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ON OPEN MAPS AND SPAN ZERO

A Thesis Presented to

The Faculty of the Graduate School  
Department of Mathematics  
College of Science  
De La Salle University

In Partial Fulfillment  
of the Requirements for the Degree of  
Master of Science in Mathematics

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April, 1994

**AKLATANG EMILIO AGUINALDO**





## ABSTRACT

The span of a metric space is a measure of "connectedness" of the metric space. Defined by Duda and Lelek, this concept was studied intensively, by Mc Lean, Kawamura, Oversteegen and others.

This paper presents some results by the above-named authors. The main result presented is the theorem which states that if a compactum has span zero then its image under an open continuous map has span zero also.

Among the concepts studied in this paper are the confluent maps between metric spaces and tree-like curves. Related to these are the approximately right invertible mappings and  $\varepsilon_n$ -translations. All these concepts and their relations to spans of metric spaces are discussed in this paper.





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