Psychology 719 – Speech Perception James R. Sawusch, Instructor Fall, 2011 Short Paper 1 – Due October 20 (Thursday) by 5pm.

Answer one of the following questions. You may use your notes, published sources and archives. You may not consult with one another or any sentient being. Try to limit your answer to 5-6 double space pages.

1) What is an invariant? Are any phonetic distinctions cued by invariant acoustic properties? Cite data on both the acoustics of speech and perception in your answer.

2) Choose vowels or consonant voicing or consonant place of articulation. Base on the contrast you choose, what are the sources of information that a listener could exploit in perception? What types of variation in the acoustic signal make perception a non-trivial task? What information do listeners use (describe data)?

3) Choose one: Speech perception involves a reference to articulation. –or- Speech perception is based on the direct recovery of the gestures used to produce it. –or- Speech perception is a direct mapping from the stimulus to the lexicon without the use of intermediate representations. –or- Speech perception involves the computation of intervening representations. Now that you've made your choice, explain the position that you've chosen and use data to construct arguments for and against.