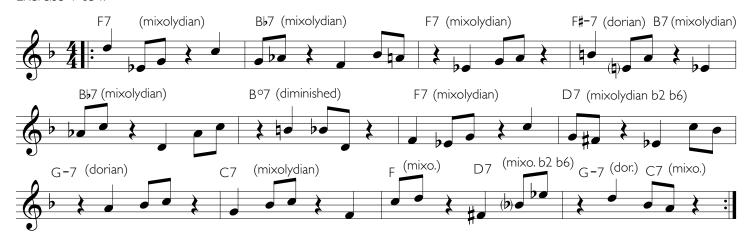
If you choose to play these pitches:

Exercise 4-009:



When tackling a new chord progression, you may find it most helpful to work immediately on improvising on it, or it may be helpful to write a couple etudes on it first. If you create etudes, try to emphasize the interesting notes made available by the chord substitutes. For instance:

Exercise 4-034:



Using Worksheet 4-W-002, write out a different set of blues changes (either from an existing piece, or some chord changes you create), and write out a one-chorus etude with this 3/4 crossrhythm.

If you are a drummer, these details of note choice over harmony may seem irrelevant. But understanding how the crossrhythm works with respect to the song form and even with respect to the chord changes is useful in getting deeper into an understanding of the music. Exercise 4-024 on page 15 and play it on drums, using one drum (e.g. middle tom) every time an "A" is called for, and a different drum (e.g. floor tom) every time the "Ab" is called for. Drummers can even explore playing specific pitches on the drums, by pressing with different degrees of pressure on the drum heads, when they strike them. A simple version of this would be to play this exercise using a tom tuned to Ab, but press the drum head to raise it to A natural whenever that is called for. Ari Hoenig is an example of a drummer who has mastered playing melodies with specific pitches on his drums.

Once you are confident in improvising with this 3/4 crossrhythm on the blues, try improvising with it on another song form. This introduces two challenges: a different number of bars and different length of sections; and different harmony and harmonic rhythm.

and this is just right:

Example 4-033:



Once you get comfortable with a pattern like this one, you can feel the rests better in a more sparse pattern, perhaps by filling in the rests with "unplayed" (imagined) notes that you feel or hear in your head when the rests happen (you may find the discussion in a later section on using syllable systems helpful in this regard).

Losing Track of Underlying Time

If you lock into the pattern of a crossrhythm and can play it accurately, you may still find that you have a problem losing track of the underlying time. For example, I can show a classroom of students an II/8 crossrhythm; if I have them start singing it for a while with nobody doing anything to reference the underlying 4/4, and then I stop them after a minute or two, many will have no idea where they are in 4/4.

One step to help with this problem is to keep a constant reference to 4/4 happening. For example, sing the crossrhythm while clapping on "2" and "4". This helps with many of the more familiar crossrhythms, but it does not always entirely solve the problem. I remember early in my work with crossrhythms when I played a pattern (I think it was a 9/8 crossrhythm), and watched with fascination as the clapping on "2" and "4" got turned around to sound like "I" and "3"! Of course, the clapping did not get turned around; I just wasn't used to hearing this rhythm in a 4/4 context, so it was my perception of it that got turned around.

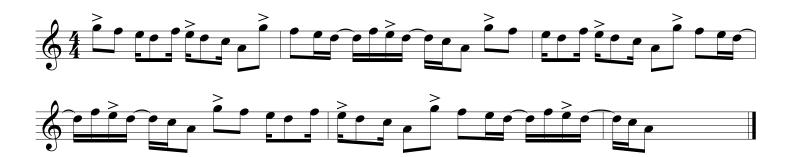
Here is a way to address the root of this problem: with each crossrhythm, you can sing or play each crossrhythm in two ways, either emphasizing the pattern itself emphasizing the underlying time. Play this 7/8 crossrhythm emphasizing the underlying meter (accenting "one" and "three" every time a note falls on them):

Exercise 4-053:



... and the same 7/8 crossrhythm with a set of accents that emphasizes the crossrhythm pattern itself (at both the beginning and sixth note of the phrase):

Exercise 4-054:



Another type of exercise is to play the bass part in "2" feel, while playing the chords in the crossrhythm. In this case, I have notated it for guitar, but you can also play it on piano:

Exercise 4-046:



The rhythm of the bass part in the last two bars of the third system should be played by the drummer as well. These two bars proved a bit more challenging for musicians to sightread than did anything else in the chart, perhaps because they are a crossrhythm:

Example 4-104:



5/8 crossrhythms on 4/4 became more widely used in jazz and other contemporary styles of music beginning in the 1960s, and can be found in both compositions and improvised solos.

Jaco Pastorius, in his solo on "Used To Be a Cha Cha" from his eponymous debut recording as a leader, plays this grouping of eighth notes that begins with a 5/8 crossrhythm (at 1:54):

Example 4-105:



The first six bars of the bridge of Wayne Shorter's composition "Speak No Evil" are based on a 5/8 crossrhythm, but every second bar has an extra eighth note rest on the second beat to even things out:

Example 4-106:



Even though the eighth rest keeps this from being a strictly consistent repeating crossrhythm, it is interesting to practice. Here is an exercise on a blues in F, using exactly the rhythm (including the extra eighth rest) that Wayne Shorter used:

Exercise 4-092:



Although the possibilities we've just discussed cover all the long and short beat divisions at the eighth note level, there are other ways of thinking about or feeling some of these. For example our LSSS (3+2+2+2 eighth notes) can also be felt as 5+4 or 3+2+4 or 3+4+2 or 5+2+2.

If we use syllables for the 3+4+2 example:

Example 4-161:



... we could make a rhythm from that such as:

Example 4-162:



... and an exercise such as this (I shorten the last note in the phrase to allow a place to breathe):

Exercise 4-124:



Here are yet some more exercises, with variations of the divisions we've examined. I'm including these so that you get a sense of how you can take one crossrhythm idea and come up with many variations. (While I won't do as many variations on each of the other crossrhythms, the 9/8 examples can be a model for how to come up with variations.)

With the 3+2+2+2 division, here are some variations of the phrase:

Example 4-163:



... and an exercise playing that crossrhythm over a blues (I've included an example bass line in case you want to play this on piano):

Exercise 4-227:



Of course, if you play an instrument such as piano, you can play both parts together, never omitting a note. For example:

Exercise 4-232:



However, if you play an instrument that can not play simultaneous pitches, or you sing, or even if you play an instrument such as piano but want to explore this concept anyway, you will want to see what it is like to combine these into one part. Here is the composite of the two rhythms with the bass part raised an octave and merged with the treble part:

Exercise 4-233:



Appendix II: Exercises for Drums

Drummers can choose which limbs, and which components of the drumset, are used to play a crossrhythm. You can also choose whether or not to play a simultaneous 4/4 groove part. As an example, let's take this 5/4 phrase:

Example 4-318:



... to be used as a crossrhythm on 4/4.

Play it repetitively on one component of the set, keeping track of where you are in 4/4; then, do the same, but add some other parts that are grooving in 4/4:

Exercise 4-258:



Experiment with playing the crossrhythm alone, but distributing it between different instruments of the set:

Exercise 4-259:



Now add 4/4 parts in addition to the crossrhythm. In this exercise, the rhythm of quarter note, quarter rest, two eighths and quarter note, as shown in the first bar, is distributed between the instruments that are not playing the crossrhythm. The crossrhythm and 4/4 groove are quite mixed between instruments here, so much so that you may want to refer to the previous exercise to help see the crossrhythm vs. the 4/4 groove; of course, you can orchestrate this a different way in order to make the two more easy to distinguish:

Exercise 4-260:



About the Rhythm Book series:

THE RHYTHM BOOK—Beginning Notation and Sight-Reading:

- introduces rhythmic notation, from the very first steps (does not assume you have any notation background);
- teaches how to read and write rhythms in 4/4 at the quarter, eighth, and triplet eighth levels;
- creates a solid foundation on which further notation and sight-reading skills can be built.

THE RHYTHM BOOK—Intermediate Notation and Sight-Reading:

- builds from knowledge of quarter, eighth, and triplet eighths;
- progresses systematically from 16th notes through triplets of all rates, triple meters, odd meters, and even 32nd notes and beyond;
- prepares you to read and correctly write nearly any rhythms you will ordinarily encounter.

THE RHYTHM BOOK—Rhythmic Development and Performance in 4/4: Master rhythmic performance in 4/4. This volume:

- examines rhythmic styles and feels, including swing, Afro-Cuban, Brazilian, funk, calypso, reggae, and ballads;
- discusses phrasing, relationship to the beat, feeling time and form, defining the time in your playing, very fast and slow tempos, playing with others and rhythmically interacting, and how to develop rhythm ideas;
- includes numerous examples, as well as worksheets for suggested transcription projects.

THE RHYTHM BOOK—Crossrhythms on 4/4: Crossrhythms (a.k.a implicit polymeter or groupings) are a powerful tool to expand your vocabulary in performance and composing. Perhaps the most under-represented rhythmic area in musical education, their study brings surprising benefits, including greater depth and freedom over harmonic forms. This volume:

- provides a systematic method for learning any crossrhythm;
- presents crossrhythms on 4/4 comprehensively, from most common/simple to rare/complex;
- incorporates many exercises, and examples from different musical genres.

THE RHYTHM BOOK—Odd Meters and Changing Meters: Aimed at developing the reader's performance and composition skills with odd and changing meters, this volume:

- provides a systematic way to learn any new meter;
- explores odd meters in depth, different flavors of changing meters, and crossrhythms on odd meters;
- includes interesting examples from a wide variety of musical styles, and exercises to develop your mastery.

THE RHYTHM BOOK—Superimposition and Subdivision, Metric Modulation, Feel Modulation and Displacement: With focus on some of the most challenging rhythmic areas in 21st Century music, this volume:

- offers systematic ways to learn rhythm superimpositions and convert between superimposition and subdivision;
- teaches a series of methods for performing metric modulations;
- presents exercises to address the challenges of feel modulation and feel displacement;
- demonstrates how to combine techniques (e.g. crossrhythms at superimposition rates over odd meters).