A cognitive model of Malay language processing is developed and evaluated using four case studies of dysphasia. Unlike English, Malay is characterized by a system of regular orthography-phonology relationships and has a particularly rich morphological structure. The English Psycholinguistic Assessment of Language Processing in Aphasia (PALPA) was adapted for the new model of Malay language processing with a distinction between affix-stem and whole-word processing. The development and administration of new Malay tests for assessing reading, spelling, auditory processing and semantic processing are described and case study data are presented. The thesis concludes with a review of the characteristics of language processing in Malay, including a comparison between the cognitive representation of Malay and English. The emphasis of the research is theoretical but the results could have implications for clinical assessment and intervention with dysphasic Malay-speaking adults.