The purpose of communication is to exchange meaning. A large territory of the brain is involved in representation and access to meaning. Here, I will discuss studies of stroke patients that shed light on the nature of this semantic system. Studies show that action and perception systems of the brain are important for representation of meaning, and when these systems are impaired, processing of the meaning of related words is also impaired. Furthermore, impairments in processing meaning are seen especially when, with left hemisphere damage, functional connectivity to the right hemisphere is compromised. This highlights the importance of taking connectivity into account in lesion-symptom mapping, and the potential compensatory role of the contralateral hemisphere. Finally, I will discuss the role of anterior temporal lobe in semantics, and whether it is involved in processing both lexical and non-lexical meaning.