Design guidelines for landscape integration in territorial transformation

Les Lignes directrices du projet pour l'intégration du paysage dans les transformations territoriales

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Introduction

Why the guidelines

✓ A helpful tool to diffuse best practises in landscape transformations
✓ They are beside the law

Guidelines are usually more sensitive to environmental components
✓ there were a need of guidelines considering landscape as a palimpsest of traces and signs
→ formal, symbolic and visual signs
Introduction

Scale
National
Local

Inspired principles

Codice dei Beni culturali e del Paesaggio (2004 and foll modif.) Cultural heritage and landscape code, Ministry of Cultural heritage

DPCM 12 dicembre 2005 Landscape report
→ Both are concerning protected landscapes

 образом enlargement to any landscape due to European landscape convention → ratified by Italian government in 2006 (11/01/06)
Objects

✓ Rural buildings
  • Recovery, enlargement of existing rural buildings
  • New construction of agricultural buildings

✓ Technical equipment
  • Equipment with a strong technical component.
    In particular:
    1. the energy system and its various production and transmission components, with particular reference to the renewable source energy production plants from (particularly wind and solar)
    2. network and telecommunication systems (radio, television and telecommunications)
Commitments

→ MiBAC_Ministry of Cultural heritage and Tourism

→ South Agricultural Park Milan

→ Lombardy region

→ Foggia province
Guidelines structure

The guidelines are divided in two sections:

1. “landscape knowledge”: it gives tools in order to read and value the landscape.

2. Suggestion of landscape project principles referring to the different categories of analyzed works

The guidelines offer:

- a relevant iconographic resource
- an overview on bad and good projects realized in Italy and abroad.
- examples about the project research.

They are the result of a network among expert people (academics, technicians, administrators, professional experts);

They are based on the practice that helps to direct the suggestions (research by design).
Landscape knowledge

Proposed analysis:

✓ Defining of the study area and scale
✓ Law, protection tools and rules
✓ Survey
✓ Historical permanencies, remnants
✓ Landscape social perception (historical and lately) and meaning of the places (historical and lately)
✓ Landscape architecture

We consider the landscape as a system, underlining the different relationships (functional, symbolic and sensorial) among the different elements.

Guidelines give a lot of suggestions about sources, tools, information technology instruments and how to draw and communicate an issue. (In Italy one of the main problem is the lack of an effective communication of landscape characters)

Landscape is not only the territory and it is not enough a functional description about the land use.
Reading the landscape

✓ Reading landscape architecture

From «Linee guida per la valutazione paesaggistica degli impianti di produzione energetica da fonte rinnovabile nella provincia di Foggia», 2012
Reading the landscape

✔ Site architecture

Reading the landscape

From «Gli impianti eolici: suggerimenti per la valutazione e la progettazione paesaggistica», 2006

Fig. 5. L'architettura del luogo: fotografie comparatistiche e "lessicodiagrammi" sono in Francia strumenti privilegiati per la lettura delle caratteristiche di un paesaggio. La fotografia riprende, compositamente, la percezione visiva di un luogo i cui caratteri essenziali sono evidenziati dal commento. Gli schemi, più simbolici e sintetici, mostrano gli elementi che donano identità e unità al paesaggio oggetto di studio.

Fig. 6. L'architettura del luogo: in Inghilterra gli schizzi comparativi sono un utile strumento per la lettura delle caratteristiche del paesaggio e, in particolare, per una comparazione diornealmente differenti illustrati nel paesaggio. Sono, inoltre, efficaci mezzi di sintesi e di contromazione dei caratteri passaggistici nei "mappe" di analisi del paesaggio degli strumenti di pianificazione o di altra genere.

Fig. 7. L'architettura del luogo: la percezione visiva: sono realizzate le relazioni visive tra l'isola dei Cipressi ed il suo luogo mediante l'individuazione di alcune aree, punti a sorgenti panoramiche localizzati lungo le principali direttrici stradali e pedonali che circondano il lago di Pausiano. Lungo tali percorsi sono state individuate anche le barriere visive, da architettura che vegetali. Sono stati così tracciati i limiti di permeabilità ed impenetrabilità dell'isola dei Cipressi rispetto alla sponda del lago.

Fig. 8. L'architettura del luogo: la tavola individua diversi punti di paesaggio che valutano a seconda della distanza dal piano immediato in cui si posizionano, al piano in cui si individua l'area oggetto di progetto, al piano immediatamente dietro la figura, i punti di stacco sono quelli percepibili in modo variabile a variare le condizioni atmosferiche.

Modway Valley - typical landscape characteristics
Reading the landscape

✓ The landscape system

✓ Synchronical analysis

From «Fabbricati rurali e paesaggio: suggerimenti per la valutazione e la progettazione paesaggistica», 2014
Landscape design criteria

Design criteria are illustrated through (referring to the law):

- explanation of good and bad practices;
- comparison with international experiences;
- design simulation in different landscape situation/contest.

A useful tool to verify the good quality of the design it is a check-list to prove/check:

- all the parameters to be taken into account in the analysis;
- the correct and essential documentation to deliver;
- a clear and more objective motivation of the project.
Interventions on existing buildings

Relationship with historical permanencies

From «Fabbricati rurali e paesaggio: suggerimenti per la valutazione e la progettazione paesaggistica», 2014
New agricultural buildings

Control of landscape relationship at different scale

From «Fabbricati rurali e paesaggio: suggerimenti per la valutazione e la progettazione paesaggistica», 2014
New agricultural buildings

In different morphological and historical contexts (Italian landscape variety)

From «Fabbricati rurali e paesaggio: suggerimenti per la valutazione e la progettazione paesaggistica», 2014
Way of setting telecomunication systems in a mountain and hill landscape

High concentration of telecomunication systems on a historical building in a protected area

Masking attempts with the wrong use of the vegetation
How to install energy pylons in a woodland

How to install energy pylons in a large landscape

How to install energy pylons in a splited landscape
Va evitata la costruzione di impianti in aree rurali (incluse le radure). In particolare modo perché l’impatto risulta maggiore in quanto contrasta con l’aspettativa che l’osservatore ha di quel particolare luogo.

I paesaggi industriali si presentano spesso destrutturati con immagini confuse. Gli edifici generalmente di grossa taglia e disposti su grandi superfici presentano un contesto in cui gli impianti possono trovare adeguata integrazione.

Al di fuori dei centri abitati gli impianti dovrebbero essere posizionati lungo le arterie di grande traffico, le linee ferroviarie e le linee elettriche già esistenti, per non creare ulteriori elementi di disturbo e di attraversamento del paesaggio.

Alpeggio in alta Val Seriana
Installazione di pannello fotovoltaico in posizione inadequata rispetto all’edificio. Nel caso di integrazione all’interno di edifici con caratteri costruttivi tradizionali, le installazioni dovrebbero essere posizionate sulle falde di copertura non visibili dalle visuali principali.
Wrong collocation in relation with historical buildings and due to different project scales

Different impacts of a wind farm on a mountain due to a different disposition of the machines

Bad and good disposition related to the shape and the scale of landscape
“Guidelines for the landscape project and evaluation of energy plants from renewable sources in the territory of Foggia

Specific suggestions related to landscape characters and wind farms already made on the territory
Design mistakes in landscape reports

- New irregular windows
- No identity of new horse recovery: bad adaptation of existing building
- "Dallas model" in Po Plaine (!)
- Mimesis: traditional material in industrial model
## Dissemination and monitoring

<table>
<thead>
<tr>
<th><strong>TOOLS</strong></th>
<th><strong>INDICATORS</strong></th>
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| **Landscape commission**: pool of expert (architect, agronomist, naturalist, ….) called to judge landscape compatibility of any landscape intervention (from small to large scale) in protected and non-protected site | Direct participation in 3 landscape Commission at different territorial scale during the last 10 years  
- Region (Great lakes commission)  
- Province (PASM)  
- Municipality (Rho e Olgiate Molgora) |

**books, leaflet**  
Rural building  
Wind farm  
technological equipments  

**Web sites** (of institutions)  
Ministry of Culture  
Region Lombardy  
Province of Milan  

**Meetings, conferences** between technicians and researcher  
Themes of conferences  
Number of conferences organised by each institution  

**Refresher course for professionals** (mainly for architect, geometers…)  
Municipalities, Italia Nostra and other associations for landscape protection, professional associations  
“Compatibility of rural buildings” PASM  
Number of course organised by territorial organisation (municipality, park, province, region)  
Numbers and profession of participants  

**Territorial plans** with specific regards to landscape components  
Rules for historical centres  
Obligation to refer to local instructions  

- **Awareness**  
- **Clearness**  
- **Easy availability /traceability**  
- **Easy way to downloading documents**  
- **Verified through professionals presenting landscape reports**
Results of Landscape Commission

It is **potentially** the **most efficient** way for dissemination of guide lines and raising awareness of the designers.

<table>
<thead>
<tr>
<th>POSITIVE</th>
<th>NEGATIVE</th>
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<tr>
<td>Simplifying project evaluation by technicians</td>
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<td></td>
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<tr>
<td>Context partial evaluation</td>
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**Issued analysis:**
- Photo survey of the closed context
- Project simulation of closed context
- Material and colour evaluation in the closed context
- Visual analysis in the closed context
- Better attention to the vegetal component

**Not issued analysis**
- Photo survey of the large context
- Historical analysis
- Respect of the composition
- New agricultural architecture quality
- Social perception analysis

Better purpose explanation of the project choices

Project standardization (due to a trivial work of imitation)
## Results of others tools

<table>
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<tr>
<th>Tool</th>
<th>Description</th>
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<tr>
<td><strong>Book, leaflet</strong></td>
<td>Rural buildings: rich in examples and instructions but weak dissemination</td>
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<tr>
<td></td>
<td>Technological equipment: book very diffused in particular among energy companies, on line magazines in the field of energy and of professional training</td>
</tr>
<tr>
<td><strong>Web sites</strong></td>
<td>RB: Difficulty in findings guidelines in the web site of PASM</td>
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<td></td>
<td>TE: Frequent change of place in MiBAC website but often downloaded</td>
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<tr>
<td><strong>Meetings, conferences between technicians and researchers</strong></td>
<td>RB: Frequent conferences concerning relationship between city and countryside/urban agriculture or on respecting environment/biodiversity (1 per year); less conferences on rural buildings</td>
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- Achieved a good landscape reading of closed context, weak reading of historical transformations and social perception
- Efficacy depends on good circumstances not only on tools of dissemination: wind farm guidelines arrived at the right moment in the national debate
- Courses were used seldom, not in a continuative way
Conclusion
(how to work for a better situation?)

- **Catch technicians at the beginning of the project** (design process) and not only during the project evaluation period
  - through the introduction, for example, of landscape teaching at high school and universities
  - through participatory process between professionals (how? Time? Research by design, “territory game”…)

- **Improve diffusion** of guidelines
  - To the «client»: not only among the experts or the professional but among the people as well; a landscape culture wide to the «client» is the first factor for an appropriate transformation that looks for more qualified technicians;
  - activate **specific courses for great public land owners**; intercept or solicit sensitivity of public institutions

- Better **integration with the territorial planning** tools and laws through the introduction, for example, of incentives (as what happens in the field of environmental and energy spare design);
Thank you for your attention!

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