... that durational categories do occur in languages with phonemic length features. They are entirely different things when a vowel or consonant is used. In some languages, there are three-way length contrasts. For example, the words “hundred,” “send,” and “lait” are different. It would be interesting to study this and examine the amount of temporary in connected speech. This could be a given duration category in music, to a similar tolerance for within-category

musical durations as a sequence of notes.

human locomotion, in other words, a musical allusion to physical movement (cf. Kronman & Sundberg, 1987).

The above paragraph focuses on the role of IOIs in expressive timing. IOIs are the basis of “expressive timing profiles,” time series that show the actual pattern of event timing versus the idealized pattern based on notated duration. Although studies of these profiles have dominated research on expressive timing, it is important not to overlook another aspect of expressive timing, namely, articulation. Although IOI refers to the time interval between the onsets of successive tones, articulation refers to the time between the offset of one tone and the onset of the next. If there is little time between these events (or if the tones overlap), the offset of the prior tone occurs after the onset of the following tone, which is possible in piano music, this is considered “legato” articulation. In this type of articulation, one tone is heard as flowing smoothly into the next. In contrast, staccato articulation involves a salient gap between offset and onset, giving the tones a rhythmically punctuated feel. In addition to IOI and articulation patterns, another important cue to musical expression is the patterning of tone intensity.

Due to the fact that timing, articulation and intensity in music can be measured with great precision using modern technology (e.g., using pianos with digital interfaces, such as the Yamaha Disklavier), expression has been a fruitful area of research in studies music production. There has also been some research