DISSERTATION ABSTRACT

The effect of syntactic and semantic complexity on attention and processing in second language acquisition (SLA) has long been of interest to both practitioners and researchers of SLA. Theoretical models of attention in SLA (Schmidt 1990, Tomlin and Villa, 1994) have spurred a great deal of empirical research in the field, and VanPatten's (1994, 2004, 2007) work on the effect of attention to form and meaning on comprehension of input has been influential in the field. From a language processing viewpoint, Clahsen and Felser (2006, 2009) have hypothesized that the different ways in which native and nonnative speakers prioritize and parse syntactic and semantic information are central to understanding the qualitative differences in L1 and L2 language use. To date, however, no study has attempted to bridge the gap between these two areas of inquiry in order to discover how the natural complexity of form and meaning inherent in certain linguistic information affects nonnative speakers' ability to attend to and process linguistic input. This study examines variations in input and attempts to determine whether it is complexity of meaning, of form, or some combination of the two that has the greatest impact on the attentional system and the processing of a second language.

To do this, this study makes use of the natural syntactic and semantic complexity available in the instantiations of phrasal verbs in English. Syntactically, phrasal verbs are capable of appearing in two different forms ((a) and (b) below). Semantically, these items can be either directional, in which the particle of the phrasal verb retains some of its directional quality (e.g., *throw away, pick up*) or metaphorical, in which the particle has no directional meaning (e.g., *tear up, blow up*). Comparison of these syntactic and semantic alterations can be accomplished by creating groups of sentences as seen below.

a. Susan **threw away** the piece of paper. (directional, contiguous)

b. Susan **threw** the piece of paper **away**. (directional, separated)

c. Susan **tore up** the piece of paper. (metaphorical, contiguous)

d. Susan **tore** the piece of paper **up**. (metaphorical, separated)

Participants (66 learners of English and 16 native speakers) were tested by use of a sentence repetition task and a self-paced reading task, which were then analyzed to determine how variations in syntactic and semantic complexity affected speakers' ability to attend to variations in form, their comprehension of the input, and processing time.

Results showed that semantic and syntactic complexity played a significant role (p=.0009) in determining whether nonnative speakers would be able to attend to syntactic variations in aural input, as determined by correct recitations of sentences containing a phrasal verb in the sentence repetition task. Further, learners were significantly less likely to correctly answer a comprehension question about a sentence containing a phrasal verb that was both syntactically and semantically complex (p=.0007). However, only syntactic complexity was a statistically significant factor in

determining whether participants would experience a greater processing load in reading a phrasal verb construction (p=.0094).