

## About Towns, Ecology and the Land: lessons learned from an Italian point of view

**Catherine Dezio**  
MArch PhD, Politecnico di Milano  
[catherine.dezio@polimi.it](mailto:catherine.dezio@polimi.it)



It is now recognized that ecosystems management is a key factor for the good ecosystems functioning. Since the unaltered systems are few, humans are to be considered as fundamental actors in ecological systems. For years urban ecology has been studying the interactions between urban and natural systems. Richard Forman with his latest book *“Towns, Ecology and the Land”* coined the *“town ecology”*: a pioneering and extremely fundamental science as, despite the unstoppable urbanization, the territories of towns still cover half of the global surface and on them depends the supplying of natural resources for big cities. Here Forman analyzes and conceptualizes the ecological functioning of towns, with the scientific and passionate method which distinguish-

es him. To write the volume, Forman visits 55 towns belonging to 6 continents and 16 different nations (2 in Italy: Pompeii and Sorrento), identifying 20 types of towns and hundreds of specific places. With those visits he was able to find a common denominator of the universal validity of the town concept, preserving the specificity of individual realities at the same time. Moreover, the site visit is once again, as for the urban and landscape planners, a fundamental moment for knowledge and abstraction (the Italian planner Bernardo Secchi said *“the research concerning territories is done with feet”*). And even the volume itself, expressly tailored to different professionals, directs knowledge to the project, with a

view to maintaining and enhancing the ecology of towns.

The volume is divided into four parts that constitute a linear and scientific process: the first part is descriptive, so it describes the essence, the characters, the functioning of the towns; the second part is analytical, so it goes into the depth of the ecological components of the towns (air, water, soil, flora, fauna); the third part we can say being more ‘interpretative’, as it reads interactions between the territories of the towns and the anthropic activities that influence them; the fourth and last part we can describe it as ‘projectual’, since it looks ahead, abstracting the principles learned and identifying new challenges for the management of the towns.

Each chapter begins with a roadmap of the paragraphs, whose titles often coincide with simple and basic questions that guide the reading. The style is scientific and engaging at the same time, inserting literature references or personal anecdotes in the smooth and rigorous writing. A rich block of images, mostly taken by the author himself, accompanies the volume.

In the first part Forman presents us the towns. He describes the size and shape of the towns, which are different in the population range according to the country in which they are located (small towns: 2,000-5,000; medium towns: 5,000-20,000; large towns: 20,000-30,000), and he distinguishes towns from objects more similar to them (*"Villages are smaller than towns and towns smaller than cities"*). He outlines the town anatomy and the typological classification that

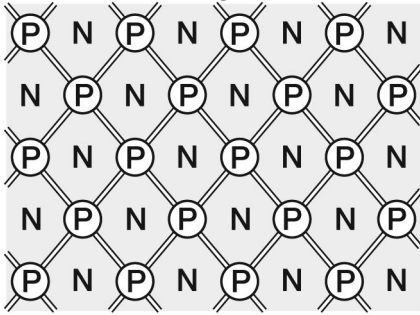
derives from their settlement form. He presents the surrounding territories and their functioning through the description of flows and movements of people, vehicles, water, air and fauna. He identifies the processes that led to town foundation and the current and future ones (i.e. climate change and shrinking) for which specific adaptation and planning skills are required. He tells who are the residents of the towns and the interactions between them and the territories that they inhabit, giving us the identity image of towns: the authentic and genuine lifestyle; the lack of jobs and the increase of elderly people; the tangible and intangible cultural heritage that is part of the great wealth of resources that represents beauty, identity and memory of these places (i.e. the rural heritage as meeting point between the natural, economic and cultural system).

In the second part the author

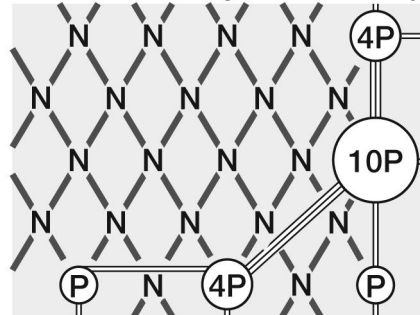
goes in depth describing the ecological characters and functioning of the town ecosystems, always through different and punctual examples deriving from the 55 visits: the characters of the soil and the quality of the air; the water resources and management; the herbaceous species and their location; the local biodiversity; the fauna characterizing different geographical climatic contexts (i.e. the different birds in the American towns and those in the European towns) and the ecological chains that are linked to it (i.e. the cat predators).

In the third part *"we begin to weave the threads into patterns"*. Forman describes the complexity of the interactions between the towns and the human presence, inside and outside their borders. Firstly the 4 main parts inside the towns are analysed (commercial town centers, edge-of-town commercial centers, industrial centers, residential are-

(a) Fragmented nature  
Connected villages

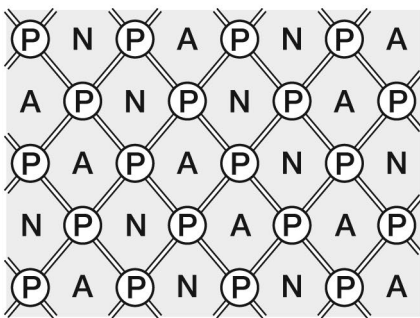


(b) Connected nature  
Connected villages, towns, + city

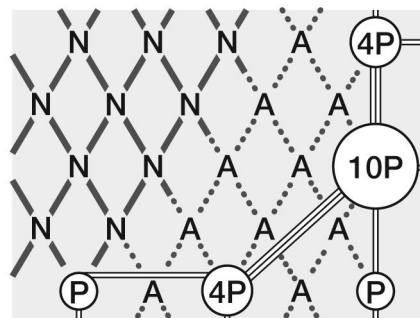


N	Natural land
A	Farmland
R	River system
P	Village; 4P town; 10P city

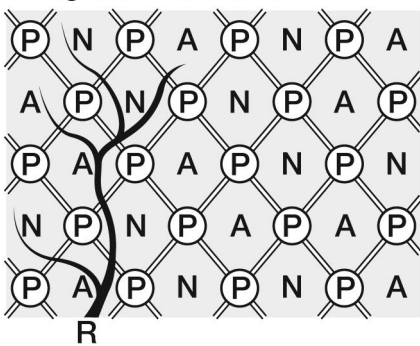
(c) Fragmented nature  
Connected villages  
Dispersed farmland



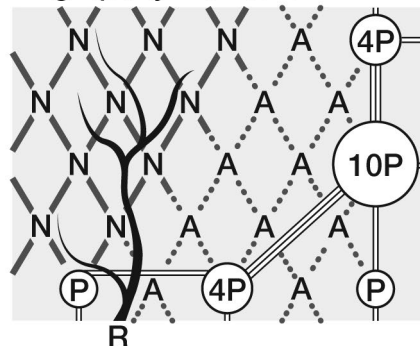
(d) Connected nature  
Connected villages, towns, + city  
Connected farmland



(e) Fragmented nature  
Connected villages  
Dispersed farmland  
Degraded river network



(f) Connected nature  
Connected villages, towns, + city  
Connected farmland  
High quality river network



as) and the relative conditions, such as the microclimate and the water quality. Later the author describes what happens outside the towns, or the agricultural and forest landscapes

around them and their management methods, how they influence the towns and vice versa as they are influenced. At the end of this part the author analyzes the transport network and how it in-

fluences the flows of the ecological system.

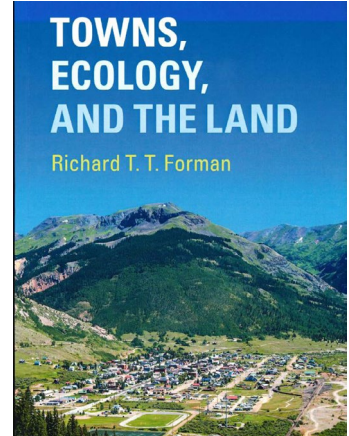
In the fourth and last part “we now briefly look ahead”. Forman here tries to answer the question “what have we learned that can

The book cover, Colorado, USA.

**opposite page**

Modeling spatial options for a viable future for nature and us.

Photograph courtesy of Prof. Richard T. T. Forman, Harvard University, Graduate School of Design.



*be put to use*” through the abstraction of principles grouped by families: habitats principles, biodiversity principles, plants and vegetable principles, etc. More importantly, the author exposes the risks of the towns and leads the reader to antifragility goals, pushing forward suggestions for sustainability-oriented planning and management.

Now we focus on a paragraph located in this last part, that deals with problems and solutions for the ‘*shrinking town*’. Here we definitively recognize the profile of what was already familiar during the reading, so the image of our Italian “*inner areas*”: rich in natural and cultural resources but underdeveloped in terms of essential services, public transports and job opportunities, and for this reason they are subject to depopulation and aging (“*Towns and villages losing people has become the worldwide norm*”). The

author responds once again to the pragmatic question “*what can be done*”, through precise and replicable suggestions: support by a city, encourage the elderly, help immigrants, diversify socio-economic dimensions, optimize the use of surrounding resources, etc.

From here we can deduce how the ecological approach proves to be congenial for a concrete revival of our inner areas, thanks to a sustainable development based on endogenous resources.

Then, the path taken by the volume, descriptive, analytical, interpretative and proactive path, brings to light the fascinating complexity of the towns: “*the entire human population depends on the food and resources on the land of towns and villages. [...] Understanding the ecological patterns, processes, and changes in this people-and-nature area should be a priority*”.

Consistent with this, the author

dedicates a paragraph to a brief and effective text analysis of one of his famous sentences, which well sums up the overall intent of the volume. “*Mold the land so both nature and people thrive long-term*” (Forman, 2008): “*mold*” means “*do something*”; “*the land*” means “*a large area*”; “*both nature and people*” means equal importance between the social and natural system; “*thrive*” means that everyone has the same rights; “*long term*” refers to the intergenerationality of resource management.

It’s also with this simple but effective sentence aimed to the reader that we can realize how “*Towns, Ecology and the Land*” stands as an extraordinary volume for its versatility: the didactic usability of a manual, the multisectoral complexity of an encyclopedia, the original and inspiring depth of a scientific product, and the consultative capacity oriented to place-based policies.