

**Giuseppe Tupputi**  
Polytechnic of Bari, dICAR  
University of Parma, DIA

**Alberto La Notte**  
Polytechnic of Bari, dICAR

**Olga Giovanna Papparusso**  
Polytechnic of Bari, dICAR

**Massimiliano Cafagna**  
Independent Researcher

# The Lower Valley of Ofanto River

---

*From Landscape Archaeology  
to Landscape Design*

*Keywords*

– Apulia, river, landscape,  
archaeology, design.

*DOI*

– 10.14195/1647-8681\_11\_12\_5

*The Ofanto river is the most important waterway in the karstic Apulia region and both nature and man have constantly written on its landscape palimpsest over centuries. The lower valley and the mouth are highly representative of the river landscape, currently threatened by abandonment and degradation. It could be considered an interesting case study of an area outside the major touristic flows but with great potential in terms of cultural values and local development. Following the approach of the landscape archaeology and crossing multi-disciplinary analyses, the area is interpreted as a complex palimpsest. The paper points out a strategy of valorization of the river valley within the frame of the wider*

*regional programmes by proposing an ecomuseum of the territory. The insights and the suggested guidelines allow the area to be “re-signified,” to preserve the heritage and highlight the variety of features that make it unique in the local context.*

- 1 Alberto Magnaghi, *Il progetto locale. Verso la coscienza di luogo* (Turin: Bollati Boringheri, 2010), 24.
- 2 About the landscape archaeology: Franco Cambi, *Manuale di archeologia dei paesaggi. Metodologie, fonti, contesti* (Roma: Carocci, 2011). About the different layers of the landscape: José Maria Martín Civantos, “Il territorio stratificato: proposte dall’archeologia del paesaggio,” in *Atti del IV Congresso nazionale di Archeologia Medievale*, ed. Riccardo Francovich and Marco Valenti (Florence: All’Insegna del Giglio, 2006), 12-16.
- 3 Bruno Brulon Soares, “L’invention et la réinvention de la Nouvelle Muséologie,” *ICOFOM Study Series*, no. 43a (2015): 57-72.
- 4 Mauro Iacoviello and Maria Laura Scaduto, “Il contratto di fiume per la pianificazione del sistema insediativo della Val d’Ofanto: tra approcci bioregionali, animazione territoriale e azioni concorrenti,” in *Atti della XV Conferenza Nazionale SIU, L’urbanistica che Cambia. Rischi e valori*, Atelier 7 (Rome: Planum Publisher, 2012), 136-137.
- 5 Francesco De Mattia, “Le trasformazioni del territorio e del paesaggio sud-costiero dauno. Da Manfredonia alle Regie Saline di Barletta,” in *Coste di Puglia*, Angelo Ambrosi et al (Bari: Adda, 2004), 107-168; Roberto Goffredo, *Aufidus. Storia, archeologia e paesaggi della valle dell’Ofanto* (Bari: Edipuglia, 2011).

Intended “as a result of the transformation of the environment caused by subsequent and stratified cycles of civilization”, the territory crossed by the Ofanto river in North Apulia (Italy) acquires the characteristics of a composite set of both physical and symbolic connections between the inland and the coast.<sup>1</sup> The lower Ofanto valley is highly significant of the complexity of the river landscape, particularly the mouth, “mushy” in nature and with its synthesis of opposing features: the river and the motion of the marine waves, the furrow of the riverbed and the orthogonal coastline.

Unlike other Apulian archaeological sites, less attention has been paid to this area, which is rich in history but currently threatened by abandonment and degradation. Moreover, the alteration of the natural flow regime, the retreat of the coast, the abusive agricultural use of the river bed and the building of holiday houses near to the mouth are fast changing the features of the area.

Therefore, the lower Ofanto valley and mouth emerge as an interesting case study of an archaeological area outside the major touristic flows but with great potential in terms of cultural values and sustainable local development.

Following the approach of landscape archaeology, the landscape can be regarded as a multi-layered space in which nature interacts with “social” and “symbolic” environments.<sup>2</sup> By crossing multi-disciplinary analyses (topography, hydrogeology, botany, archaeology and history), it is possible to interpret the territory as a topographical and symbolic palimpsest and thus propose innovative strategies of valorization for the territory, which also benefit from the contributions of the *Nouvelle Muséologie* and fall within the scope of the current regional development programmes.<sup>3</sup>

### **The Lower Ofanto Valley: A Multilayered Palimpsest**

The Ofanto river represents the most important waterway of the Apulia region, but also one of the most complex set of hydraulic circumstances in southern Italy. Rising at the foot of Mount Vulture in Campania, the river crosses the territories of Basilicata and Apulia for about 170 km. The lower valley is located between the coastal and sub-coastal north-Apulian lands, close to the Murgia plateau and the Tavoliere plains at the foot of Gargano promontory, constituting the setting of interaction between neighbouring territories (figure 1).<sup>4</sup> The natural corridor is made of pebbly and clayey alluvial deposits, coming from the hills and divided terraces that widen in keeping with the minor tributaries and the coastal wetlands system.

The archaeological researches, the study of ancient cartography, the pictorial representations of the river and the descriptions left by travellers who crossed the Apulian land allow a reading of the anthropic interventions on the territory and the different levels of the landscape palimpsest to be distinguished.<sup>5</sup> The fresh watercourse in a mainly karstic

fig. 1 [next page]

The Ofanto river with Gargano promontory in the background (Massimiliano Cafagna).

- 6 The latin definition of Apulia is in Horat., *Epodi*, 3, 16. About the history of the area, see in general Patrizia Gentile, "Puglia settentrionale," in *Puglia*, ed. Giuseppe Ceraudo (Bologna: BraDypUS Editore, 2014), 56-58; Goffredo, *Aufidus*, 209-252.
- 7 Raffaella Cassano, ed., *Principi, imperatori, vescovi: Duemila anni di storia a Canosa* (Venice: Marsilio, 1992); Goffredo, *Aufidus*, 85-134; Sabrina Landriscina, "Canusium," in *Puglia*, 300-303.
- 8 The latin definitions of Ofanto river are in Horat., *Odi*, III, 30; IV, 9; IV, 14. About the *emporium* of Canusium see Goffredo, *Aufidus*, 83-85.
- 9 Goffredo, *Aufidus*, 120-123; Goffredo and Giuliano Volpe, "All'ombra di Canosa: Barletta e il suo territorio tra età romana e tardoantica," in *Archeologia, Storia, Arte. Materiali per la storia di Barletta (secoli IV a.C.-XIX d.C.)*, ed. Victor Riviera Magos, Saverio Russo and Giuliano Volpe (Bari: Edipuglia, 2015), 31-45.
- 10 Cassano, Il ponte sull'Ofanto, in Cassano, *Principi, Imperatori, Vescovi*, 708-711; Goffredo and Volpe, *All'ombra di Canosa*, 39-40; Giuseppe Ceraudo, "Viabilità e infrastrutture viarie," in *Puglia*, 232-248; Goffredo, *Aufidus*, 75-83; Renato Russo, *La cittadella di Canne dalla preistoria al medioevo* (Barletta: Rotas, 2002), 145-151.
- 11 Achille Bruni, *Descrizione botanica delle campagne di Barletta* (Napoli: Stamperia e cartiere del Fibreno, 1857), 21.
- 12 Russo, *La cittadella di Canne*, 145-151.
- 13 Goffredo, *Aufidus*, 140-144; Goffredo and Volpe, *All'ombra di Canosa*, 32-34; Idem., "Gli insediamenti della Puglia tra Romanizzazione e Tarda Antichità," in *AdriAtlas et l'histoire de l'espace adriatique du VIIe s. a.C. au VIIIe s. p.C.*, ed. Yolande Marion, Francis Tassaux (Bordeaux: Ausonius, 2015), 377-402; Goffredo, "Città, insediamenti rurali e paesaggi agrari della Daunia tra le guerre sannitiche e l'età post-annibalica," *BABesch*, 89 (2014): 43-73.



land, the *siticulosa Apulia*, made the fields fertile and has favoured human settlement since the prehistoric age, as evidenced by the findings in Canosa, Canne, Trinitapoli and San Ferdinando.<sup>6</sup> After the hybridization of the local communities with the Hellenic culture of Magna Graecia, some Daunian settlements along the river (Venusia, Canusium, Cannae) became important in the process of Romanization of the region and still preserve important archaeological sites.<sup>7</sup> Despite the dangerous floods of Ofanto, described as *violens*, *sonantem* and *tauriformis*, Canusium used the river for the maritime commercial activities, setting a commercial emporium along the river, probably at the *vicus* of Cannae or at Aufidena-Aufinum, near the mouth.<sup>8</sup> Barletta (*Bardulos*), mentioned in the ancient *Tabula Peutingeriana*, also seems to have been a seaport of Canusium.<sup>9</sup>

After the Roman conquest, a new road network connected the major towns and fostered the development of the territory: the *via Minucia/Traiana* in the inland, crossing the river near Canosa, and *Via Litoranea*, along the coast, crossing the Ofanto on the *Pons Aufidi* or *Pons Cannarum*.<sup>10</sup> This bridge, which strongly connoted the river mouth in ancient cartography (figure 2), collapsed during a flood in 1850.<sup>11</sup> Rebuilt in a different position, it was destroyed again by Nazi soldiers in 1943 and the ruins are still visible near the new provincial road (Via Foggia).<sup>12</sup>

Besides few important cities, the archaeological research identified a large number of small settlements spread across the countryside and linked to rural activities practised for centuries, particularly the production of cereal and wine with the specific practice of vines yoked to fig trees.<sup>13</sup>



fig. 2 Antonio Michele, Atlante delle Locazioni della Dogana delle pecore di Foggia, 1686 (Archivio di Stato Foggia).

fig. 3 Holiday residence "La Fiumara" near the river mouth (Massimiliano Cafagna).

fig. 4 The pylons of the cableway crossing the irrigated gardens and the vineyards, with the Ofanto Tower in the background (Massimiliano Cafagna).



- 14 Goffredo and Volpe, *All'ombra di Canosa*, 34-35; Francesco Grelle and Marina Silvestrini, "Lane apule e tessuti canosini," in *Epigrafi e territorio. Politica e società. Temi di antichità romane*, vi, ed. Mario Pani (Bari: Edipuglia, 2001), 91-136; Volpe, *Contadini, pastori e mercanti nell'Apulia tardoantica* (Bari: Edipuglia, 1996), 276-297; Saverio Russo, "Pastorizia e transumanza dal xv secolo ad oggi," in *Tratturi di Puglia. Risorsa per il futuro*, ed. Saverio Russo (Foggia: Claudio Grenzi Editore, 2015), 31-40.
- 15 Antonietta Magliocca, *Le masserie nel territorio di Canne* (Canosa: Acquaviva, 1994); Russo, *La cittadella di Canne*, 118-121; Marcella Ruggiero, "La cartografia antica," in *Ofanto*, ed. Antonio Ruggiero (Bari: Sibilla, 2004), 51-73; Goffredo, *Aufidus*, 29-40.
- 16 Salvatore Lopez, *Torre delle Saline (Margherita di Savoia) e le torri di Pietra, Rivoli, Ofanto nel contesto della difesa costiera del Regno di Napoli (xvi-xviii Secolo) con relativi cenni topostorici* (Margherita di Savoia: Santobuono, 1986), 89-91; De Mattia, "Aspetti dell'architettura difensiva in età aragonese in Puglia. Continuità e innovazione nel periodo della transizione," in *Architetture fortificate di età aragonese in Puglia. Capitanata, Terra di Bari e Terra d'Otranto*, ed. Francesco De Mattia (Bari: Adda, 2006), 9-96; Luigi Mongiello, "L'architettura dei castelli di epoca rinascimentale in Puglia," in Luigi Mongiello et al., *Architettura del Rinascimento in Puglia* (Bari: Adda, 2008), 41-81.
- 17 Lopez, *Torre delle Saline*, 25-37.
- 18 Idem., *Salinae Cannarum. Sancta Maria de Salinis* (Lucera: Edistampa, 1996); Landriscina, "Salapia," in *Puglia*, 292-294; Giovanni De Venuto et al., "Salapia. Storia e archeologia di una città tra mare e laguna," *MEFRA*, no. 127-1 (2015): 97-130; Goffredo et al., "Salapia romana, Salpi medievale (Cerignola, FG): notizie dagli scavi 2017," *FOLD&R*, no. 426 (2018), 1-43; Enzo Lippolis, Tonia Giammatteo, ed., *Salpia Vetus. Archeologia di una città lagunare* (Potenza: Osanna, 2008).
- 19 De Mattia, *Le trasformazioni del territorio*, 155-168; Saverio Russo, *Le Saline di Barletta tra sette e ottocento* (Foggia: Grenzi, 2001); Emanuele Amoruso, *Margherita di Savoia tra il mare e le saline* (Foggia: Leone, 1997), 10-11, 18-20.
- 20 Angelo Ambrosi, "Visualità della fascia costiera della 'Terra di Bari,'" in *Coste di Puglia*, 169-282; Goffredo, *Aufidus*, 45-56.
- 21 Marcella Ruggiero, "Giuseppe De Nittis pittore dell'Ofanto" in *Ofanto*, 115-127; Christine Farese Sperken, *La pittura dell'800 in Puglia* (Bari: Adda, 1996), 35-45; Idem., *Giuseppe De Nittis da Barletta a Parigi*, second edition (Fasano: Schena, 2007).

The valley was characterized by wooded and uncultivated areas also used for permanent and transhumant breeding, a fundamental activity for the local economy which continued through late antiquity and the Middle Ages and was fostered in the 15th century by the institution of the *Regia Dogana*.<sup>14</sup>

The rural landscape continued to be populated in the Modern Age by farms, post-houses, villas and rural churches that appear in the historical cartography and still survive in large number.<sup>15</sup> The last settlement, La Fiumara, was built in the last thirty years of the 20th century, on the east side of the mouth of the Ofanto (figure 3). It is a fenced grouping of holiday residences, dissonant from the local architectural typologies and building techniques, currently deteriorated by obsolescence and abandonment of several houses. The ruins of a Renaissance watchtower, known as Torre Ofanto, resist nearby the settlement. It was built in 1568 as part of the wide fortification programme of the coast, which includes Torre delle Saline and Torre Pietra further north and the castle of Barletta to the south.<sup>16</sup> Severely damaged but not collapsed, the tower still represents a symbolic landmark of the river mouth as it is appears in historical cartography.<sup>17</sup> Between the Ofanto and Carapelle rivers, the salt pans of Margherita di Savoia, one of the largest in Europe, are a feature of the coast. The setting of an extraordinary wetland ecosystem, they offer an economic asset to the territory from antiquity, when the settlement of Salapia-Salpi flourished nearby.<sup>18</sup> The salt industry increased in the 20th century, when a cableway on 108 concrete pylons was built to transport salt between Margherita di Savoia and Barletta (13 km), largely surviving (figure 4).<sup>19</sup>

In parallel, the fertility of the land has favoured intensive agricultural use of the valley, progressively specializing in viticulture but still maintaining the dense mosaic orchards and olive and almond trees, as described by the travellers who visited the Ofanto valley in the past.<sup>20</sup> Furthermore, the coastline from Margherita di Savoia to Barletta features a set of rhythmic and narrow irrigated gardens, locally called *arenili*, which outline a unique agricultural landscape within the Apulian panorama.

The lower Ofanto valley therefore preserves significant heritage of high landscape and cultural interest. In addition to several archaeological sites (Canne, Canosa, Ripalta, the hypogea of Trinitapoli and San Ferdinando) and historic farms (De Leon, Cafiero, Marulli, etc.), the river landscape, the cultivated countryside and the salt industry constitute the main resources of the territory.

Nevertheless, the lower Ofanto valley landscape is actually threatened by several detractors and weaknesses.

In the last two centuries, in fact, the morphological terraces of the valley and the meandering watercourse underwent artificial interventions so that, as reported by the impressionist Giuseppe De Nittis, few glimpses of the natural landscape of the river mouth survive.<sup>21</sup>

22 De Mattia, *Le trasformazioni del territorio*, 107-168; M.L. Storchi, "Fonti documentarie per la storia delle bonifiche nel Mezzogiorno dal 1806 al 1860," in *Il Mezzogiorno preunitario. Economia, società e istituzioni*, ed. Angelo Massafra (Bari: Dedalo, 1998), 697-722.

The overexploitation of water resources and the anthropic transformation of the floodplain fragmented the natural flora and the morphological continuity of the landscape, leading to increased hydraulic risk and coastal erosion. In fact, several water reservoirs were built along Ofanto and its last stretch was regimented by embankments to favour anthropic activities. Furthermore, the illicit withdrawal of both water and gravel from the riverbed progressively reduced the hydraulic regime and the solid transport of the river, thus increasing coastal erosion and a general imbalance of the mouth, whose modest cuspidate delta increasingly evolves into an estuary.<sup>22</sup> Along the river banks, few discontinuous trees and shrubs are preserved, marked by poplars, willows, some elms and, near the mouth, tamarisks, sedge and straws of swamp. The agricultural occupation of the floodplain and the destruction of riparian groves have contributed to reducing the ecological continuity of the river landscape, often intensely and illegally cultivated. The river valley is also threatened by the spread of residential and industrial buildings inconsistent with the landscape, such as on the western outskirts of Canosa and at the mouth of the river (La Fiumara complex). Moreover, the pollution of the river water exists due to civil, industrial and agricultural discharges, particularly the large amount of fertilizers used for crops that still do not make use of organic agricultural techniques. Last but not least, the scarce awareness of the local community about the value of its own heritage constitutes the greatest risk for the landscape. In fact, the community has historically produced its own landscape; the community uses, transforms and enriches it and it is in favour of the community that every landscape project can and must find its own reason.

#### **The Lower Ofanto Valley: the Valorization Strategy**

Regarded as a palimpsest (figure 5), the Ofanto valley cannot be included in a single, formal-structural and spatial-aesthetic paradigm. On the contrary, it needs to be framed within its deep and complex semantic value, in which different interpretations and formal issues have overlapped in time, often generating dissonances, conflicts and contradictions but, in some cases, giving voice to unexpected harmonies and resonances. It is therefore necessary to lay the groundwork for an organic vision which can connect and enhance this complex territory, taking on the difficult challenge of identifying a frame of possible relationships between all the fragmented identities of the area, restoring past synergies and sometimes offering new meanings to them. For these reasons, the aim of our work is not only to reflect on the "value of the existence" of the different landscape elements, both artefacts and natural, considered by themselves, in their own objectivity. Above all, the target is to develop their potential "relational value," thus assuming the multilayered condition of the lower Ofanto valley as a new value, heritage and an asset for the local community, to which every project of architectural, landscape and environmental transformation is mainly addressed.

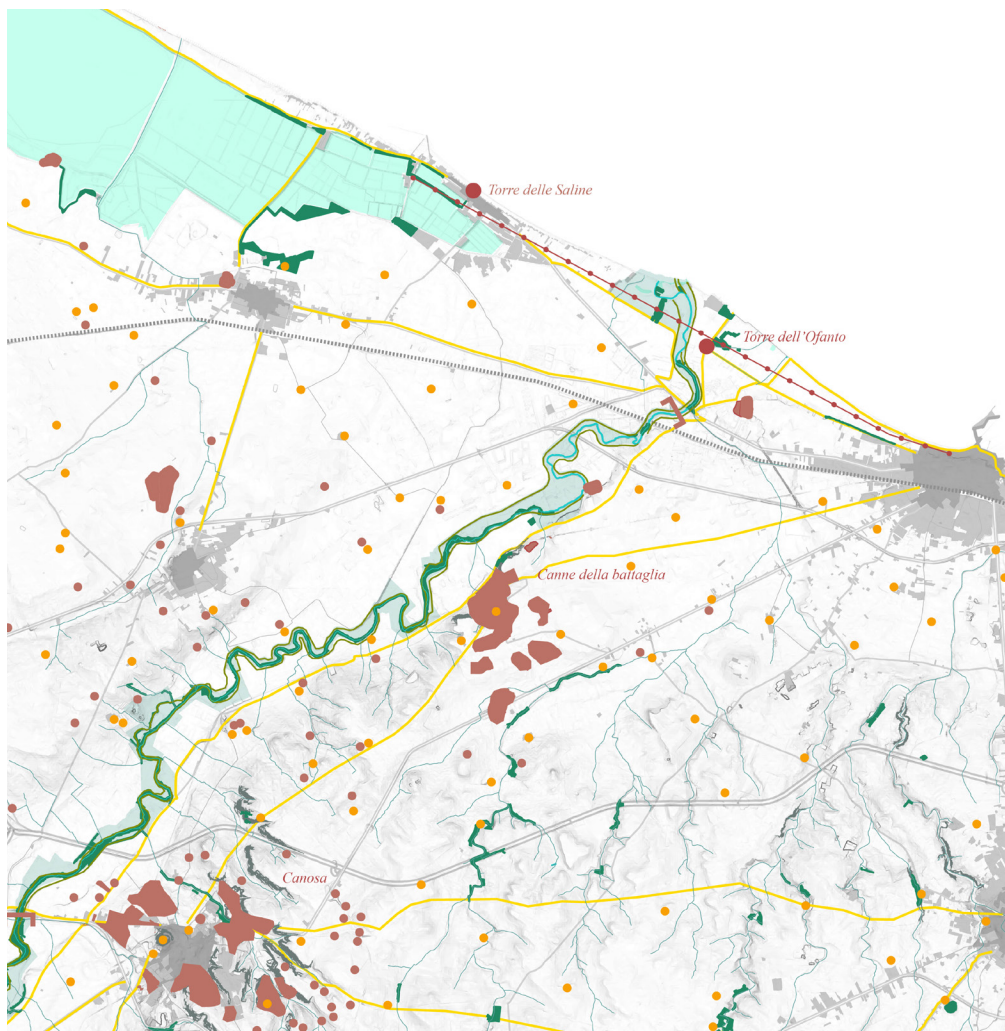


fig. 5 The landscape palimpsest. The environmental components in green, the archaeological sites and the ancient bridges in light red, the watchtowers and the cableway in dark red, the rural architectures in orange, and the historic routes in yellow (drawing by the authors).

- 23 Alberto Magnaghi, "Patrimonio territoriale e corallità produttiva: nuove frontiere per i sistemi economici locali," in *Scienze del Territorio. Rivista di Studi Territoriali*, no.6 (Florence: Firenze University Press, 2018), 12-25.
- 24 Regional Act No 9 of 14 December 2007.
- 25 Regional Act No 176 of 16 February 2015.
- 26 Regional Act No 378 of 19 March 2020. The definition of the planning tool is in the Decree Law No 152 of 2006, art. 68-bis.
- 27 Approved October 30, 2020 and funded with PO FESR-FSE Asse VI - action 6.5 Sub-action 6.5 "Measures to protect and enhance terrestrial and marine biodiversity."

This evaluation leads to the definition of an overall territorial project that uses strategic and non-predictive scenarios, aiming at a holistic vision of the implementation of enhancement interventions, both procedural and tendential. The transformation and valorization projects, in fact, must take the real contingencies linked to the risk factors of the territory and to the financial resources into account. Above all it is necessary to allow the participation of local communities in projects on their own landscape and to value the effective possibility of contributing to the sustainable development of the territory.

The Italian planning legislation has established a series of governance and participatory democracy tools to correlate the enhancement of the heritage and the place-based development, thus overcoming the canonical "*tout court*" protection and top-down planning. These tools are based on multi-actor, multi-sectoral and multi-functional contractual forms and agreements, to accept the governance of the territory as a "common heritage." The projects activated in these forms of active citizenship assume the capitalization of the territory itself as a basis for the social production of wealth, based on the peculiarity, uniqueness and self-sustainability of local assets.<sup>23</sup>

The naturalistic, landscape, hydrogeological and historical-cultural values of the Ofanto valley have been enshrined in numerous protection instruments such as Natura 2000 Network, Sites of Community Interest SCIs, the components of the landscape plans and more recently by the institution of the Regional Natural Park of the Ofanto River.<sup>24</sup> In addition to the instruments of environmental and landscape protection, the Apulia Region has activated new generation, participatory democracy tools, one of the first in Italy. The Regional Territorial Landscape Plan (PPTR) belongs to this last category, integrating the landscape into urban, cultural, environmental, agricultural, social and economic policies.<sup>25</sup> Moreover the River Contract has been started, a "voluntary strategic and negotiated planning tool that pursues the protection, proper management of water resources and the enhancement of river territories together with safeguarding from hydraulic risk, contributing to local development."<sup>26</sup>

Within these planning frames, some projects have been already financed and are in progress, particularly some restoration and management interventions in the wet coastal area near the mouth of the Ofanto, with the aim of mitigating the risk of overflows and increasing the biodiversity by lowering the floodplain, reinforcing the embankments and creating some islets in the riverbed, planted with the characteristic flora of the area.<sup>27</sup>

The numerous plans for the Ofanto valley have different purposes, time of realization and actors involved, but converging thematically and methodologically to protect and enhance the landscape. Therefore, it is necessary to activate forms of relationship, mutual recognition and cooperation; since all of them are in fact separately cooperating in the



- 28 Maurizio Maggi and Vittorio Falletti, *Gli Ecomusei: che cosa sono, cosa potrebbero diventare* (Turin: Umberto Allemandi & C., 2001).
- 29 John Schofield, ed., *Who Needs Experts? Counter-Mapping Cultural Heritage* (Farnham: Ashgate, 2014).
- 30 The definition of the ecomuseum is in Maggi, *Ecomusei. Guida europea* (Turin: Umberto Allemandi & C, 2002), 9. About the ecomuseum, in general, see Nunzia Borrelli and Peter Davis, "How Culture Shapes Nature: Reflections on Ecomuseum Practices," *Nature and Culture*, no. 7 (Spring 2012), 31-47; Elena Dell'Agnese, "L'ecomuseo come strumento per la rivalorizzazione del territorio," in *Turismo sostenibile. Retorica e pratiche*, ed. Alfonso Pecoraro Scanio, (Rome: Aracne, 2016), 245-264.
- 31 Francoise Choay, "Patrimonio: quale scommessa per la società? L'evoluzione del concetto di patrimonio," in *Del destino della città*, ed. Alberto Magnaghi (Florence: Alinea, 2008), 103-118.
- 32 Regional Act No 15 of 6 July 2011.

construction of a more advanced generation of forms of self-sustainable local development.

We believe that a valid opportunity to fulfil this need can be offered by the ecomuseum, an innovative institution which could represent the project framework to keep together all the interventions of local heritage enhancement and self-sustainable development. Born in the 70s within the *Nouvelle muséologie*, thanks to the activity of G.H. Rivière and H. De Varine, ecomuseums represent an alternative to traditional museums.<sup>28</sup> Rather than protecting a collection within a building, it enhances the heritage of a territory, both material and immaterial, including the environment, cultural values, traditions, craftsmanship, historical and cultural resources, etc. Furthermore, rather than addressing external visitors, it is mainly aimed at local communities who become the active producers, users and custodians of it, determining heritage by a bottom-up process.<sup>29</sup>

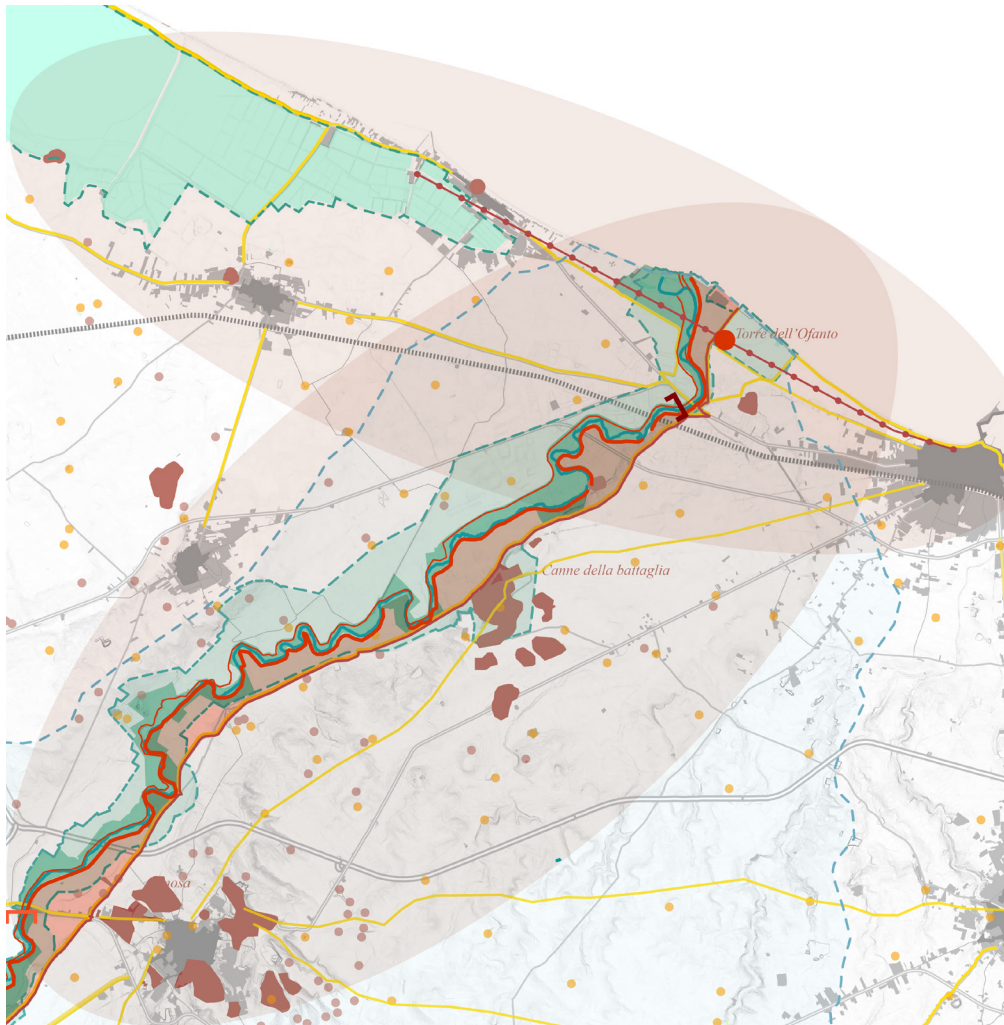
Defined as "a pact with which the community takes care of a territory", the ecomuseum can be regarded as an innovative tool for the community to develop a "sense of place" towards its own territory, where "place" is a portion of space with a deep meaning, according to the new cultural geography approach.<sup>30</sup> Therefore, it represents a path of "recognition of cultural, environmental and territorial heritage, through new forms of social self-representation of heritage (community maps) and mobilization of active citizenship, activating new models of integrated economies, based on the enhancement of the cultural, environmental, territorial and landscape heritage."<sup>31</sup>

The Apulia region has approved the establishment of ecomuseums and it has been included in the governance tools of PPTR.<sup>32</sup> At present, the largest number of these new generation museums have been developed in southern Puglia and mostly in the Valle d'Itria and Salento areas, whilst in northern Apulia the ecomuseum of the Carapelle river has been created, in a land culturally similar to the Ofanto valley.

In the project proposal for this paper, we reflect on the possibility of promoting an ecomuseum of the lower Ofanto valley, due to the specificity and organic nature of its landscape which is so rich in heritage and closely interconnected in all its cultural aspects. Unlike other planning tools, such as the Ofanto Natural Park and the River Contract, the ecomuseum does not have a rigid institutional perimeter and therefore could include the whole lower river valley among the towns which share the common heritage. Moreover, it is not proposed that it should to replace the Ofanto Park or the River Contract but integrate them with methodological consistency, becoming a tool to develop its major goals and projects with different possible outputs. By implementing the current policies of enhancement of the territory, it could highlight those elements still latent at present, particularly the active participation of the community in the protection of its own heritage.

fig. 6 The ecomuseum area. The Regional Park "Fiume Ofanto" and the salt pans of Margherita di Savoia in green, the perimeter of the River Contract in light blue, the two districts of the ecomuseum (inland and coast) in light red, and the river area mainly addressed by the project in dark red (drawing by the authors).

Therefore, the river could become the "narrator" of the wide valley territory, composed by two different areas but strongly connected: the inland, strongly represented by the rural area of Canosa, Canne della Battaglia and San Ferdinando, and the coast, with the river mouth, the wetland and the salt pan which involves Margherita di Savoia, Trinitapoli and Barletta (figure 6).



- 33 Regional Law No 15 of 6 July 2011.  
34 Regional Law No 15 of 6 July 2011, art. 2 sub.4, a.  
35 Regional Law No 15 of 6 July 2011, art. 2 sub.4, b.  
36 The definition of landscape is in the European Landscape Convention, 20 October 2000, art. 1.  
37 Regional Law No 15 of 6 July 2011, art. 2 sub.4, c.

### **The Lower Ofanto Valley: Towards the Ecomuseum**

The ecomuseum proposal aims at preserving memory to look forward to the future, gathering the community and institutions in a work of safeguarding and enhancing their shared heritage, recreating relationships between citizens themselves and between citizens and the territory.

To be effectively feasible and consistent with the ongoing programmes, the ecomuseum meets the requirements laid down by the regional law.<sup>33</sup>

Firstly, the lower Ofanto valley ecomuseum is based on the recognition of the cultural, geographical and landscape specificity of the territory.<sup>34</sup> This includes particularly the local heritage of archaeological and architectural emergencies, historical infrastructural systems (the Roman *via Traiana* and *via Litoranea*, the medieval pilgrimage road *via Francigena*, the sheep-tracks), the unique landscape composed by the river habitats, coast and salt pans wetlands, the salt industry and the local agriculture specialized in vineyards, olive groves, and *arenili* at the seaside.

Furthermore, the ecomuseum should be inspired by the principles of subsidiarity, sustainability, responsibility and participation of both institutions and people, following a bottom-up dynamic for the project.<sup>35</sup> If landscape is a certain part of the territory “as perceived by people,” they are the best connoisseurs of the territory and can thus actively determine the project choices of enhancement.<sup>36</sup>

Consequently, through various listening and selection methods, such as questionnaires, interviews and debates, it is possible to build community maps and a database of the local landscape values which need to be protected and enhanced. In addition, people can specify “how,” “when” and “what” kind of effective support can they offer to the project, being an actor within it. These participation mechanisms not only help people to take roots in their own territory, but also communicate more effectively the values of natural and cultural heritage contained therein, create experiences of active citizenship and trigger processes of cooperation and exchange within the community.

The active participation of the local community in the ecomuseum project needs the involvement of a wide range of stakeholders.<sup>37</sup> Thanks to the cooperation between the Province (BAT), the Superintendency (MiBACT), the municipalities, the numerous cultural, sports and environmental associations in the area, the city museums, the universities, the dioceses, the reclamation consortia, the GAL groups (Gruppo di azione locale) with wineries, oil mills, didactic farmhouses and breweries, it will be possible to start a participatory path of increasing intensity. The involvement of economic realities, both agricultural and artisan, is particularly strategic for the enhancement of local knowledge and know-how, regarded as part of the territorial heritage.

Moreover, thanks to the presence of the salt pans wetland between the Ofanto and Carapelle rivers, and due to the cultural and

- 38 Regional Law No 15 of 6 July 2011, art. 2 sub.4, f.  
39 Regional Law No 15 of 6 July 2011, art. 2 sub.4, e.  
40 Regional Law No 15 of 6 July 2011, art. 2 sub.4, d.

landscape similarity between the two river valleys, close cooperation is possible with other ecomuseums, such as that of the nearby Carapelle Valley.<sup>38</sup>

The intention of the ecomuseum project is to reconnect architecture, history and landscape, in particular those fragments of “marginal landscape” which are neglected and outside the touristic mainstream. Therefore, it is possible to recreate the invisible connections between artefacts, nature, history and communities by the means of thematic itineraries, autonomous but at the same time interconnected, as a fundamental tool for narrating, understanding and interpreting these landscape components.<sup>39</sup>

Among the various tours concerning the inland area, the “archaeological itinerary” is the most organic and rich and can be developed according to different themes. It connects Barletta (the port, the early Christian and medieval Cathedral, the Antiquarium) to the mouth of the Ofanto with the watchtower; then, going up the river, the archaeological park of Canne, the city of Canosa (archaeological museums, Daunian hypogea, the Roman domus, temples and baths, the Paleochristian basilicas, the Honorary Arch), the Roman bridge crossing the Ofanto, the cities of San Ferdinando and Trinitapoli with their prehistoric hypogea and the salt pans area of the ancient Salapia/Salpi, leading to the destroyed bridge near the river mouth.

Furthermore, an “itinerary of historic villas and farmhouses” could include the most important examples in the territory, suggesting the different uses connected to agricultural and pastoral activities. A “stone itinerary” could illustrate the ancient local stone industry by connecting the small caves in Canosa, with the bigger Cafiero quarries in San Ferdinando di Puglia. Moreover, the “environmental-avifaunal itinerary” includes the whole Ofanto valley with the typical flora and fauna on the riversides, visible along the river banks too, and the brackish environments of the salt pans. The “slow-food itinerary” would connect the oil mills and wineries of Canosa, Trinitapoli and Barletta, which for centuries have contributed to the richness of the territory with traditional production techniques.

On the coast, the “itinerary of the watchtowers” could include the Castle of Barletta, Torre Ofanto, Torre delle Saline and Torre Pietra. Furthermore, the “salt itinerary” would connect Trinitapoli, close to the ancient Salapia salt pans, Margerita di Savoia with the salt pans museum, the coastal watchtowers and the cableway for the transport of salt to the port of Barletta.

The itineraries in the territory need be implemented with spaces arranged to host the ecomuseum laboratories, intended as interpretation, documentation and centres of information on the territory, thus making an active contribution in raising awareness of the population of their local heritage.<sup>40</sup> The laboratory activities would include not only those on archaeology, folk culture and traditions, but also would

- 41 Giancarlo De Carlo, *La piramide rovesciata. Architettura oltre il '68* (Macerata: Quodlibet, 2018), 116.
- 42 Ibid., 158.
- 43 Ibid., 162.
- 44 “È camminando che l'uomo ha cominciato a costruire il paesaggio naturale che lo circondava,” Francesco Careri, *Walkscapes. Camminare come pratica estetica* (Turin: Einaudi, 2006).

include experimental agricultural initiatives such as urban gardens and shared gardens.

Following the sustainability approach, the laboratories and the participatory activities can be hosted in the museums and the didactic farmhouses which are already active in the area, increasing their endowments when necessary. Furthermore, some specific architectural assets of the ecomuseum can be restored and saved from abandonment and degradation. Particularly those buildings which have a considerable significance for the landscape, whose location and historical-architectural value turns them into a “node” and a “pole” for the ecomuseum itineraries.

### **The Lower Ofanto Valley: Networks, Spaces and Objects of Enhancement**

Coherently with these strategic programmes on such a wide and complex area, involving long periods of time and different actors, the planning process for the project must be participatory. Any transformative intention should be framed in terms of long-term process, based on agreements with the reference communities and continually renewed through constant dialogue.<sup>41</sup> As Giancarlo De Carlo writes, if “collective participation introduces [...] a plurality of objectives and actions whose outcomes cannot be predicted from the outset,” then “one can only, from the start, prefigure a line of trends and behaviours along which the transformation process can start.”<sup>42</sup> Therefore, following an experimental approach, the project can be seen as a “process that starts with the disclosure of the user’s needs, and then passes to the “formulation of organizational and formal hypotheses” and finally to “a management phase where, instead of ending, it reopens in an uninterrupted alternation of verifications and remodelling that feedback on needs and hypotheses, urging their continuous re-proposal.”<sup>43</sup>

Following this design posture, our work aims to point out targets and possible scenarios, rather than offering top-down solutions. However, it is possible to illustrate some milestones and start-up choices, to give substance to both programmatic planning (therefore structured around the system and the planning of the programme), and tendential planning (open to changes and deviations in progress), starting from the network project, the river space and those places recognized as territorial nodes.

From this perspective, one strategic target is strengthening the infrastructural system. Referring to the ancient transhumance and pilgrimage that characterized the Ofanto valley, the aim is to encourage walking as an exploratory, relational, convivial and ludic spatial practice. Walking helps to promote a greater awareness of the community towards its own territory, since it is a fundamental tool of knowledge: “It is by walking that man began to build the natural landscape that surrounded him.”<sup>44</sup> Therefore, the ecomuseum project intends to enhance the circulatory itineraries by equipped routes, slow and open, accessible from different entrances, which integrate the existing roads to lead the wayfarers,

45 “armoniza los restos de los puentes antiguos con los puentes modernos, en una lectura de integración [...] en una superposición de tiempos y memorias en diálogo permanente con el paisaje del río.” Darío Álvarez, “Paisajes contemporáneos de la desaparición,” in *Paisagem Antiga, sua construção e (re) uso, reptos e perspectivas*, ed. Lino Tavares Dias and Pedro Alarcão (Porto: CITCEM – Centro de Investigação Transdisciplinar “Cultura, Espaço e Memória,” 2017), 21.

modern pilgrims and *flâneurs* towards the historical poles by enjoying the natural heritage of the landscape.

Two main directions can be recognized among the territorial infrastructures. On the one hand some paths run parallel to the river and connect the river mouth, the Ofanto Tower and the ancient settlements of Canne and Canosa; on the other hand, there are the paths parallel to the coastline and the disused infrastructure of the cableway which connect the port of Barletta, again the watchtower and the river mouth, Margherita di Savoia and the salt pans.

In the first case, the project intends to strengthen the penetration inland, enhancing the riverbed itself by creating a soft mobility itinerary parallel to the current provincial road (SP3 Canosa-Barletta). It is possible to recover the original line of *via Salinelle*, as it appears in the ancient cartography, and to integrate stretches of rural roads along the meandering Ofanto. There is the possibility of canoe excursions which are feasible in the navigable parts of the river, mostly in the final stretch and close to the mouth. Furthermore, it is possible to arrange a new panoramic cycle and pedestrian way along the banks of the river, whose elevation on the flat coastal land, increased by recent interventions, helps to provide a wider overview of the mouth of the Ofanto, with its last bends bordered by shrubs.

Regarding the second direction, the destruction of the old bridge on the river cuts any possible connection between the two riversides by slow paths. Nowadays, in fact, the only way to cross the Ofanto is by railway and the provincial road SP141. Identifying the historical and cultural importance of this node, due to the presence of the bridge remains also connected to recent war events, the project suggests freezing and maintaining the ruined state of the old bridge, recognizing its fragmented condition as a key feature, rich in meaning in the river landscape. This could be enhanced by the project of the surrounding area, arranged as a resting area along the itineraries, where it is possible to rest and extend knowledge of history. Furthermore, by also identifying the strategic-functional value of this infrastructural system node, the project proposes adding a smaller and lighter bridge on the river, next to the ruins, designed to be occasionally submerged in case of floods on the river, ecologically and financially sustainable, devoted to a cycle and pedestrian crossing of the river (figure 7). These proposals, as shown by the Iter Plata project at the Castrogonzalo (Zamora) bridges, “harmonizes the remains of the ancient bridge with the modern bridge in an integrative interpretation [...], in an overlap of times and memories in permanent dialogue with the river landscape.”<sup>45</sup>

The design of the minute infrastructure of the networks is essential, too. The equipment of the paths consists of orientation and information tools along the walkways as well as facilities for small rest areas and *belvedere*, where the panorama can be enjoyed whilst being guided in the interpretation of the anthropogenic and natural elements

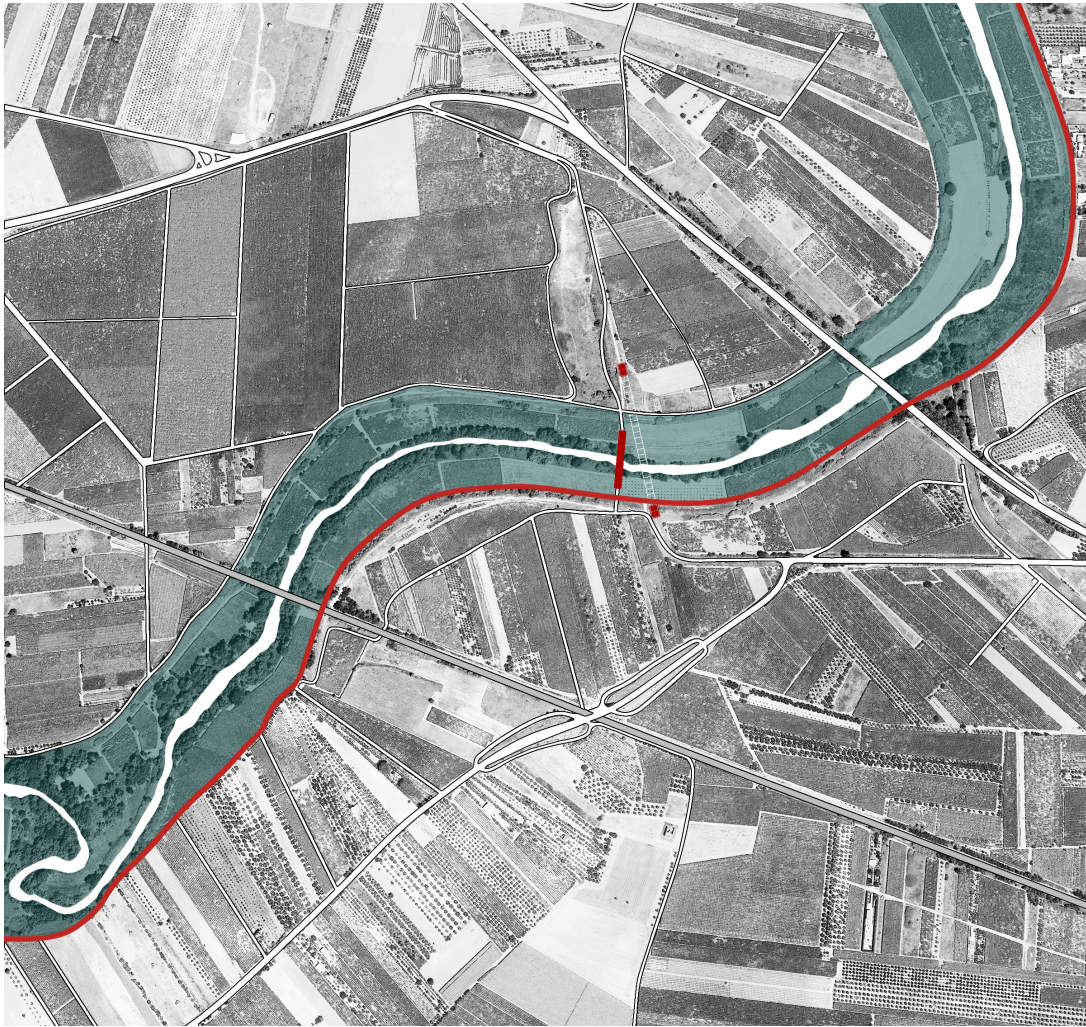


fig. 7 Concept design for a new pedestrian and cycle bridge next to the remains of the old bridge in dark red, the walkway along the river embankments in red and the floodplain in green (drawing by the authors).

fig. 8 Design for the nodal area of Ofanto Tower and the cableway, with the stone "menhir" and seats (drawing by the authors).



46 Ibid., 14.

of the landscape. The project is oriented towards minimal architectural interventions, integrated into the landscape, sustainable in respect of the territory's needs, financial possibilities and management capacity in terms of duration.

The Iter Plata and the Jardín de Sefarad project in Spain by the LABPAP group could be regarded as an exemplary reference for the lower Ofanto valley ecomuseum. There, small design additions carry information on bridges, river landscapes, ethnographic complexes, archaeological remains and other heritage elements, thus instructing the visitor in enjoying the landscape.

In this perspective, our proposal focuses on the concept of "menhir" considered as a thin totemic element that informs of remarkable places. It is an architectural element already inherent in the local culture, from prehistory to the *miliari* of *via Traiana* and the columns introducing the Capuchin monasteries. Both its figurativeness and the materiality of rough local stone allow this modern totem to be a sustainable landmark, well integrated in these places and connected to tradition (figure 8).

Furthermore, by taking inspiration from the Iter Plata project, *aulas al aire libre* could be designed by minimal interventions such as the creation of small paved areas and placing seats in quarry stone, which recall the naturalness of the landscape and offer a direct contemplation of places, allowing the greatest kinaesthetic and panoramic enjoyment of the area.<sup>46</sup> Therefore, beside the vertical totems, these horizontal blocks of rough local stone could form single seats or seating systems, placed in symbolic and panoramic places such as the hill of Canne, next to the



fig. 9 Design for “aulas al aire libre” in the river bends, with small paved areas and rough stone seats (drawing by the authors).



47 Ibid., 15.

commemorative column of the famous Roman battle, and next to the remains of the Ofanto bridges of Barletta and Canosa, or next to the pylons of the cableway (figure 9).

Guiding visitors and informing and instructing them about the complex procedure of reading the stratifications in the landscape palimpsest and, at the same time, offering them the possibility of contemplating a landscape in which different times overlap: these are the main targets of the widespread micro-enhancement project, aiming at building a diffused awareness of the local heritage.<sup>47</sup> Just like parasitic yet gentle architectures, minimal, light and agile architectural interference on a small and very small scale, these actions do not aim at creating new places or introducing new signs in the palimpsest, but they intend to offer a possibility of reinterpreting the forgotten pre-existences. This could be done by using techniques, forms and materials already present in the area, sometimes self-produced by the community, in a realistic and conscious approach, also conscious of the limited budget.

Furthermore, within the network of itineraries and paths in the landscape, the project enhances those spaces and architectural objects that constitute the nodes and poles of the ecomuseum system.

The large pockets of the river bends deserve particular attention, as they could be interpreted as “landscape rooms” of naturalistic value placed in sequence along the river course, as well as interchange nodes in the system of itineraries and collective spaces for relaxation, recreational activities and sports in nature (bird-watching, rafting, canoeing, trekking, mountain biking, kite flying, etc.). In addition to equipping the areas

for these activities, they could be a starting point for reconstructing the continuity of the ancient riparian vegetation. According to the regional plan of the Ofanto park, the project suggests actions of environmental mitigation and renaturalization of the riversides. In fact, the agricultural crops frequently occupy the floodplain abusively and interrupt the continuity of the riverbed. While it is impossible to completely reconstitute the ancient riparian vegetation, it is however possible to intervene on significant stretches of the river, specifically the bends, aiming at recomposing the traditional river landscape at least from the perspective of the visitor.

A key action of the entire project is the valorization of the most symbolic feature of the river mouth: the Ofanto Tower, which could be regarded as a “synecdoche” of the whole landscape, a representative and symbolic synthesis of this complex multi-layered territory. The tower dominates the river mouth and stands as a “gate” to the territory and node of the convergent itineraries across the landscape, thus becoming one of the priority targets of the project. The Ofanto Tower is actually illegally occupied and the stone blocks of the facades have been partially dismantled and reused for the needs of some shepherds. The monument deserves urgent consolidation interventions to avoid its collapse and the restoration project can benefit both from the rich archival documentation about the tower, including ancient surveys, and from the typological and formal comparison with the various watchtowers along the Apulian coast. In this preliminary phase, what is necessary to underline is the historical vocation of Ofanto Tower as a terrace and *altana*, a privileged observation point over the valley landscape; moreover, it will be a node among the ecomuseum paths, a centre of interpretation of the landscape and information on the local heritage, a fulcrum in the enhancement of the whole area (figure 10). Consequently it is necessary to investigate the needs of the ecomuseum actors, the “who” and “why” of the project, before investigating the “how” of the project, which could oscillate between a purely conservative restoration and a contemporary reinterpretation of the tower’s formal characters and volumetric elements. In this sense, the restoration project of Torre Borraco (Manduria, TA) by Netti Architetti group could be considered best practice in Puglia, with several connections with the Ofanto case, too.<sup>48</sup> Furthermore, the transformation programme needs to build renewed synergies between the tower and the other elements of the territorial system. Therefore, the project should take the surrounding areas too into consideration, aiming at arranging places devoted to collective public uses, such as an equipped resting area and intermodal exchange hub for slow mobility, cyclists and pedestrians, along the paths immersed in nature. Concerning the landscape detractor of the nearby residential settlement *La Fiumara*, the impact can be mitigated by green actions on the contiguous public spaces and by designing an ecological “belt” around the complex, integrated within the mouth system and thus strengthening the environmental restoration. This sort of “reversed buffer” could be

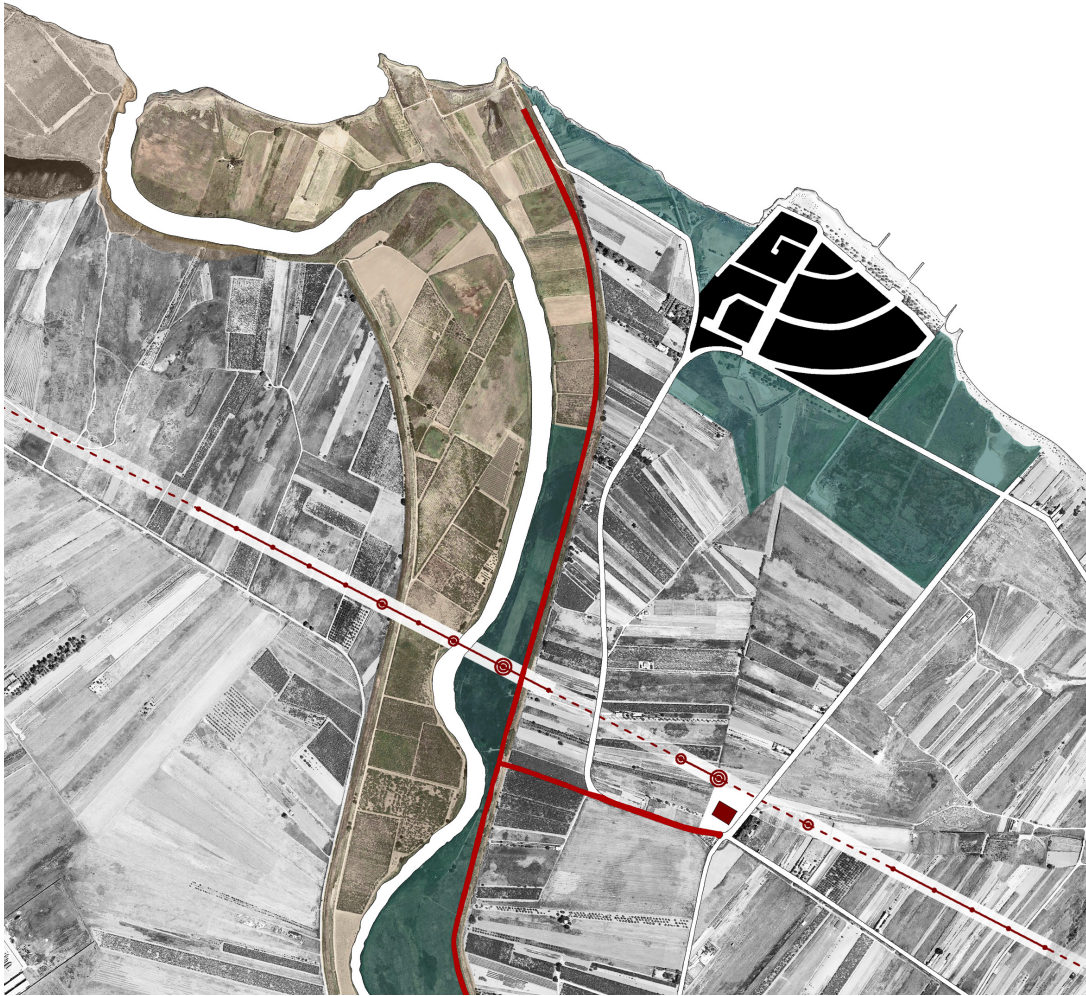


fig. 10 Concept design for the river mouth.  
The walkway along the river embankments  
in red, the floodplain in yellow, the area  
addressed by the re-naturalization project  
in green, and “La Fiumara” complex in black  
(drawing by the authors).

- 49 Matthew Gale, ed., *Paul Klee. Creative Confession and other writings* (London: Tate publishing, 2013).
- 50 “consiguiendo que emerjan, parcialmente, de su invisibilidad, para devolverlos, flotantes y dotados de una cierta ingravidez, a un tiempo presente para que sean proyectados hacia un tiempo futuro.” Álvarez, “Paisajes contemporáneos,” 11.

a sustainable alternative to the actual political immobility, waiting to decide the fate of this holiday settlement, which has been in decline for more than ten years.

Viewed from the perspective of land requalification and reuse strategies consistent with protection and, at the same time, promoting forms of heritage conservation compatible with environmental and landscape qualification, this work follows the tracks of a landscape enhancement metaproject. By proposing an ecomuseum of the lower Ofanto valley, it suggests some starting points of the project and some possible directions for development.

This strategic plan cannot be realized without the construction of a complex and continuous process of “participatory planning” with the local community, through interventions that promote and innovate the local culture and know-how, through the integration with the economic and productive realities in the area and even through the promotion of alternative forms of tourism, which do not congest the coastal and seaside areas but are more evenly distributed in the territory.

Moreover, the project does not aim at representing the marginal landscapes but more significantly to make them visible, as Paul Klee would say.<sup>49</sup> It aims at “getting them to emerge, partially, from their invisibility, to return them, floating and endowed with a certain weightlessness, at a present time so that they are projected into a future time.”<sup>50</sup>

It is an experimental and innovative approach, patient and non-monolithic, based at the same time on programmatic premises and developments in trends. This method considers the landscape palimpsest as a feature not to be merely protected, but a subject of a possible controlled transformation and as an asset of the local community: the widespread cultural, historical and landscape heritage is considered as an active agent of territorial enhancement.