

# Choosers - workshop

A practical introduction to a simple-  
to-use algorithmic music tool

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# Overview

- An algorithmic composition system;
  - The partial or total automation of music composition by formal, computational means (Fernández and Vico, 2013);
  - Non-deterministic: multiple outcomes can result from the same algorithm.
- Designed to be accessible to those with minimal programming skills and little musical training;
- Allows the manipulation of detailed musical structures;
- Permits indeterminism, parallelism, choice, multi-choice, recursion, weighting, and looping;
- Implemented as a set of SuperCollider classes to enable end-user testing.

# Principles

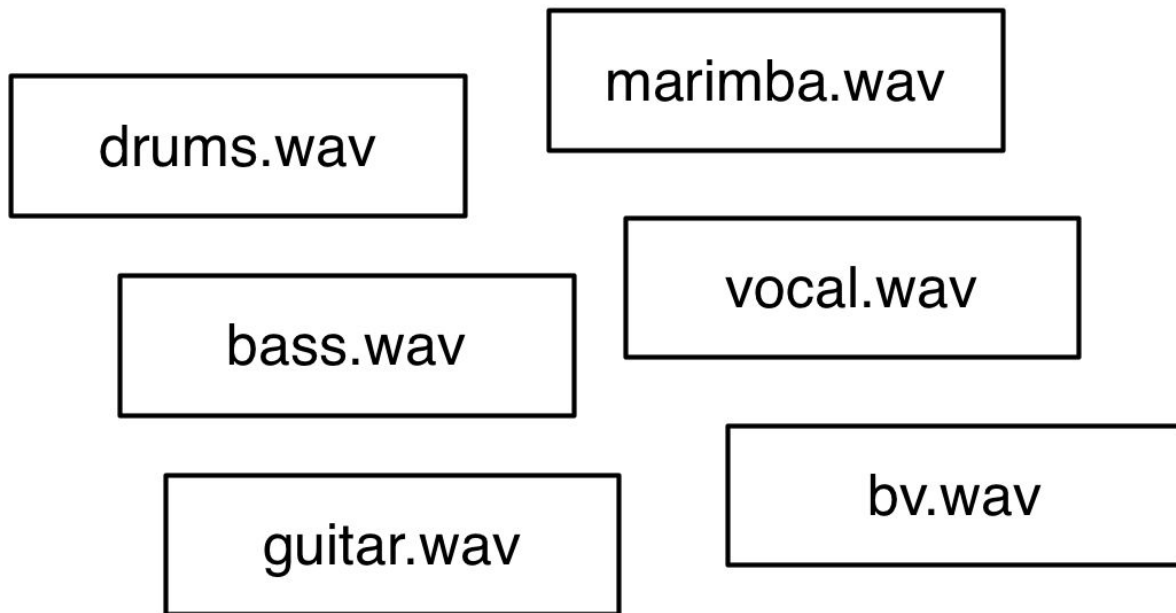
Parsimony — a small number of consistent powerful ideas do the work combinatorially;

Musically meaningful structuring actions are simple and quick to do;

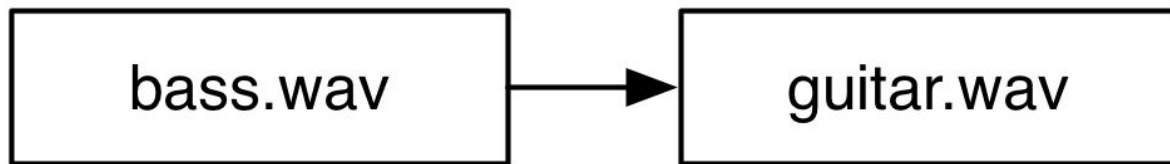
Both bottom up and top down construction are allowed in any combination;

Affordances are designed for a wide range of users — children to experts — via progressive disclosure.




# The play area and playing samples



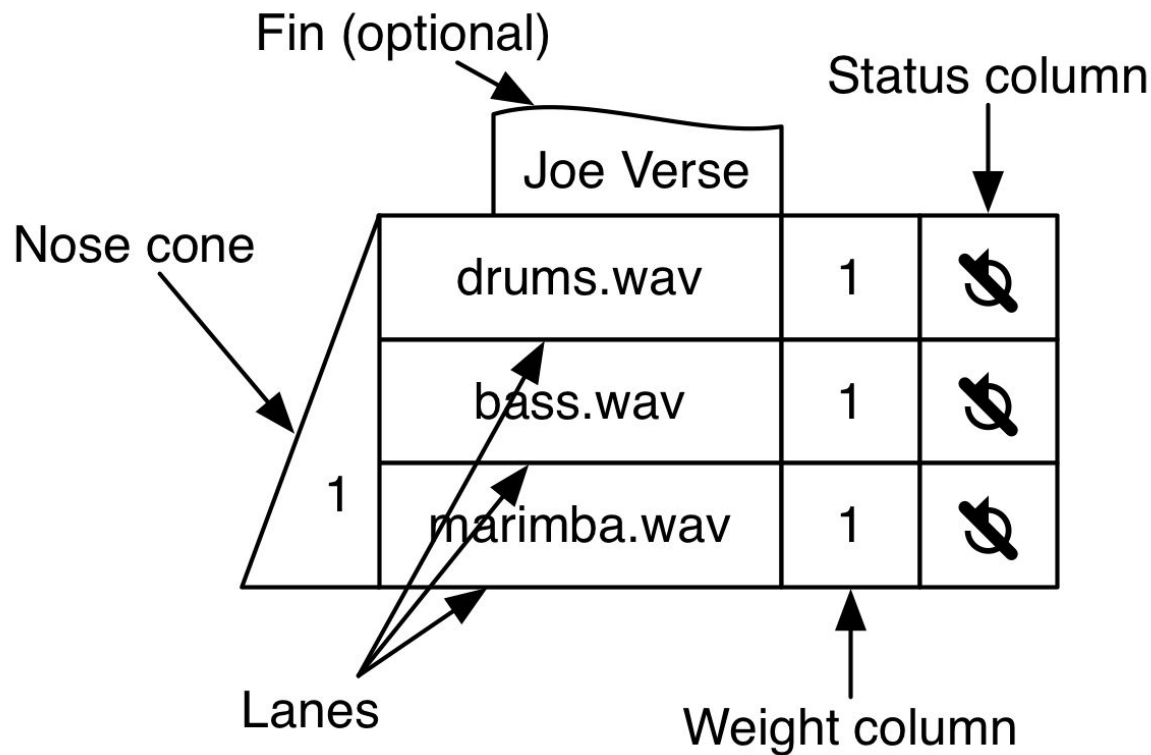
# Simple sequence



# Soundable choosers

|   |             |   |                                                                                     |
|---|-------------|---|-------------------------------------------------------------------------------------|
| 1 | drums.wav   | 1 |  |
|   | bass.wav    | 1 |  |
|   | marimba.wav | 1 |  |

# Soundable choosers







drums.wav




marimba.wav

bass.wav

vocal.wav

guitar.wav

bv.wav

|   |             |   |                                                                                     |
|---|-------------|---|-------------------------------------------------------------------------------------|
| 1 | drums.wav   | 1 |  |
|   | bass.wav    | 1 |  |
|   | marimba.wav | 1 |  |

# Time lanes and time choosers



# Full choosers

|   |             |   |   |
|---|-------------|---|---|
| 1 | drums.wav   | 1 | ↶ |
|   | bass.wav    | 1 | ↶ |
|   | marimba.wav | 1 | ↶ |
| 1 | 8 bars      | 1 | ✕ |

# Full choosers

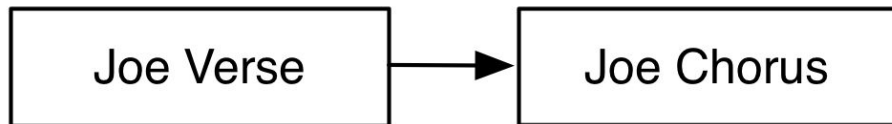
|   |             |   |   |
|---|-------------|---|---|
| 1 | drums.wav   | 1 | ↶ |
|   | bass.wav    | 1 | ↶ |
|   | marimba.wav | 1 | ↶ |
| 1 | 8 bars      | 1 | ✕ |
|   | 16 bars     | 1 | ➤ |

# Always play

|   |             |   |   |
|---|-------------|---|---|
| 2 | drums.wav   | A | ↶ |
|   | bass.wav    | 1 | ↶ |
|   | marimba.wav | 1 | ↶ |
| 1 | 8 bars      | 1 | ✕ |
|   | 16 bars     | 1 | ➤ |



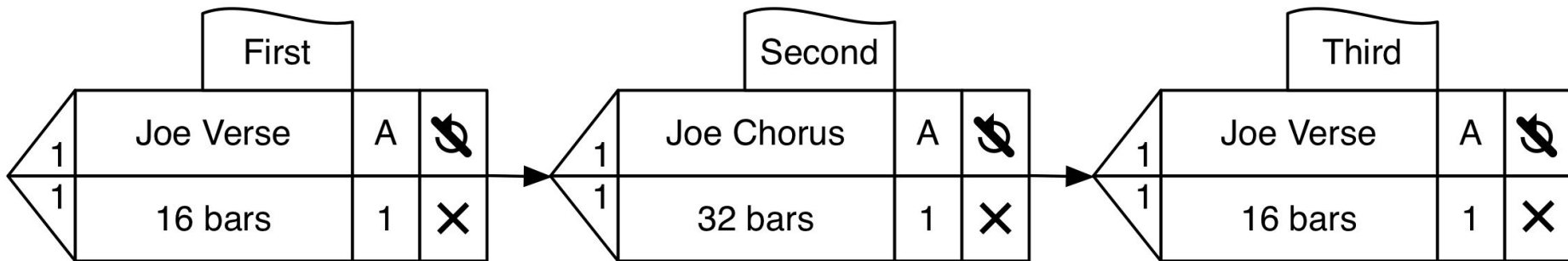
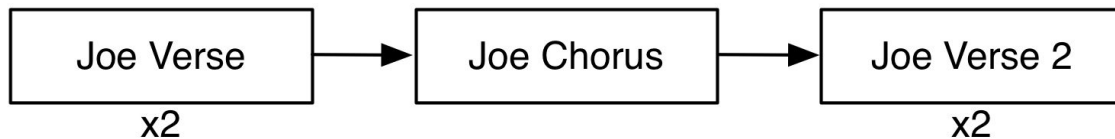
# Boxes and sequence



| Joe Verse |             |     |
|-----------|-------------|-----|
| 1         | drums.wav   | 1 ↺ |
|           | bass.wav    | 1 ↺ |
|           | marimba.wav | 1 ↺ |
| 1         | 8 bars      | 1 ✕ |
|           | 16 bars     | 1 ➤ |



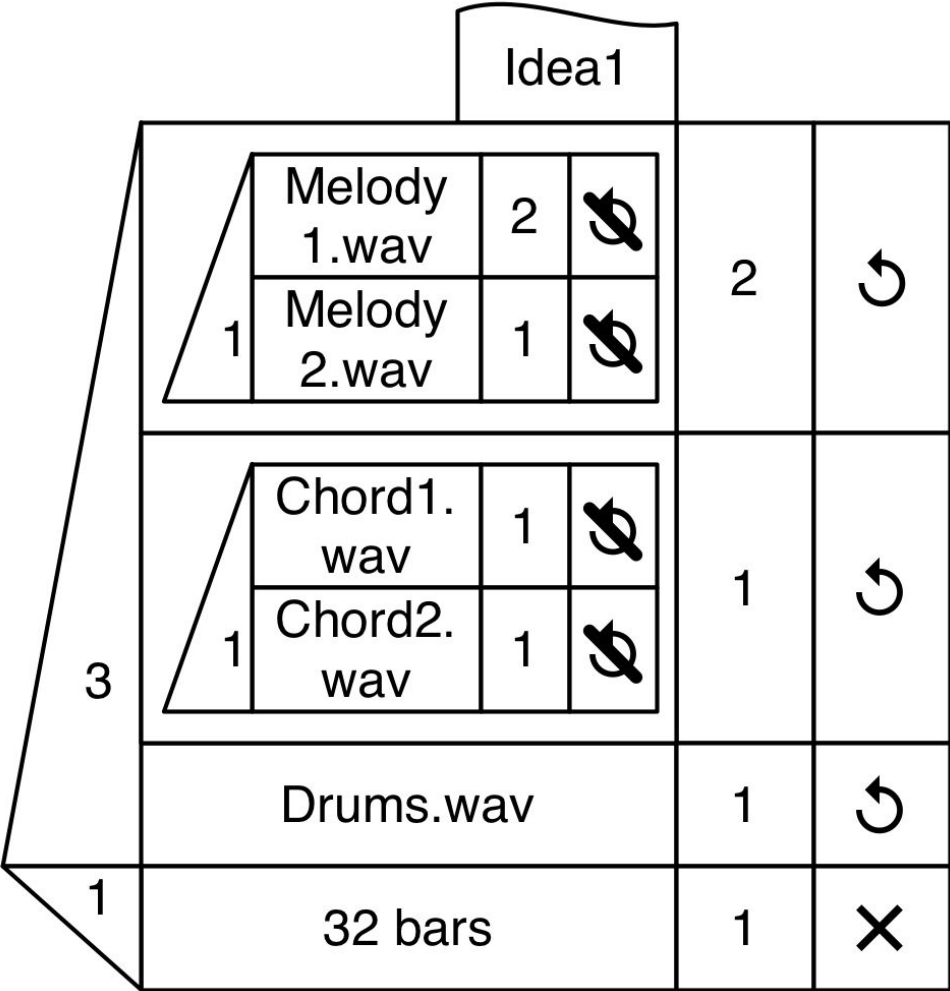
# Repetition





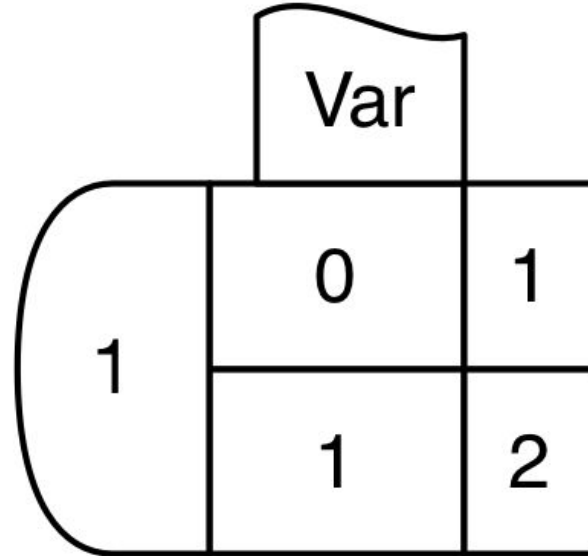
Advanced I

Nesting and recursion



## Advanced II

### Variables and abstraction



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