Evaluation Maps on Groups of Self-Homeomorphisms
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In this dissertation, some properties of evaluation maps on groups of self-homeomorphisms will be studied. In particular, the following question is considered: For what type of spaces, $X$, and what topologies, $T\,^{sp*}$, on a group, $G$, of self-homeomorphisms on $X$, will give us that, for each $x \in X$, the evaluation map, $E_{x}: (G, T^{sp*}) \to X$, defined by $E_{x}(g) = g(x)$, is an open map?

In 1965, E. G. Effros published a very important result which gave one answer to the preceding question. One form of Effros' Theorem is: If $X$ is a compact, homogeneous, metric space, then for all $x \in X$, the evaluation map, $E_{x}: (H(X), T^{bf\,co}) \to X$, defined by $E_{x}(g) = g(x)$, is an open map. Here $H(X)$ is the collection of all self-homeomorphisms on $X$ and $T^{bf\,co}$ is the compact-open topology.

The main results of this dissertation are as follows; first, the introduction of even homogeneity as a generalization of the concept of ULH spaces and the development of some of its properties; and second, the use of even homogeneity and Effros' Theorem to extend Effros's Theorem to the case where $X$ is an uncountable product of compact, homogeneous, metric spaces.