- **Title**: Enabling the Study of Lyric-Music Correspondence in Song: Encoding Linguistic Annotations in Humdrum Scores
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- I'd prefer giving an oral presentation.

Lyrics are a ubiquitous and essential part of most of the world's most popular forms of music. Unfortunately, computational musicology—like many areas or music research—has often given lyrics short shrift. Though many music encoding standards (musicXML, humdrum, MEI, etc.) allow for the basic encoding of lyrics in a mode similar to conventional Western scores, encoding options are limited and have rarely been taken advantage of at all. Many major collections of digital scores simply don't include lyric encodings: for example, the Essen collection does not. Even when lyrics are included in datasets, there is generally little consistency or rigor. For the most basic example, no consistent standards for capitalization, punctuation, dialectical pronunciations, or marking syntactic boundaries have been adopted in music research. Though computational musicology is a close cousin to computational linguistics, we have generally failed to consider how linguistic standards or analyses (for example, part-of-speech or syntactic dependency tags) might be applied to lyric data.

In this paper I present systematic standards and best practices for the *consistent* and detailed encoding of lyrics in humdrum-syntax data, including approaches to annotating "lyrics-specific" annotations like pronunciation, rhyme, parts-of-speech, and syntactic dependencies. I also demonstrate practical workflows for adding such annotations to existing datasets. I demonstrate these standards applied to humdrum-encoded datasets of popular music (MCFlow and CoCoPops), folk music (Densmore collection), and classical music (Bach and Telemann cantatas). I will then share examples of analyses taking advantage of these annotations: 1) Studying the use of "enjambment"-like techniques—wherein the syntactic boundaries mismatch with musical boundaries—in rock and hip hop music; 2) comparing how multi-syllable words are set differently in classical music and vernacular music.

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