

SOUND SIMILARITY JUDGMENTS AND PHONOLOGICAL UNITS

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ABSTRACT

The purpose of this paper is to assess the psychological status of the phoneme, syllable, and various postulated subsyllabic units in Korean by applying the Sound Similarity Judgment (SSJ) task, to compare the results with those in English, and to discuss the advantage and disadvantage of the SSJ task as a tool for linguistic research. In Experiment 1, 30 subjects listened to pairs of 56 CVC words which were systematically varied from 'totally different' (e.g., *pan-met*) to 'identical' (e.g., *pan-pan*). Subjects were then asked to rate sound similarity of each pair on a 10-point scale. Not very surprisingly, there was a strong correlation between the number of phonemic segments matched and the similarity score provided by the subjects. This result was in accord with the previous results from English (e.g., Vitz & Winkler, 1973; Derwing & Nearey, 1986) and supported the assumption that the phoneme is the basic phonological unit in Korean and English. However, there were sharply contrasting results between the two languages. When the pairs shared two phonemes (e.g., *pan-pat*; *pan-pen*; *pan-man*), the pairs sharing the first two phonemes were judged significantly more similar than the other two types of pairs. Quite to the contrary, in the comparable English experiments, the pairs sharing the last two phonemes were judged significantly more similar than the other two types of pairs. Experiment 2 was designed to confirm the results of Experiment 1 by controlling the 'degree' of similarity between phonemes. For example, the pair *pan-pam* can be judged more similar than the pair *pan-nan*, although both pairs share the same number of phonemes. This could be interpreted either as confirming the result of Experiment 1 or as the fact that /n/ is more similar to /m/ than /p/ is to /n/ in terms of shared number of distinctive features. The

results of Experiment 2 supported the former interpretation. Thus, the results of both experiments clearly showed that, although the 'number' of matched phonemes is the important predictor in judging sound similarity of monosyllabic pairs of both languages, the 'position' of the matched phonemes exerts a different influence in judging sound similarity in the two languages. This contrasting set of results may provide interesting implications for the internal structure of the syllable in the two languages.