Psych verbs (e.g., love, hate, fear) have historically been of interest due to the unique ways that their meaning is encoded onto structure both within and across languages. Previous research has identified three classes of Spanish psych verbs based on the syntactic role of the experiencer: Class I – subject experiencer (temer ‘to fear’), Class II – accusative object experiencer (molestar ‘to bother’), Class III – dative object experiencer (gustar ‘to like’) (Parodi-Lewin, 1991). The current research examines Class II (molestar) and Class III (gustar) verbs and demonstrates that observed differences in their syntactic behavior are theoretically motivated by semantic featural differences. For example, Class II verbs are [+change of state], while Class III verbs are [−change of state]. At the same time, this research investigates the adult second language (L2) acquisition of these verbs from a feature-based perspective. Here I will discuss two experimental tasks – an audiovisual judgment task and a written judgment task – which were completed by four groups of L2 learners and a group of native speakers (NSs). The results of the NSs across task modes display all contrasts predicted by the theoretical analysis. Unlike previous research (i.e., Montrul, 1998; Gómez Soler, 2013; Kanwit & Quesada, 2017) suggesting that Class III verbs (gustar) are particularly difficult for L2 learners, the results presented here illustrate that near-native learners’ behavior is native-like in the case of Class III verbs, but differs from native speakers with Class II verbs in certain conditions. The results are considered in light of the Feature Reassembly Hypothesis (Lardiere, 2008, 2009), with a particular focus on issues of morphological competence. The potential influence of classroom pedagogy on these results is also discussed and further pedagogical implications are identified.