This paper focuses on the analysis of some derivational affixes in Portuguese (L1) and in English (L2), discussing the mechanisms underlying the acquisition of the same by Portuguese native speakers (students from elementary schools). In particular, we will consider the processes and stages of acquisition, as well as the possible segmentations of words which carry out the derivational affixes under analysis. It will be explained, through the reference of an experimental study held this year, how speakers' morphological awareness influences (or not) the production and recognition of complex words in L1 and the role performed by productivity.