

Dynamic Development of Urban Structure using Mathematical Morphology and GIS Case Study: Township of Vedène (France) between 1983 and 1997

Dr. Heba Alawad *

Abstract

There are many ways and means for studying and analyzing the dynamic urbanism. This research sheds light on mathematical morphology to study this phenomenon for over 14 years of development. The Results were obtained for Vedène, as a case study for the application of this methodology, showed feasibility to use mathematical morphology method. Also, it proved by comparing the analysis of images from both 1983 and 1997, a clear change in the dynamics of the studied area with identifying trends and widening of urban axes.

Keywords : Geographic Information System, mathematical morphology, widening of urban axes, Urban Squelette, Urban Center, Micromorph, ArcGIS

* Department of Geographic - Faculty of Arts and Humanities - Damascus University

For the paper in Arabic see pages (309-86).