

Hookpad Aria: A Copilot for Songwriters

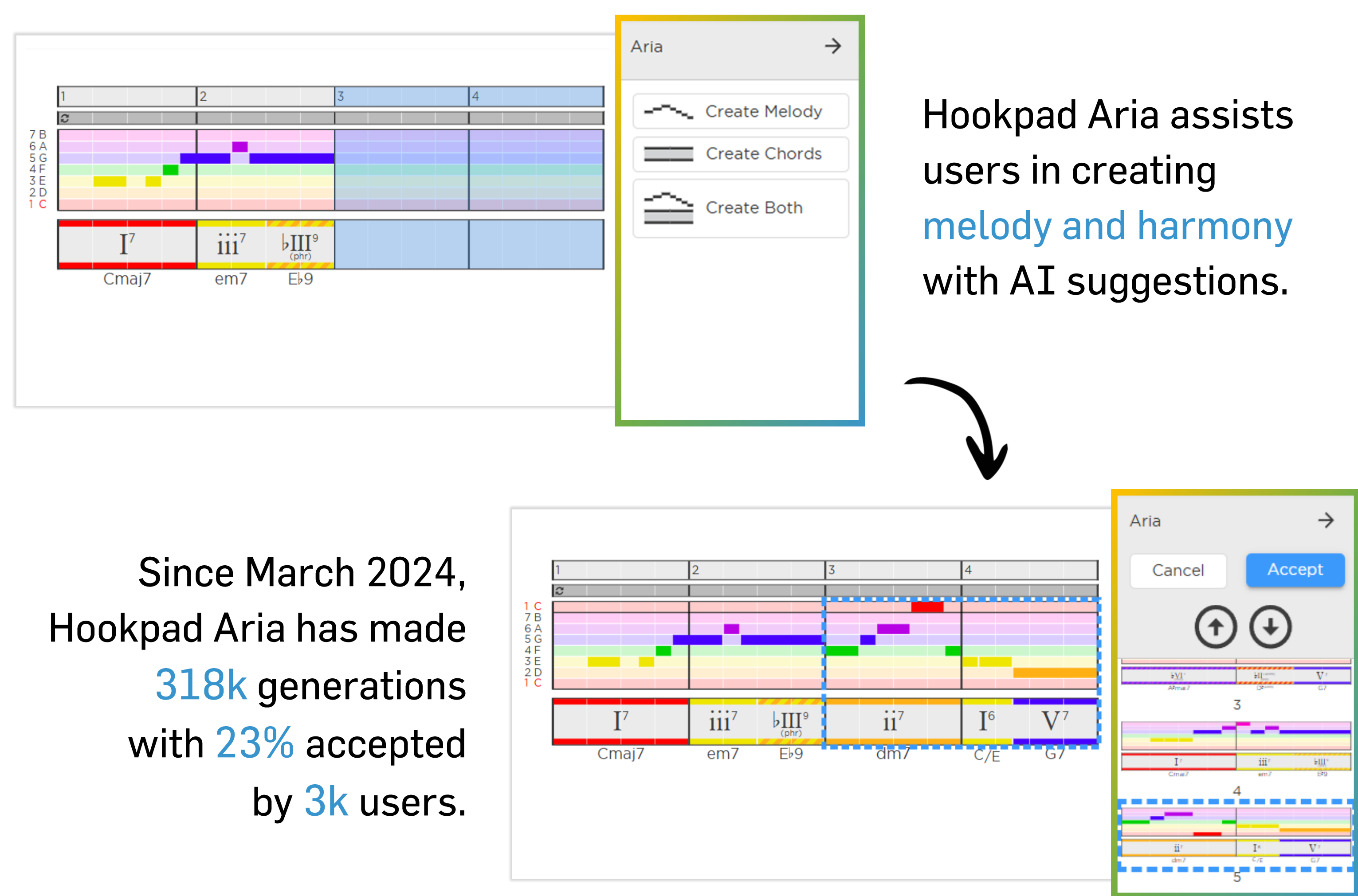
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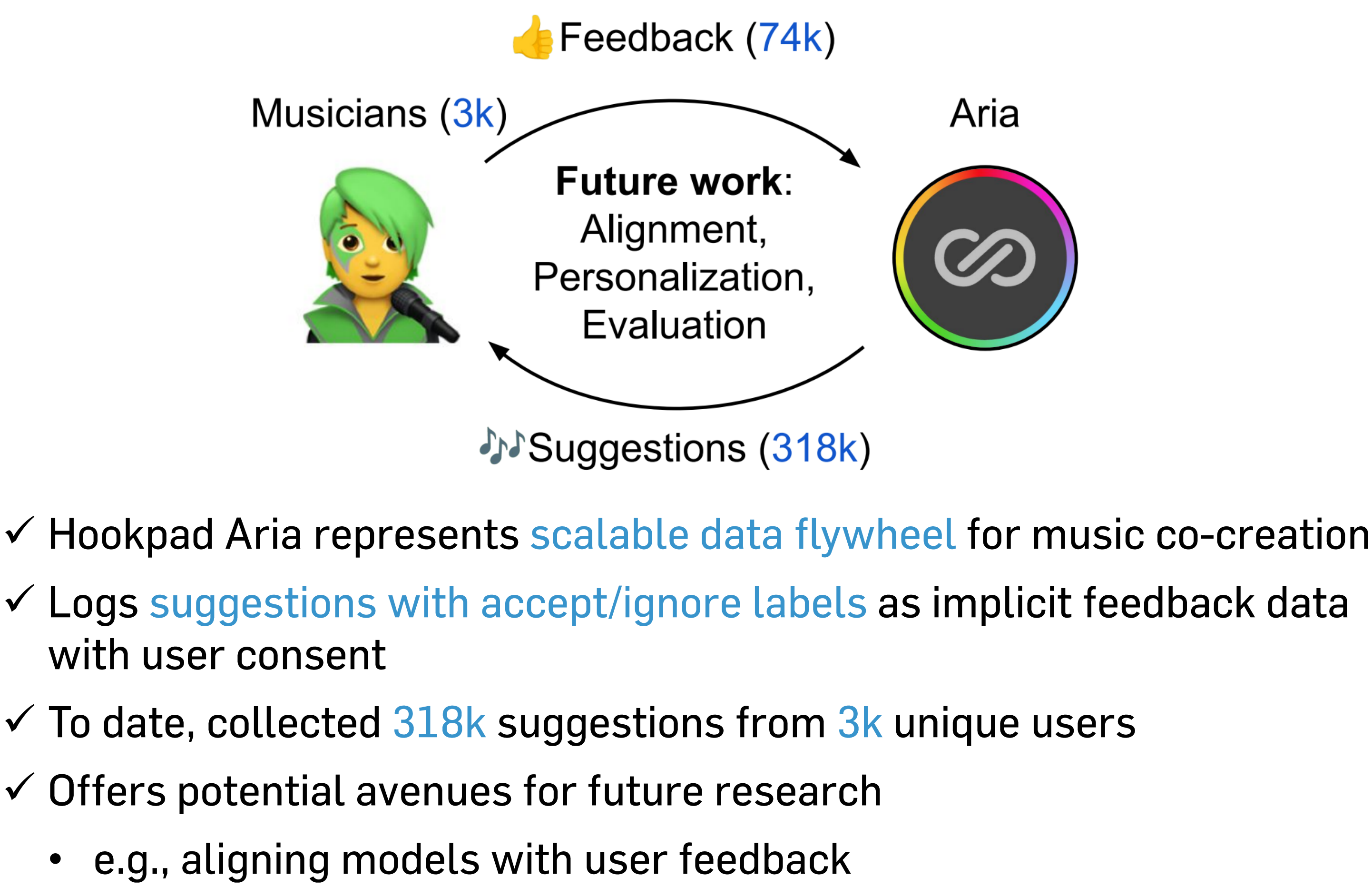
TL;DR

We present Hookpad Aria, a generative AI system designed to assist musicians in writing Western pop songs.

Hookpad Aria: Overview

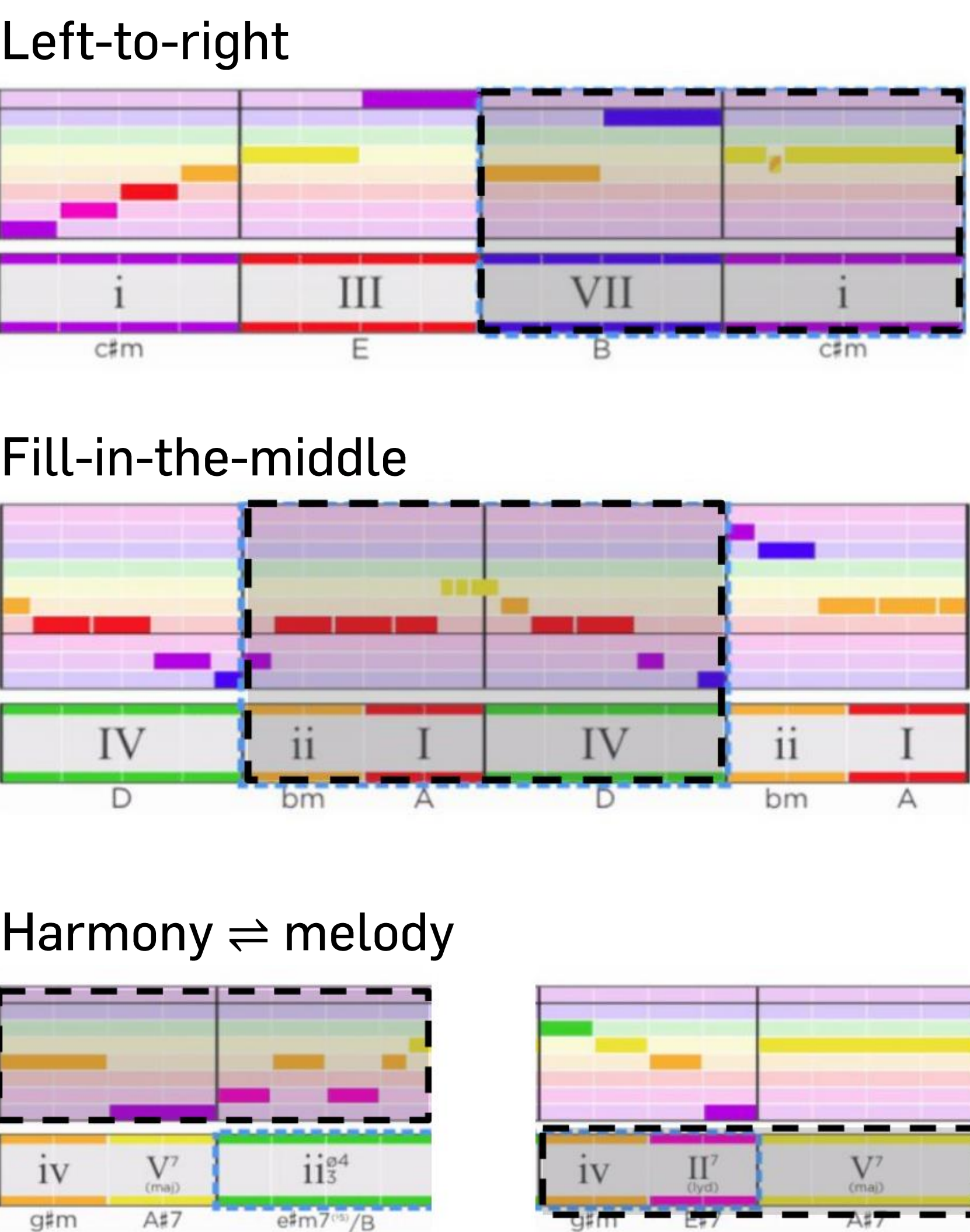


Scalable Data Flywheel for Co-creation



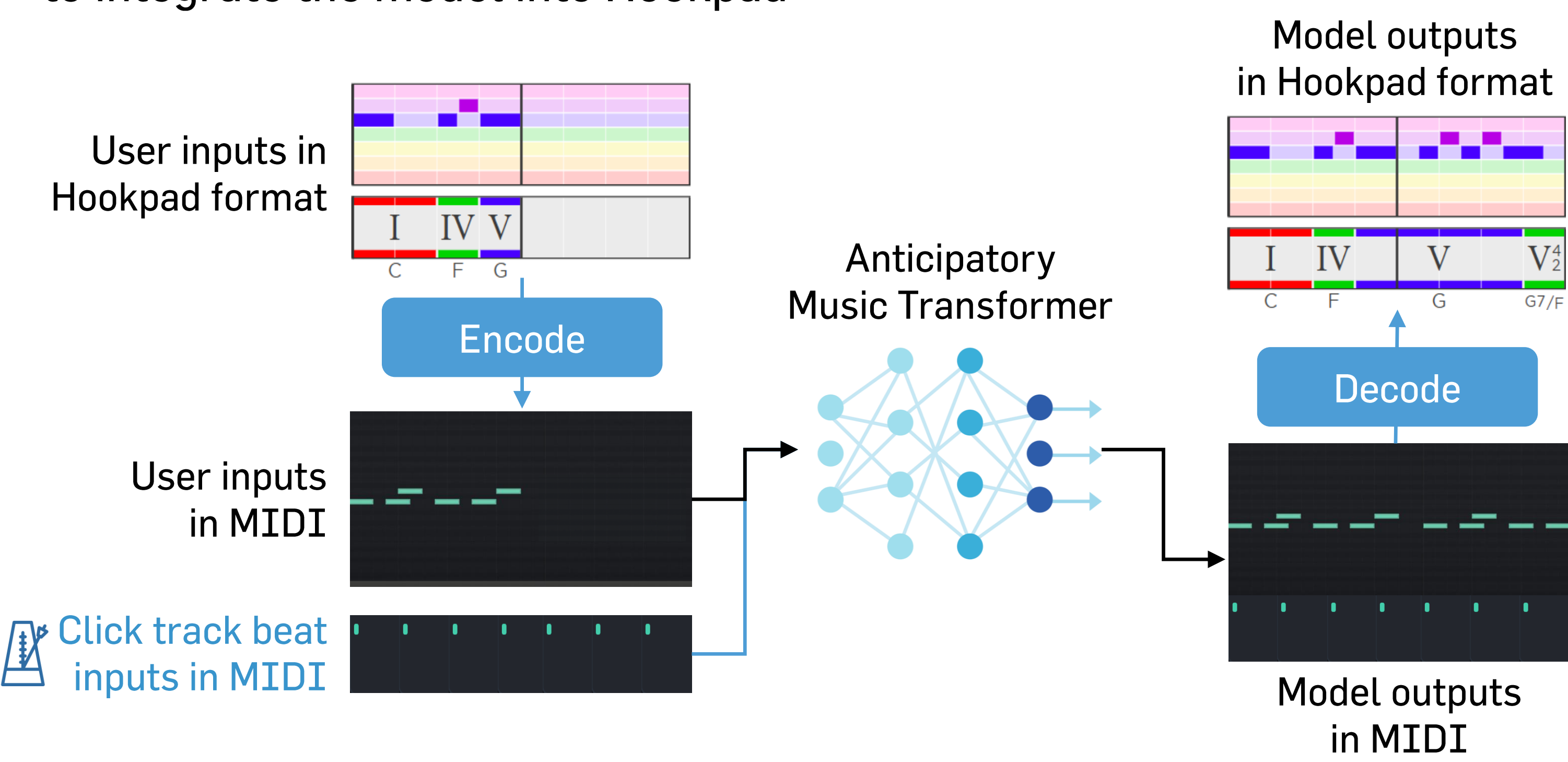
Generation with Flexible Content

- ✓ Hookpad Aria supports songwriters in **non-sequential** workflows
- ✓ **Three key controls**: left-to-right, fill-in-the-middle, harmony \rightleftharpoons melody, all conditioned on user-selected global structures (meter, key, tempo)



Key Enabler: Anticipatory Music Transformer

- ✓ Anticipatory Music Transformer is a SOTA LLM pre-trained for **multi-instrumental symbolic** music generation
- ✓ We design (i) a **beat-tracking input** and (ii) an **MIDI encoding scheme** to integrate the model into Hookpad

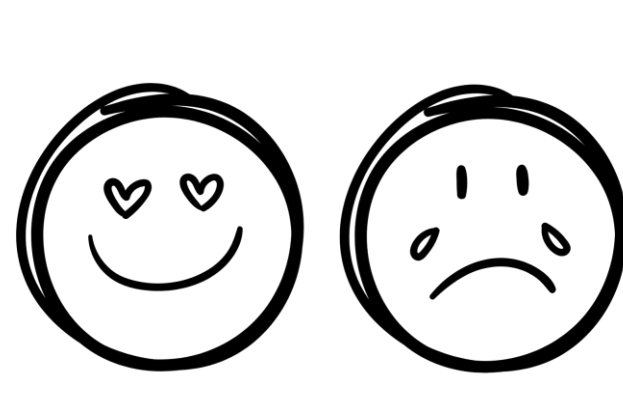


Interview Study with Eight Users

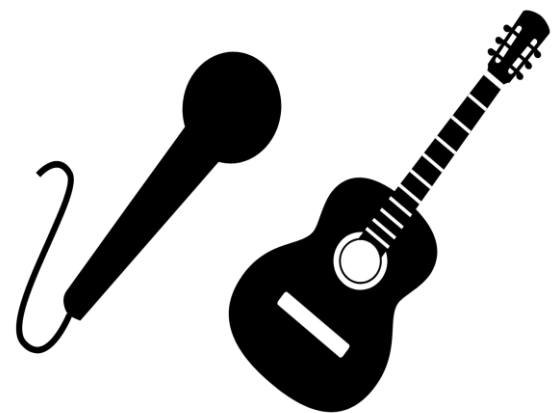
- ✓ Hookpad Aria helps users **overcome creative blocks** while preserving **agency**
- ✓ Users want even **more control**—invites future research



Genre
(e.g., rock, jazz)



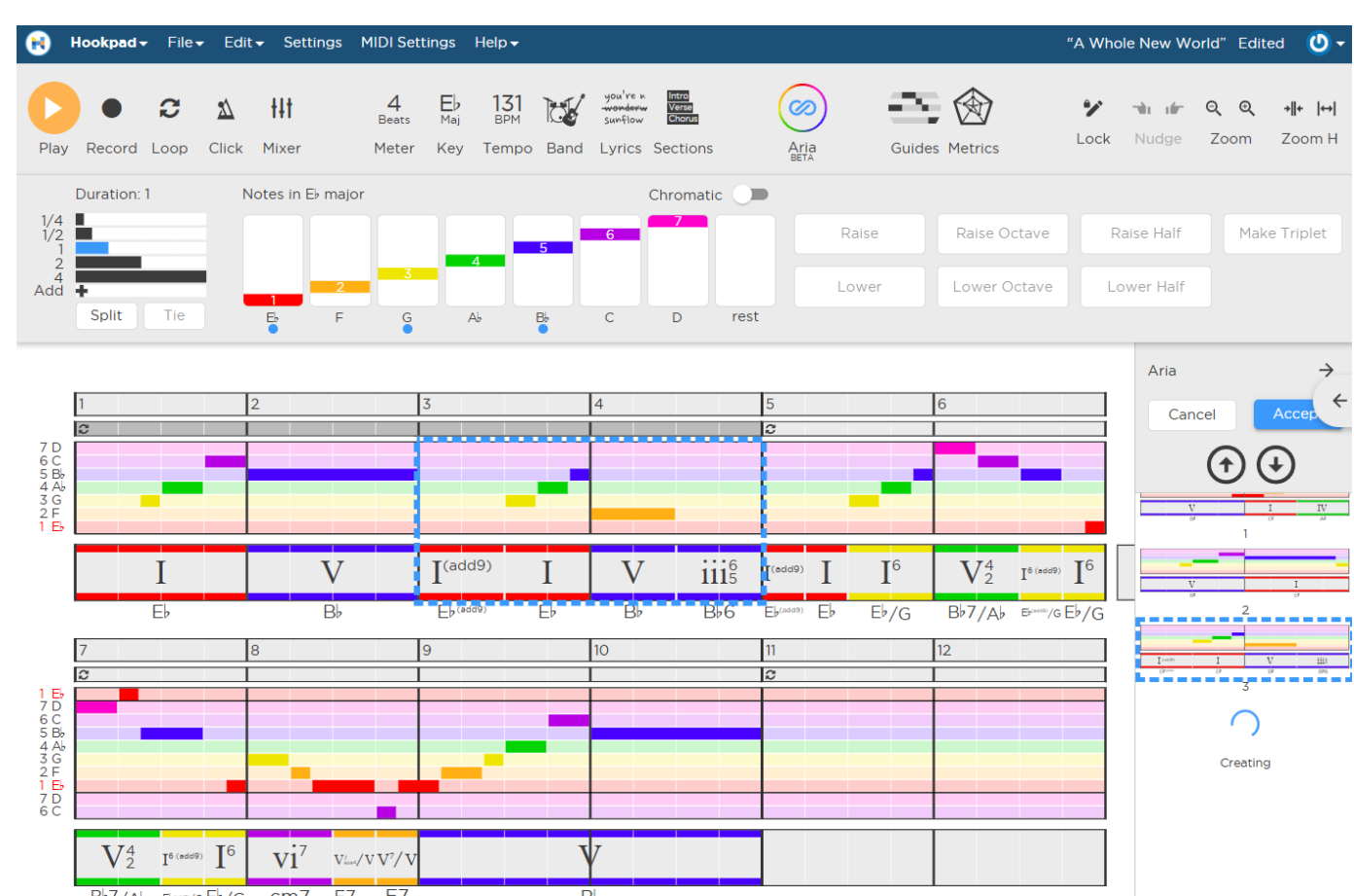
Emotional tone
(e.g., happy, sad)



Intended instruments
(e.g., vocal, guitar)

Seamless Integration with Existing Workflow

- ✓ Hookpad Aria **seamlessly integrates** into Hookpad, one of the popular songwriting software tools
- ✓ Ensures **familiar** and **intuitive** user experience
- ✓ Enables collecting feedback from **real-world** users



More Details

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Project Page