

5.1.4. Combining socio-economic data

Urban evolution assessment generally requires very complex analyses combining different types of data and information. A territorial database is very well suited for this purpose, for instance associating the population density, as in the case of Vienna, to the residential areas identified by the Murbandy/Moland database. In this casestudy, it has been possible to introduce a corrective factor: instead of being uniformly distributed over the overall area, the

population has been re-distributed only in residential areas, ignoring those zones where the population number was obviously zero: wetlands, forests, etc. The map obtained has then been overlaid onto the population numbers of every administrative jurisdiction. The exact position of highly densely populated areas is immediately visible. It can be noticed that these areas do not always coincide with the most populated ones, according to administrative boundaries, and vice versa.

Correlation between the growth of residential and green urban areas in Lyon (France) from 1956 (left) to 1997



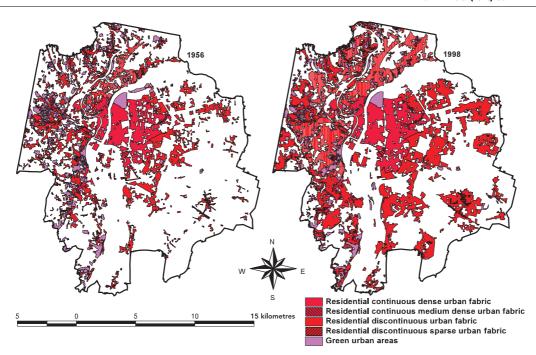
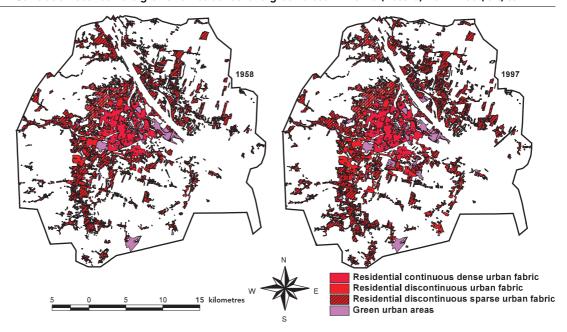


Figure 5.23

Correlation between the growth of residential and green areas in Vienna (Austria) from 1958 (left) to 1997



Among the broad spectrum of applications that can be derived from the database, the combination of territorial parameters and socio-economic data is perhaps the most interesting one, showing for example how the evolution of industrial and commercial

sites can be associated with the movement of commuters during different time periods. Other features, such as the transport network evolution, can be added for cross-sectoral analyses.

Figure 5.24

In many cases the percentage of green areas (parks and gardens) within the urban domains is decreasing.

