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Landscape architecture and sustainable energy transition.

Designing for renewable energy policies from the Italian perspective.

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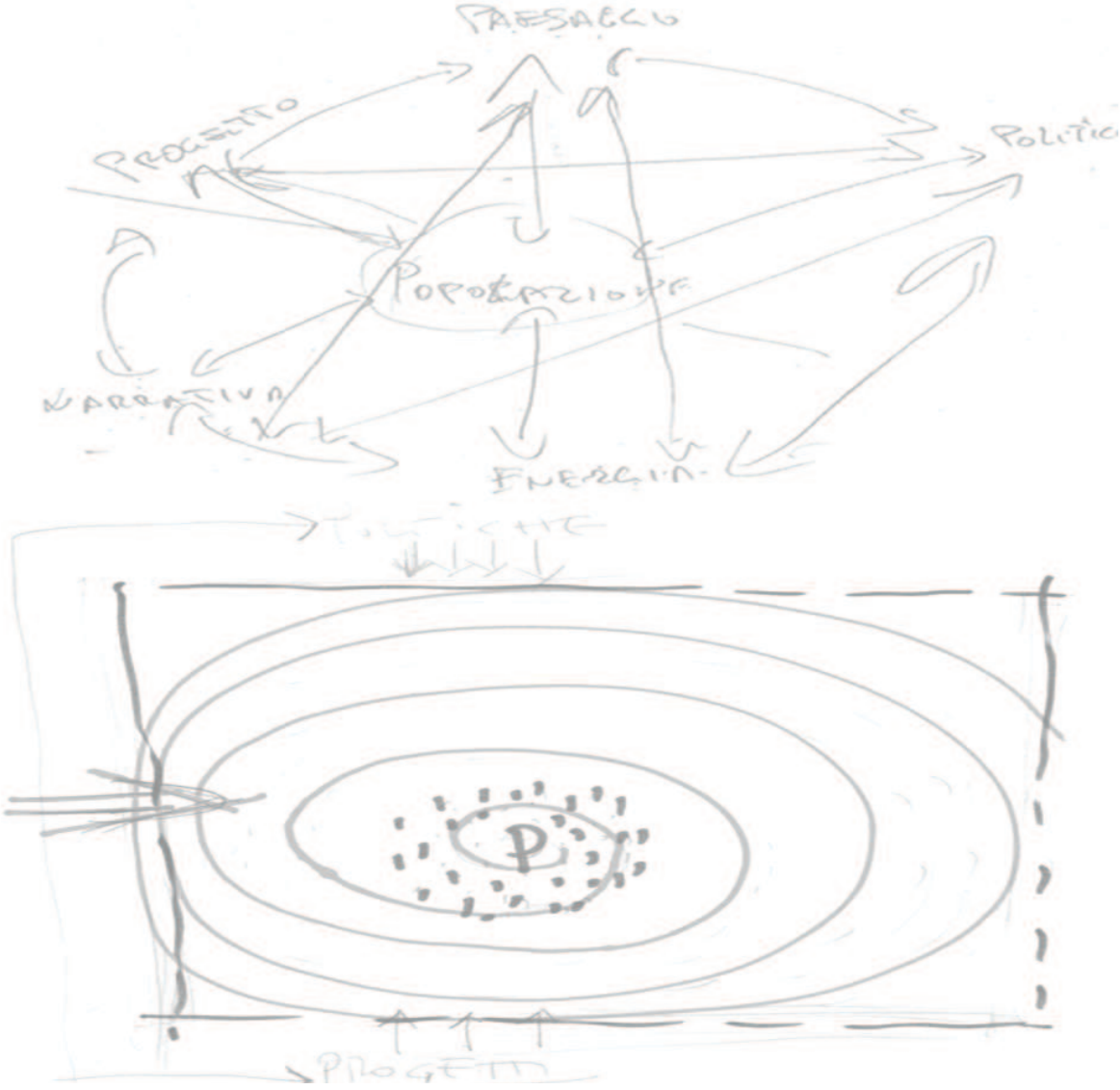
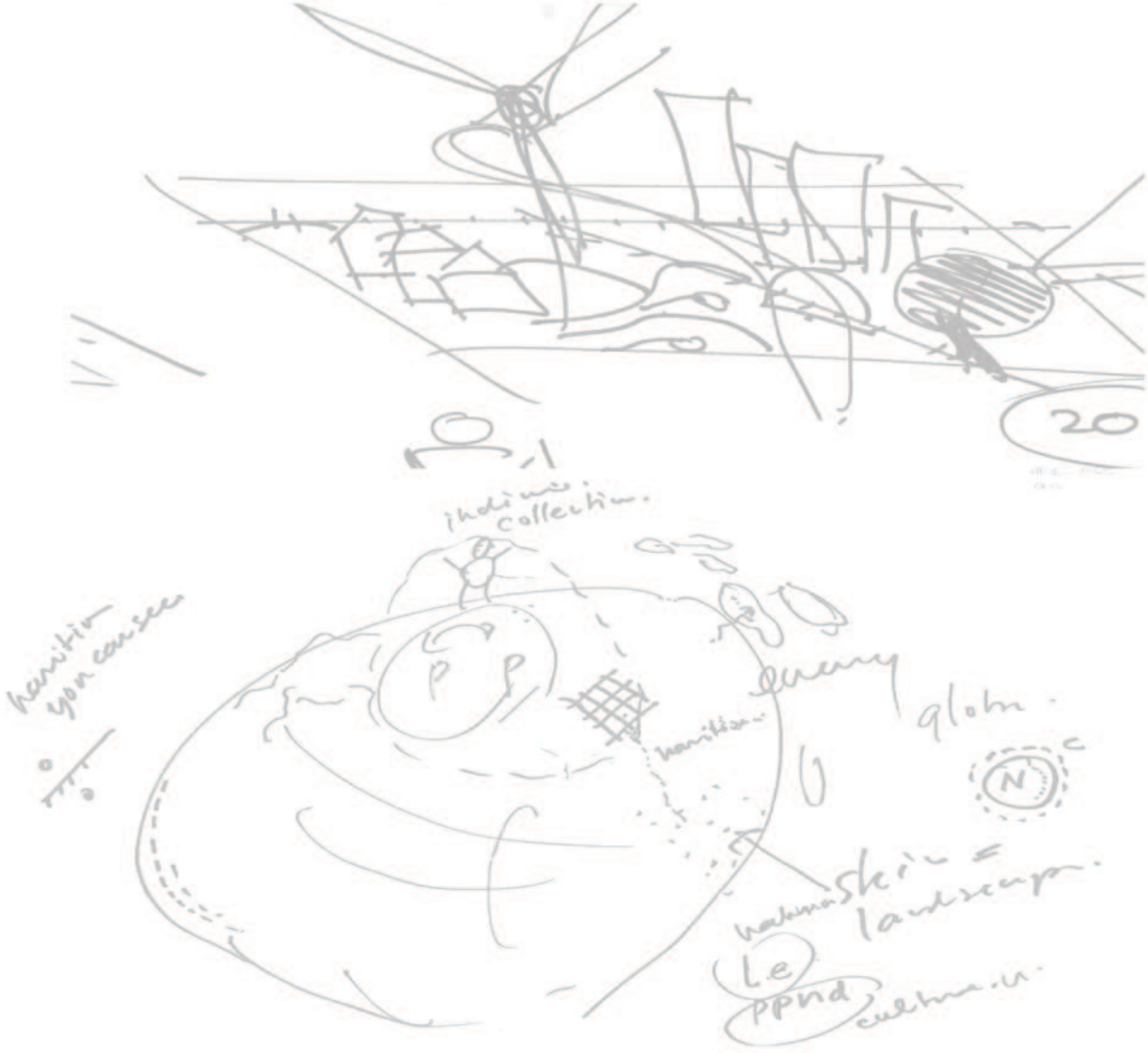


Landscape architecture and sustainable energy transition

Designing for renewable energy policies
from the Italian perspective

Silvia Minichino



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and Steven Slabbers,BOSH SLABBERS.

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Electrical power lines, Corsico, Milano, Italy.
(S. Minichino)

Electrical power lines, Hoeksche Waard, South Holland, The Netherlands .
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Water storage for hydroelectric power plant, Caccamo, Macerata, Italy. (S. Minichino)

Abstract

The discipline and profession of landscape architecture is rooted in design and uses a design approach based on sliding spatial-temporal scales. Recently, landscape architecture has started dealing with the emerging paradigms of complexity and sustainability (Musacchio, 2009b). In order to contribute to these paradigms, landscape architecture proposes a collaborative approach aimed at the democratization of design processes. Due to this reason, landscape architects are more and more involved in the emerging field of sustainable transitions which, for instance, concerns climate change, water management and energy.

Renewable energy deployment is one of the strategies to promote sustainable energy transition (Strong, 1992). This kind of process involves the whole territory and deals both with the formulation of energy strategies and with their implementation. These actions occur on different spatial scales and involve an increasing number of actors.

The main objective of this research work is to investigate the contribution of landscape architecture to sustainable energy transition, focusing mainly on Italy. To this end, this research wants to explore how landscape architecture can bridge the gap between the formulation of renewable energy strategies and their implementation.

This research grounds on two propositions: the first one is that landscape design, which is at the core of landscape architecture, can provide information for energy plans and energy policies. The second one is that landscape design is also a means for integrating the landscape into sectoral policies, especially those regarding renewable energy.

This research work follows the *research on design* approach (Deming & Swaffield, 2011) and considers as case studies Italy and the Netherlands. Energy-related landscape architecture projects are analyzed in both countries. Moreover, I created and then analyzed renewable energy-related precedents as embedded cases, according to the *transition management theory* (Loorbach & Rotmans, 2010).

This study has three main outcomes: the first one shows that landscape architecture-sustainable energy transition link has a powerful role in dealing with renewable energy deployment and the second one demonstrates that landscape design processes and products, elaborated at the site scale, are also used for energy spatial visions. Finally, the third one shows that such operational knowledge, if strategically used, can be essential to provide information for energy-related decision making processes, as well as for the formulation of renewable energy policies.

In Italy, as elsewhere, the embedded cases analyzed showed that landscape architecture knowledge and skills have started to be used for the formulation of renewable energy strategies at different levels of the territorial governance. Therefore, landscape design has started to be envisioned as a method to discuss various design solutions. Starting from the discussion on landscape design, the formulation of renewable energy policies includes landscape development scenarios.

Wind turbine, Pontedera, Pisa, Italy.
(S. Minichino)

Wind farm, Groningen, The Netherlands.
(S. Minichino)