



ΕΘΝΙΚΟ ΜΕΤΣΟΒΙΟ ΠΟΛΥΤΕΧΝΕΙΟ

ΣΧΟΛΗ ΑΓΡΟΝΟΜΩΝ ΚΑΙ ΤΟΠΟΓΡΑΦΩΝ ΜΗΧΑΝΙΚΩΝ Διεπιστημονικό
Διατμηματικό Πρόγραμμα Μεταπτυχιακών Σπουδών **‘Γεωπληροφορική’**

**ΑΝΤΙΚΕΙΜΕΝΟΣΤΡΑΦΗΣ
ΑΝΑΠΑΡΑΣΤΑΣΗ
(ΠΡΟΓΡΑΜΜΑΤΙΣΜΟΣ)
ΚΑΙ
ΒΑΣΕΙΣ ΓΝΩΣΗΣ**

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Objects and Groups of objects

- OOP
- Fig. 3.16 The object oriented approach
- Features are grouped into classes and hierarchies of objects
- Resembles natural language descriptions
- AIM: Conceptual Model closer to real world things

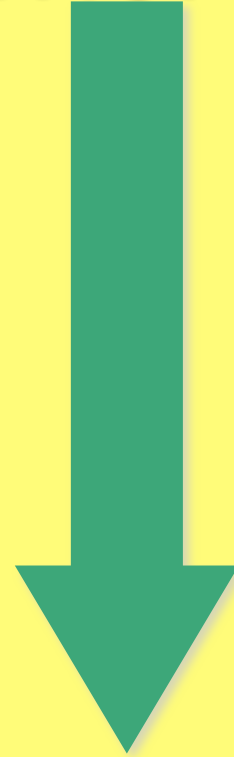
Define collections of objects:

- **Their characteristics (spatial, topological)**
- **Their activities**
- **Their relationship with other objects**
- **Their classes / inheritance relationships**

**Entity = object =
state + behavior**



Attribute values



Methods operating on the attributes

**Entity = object = state +
behavior**

- **Composite objects – Part of Hierarchies**
- **Class – Subclass hierarchies**
- **Inheritance of properties**

GIS: A COMPUTING PERSPECTIVE

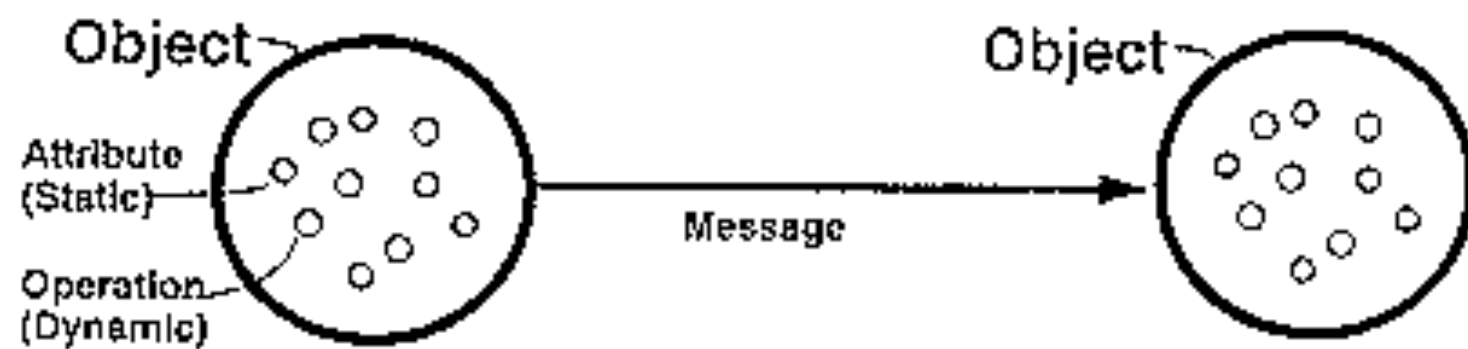


Figure 2.21 Objects encapsulate state and behaviour and communicate via messages.

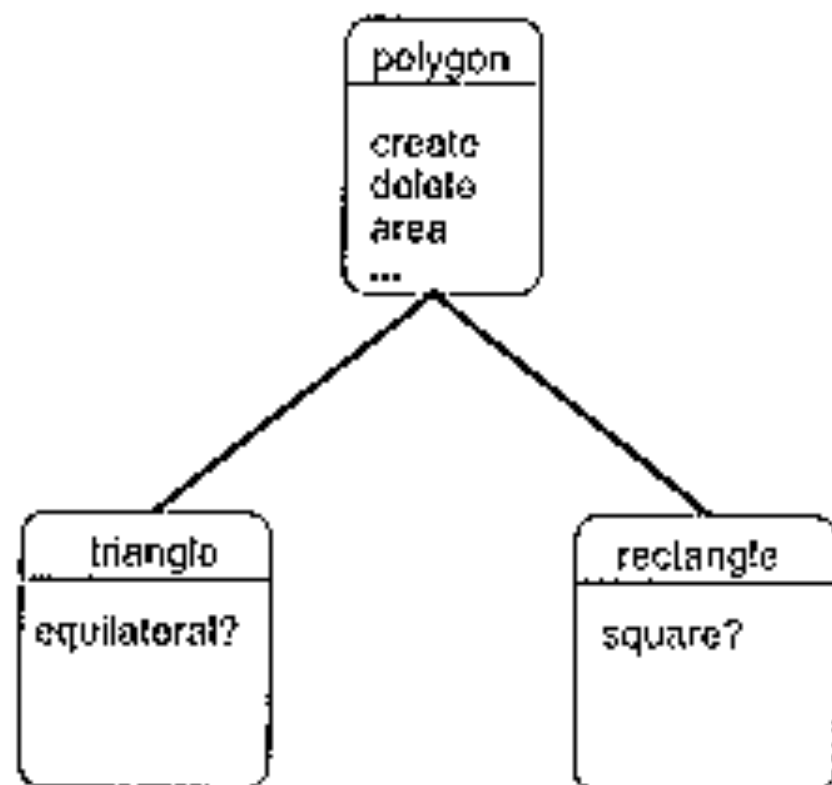


Figure 2.22 Object diagram showing inheritance of operations.

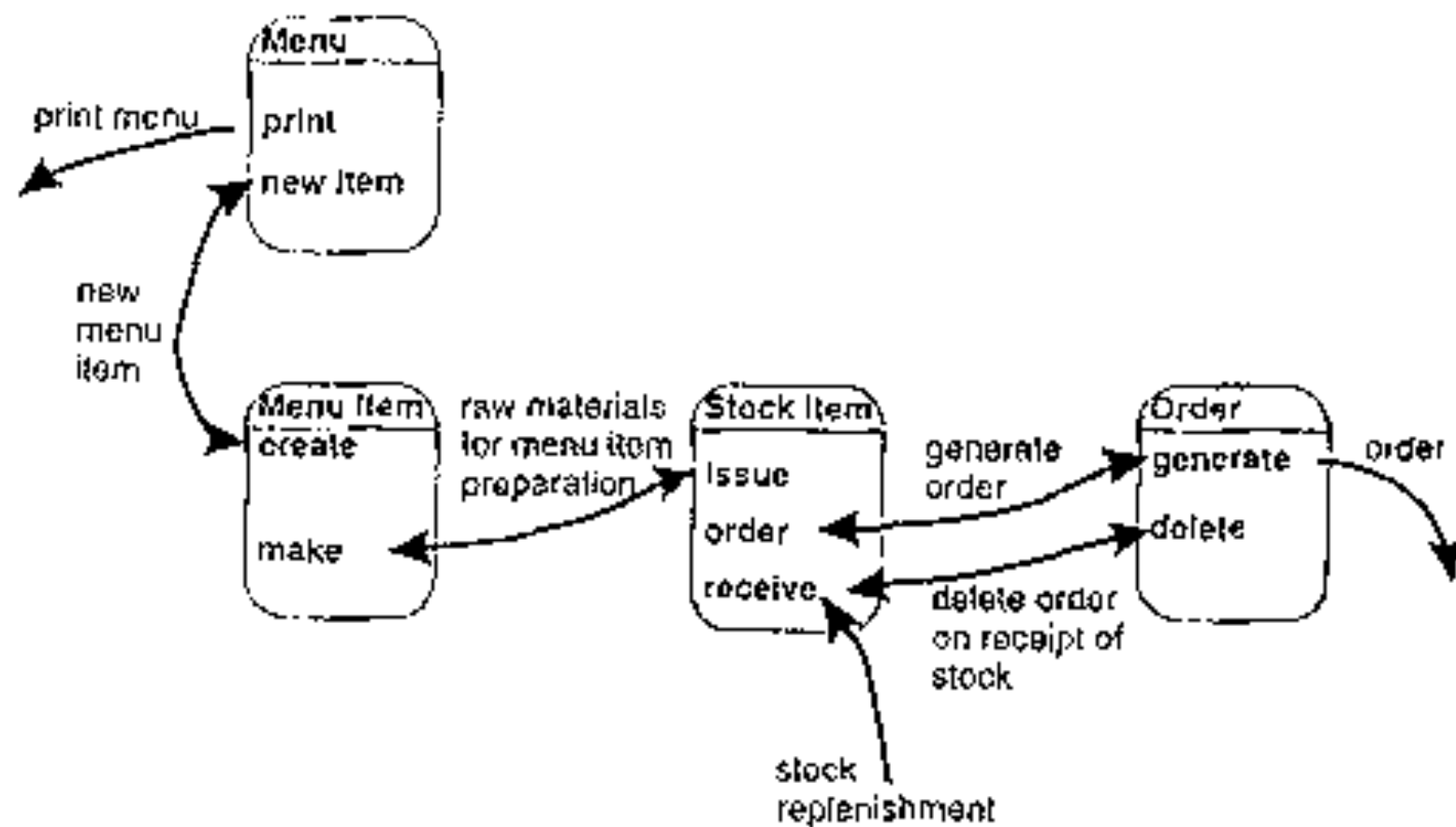


Figure 2.23 An example of an Object Interconnection Network Diagram.