Redefining Drum Notation

CS 448b – Project Update

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The Problem

Traditional music notation does not adapt well to drum sets

**Reasons**

- Other instruments have pitch
  - Vertical mapping
- DrumGrooves are very repetitive
- Duration of notes irrelevant

**Consequences**

- Not commonly used
- Non universal
- Confusing if dense
Drum Key

- China
- Splash
- Cowbell
- Crash
- Choked
- Ride
- Ride
- Closed
- Open
- Tom 1
- Tom 2
- Snare
- Tom 3
- Tom 4
- Tom 5
- Right Bass
- Left Bass
- Hi-Hat
- Hi-Hat
- Hi-Hat
- Splash

http://www.drumnuts.com/wep/member-images/20/image/VirtualDrumkitPic.jpg
There Is Other Notation Out There

**Klavascribo**

- Has spatial mapping to the keys
- Meant to be more easily readable
- Applied to organs

**Conclusion**

Solution heading the right way, but for the wrong problem

https://en.wikipedia.org/wiki/Klavarskiabo
There Is Other Notation Out There

**Colored Music Notation**

- Conceived for kids to improve musical learning
- Proved to enhance learning
- Unsure result for more complicated songs

**Conclusion**

Solution heading the right way, but for the wrong problem
What About Games?

**Pros**

- Automatic scrolling
- Visual mapping to drum set
- Color coding of different drum parts

**Cons**

- Incomplete drum kit
- Loses some information
- Too reliant on scrolling

There Is Other Notation Out There

**Dance Music Notation**

Let’s Start From The User’s Needs

- **Easy** - to visually follow
- **Printable**
- **Unique** – Mean one thing to everyone
- **Specific** – to drums
- **Non Redundant** – no repetition of similar sequences
- **Transitionable** - Easy transition from existing notation
- **Technologic** – must have a IT interface for writing it up
Deliverables

- **11/18** – Initial prototype of D3 note writing SW
- **12/2** – Key mapping and notation rules finalised
- **12/2** – Example of transcriptions of songs
- **12/2 – 12/7** – Gather feedback from drummer page on fb
- **12/7** – Final D3 note notation web editor

**If time allows**

Conduct speed of learning test on non musicians and test with drummers (music department or/and CCRMA)
Preliminary Prototype in d3

- Displays data structure
- Removes notes on right click
- Adds note on click based on which column is being clicked
- To be implemented – variations of notes in the same column (open vs closed high hat)
Feedback

- Improvement of visualization of percussion instrument music
- Features that might benefit users or drive adoption of the tool