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**David John Baker\*** (davidjohnbaker1@gmail.com), 2800 July Street, Unit 39, Baton Rouge, LA 70808. *Measuring Distances of Musical Schemata.*

In order to understand the relationships between musical ideas, we must first define what it means for musical ideas to be similar. This could mean one of many things, including rhythmically similar, similar in contour, or containing similar intervals or pitches. While making such judgments lies at the nexus of music research, the notion of similarity and pattern discovery is often thought of as an abstract, intangible concept. Scholars have theorized that elements of the musical surface are able to be abstracted in order to create a schematic representation of essential musical features. These abstractions, once created, can then serve as a representation from which similarity measures of essential features can be modelled mathematically. This study examines how improvisatory patterns ("licks") might be analyzed in terms of similarity and distance metrics. Temporal pattern-matching, distance algorithms (COSITEC, SIAM, and others), and interval matching are all discussed and compared, with a discussion focusing on the results that might provide the most ecologically valid description of common jazz improvisational ideas. (Received September 21, 2016)