

Ferri F., Massari F., Rafanelli M, **A Pictorial Query Language for Geographic Features in an Object-Oriented Environment**, Journal of visual languages and computing, Academic Press. - London, UK, 1999.

Abstract: In this paper, a visual algebra and the relative pictorial query language (PQL) for geographic information systems (GIS) are proposed and discussed. The base data structure of the object oriented model for geographical data is defined and the symbolic features used in the PQL are described. The algebra operators are formally defined, besides their properties and applicability. The use of the symbolic features to express the queries is illustrated, as well as the possible pictorial operations are considered. The used interface is part of the Scenario GIS, developed using an object-oriented environment. This PQL makes easier the formulation of a complex query and simplifies user approach to the system, maintaining a strong expressive power. Finally, an example of query and its pictorial composition on the screen is shown.