

Pandeiro Funk

Experiments on Rhythm-Based
Interaction

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To make the computer listen and
react to music in an improvisation
situation

How I got here

Contemporary
music

Popular music

Contemporary
music

Popular music

DJ

Musicians

Visual

Auditive

Piece ending

Steve Coleman

Bata



Puntilla Pepe Calabaza Jose R.

RELIGIOSA





How to communicate
with the computer?

Make the computer

- Listen to attacks

Make the computer

- Listen to attacks
- Recognize the rhythmic phrase

Make the computer

- Listen to attacks
- Recognize the rhythmic phrase
- Interpret the commands

Make the computer

- Listen to attacks
- Recognize the rhythmic phrase
- Interpret the commands
- Generate an answer

Performance explanation

- Loops

- Loops
- Effects

- Loops
- Effects
- Samples

Modes of Interaction

Commands

Meta-Commands

- George Lewis' Voyager
 - Rowe's Cypher
- Sequential Modes
- Belinda Thom's BoB
 - Nick Collins BBCut
- Player Paradigm
- UPF's React Table
 - Sergi Jorda's Afasia
 - Perry Cook's percussion
- Instruments
- Gil Weinberg and Scott Driscoll's Haile
 - François Pachet's Continuator

Goals

- A rhythm-based interactive system developed to music improvisation situations
- Performance-driven / Instrument-driven
- Audio-based system
- Applied to percussion
- Modes of interaction
- No external meta-commands (e.g. pedals, mouse, keyboard)

Future Work

- Misunderstanding
- Choosing Phrases
- Latency decrease with new processors
- Apply to other instruments

Funk Carioca Aesthetics

- 70's Funk parties
- Club parties
- Violence
- Pornography as differentiation
- Makulele
- The first brazilian electronic genre
- Kuduro

Questions