Shing S. So* (so@cmsu.edu), Dept. of Math. & Comp. Sci., University of Central Missouri, Warrensburg, MO 64093. A Decomposition Theorem in Cyclic Element Theory.

Suppose M is a connected Hausdorff topological space. In addition, if M is either locally connected or locally compact, then it satisfies the following condition: If U is an open subset of M containing p, there exists a non-closed connected subset V of U containing p such that $\overline{V} \cap \partial U \neq \emptyset$. In this paper, we discuss how this property can be used to establish a decomposition theorem in cyclic element theory. (Received September 22, 2006)