

# ***GIS vs CAD. La specificità di un GIS.***

# Il Cad

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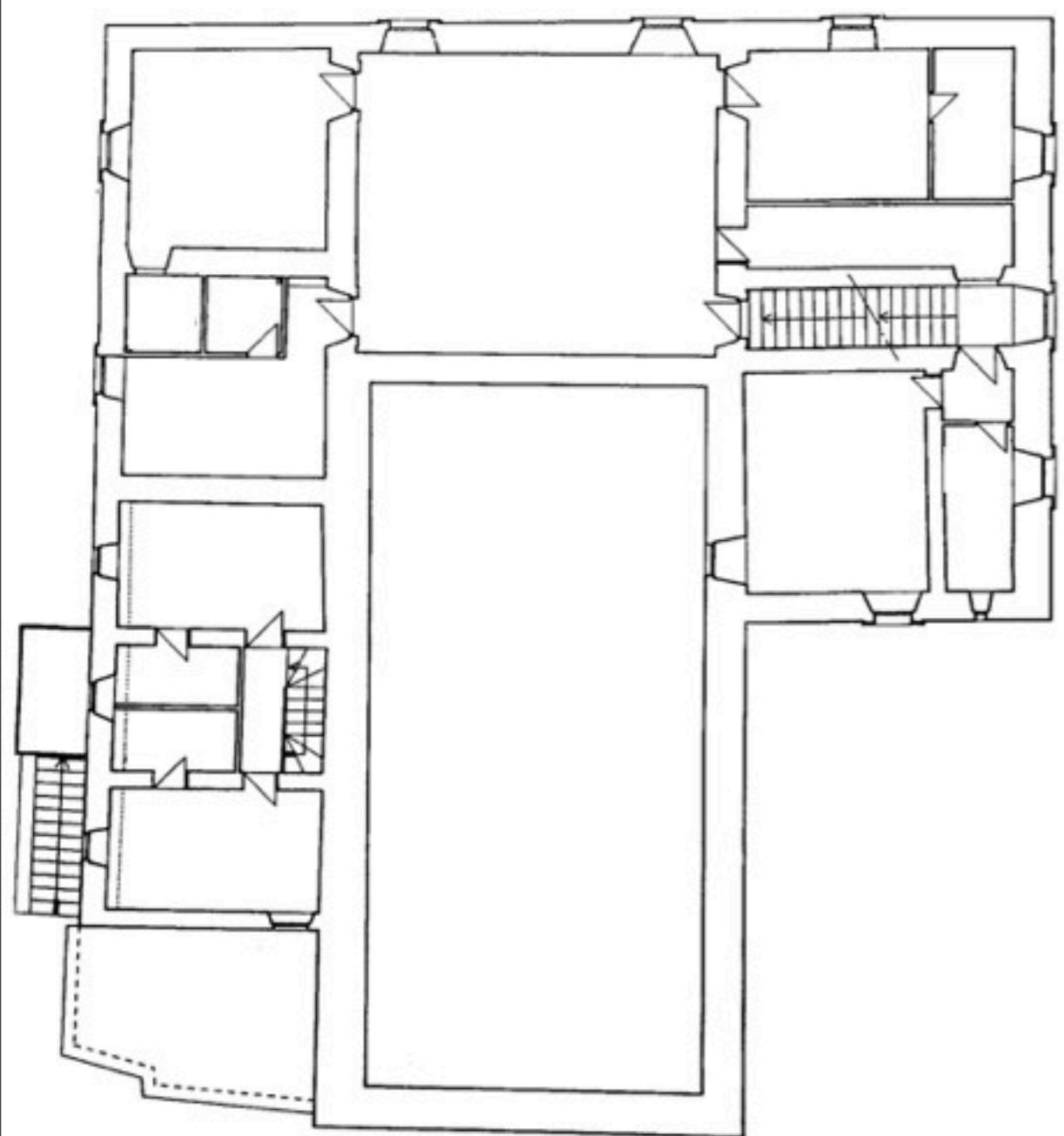
- Gestisce “entità” geometriche (punti, linee, poligoni, cerchi, spline, solidi platonici, superfici NURBS, testi).

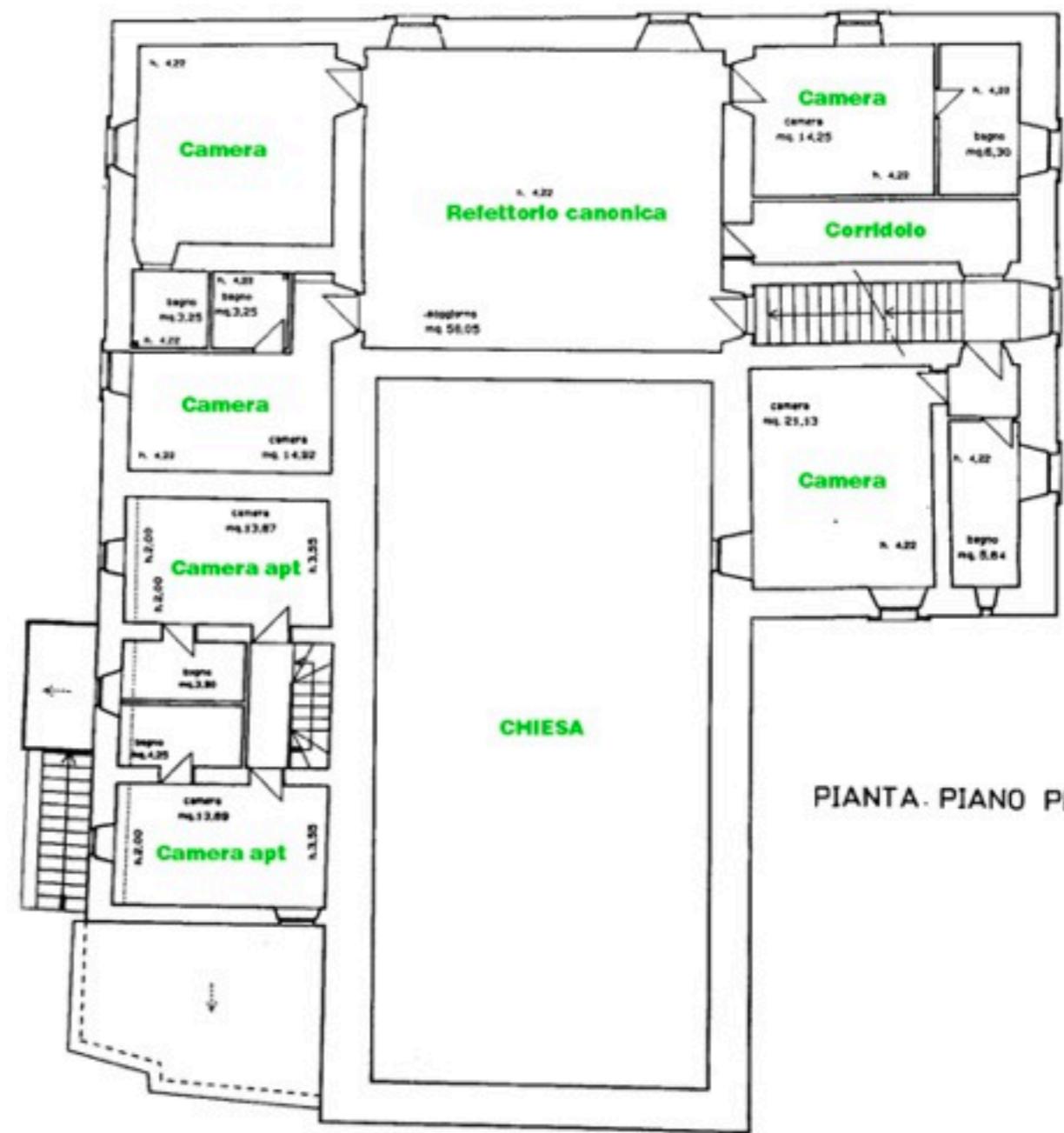
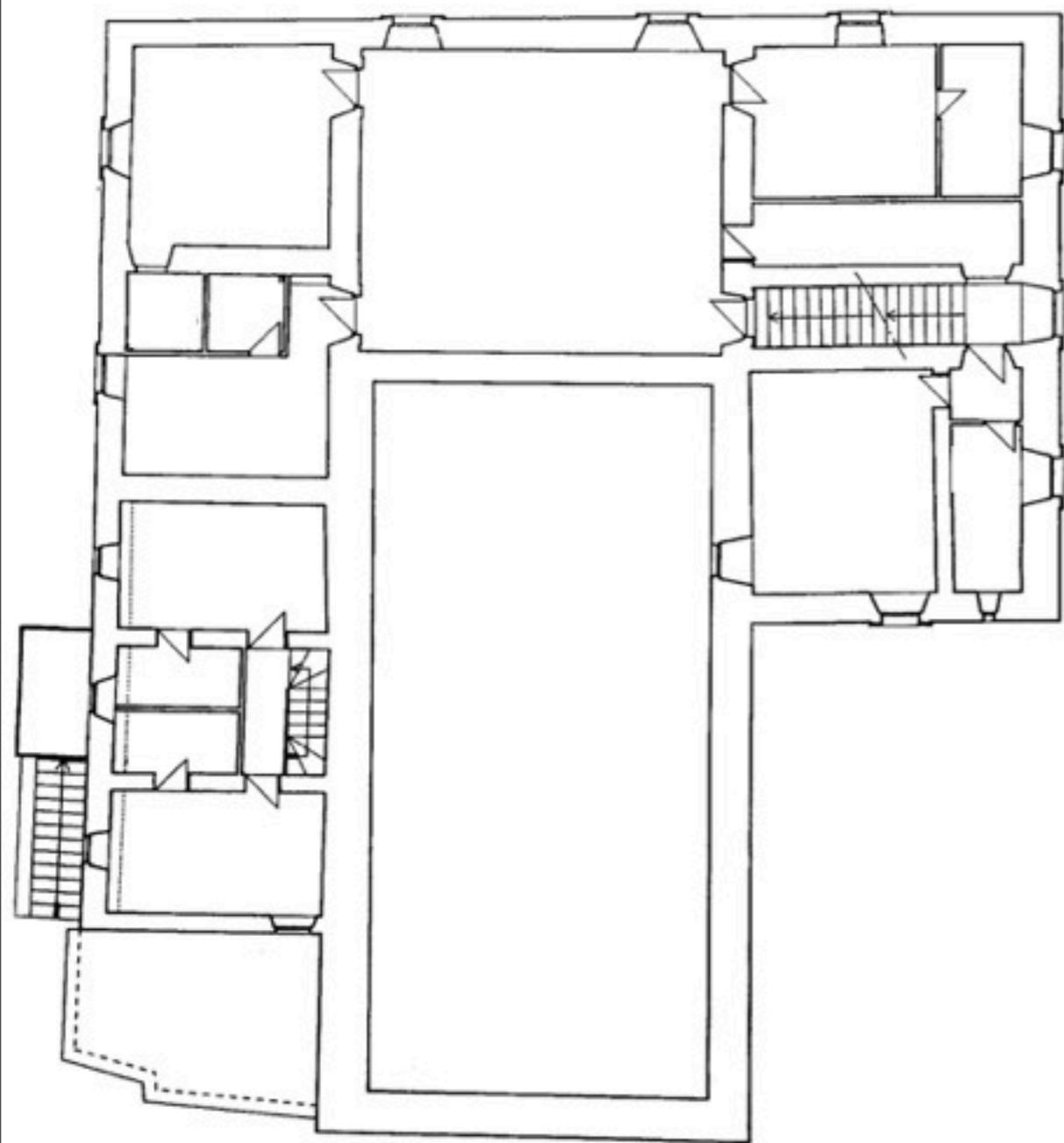
# Il Cad

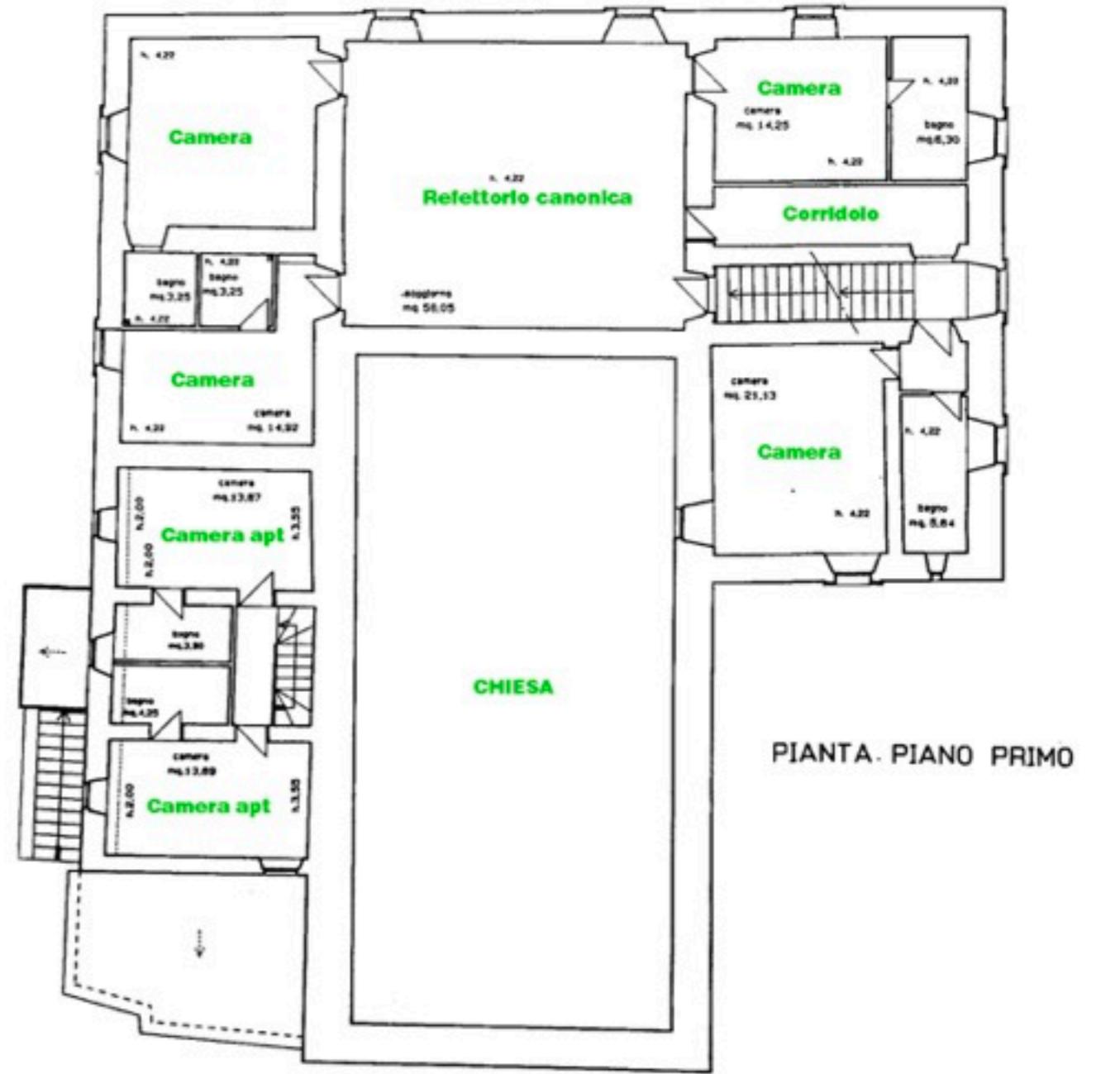
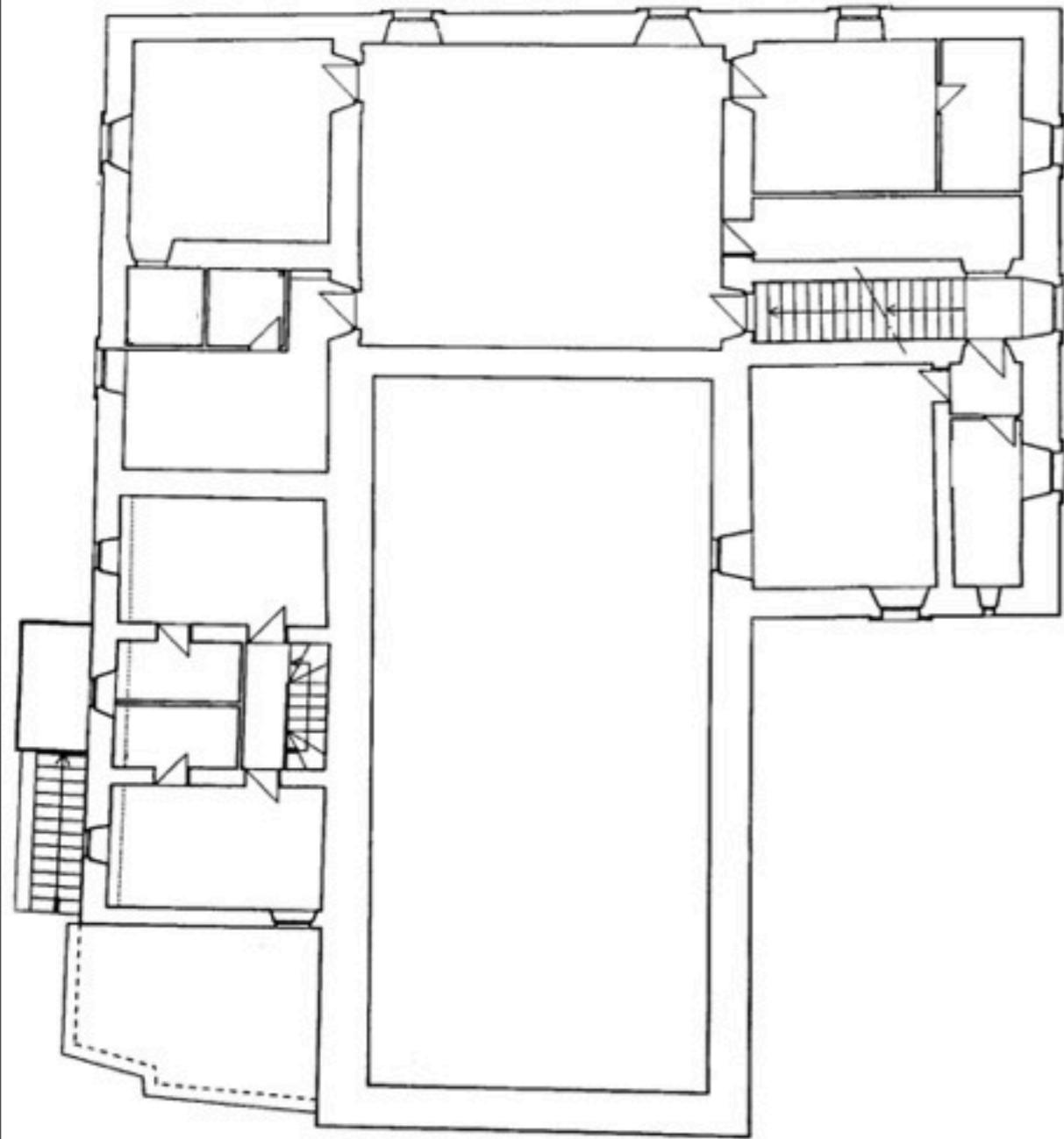
- Gestisce “entità” geometriche (punti, linee, poligoni, cerchi, spline, solidi platonici, superfici NURBS, testi).
- Fornisce potenti strumenti di disegno e manipolazione delle forme (array, stretch...), piuttosto che di rappresentazione bi/tridimensionale.

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- Fornisce potenti strumenti di disegno e manipolazione delle forme (array, stretch...), piuttosto che di rappresentazione bi/tridimensionale.
- Layer e blocchi sono i soli “meccanismi” per raggruppare entità tra di loro.







Il Cad considera le “scritte”, al pari di una linea o di un poligono. Non riconosce l’oggetto “refettorio” ad esempio

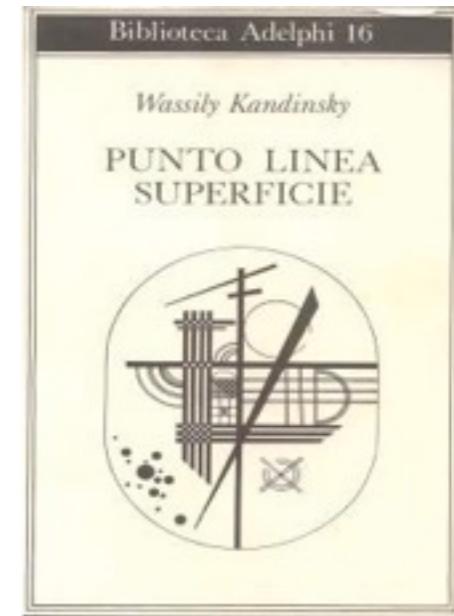
# Il Gis

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- Gestisce “solo” Punti, Linee e Poligonali chiuse, in forma semplice o multipla.

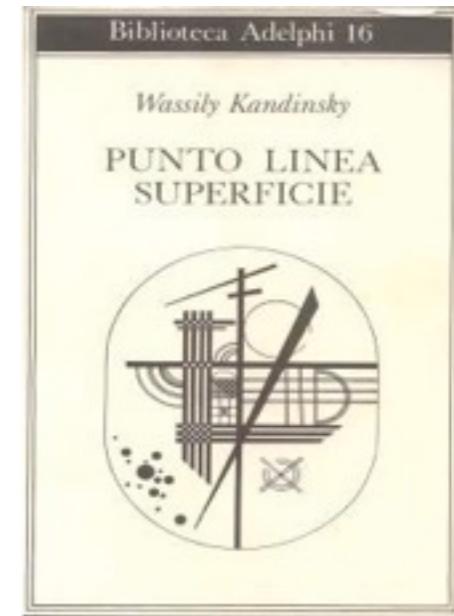
# Il Gis

- Gestisce “solo” Punti, Linee e Poligonali chiuse, in forma semplice o multipla.



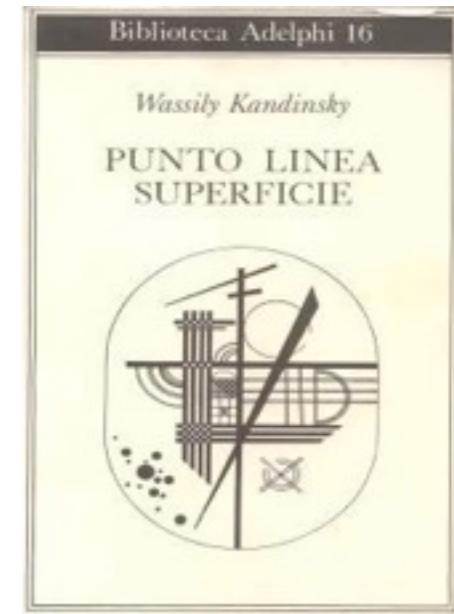
# Il Gis

- Gestisce “solo” Punti, Linee e Poligonali chiuse, in forma semplice o multipla.
- Associa ad ogni “entità” sopra descritta associa un “record informativo”, ovvero dati associati a quella specifica entità.



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- Associa ad ogni “entità” sopra descritta associa un “record informativo”, ovvero dati associati a quella specifica entità.
- Aggiunge il concetto di “topologia”, mettendo in relazione le entità tra di loro, secondo operatori logici booleani (intersezione, unione, appartenenza)



SIMPLE

POINT



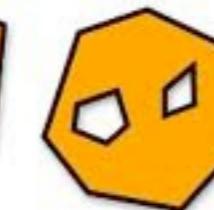
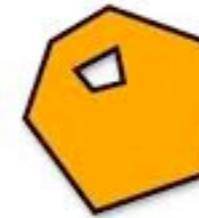
MULTI



LINESTRING



POLYGON



(1)

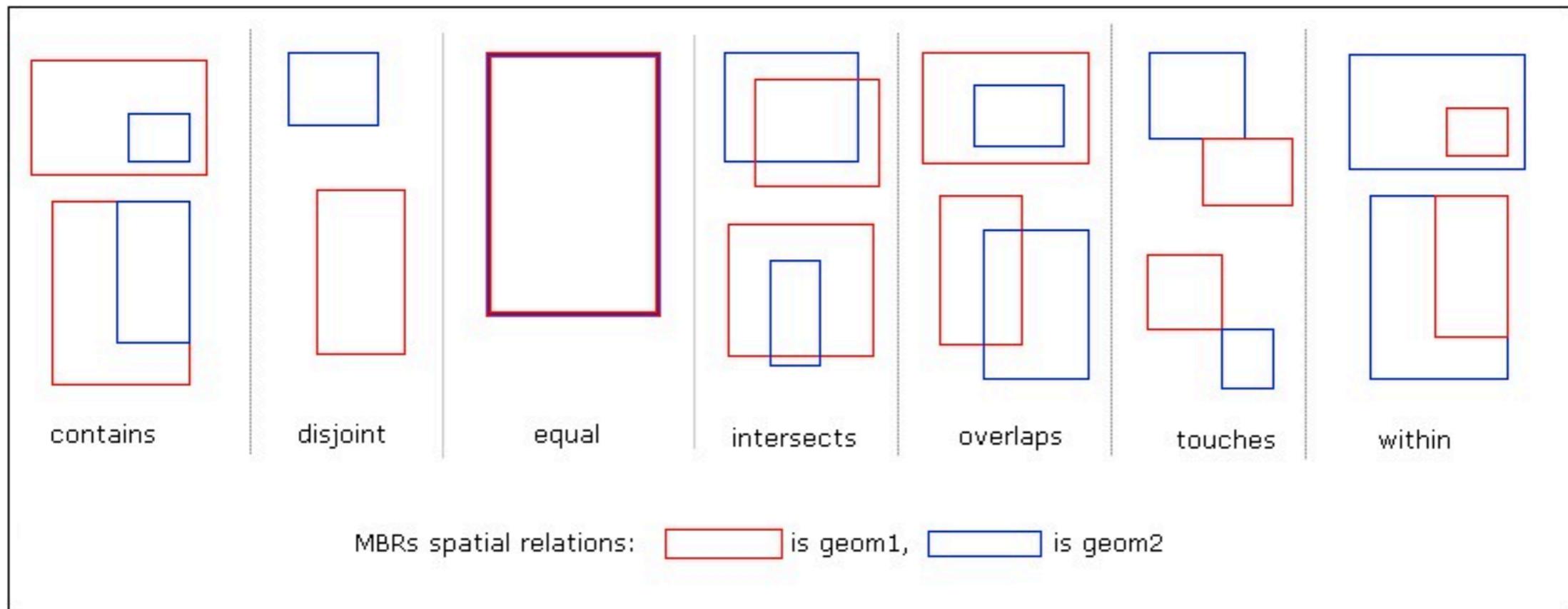


(2)

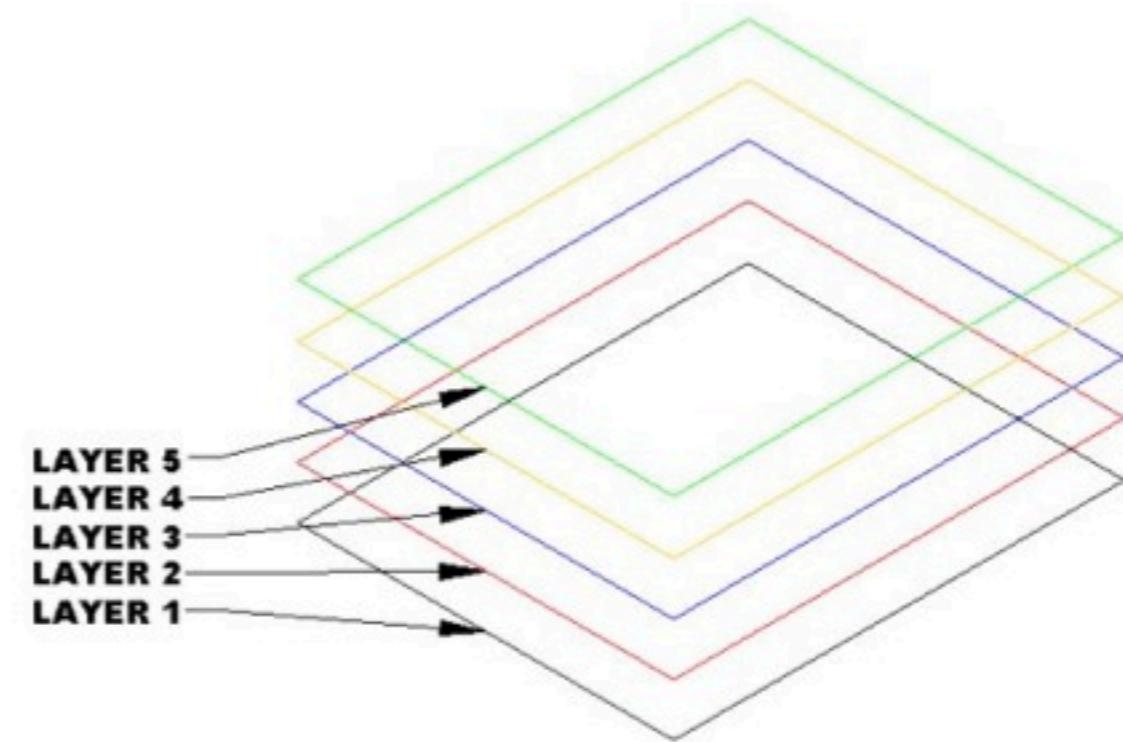
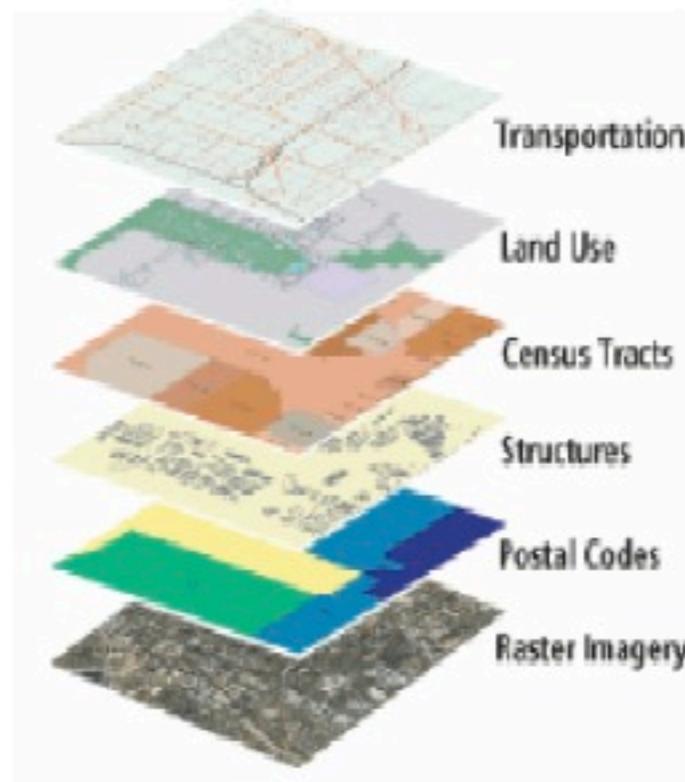
# OpenGIS spatial objects (W<sub>ell</sub>K<sub>nown</sub>T<sub>ext</sub>)

- POINT(0 0)
- LINESTRING(0 0,1 1,1 2)
- POLYGON((0 0,4 0,4 4,0 4,0 0),(1 1, 2 1, 2 2, 1 2,1 1))
- MULTIPOINT(0 0,1 2)
- MULTILINESTRING((0 0,1 1,1 2),(2 3,3 2,5 4))
- MULTIPOLYGON(((0 0,4 0,4 4,0 4,0 0),(1 1,2 1,2 2,1 2,1 1)), ((-1 -1,-1 -2,-2 -2,-2 -1,-1 -1)))
- GEOMETRYCOLLECTION(POINT(2 3),LINESTRING(2 3,3 4))

# Relazioni topologiche



# Tematismi, vestizioni e mappa.

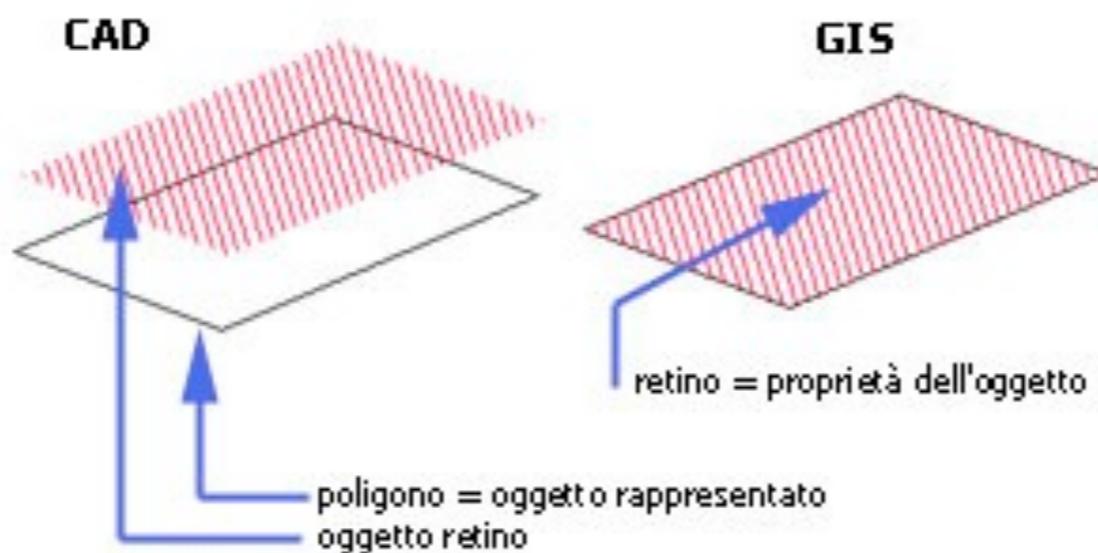


Associazione entità-livello

1 - molti

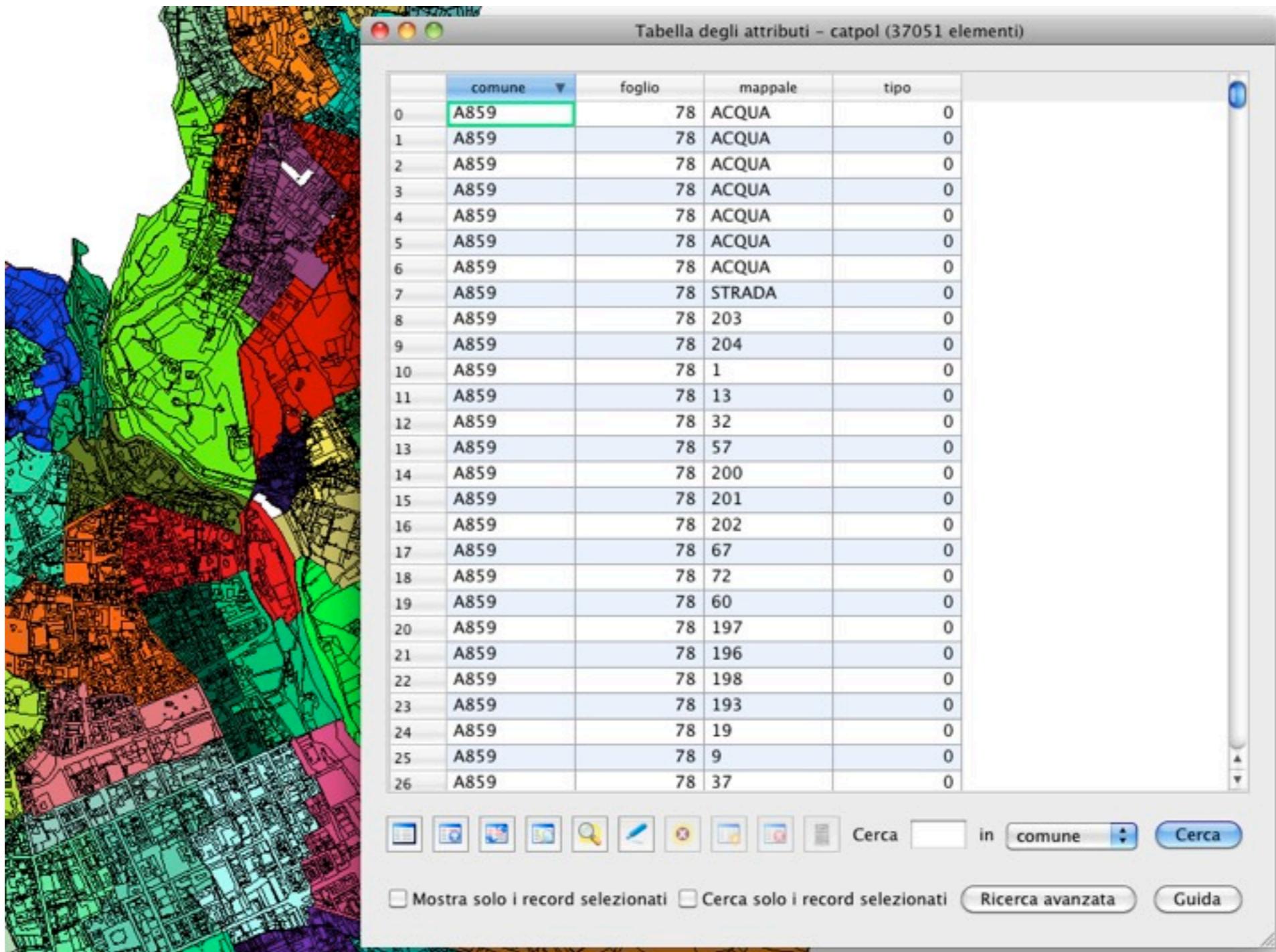
1 - 1

# .... vestizioni

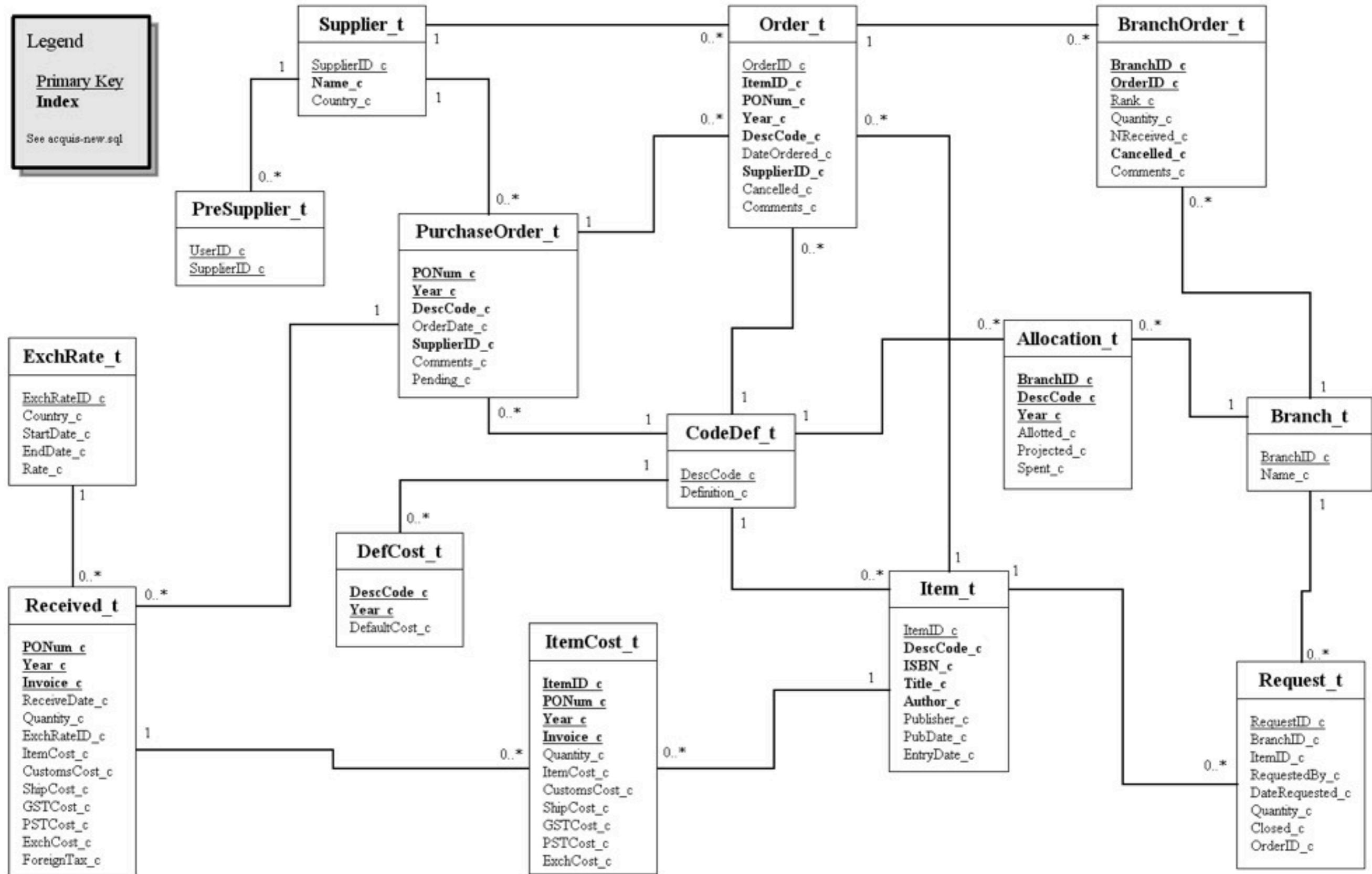


Nel Cad il “retino” è un oggetto, nel Gis una proprietà

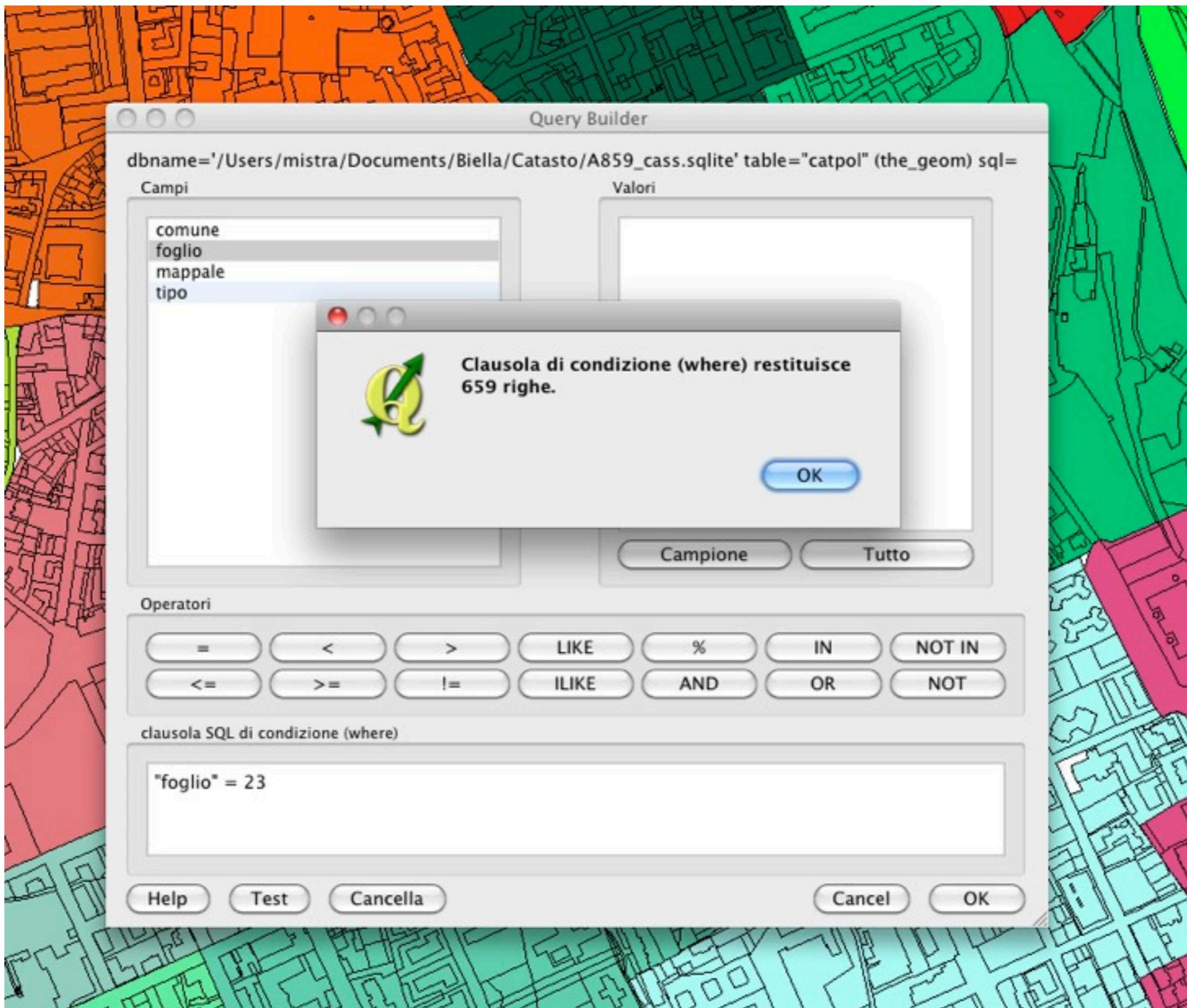
# Tabelle, database e interrogazioni



... database....



# ... e query.



# *Quantum GIS. Presentazione.*

 **Quantum GIS**

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The Quantum GIS project is pleased to [announce](#) the release of the QGIS version 1.6.0. Sourcecode and binary packages are available from the [download area](#).

# Quantum GIS

Version 1.6.0

## "Copiapó"

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**git - Poll**

How do you feel about QGIS moving away from SVN and over to GIT?

- Great idea! Please do it!
- I don't mind either way.
- I don't use code check outs or even know what the question means.
- Please don't do this!

**Welcome to the Quantum GIS Project**

Quantum GIS (QGIS) is a user friendly Open Source Geographic Information System (GIS) licensed under the GNU General Public License. QGIS is an official project of the Open Source Geospatial Foundation (OSGeo). It runs on Linux, Unix, Mac OSX, and Windows and supports numerous vector, raster, and database formats and functionalities.

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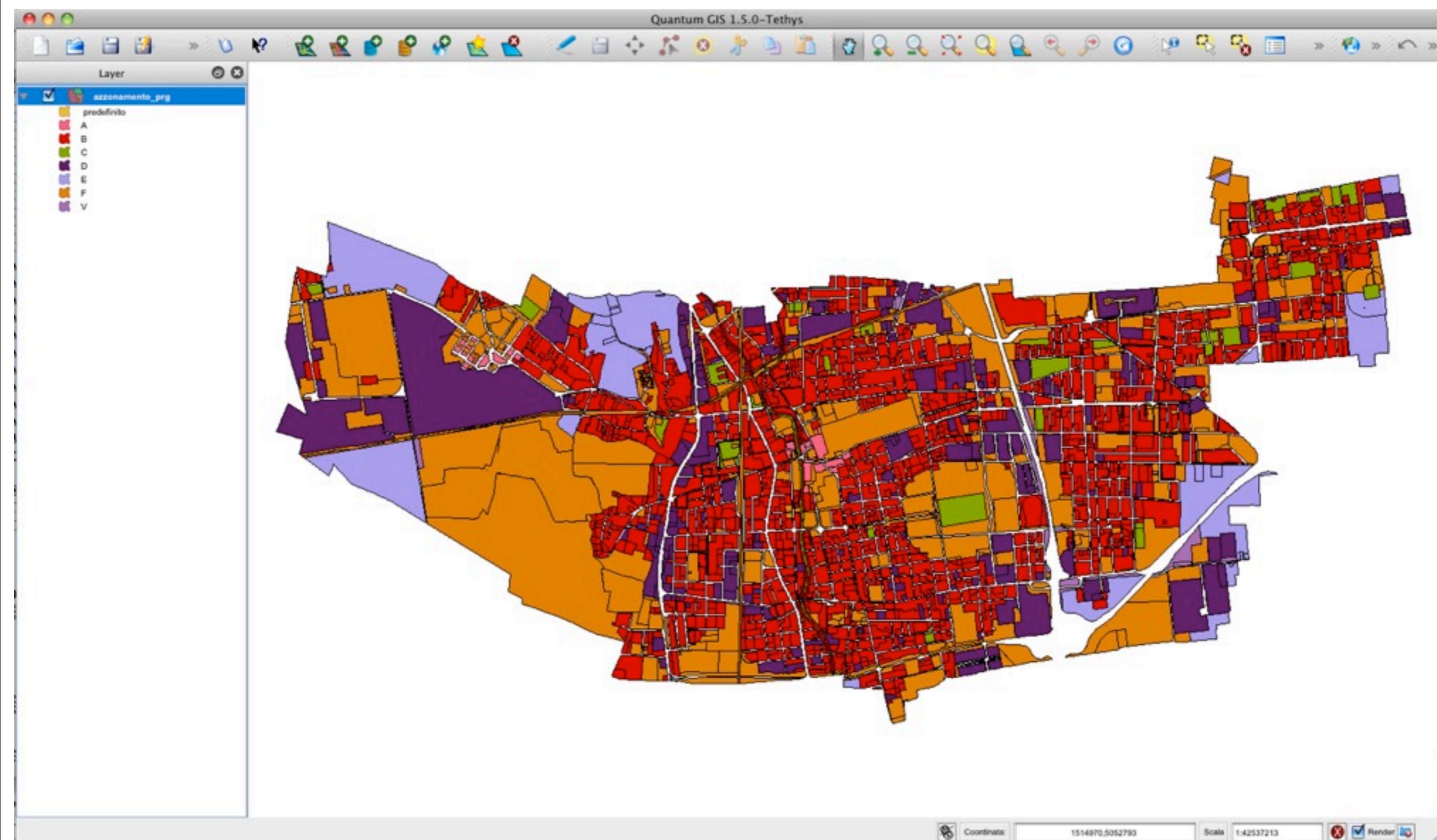
**Want to learn even more?**

Check the latest User Guide or learn how you can customize QGIS to fit your needs with our API Documentation and PyQGIS Cookbook.

**How to contribute**

Quantum GIS is a volunteer driven project. We welcome contributions in the form of code contributions, bug fixes, bug reports, contributed documentation, advocacy and supporting other users on our mailing lists and the QGIS Forum. If you are interested in actively supporting the project, you can find more information under the development menu and on the QGIS Wiki. We also welcome financial contributions in the form of sponsoring and funding.

# Il desktop di QuantumGIS



Zoom

[http://temi.provincia.milano.it/servizio\\_cartografia/sito\\_7/cartina/ctr\\_tot.html](http://temi.provincia.milano.it/servizio_cartografia/sito_7/cartina/ctr_tot.html)

<img alt="A map of the Province of Milan, Italy, showing administrative divisions and a grid overlay. The map is divided into several regions labeled with codes such as B5C1, B5A2, B5B2, B5C2, B5A3, B5B3, B5B4, B5C3, B5D3, B5D4, B5E3, B5E4, B5F3, B5F4, B5G3, B5G4, B5H3, B5H4, B5I3, B5I4, B5J3, B5J4, B5K3, B5K4, B5L3, B5L4, B5M3, B5M4, B5N3, B5N4, B5O3, B5O4, B5P3, B5P4, B5Q3, B5Q4, B5R3, B5R4, B5S3, B5S4, B5T3, B5T4, B5U3, B5U4, B5V3, B5V4, B5W3, B5W4, B5X3, B5X4, B5Y3, B5Y4, B5Z3, B5Z4, B6A1, B6A2, B6A3, B6A4, B6B1, B6B2, B6B3, B6B4, B6C1, B6C2, B6C3, B6C4, B6D1, B6D2, B6D3, B6D4, B6E1, B6E2, B6E3, B6E4, B6F1, B6F2, B6F3, B6F4, B6G1, B6G2, B6G3, B6G4, B6H1, B6H2, B6H3, B6H4, B6I1, B6I2, B6I3, B6I4, B6J1, B6J2, B6J3, B6J4, B6K1, B6K2, B6K3, B6K4, B6L1, B6L2, B6L3, B6L4, B6M1, B6M2, B6M3, B6M4, B6N1, B6N2, B6N3, B6N4, B6O1, B6O2, B6O3, B6O4, B6P1, B6P2, B6P3, B6P4, B6Q1, B6Q2, B6Q3, B6Q4, B6R1, B6R2, B6R3, B6R4, B6S1, B6S2, B6S3, B6S4, B6T1, B6T2, B6T3, B6T4, B6U1, B6U2, B6U3, B6U4, B6V1, B6V2, B6V3, B6V4, B6W1, B6W2, B6W3, B6W4, B6X1, B6X2, B6X3, B6X4, B6Y1, B6Y2, B6Y3, B6Y4, B6Z1, 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