## A comparison between musical and speech rhythm: A case study of Standard Thai and Southern Thai

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The nPVI measurement is an empirical tool that can be used for finding a phonetics evidence supporting languages classification in term of their rhythmic properties. The nPVI can also be used in order to find an influence of composer's native language on instrumental music's rhythm. (Patel and Daniel, 2003). Nevertheless, their result raises a question whether music with lyrics will yield the same result as instrumental music do. So, this study aims to investigate rhythm in Standard Thai and Southern Thai pop songs.

Ten Standard Thai and ten Southern Thai popular songs were randomly selected from various composers. The whole song was analyzed as the researcher believed that it would represent the rhythmic characteristics of a song better than only the chorus. Musical phrases were parsed parallel to syntactic boundaries. A total of 212 and 217 musical phrases from Standard Thai and Southern Thai, respectively, were examined. Each note was given a duration according to the time signature of each song. nPVI values were then computed and a two-sample t-test was used to compare the means with a .05 level of significance.

The results show that the nPVI values from Standard Thai and Southern Thai music are significantly different (p < .05) as predicted. The average musical nPVI values of Southern Thai in this study (42.78) is a bit lower than the average linguistic nPVI values (50.21) obtained by Sawanakunanon (2012). This is not the case for Standard Thai though since the average musical nPVI values (33.38) is much lower than the average linguistic ones of 54.63 (Sawanakunanon, 2012) and 65.8 (Grabe and Low, 2002).

From the observation, the low musical nPVI values of Standard Thai could be because of the adapted a lot of melodies from western music. Consequently, musical rhythm in Standard Thai pop music could be different from speech rhythm. This finding, therefore, does not support Patel and Daniele (2003)'s claim that "spoken prosody leaves an imprint on the music of a culture". Nevertheless, this observation on music genres and style should be further investigated.

**Keywords:** Musical rhythm · Speech rhythm · Pop songs · Standard Thai · Southern Thai · nPVI

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