

## **FLORE** Repository istituzionale dell'Università degli Studi di Firenze

river in Tuscany
Questa è la Versione finale referata (Post print/Accepted manuscript) della seguente pubblicazione:
Original Citation:
The impact of Regional Design on River Agreements: the case of the Ombrone river in Tuscany / Carlo Pisano; Valeria Lingua In: PLANNING PRACTICE + RESEARCH ISSN 0269-7459 ELETTRONICO (2021), pp. 0-0. [10.1080/02697459.2021.2005870]
Availability:
This version is available at: 2158/1250074 since: 2021-12-28T09:33:14Z
Published version: DOI: 10.1080/02697459.2021.2005870
Terms of use: Open Access
La pubblicazione è resa disponibile sotto le norme e i termini della licenza di deposito, secondo quanto stabilito dalla Policy per l'accesso aperto dell'Università degli Studi di Firenze (https://www.sba.unifi.it/upload/policy-oa-2016-1.pdf)
Publisher copyright claim:

(Article begins on next page)



### **Planning Practice & Research**



ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/cppr20

# The Impact of Regional Design on River Agreements: The Case of the Ombrone River in Tuscany

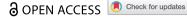
#### Carlo Pisano & Valeria Lingua

**To cite this article:** Carlo Pisano & Valeria Lingua (2021): The Impact of Regional Design on River Agreements: The Case of the Ombrone River in Tuscany, Planning Practice & Research, DOI: 10.1080/02697459.2021.2005870

To link to this article: https://doi.org/10.1080/02697459.2021.2005870

9	© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.
	Published online: 05 Dec 2021.
	Submit your article to this journal 🗗
hh	Article views: 101
α	View related articles 🗗
CrossMark	View Crossmark data 🗗







#### The Impact of Regional Design on River Agreements: The Case of the Ombrone River in Tuscany

Carlo Pisano n and Valeria Lingua

Department of Architecture, Università Degli Studi Di Firenze, Florence, Italy

#### **ABSTRACT**

Regional Design is a planning approach employed to build up robust argumentative structures and visions of the future that aim to guide decisions over a long time. The paper investigates the impact of the use of the Regional Design operational approach for the definition of a River Agreement. It traces the path of researchaction that led the local community of Buonconvento, a small Tuscan town, to activate networks of social capital useful to build the Ombrone River Agreement. The methodology of analysis builds on Faludi's concept of 'performance' and falls within four main areas of observation.

#### **KEYWORDS**

Regional design; river agreement; visioning; performance; scenario construction

#### 1. Introduction

Regional design (RD) as a method of argumentation in urban planning refers to the ability of representations to build up robust argumentative structures and visions of the future (Thierstein & Forster, 2008; Balz & Zonneveld, 2014; Lingua, 2017). It is based on the use of spatial representations of future developments or visions, both to indicate physical changes and stimulate debate on the sharing of responsibilities and resources (Balz & Zonneveld, 2014). Visions are drawn up in a collaborative visioning process with stakeholders (Helling, 1998; Nam, 2014), which is a process of persuasion and seduction that has a lot in common with planning as persuasive storytelling (Throgmorton, 2003; Stoep, 2014; Kempenaar *et al.*, 2019).

In this process, the world is reimagined to develop common ground for collective action (Rauws & van Dijk, 2013), which can be useful in regions where an overarching regional authority is weak or lacking, such as a supra-local, regional context. Due to its discretionary character, RD is often regarded as a useful approach to deal in political and geographical cross-border contexts demanding synchronization of planning philosophies, systems, tools, and methods.

Notwithstanding a growing number of researches on RD approaches to planning (Von Seggern et al., 2008; de Jonge, 2009; Meijsmans, 2010), little empirical research has been developed about the effects of RD on the complex and fragmented setting of cross-border or natural regions such as bio-regions or river basins, which have often highlighted a great difficulty in applying tools related to their management (Danese & Chicca, 2007).



**Table 1.** Correlation between the factors proposed to evaluate the performance of RD, the related literature and specific criteria used in the study. Source: Authors, 2021.

	Factor	Sources	Criteria
i	RD changes the perception of the region	(Balz & Zonneveld, 2014; Kempenaar <i>et al.</i> , 2016; van Dijk & Ubels, 2016; Lingua, 2017)	New practices and activities of inhabitants and institutions concerning their experience of the river
ii	RD builds up regional networks and relationships	(Hajer et al., 2006; Von Seggern et al., 2008; Meijsmans, 2010; Rauws & van Dijk, 2013; Förster et al., 2015)	Overcome conflicts caused by institutional barriers
iii	RD provides navigation devices for regional planning and development	(Neuman, 1996, Neuman, 2000; de Jonge, 2009; Balz & Zonneveld, 2014)	Build institutional capacity related to RA at a National and Regional level
iv	RD fosters the implementation process by operationalizing local actions	(Lingua, 2017, Lingua, 2020; Pisano, 2018a)	Affect decisions and influence actual physical developments

The paper aims to foster the debate on RD by developing an insight into the spectrum of its possible applications and impacts on River Agreements (RA). Within a river basin, these voluntary tools for territorial governance integrate different territorial and land-scape measures and projects with different planning tools (Voghera, 2020). Intended as an agreement between the largest possible number of actors from both the public and the private sector to harmonise the diverse uses and functions of the river, its banks, and the water resources, RA appears a relevant field of action to test the RD approach.

This paper unravels the path that has led to the definition of the Ombrone RA in Tuscany, Italy, as an empirical case study to discuss both the premises and the methodologies within which approaching a RA as an occasion to build up and make operational a shared vision of a 'larger-than-local' context as the one of the river basins, using a RD approach.

The research questions concern the way the RD approach can help constructing a RA, as well as the traceable performances of RD for both these processes and their implementation.

In the next section, we elaborate on the notion of RD and its potential use for RA processes. The methodology of analysis, building on different contributions on the role and performance of RD, falls within four main areas of observation related to the capacity of RD to (i) change the perception of a region; (ii) shape or enhance regional networks and relationships; (iii) provide for navigation devices for regional planning and development; (iv) foster the implementation process through local actions.

Despite RA experiences have flourished across the whole of Europe in the last decades (Ingaramo & Voghera, 2016), the analytical framework is tested with reference to the Italian context, where particular attention is dedicated to both the design of the process, the regional-scale vision provided for the river basin and the operational projects conceived for its implementation. The Ombrone RA process, which is the subject of our study, is analysed and put into tension through this analytical framework, to define traceable RD performances and their realization. We conclude by suggesting perspectives and directions for further research in the generalization of this analytical framework for strategic planning in supra-local cross-border areas and discussing possible challenges of its application.



#### 2. The Use of Regional Design Operational Approach for River Agreement

Planning used to be carried out primarily by government authorities. However, in many countries, it is now a more inclusive process of governance involving both governmental and non-governmental stakeholders (Healey, 1997; Sanyal, 2005; Innes & Booher, 2010). The nature of Planning in the European countries has also changed from a pre-dominantly regulative activity to a more strategic and proactive activity to facilitate or stimulate development (Waterhout et al., 2013; Reimer, 2014; Roodbol-Mekkes & van Den Brink, 2015). This has led to an increasing need for coordination, facilitation, and process management in the planning and development of regions (Kempenaar et al., 2016).

This brought design-led planning experiences to emerge in many European regions where politicians, administrators, planning professionals, market and civil actors are experimenting with urban, landscape or regional design approaches to overcome limitations that the statutory planning systems pose and, alongside, to face 'a relative decline of the role of the state, a growing involvement of nongovernmental actors in a range of state functions, the emergence of new forms of multi-agency partnerships and more flexible forms of networking at various spatial scales' (Davoudi, 2008). All these factors call for different and new ways for defining and designing the regionin particular, for 'noninstitutional' or 'soft' planning spaces with fuzzy boundaries (Allmendinger et al., 2015).

#### Defining the Region: The Contribution of Regional Design

Given the differences in planning cultures, systems and procedures, the experiences of the last decade outline the role of the RD approach to not just define physical interventions, but to contribute to the creation of institutional and organizational capacity (Balz & Zonneveld, 2014). This development-oriented planning style calls for improved alignments between governmental agencies and societal actors, indicating how growing spatial integration exceeds restricting administrative boundaries, and demonstrating why and how such barriers should be overcome (Förster et al., 2016).

Many conferences, seminars, and literature have been recently dedicated to the topic of RD and on the use of design-led approach in spatial and strategic planning (Neuman, 2000; de Jonge, 2009; Meijsmans, 2010; Balz & Zonneveld, 2014; Förster et al., 2016; Kempenaar et al., 2016; Lingua, 2018; Pisano, 2018b). A large part of the cases raised can be framed under the notion of Functional Urban Regions, as areas that people and businesses refer to in carrying out their activities (Friedmann & Weaver, 1979).

Less attention has been placed in cases in which the Region by itself should be established, so identified in social practices and regional consciousness, both inside and outside the geographical context (Paasi, 1991) and used by social actors as a medium in the struggle over resources and power (Paasi, 2009). Regions are not permanent (Kempenaar et al., 2019), they perpetually evolve under the influence of many factors (Keating, 2000; Paasi, 2009). Some of them have been historically established, some created to serve a specific purpose, and have little self-evident raison d'être so they need to be more actively built and constructed (Kempenaar et al., 2019).

Although various initiatives on the coordination and planning of spatial developments in European cross-border regions have been established (Luukkonen & Moilanen, 2012; Fricke, 2015), areas such as mountain ranges or river basins result in a network of informal and multiple formal (national, regional, provincial) planning arenas involved in the planning and coordination of spatial developments and still highlight a great difficulty in applying tools related to their management (Danese & Chicca, 2007).

The coordination of developments in such a fragmented planning landscape depends on the capacity of regional planning ideas, concepts, visions, and strategies to transfer to other planning arenas. Moreover, to have an effect, these ideas, concepts, visions, and strategies need to have persuasive power and hold that power over a considerable period of time (Albrechts *et al.*, 2003; Healey, 2006).

#### Designing and Managing River Basin Regions: The Role of River Agreements

It seems therefore appropriate to deepen the study of the application and impacts of the RD approach on RA, which are a voluntary tool for territorial governance within a river basin that integrate different territorial and landscape measures and projects by different planning tools (Voghera, 2020). The RA has the intrinsic objective of integrating and territorialising sectoral policies into a multifunctional vision of the river, through a process that coordinates and supports local participation in constructing a new sense of community linked to the definition of a shared vision. The RA as defined in Italy by the National Chart of River Contracts (Regione Lombardia, Regione Piemonte, Autorità di Bacino del Fiume Po, & A 21 Italy CdF, 2010) aims to bring together the different actors of the territory into an integrated, multidimensional, multidisciplinary approach (Ingaramo & Voghera, 2016). The institutions and authorities that are directly involved in the management of the river and the territory, the inhabitants, and all the different stakeholders are linked in a pact that fosters a nonsectorial vision in which the river is perceived as an environment of life (European Landscape Convention - 2000) and therefore as a common good to be managed in collective forms.

RA is seen as the instrument to combine interventions for environmental protection – closely related to the resolution of flood safety problems – with the needs of local development and fruition. The active involvement of local communities is, therefore, essential for searching for solutions based on integrated policies for ecological regeneration, and for the fruition of the landscape river system. RA is an agreement that allows us to take a rules system in which criteria of public utility, economic performance, social value, and environmental sustainability are equally involved in searching solutions for the River Basin redevelopment (Cialdea & Cacucci, 2017).

Inspired by international experiences (i.e. Belgium, France), the process leading to the formation of a RA has already been undertaken in several river basins in Italy (Voghera & Avidano, 2012). Unlike most territorial planning tools, in Italy the RA is not based on an institutional law; it is more of an experience implemented and developed in the last years and constantly consolidated both methodologically and operationally. However, its role in water management and territorial planning is gradually gaining widespread recognition, and as a result, the RA is increasingly being inserted in a variety of planning tools (basin or hydrographic district plans, water protection plans, landscape plans, rural development programs) and nowadays soil defence is interpreted as an integral part of a general environmental planning

strategy, related to the requalification of waters, management of the fluvial heritage, protection of natural assets and control of soil uses, separating it definitively from a sectoral approach.

#### 3. Methodology

Regional design has emerged as a non-statutory approach to planning, based on the construction of future scenarios, characterized by involvement and collaboration between public and private, as well as the ability to plan and act in a large area (region) in a transcalar perspective.

Given the informal, not statutory status of both RA and RD processes, as well as the institutionalisation of their outcomes, at a level where there is no democratically elected council but decisions are the result of soft negotiations and deliberations, the methodological framework is built on the notion of 'performance' (Faludi & Altes, 1994; Faludi, 2000). The application of a performance-based evaluation approach to RD needs to assess not, or not only, the ends scheme, which only makes sense dealing with specific and well-defined operational policy or policy problem (Mastop & Faludi, 1997), but to consider also the capacity of the process to change regional frames of reference and regional fields of action: changing discourses, institutionalized perceptions of regions and commonly perceived problems (Förster et al., 2015).

To unravel the contribution of Regional Design in the formation and even duration overtime of a RA, the evaluation of the performance of RD can be approached through the use of a series of factors drew by Balz (Balz, 2018), Kempenaar (Kempenaar et al., 2019) and other scholars<sup>1</sup>, selecting three main factors that can better express the outputs of a process of RD, and adding a fourth one that, as recent practices show (Ingaramo & Voghera, 2016; Pisano & Lingua, 2019a), seems to be promising in the application of RD to RA:

- (i) RD aims to develop a change in the perception of a region (Balz & Zonneveld, 2014), by enabling collective conceptualization and shared envisioning and building support for the proposed ideas (Kempenaar et al., 2016; van Dijk & Ubels, 2016). The capacity of prefiguration or visioning assumes fundamental importance, in reference both to inhabitants of the region, who perform their visioning skills concerning their experience of life and lived space, and the institutions, required to recompose this ability to foreshadow the microexperienced personal dimension to the micro and macro scale of the city as a collective experience (Lingua, 2017).
- (ii) RD shapes or enhances regional networks and relationships (Hajer et al., 2006; Rauws & van Dijk, 2013) through visualisation: even if making problems, dynamics and strategies visible can elicit strife (Balz & Zonneveld, 2014), participatory processes within the frame of a RD process create occasions for confrontation and collaboration (Von Seggern et al., 2008; Meijsmans, 2010). The performance of RD in this field measures the capacity to both enlarge networks and enables visioning processes: from the governance side, it enhances

- participation and establishes transparency and openness; within the visioning process, RD makes multiple views visible, initiates discussions and dialogues, strikeout new directions by integrating multiple voices (Förster *et al.*, 2015).
- (iii) RD provides for navigation devices for regional planning and development (Langner, 2014): scenarios and visions affect decisions concerning the physical environment in a region (Neuman, 2000; de Jonge, 2009), and as a consequence, can influence the actual physical developments, change defined rules systems and add forms of discretion to the planning process (Balz & Zonneveld, 2014). Regional Design does not replace statutory planning, nor any other strategic planning model, but represents the moment of construction, clarification and sharing of a vision by establishing indicative frameworks, images and visualisations of the territory that are functional to the interaction between institutions and stakeholders involved in a territorial project. Within this process, the creation of spatial representations is essential not only for creating, testing and calibrating strategies but especially for building the institutional basis to support and implement them (Neuman, 1996).
- (iv) Finally, RD is a proactive method for implementation: visions, strategies, and perspectives become operational through local actions and projects that make them visible and tangible (Lingua, 2020). The use of visioning methods and techniques related to the concept of RD aims to activate processes of mutual contamination between strategies and operative actions, conceived as tactics (Lingua, 2017; Pisano, 2018a). If local projects are intended as tactics, i.e. extemporaneous processes which call into question the mechanisms and rules of strategic spatial planning, this last prefigure the framework in which they move on and toward a possible future to achieve. RD represents the intermediate and linking step between these two dimensions. In the transition from proactive to strategic action and back, it stimulates and gathers the different local projects.

This analytical framework is verified on the case study concerning the Ombrone RA in Tuscany, the second river of the Tuscany Region in Italy, by analysing the design process and its main results.

#### 4. A Field-tested Regional Design Approach: The Ombrone River Agreement

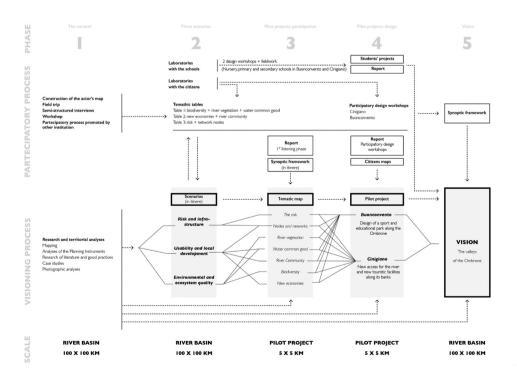
Born as a bottom-up proposal by a local Committee, the Ombrone RA started symbolically on the 21<sup>st</sup> of October 2013, when the Municipality of Buonconvento was flooded along with several other municipalities touched by the river Ombrone and its tributaries (in particular the Arbia River). This event caused the flooding of the historical city centre and the twentieth-century expansion, the destruction of the regional railway line and of a bridge that led to the isolation of a whole settlement for more than 6 months.

Following this event, and perceiving a lack of action by the Municipality of Buonconvento, a local association, *Comitato per la valorizzazione del paesaggio e dell'ambiente di Buonconvento* (Committee for the enhancement of the landscape and environment of Buonconvento), undertook a long process of confrontation with the institutions that are responsible for the governance of the river basin and its territories (Municipality of Buonconvento, Land Reclamation Consortium, Civil Engineering

Department, District, other surrounding municipalities), in order to understand what could have been the most appropriate ways for a quick restoration of the bridges and the road and railway network. In the framework of complex competencies shared by the different institutions at all levels [Table 2], the need to activate integrated policies emerged for many aspects, from soil and water protection to local development connected to the river fruition. These needs were further strengthened by a second flood event, which took place on the 24<sup>th</sup> of August 2015.

With the awareness of being able to act from below, the Committee identified the RA as a proactive path towards an integrated concept of sectoral policies in a multifunctional vision of the river, supported by the operational methodologies of RD (Pisano & Lingua, 2019a) for building up a collective image of the riparian community and defining a shared vision of its territorial development.

The local committee proposed the activation of the RA to several institutions and, the University of Florence became a partner for promoting a dedicated participatory process.<sup>2</sup> Within this partnership, a participatory process has been developed as a research-action practice to test the performance of RD for both the definition and the implementation of the RA. As summarized in the methodological diagram [Figure 1] the work was composed of two parallel and strongly linked processes: the participatory process – developed with experts<sup>3</sup> and technicians, with citizens and schools – has integrated the visioning process defined in the scientific research field, binding it to the reality and local ambitions. The participatory process helped to define a set of themes and goals to be inserted in the RA, and the visioning process allowed to organize them in a coherent framework.



**Figure 1.** The methodological structure of the research. Source: (Pisano & Lingua, Pisano and Lingua, 2019b).

The joint action of the Committee and the University, operating at different scales (local vs. regional), followed a trans-scalar methodology (Ingaramo & Voghera, 2016). The scale of the work, from the analysis to the project, has followed an oscillating trend from the large scale of the 'scenario construction' up to the scale of the detailed projects of 'case studies', and then returned to the evaluation of the results for the entire river basin, passing through the definition of the more technical thematic maps, useful to foster the participatory process.

#### Regional-scale

The design approach for the vast scale of the river basin was assisted through the technique of "scenario construction" (Bozzuto *et al.*, 2008): scenarios are intended as hypothetical and opposing stories of the future that answer the question: "what would happen if..." (Secchi, 2003). The scenario is therefore a collection of hypotheses that question the future and which allows to deal with and discuss about the future (Viganò, 2010; Cavalieri, 2013; Pisano, 2016). In this sense, the scenario can assist the correct reconstruction of problems: a problem setting service, able to isolate issues and place them in a reciprocal relationship. The construction of scenarios for the Ombrone RA allowed the discussion of the different thematic systems in a specific manner – hydraulic, naturalistic, economic, and social aspects – to set problems, to the ground and specify conflicts and interests.

First, an analysis of general and sectoral spatial planning instruments at the Regional and Provincial levels has let to provide for a scenario integrating different ways to conceive the basin area and its future. These projects, together with the results of the workshops with citizens and school children held in the first participatory phase, provided for defining three main issues (Table 2), at least partly divergent: risk and infrastructure; environmental and eco-systemic quality; accessibility, and local development. These three scenarios call for different ways of understanding the river and its future, conveyed by groups of technical stakeholders, differentiated local interests, often in conflict with each other, and accustomed to different specific languages and terminologies.

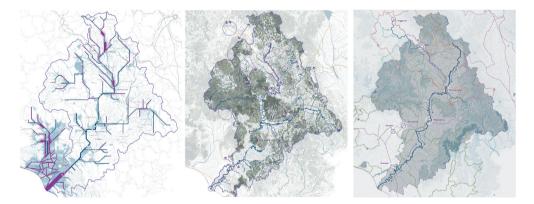
The three scenario maps [Figure 2] elaborated for the Ombrone river favour a representation of information organized in systems, envisioning the result of an interpretive action. This interpretative action is intended to develop different representations of the same river basin, which construct a reading of the territory organized on issues consolidated in planning practices and the local debate (Carta, 2009) and directed to highlight respectively: the system of large infrastructures and hydrogeological risk and the works aimed at mitigating it, as contained in the Flood Risk Management Plan of the District Basin Authority of the Northern Apennines and the Reclamation activities plan of the Land Reclamation Consortium; the interaction between the environmental and ecological dimension of the territory, informed mainly by the Regional Spatial Framework and Landscape Plan and the Hydrogeological Plan of the Basin Authority; the anthropic dimension, calling for organising sustainable mobility and local development, as contained in the Provincial Territorial Coordination Plans of Grosseto and Siena provinces and in the Regional Spatial Framework and Landscape Plan.

Table 2. Correlation between planning instruments and visions (High-Medium-Low). Source: (Pisano & Lingua, Pisano and Lingua, 2019b).

AUTHORITY – Planning instrument	Scenario 1 Risk and infrastructure	Scenario 2 Environmental and eco- systemic quality	Scenario 3 Accessibility and local development
TUSCANY REGION – Piano di indirizzo territoriale con valenza di piano paesaggistico (Regional Spatial Framework and Landscape Plan)	٦	Σ	Τ
TUSCANY REGION – Piano Regionale Integrato Infrastrutture e Mobilità (Priim) (Regional Mobility Plan)	I	Σ	Σ
TUSCANY REGION – Piano Regionale delle Attività Estrattive (PRAE) (Regional Plan for Mining Activities)	Σ	Σ	_
TUSCANY REGION – <i>Programma di Sviluppo Rural</i> e (Rural Development Program)	_	Σ	Ŧ
DISTRICT BASIN AUTHORITY OF THE NORTHERN APENNINES – <i>Piano di Gestione del Rischio Alluvioni (PGRA)</i> (Flood Risk Management Plan)	エ	Σ	Σ
BASIN AUTHORITY – Piano di Bacino – Piano di Assetto Idrogeologico (Basin Plan – Hydrogeological Plan)	I	7	_
TUSCANY REGION – <i>Programmi di intervento pluriennali</i> (Multi-year intervention programs)	I	Σ	Σ
LAND RECLAMATION CONSORTIUM – Piano delle attività di Bonifica (Land reclamation activities plan)	I	エ	Σ
SIENA PROVINCE – <i>Piano Territoriale di Coordinamento Provinciale (PTCP)</i> (Provincial Territorial Coordination Plan)	7	Σ	Ξ
SIENA PROVINCE – <i>Masterplan della mobilità dolce</i> (Soft Mobility Plan)	_	7	ェ
GROSSETO PROVINCE – <i>Piano Territoriale di Coordinamento Provinciale (PTCP)</i> (Provincial Territorial Coordination Plan)	7	Σ	Ξ
FIAB Grosseto – <i>Progetto Greenways</i> (Greenway's project)	Γ	Γ	Ŧ

**Table 3.** Correlation between the factors proposed to evaluate the performance of RD, the specific criteria and the evidence emerged during the study. Source: Authors, 2021.

	Factor	Criteria	Evidence
i	RD changes the perception of the region	New practices and activities of inhabitants and institutions concerning their experience of the river	Re-publishing of the Ombrone Journal     Workshops and seminars organised by the Municipalities of the Ombrone valley     Definition of a new project for promoting and improving the perception of the river identity among the young generations
ii	RD builds up regional networks and relationships	Overcome conflicts caused by institutional barriers	<ul> <li>Institutional mediation for the project of the bridge over the Cassia</li> <li>Enlargement of the RA partnership for the promotion of a project for the young generations by involving other municipalities, schools and associations</li> </ul>
iii	RD provides navigation devices for regional planning and development	Build institutional capacity related to RA at a National and Regional level	<ul> <li>Ombrone RA as best practice by National observatory of River Contracts</li> <li>Ombrone RA as good practice for the 2019 regional call for RA</li> <li>Definition of a Regional Landscape project that involves the river basin area</li> </ul>
iv	RD fosters the RA implementation process by operationalizing local actions	Affect decisions and influence actual physical developments	<ul> <li>Feasibility study, executive design and realisation of the first 'gate' of the river park in the Municipality of Buonconvento</li> <li>Feasibility study, executive design and realisation of the trekking paths in the Municipality of Cinigiano</li> </ul>



**Figure 2.** Three scenarios for the Ombrone river. From left: risk and infrastructure; environmental and eco-systemic quality; accessibility and local development. Source: (Pisano & Lingua, 2019a).

#### **Local Case Studies – Participatory Design Workshops**

The integration and convergence between the three main scenarios was approached at the local scale through the use of the pilot projects technique, in which the different aspects, related to the river management, are combined. Included in several theoretical frameworks – such as Landscape Urbanism (Steiner, 2011), DIY Urbanism (Sawhney *et al.*, 2015), and Tactical Urbanism (Lydon *et al.*, 2015) – pilot projects are meant as community engagement and as instruments to learn about how planning and design decisions hit the ground, thereby improving the final implementation (Gehl & Rogers, 2010). In the

downscaling from macro to micro, the regional-scale strategies have been tested in more detailed projects that, once developed and shared with the community, have been scaledup in their strategic assumptions to inform again the final river basin vision.

The pilot projects in Buonconvento and Cinigiano municipalities have been chosen as representative of two very different realities of the river basin. They are both located along the river, but in very different areas from an ecological, political, and topographical point of view (high and low Ombrone, province of Siena and Grosseto).

Through a series of participatory planning workshops, a collective reflection on the impact of different scenarios in the local area and on possible intervention strategies was developed [Figure 3]. The participatory design workshops promoted the reconciliation of the divergent large-scale scenarios in an integrated design perspective, by focusing on concrete problematics which affected a specific territorial portion of the river basin. Thus, the recreational activities along the fluvial territory were, for instance, connected to the safeguard and enhancement of environmental and ecosystem quality and with the hydrogeological risk management and mitigation works. In this way, the local scale becomes the key dimension for the definition of integrated policies able to guarantee the balanced management and development of the fluvial territories and its community [Figure 4].

At the end of this process, a memorandum of understanding of the River Agreement was formally signed on the 22<sup>nd</sup> of September 2018 by the actors involved in the participatory process. The memorandum contains the formal establishment of



Figure 3. The Buonconvento pilot project: the maquette shows the results of the participatory planning workshop held in Buonconvento from the 7<sup>th</sup> to the 25<sup>th</sup> of May 2018. Source: Authors, 2019.

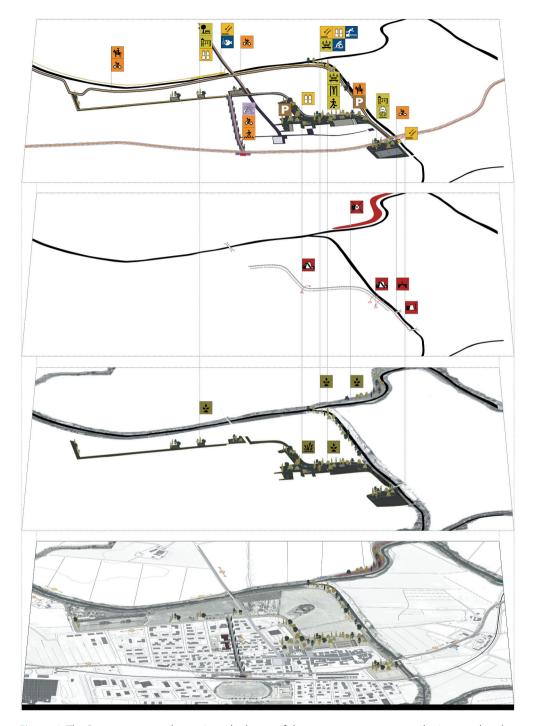


Figure 4. The Buonconvento pilot project: the layers of the axonometry represent the issues related to the three main scenarios. From the top: Accessibility and local development Risk and infrastructure; Environmental and eco-systemic quality; existing situation. The connections between the layers represent potential synergies activated by the pilot project. Source: Authors, 2019.



a permanent coordination, planning and organization Table, the first draft of an Action Plan to be implemented through the coordination of the Table, and the responsibilities and obligations of the signatory parties.

#### 5. Discussion

The analysis of the performances of the RD in constructing the Ombrone RA falls within four main areas of observation related to the capacity of RD to (i) change the perception of a region; (ii) shape or enhance regional networks and relationships; (iii) provide navigation devices for regional planning and development; (iv) foster the implementation process through local actions. The analytical framework is verified on a case study concerning the Ombrone RA, by analysing the design process and its main results, but also through the comparison with other RA processes activated both in Tuscany and in Italy (Table 3).

#### i RD Changes the Perception of the Region

The first area of impact is related to the capacity of a RD operation to enable the creation of a shared (new) conceptualization of the territory, changing the perception of a region (Balz & Zonneveld, 2014; Kempenaar et al., 2016; van Dijk & Ubels, 2016). From this perspective, the Ombrone RA case could rise two different reflections. Firstly, the participatory events, especially the design activities carried out during the participatory design workshops, helped to switch the common perception of the river Ombrone that, after the 2013 and 2015 floods, was mainly centred on risk and fear. The scenario of risk management was conceived as first, but during the discussion the need for ecological and landscape protection and for the development of local activities for fruition and territorial animation emerged, enriching the global vision of the basin river with the other two dimensions (environment and development-oriented).

Secondly, the participative methods helped local communities in defining a shared territorial perception (Paasi, 1991) of the Ombrone region, which previously emerged in various social practices, but that was never made explicit. The realisation of events in which citizens and administrations shared their vision on the river expanse, the republishing of the Ombrone Journal - an old publication which, in the thirties, promoted the beauty of the Ombrone Valley and is now aimed at collecting the stories and perceptions of the river community – the several walking-workshops helped to construct shared narratives and to signifying the Ombrone region identity, both at the community and institutional level [Figure 5].

At the community level, Osiamo! (Let's try) is a narrative that is now recognised by citizens of the involved municipalities as the slogan of the river agreement and has been the base for a project financed to the local committee and aimed to promote the building up of the river community within the young generations.<sup>4</sup> At the institutional level, the building up of the river community faced the difficulties of dialogue between small municipalities (mostly under 5.000 inhabitants and interested in the use, development and protection of the river), and the provincial capitals of Siena and Grosseto, which haven't yet signed the RA: this can be due to both the different political colour<sup>5</sup> and the size (60.000 inhabitants in Siena, 80.000 in Grosseto) such as to consider the river and its management as a residual part of their territory and policies.



Figure 5. The Ombrone Journal, a place where stakeholder can tell their stories. Source: Authors, 2019.

#### ii RD Builds up Regional Networks and Relationships

Several participatory techniques were applied in the Ombrone RA over more than 1 year: co-design initiatives, workshops, focus groups, and public presentations had been organised as part of the RD process that helped to build networks and relationships between participants (Hajer *et al.*, 2006; Rauws & van Dijk, 2013).

The capacity of the RD to assist the process from the territorial to the local scale helped to overcome the conflicts that often remained unsolved in other RAs. Conflicts that would have been difficult to resolve on a river basin scale, or would have remained vague and undefined, have found a coherent solution on a pilot case scale, where the various players have been able to confront specific situations, freeing themselves from the restrictions and prejudices of individual disciplinary and technical positions (engineering, ecological, economic, etc.) and seeking a comprehensive and rewarding mediation. The ability of RD to assist the transcalarity of the process helped therefore to solve conflicts and allowed the creation of solid networks.

Evidence is manifested by the fact that in May 2018 during the RA process, the Transport and Mobility sector of the Tuscany Region proposed the project for a new bridge over the Cassia Regional Road near the historical centre of Buonconvento. This infrastructure could have produced heavy environmental and landscape impacts. Through the Guarantee Table of the RA, a direct relationship was established between local authorities (municipal administration) and supra-local authorities (Tuscany Region), which allowed a direct comparison, dialogue, and mediation, convincing the Region to develop an alternative project that would have been more coherent with the propositions of the masterplan defined during the participatory process for the River Agreement.

Moreover, the building up of the project for the young generations has been the occasion to enlarge the RA partnership to other 7 municipalities and to 18 schools, as well as to other local associations engaged in the promotion of the river identity and fruition.

#### iii RD Provides Navigation Devices for Regional Planning and Development

The aim of design-led approaches is not just to define physical interventions, but to contribute to the creation of institutional and organizational capacity (Balz & Zonneveld, 2014), therefore an innovative RD endeavour can also impact the planning and design professions and the way that plans are made (Millard-Ball, 2013; Salewski, 2013).

The Ombrone RA has become an important case study in the evolving and developing methodologies of RA, both regionally and nationally. Tuscany Region took the Ombrone RA as a good practice and disseminated its results while publicising the 2019 call for financing local feasibility studies in the framework of regional River Agreements.

At the national level, the Ombrone RA has been indicated as best practice by the National Observatory of River Contracts of the Ministry of the Environment, which asked the local Committee and the University of Florence to present the Ombrone RA participatory process at the meeting "Public participation in the management of water bodies. The involvement of stakeholders in River Contracts" (Rome, 9<sup>th</sup> of April 2019). The RD visioning process, as well, was one of the good practices showed within the 2019 National Urban Planning Review (Rassegna Urbanistica Nazionale - RUN) organized by the Istituto Nazionale di Urbanistica - INU (National Town Planning Institute) as an overview of the most advanced experiences of urban and regional planning in Italy. Within these events, the contribution of RD processes and methodologies in RA processes was acknowledged by institutions, academics, and planning practitioners.

Moreover, at the regional level, the Region of Tuscany has recognised as part of the implementation of the river agreement different regional projects aimed to develop sustainable mobility and landscape planning, as the 'Due mari' ('two seas') interregional bike-path that, starting from the Adriatic sea, in Tuscany extends along the course of the Ombrone river to the Tyrrhenian sea and the Landscape Project 'Ferrociclovie della Val d'Orcia' (railway-cycle paths of the Orcia Valley), aimed to integrate local bike path with the regional railway lines and extended to the municipalities alongside the Ombrone River.6

#### iv RD Foster the Implementation Process through Local Actions

Finally, RD aims to affect decisions concerning the physical environment of a region (Neuman, 2000; de Jonge, 2009), and as a consequence, to influence the actual physical developments. It is certainly difficult to establish a direct pathway between a RD operation and changes in the physical environment (Kempenaar et al., 2019), especially with little time spam from the formal beginning of the process. However, the Ombrone RA allowed the creation of a strong virtuous circle which enabled the Municipality of Buonconvento to take part in several Regional and sectorial calls for funding, which makes it possible to implement the pilot project proposed as a result of the RA. In particular, the planning workshop held in Buonconvento in May 2018 within the participatory process related to the RA, foresaw the realisation of a small park located close to the historical walls, today used as a parking site, intended as the 'gate' of a more extended territorial river park. This proposal created the opportunity to take advantage of the Regional Call for River Contracts (regional resolution 770/2017) meant to finance feasibility studies related to the implementation process of RA. This study was carried out by a team related to the Regional Design Lab of the Department of Architecture of the University of Florence. The resulting feasibility study was then used by the Municipality of Buonconvento to take part in the GAL Leader FESR-based regional funds 'Siena LAG', designed to give 'Support for studies/investments related to the maintenance, restoration, and redevelopment of the cultural and natural heritage of villages, rural landscape, and sites of high naturalistic value, including the socio-economic aspects of these activities, as



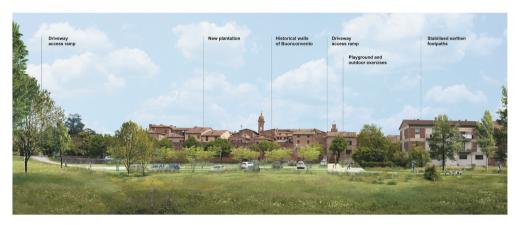


Figure 6. The feasibility study for the 'Park outside the walls of Buonconvento'. Source: Authors, 2019.

well as environmental awareness actions'. This call allowed the Municipality of Buonconvento to get financings for the executive design of the park and its realisation [Figure 6]. This will convey the physical change of an important part of the city, by the realisation of the 3 hectares river park conceived by citizens within the participatory process.

At the same time, the municipality of Cinigiano used the participatory map of the trekking path along the river to get funding by the 'Maremma LAG' for the feasibility studies of the trekking routes and for their realization.

Finally, the Regional Landscape Project 'Railway-cycle paths of the Orcia Valley' is conceived as a framework in which developing and financing local pilot projects on the involved municipalities.

#### 6. Conclusion

RD is meant to foster a specific discourse, to serve as signposts for subsequent decisions either on the level of actors or actions (Balz & Zonneveld, 2014). The methodology proposed for the Ombrone RA, based on a RD approach, consisted in the search for the mutual influence between scales (from micro to macro and vice versa) and between



policies (from short to long term and vice versa), acting at the same time at the scale of the river basin - through the surveys subsumed in the three territorial scenarios - and at the local scale, through the two pilot projects.

To evaluate the performance of RD actions we defined four areas in which the performance of RD can be traced. They are related to the capacity to change the perception of a region, to build regional networks and relationships, to define new ways in plan-making, and affect decisions concerning the physical environment. The performance of the research-action experience of the Ombrone RA was analysed according to this framework, to evaluate the contribution of RD in such a large-scale territory and governance process.

This analytical framework allowed the study of the Ombrone RA process in its different articulation of scales, action, and operating modes. The impacts highlighted in this study, however, have come about in a complex web of actions, in which multiple sources contribute to actual changes, and in which it is hard to determine causality.

The Ombrone RA moreover started officially only in 2016, and it is therefore impossible to define its long-term results.

However, the study showed that approaching RA through RD techniques opens to further research perspectives on the definition of indicative frameworks, images, and visions of the territory and the interaction between different institutions and stakeholders at different scales; moreover, the interaction between visions and projects is a key factor in the frame of the evaluation of the performance of these processes.

In particular, a generalisation of the analytical framework developed on the concept of performance highlights how the RD approach could be a viable and sound methodology to build up RA processes:

- (i) RD changes the perception of the river basin: in a RA, RD led to visualizing the river valley, its dynamics, as well as the effects of integrated strategies for territorial development, landscape protection, risk management. This visualisation process, together with the visioning attitude proper of RD processes, can help in envisioning possible futures at the regional level in the form of scenarios that can be territorialised at the local level. This implies defining, in the final visions, a strong inter-relation among projects at different scales, from the regional to the local one, by defining a pilot project aiming to operationalise the basin strategies.
- (ii) Given their nature of soft governance agreements, networking in RAs is the base for building up the river community and guarantee the implementation of the action plan. RD can give an added value to networking formation and consolidation, as it shapes or enhances regional networks and relationships (Hajer et al., 2006; Rauws & van Dijk, 2013) through visualisation: atelier sessions, workshops, and charrettes, organized in the frame of a RD process, make different stakeholders contribute in defining the river community, by creating situations for collaboration and activating or enhancing the capacity of future thinking.
- (iii) RD provides frameworks for regional planning and development. In a RA, the relationship between planning strategies and local projects is an issue: 'charming master plan or a fascinating strategic scenario gives the illusion of the integration of a system, which will probably be developed in its individual parts through an

allocation of building lots to investors, who will commission different architects who will then propose their own personal vision of architecture, forgetting the common strategy' (Ingaramo & Voghera, 2016, p. 6). In the current socioeconomic contingency, characterized by a general lack of public resources, RD can help to join the strategies at the regional scale to minute and sensitive urban projects, through a trans-scalar approach capable of triggering processes of redefinition of the urban tissue in the frame of a major and complex supra-local project.

(iv) RD fosters the RA implementation process by operationalizing local actions. In River Agreements, RD enhances interaction among scales and levels through a design-led approach that gives legs for implementation, by providing both the framework of general strategies and local feasibility studies. Financial resources are usually easier to find when the interaction among supra-local planning instruments and local projects is made explicit (Pisano & Lingua, Pisano and Lingua, 2019b). Strategies became operational through local actions and projects that make them visible and tangible in a reciprocal relationship between strategies and tactics (Lingua, 2017).

In general terms, the research highlights how the highly complex context of a crossborder region such as RA, characterized by a fragmented planning landscape, can rely on RD initiatives and techniques. These findings improved our understanding of RD impacts and their realisation.

Perspectives for further research are concerned with the comparative application of this methodological framework to different RA experiences in Italy, Europe and the world, to define changing performances of RD in RA according to changes in the planning context of RD and, on the other hand, to acknowledge how changes in the RA territorial, planning and governance contexts and frameworks affect RD practices.

#### **Notes**

- 1. See Table 1 for a summary of the sources that support each factor.
- 2. The participatory process, entitled 'Osiamo! Verso il contratto di fiume Ombrone' (Let's try. Toward the Ombrone River Agreement), was financed by the Region of Tuscany (L.R. 46/ 2013). The Regional Design Lab of the Department of Architecture of the University of Florence joined the process in the frame of the third mission of the University, aimed to promote the civic engagement of the university on territories. For the implications and effects of this form of engagement, see (Goddard et al., 2016).
- 3. The participatory process was coordinated by Micaela Deriu, Fabio Berlanda and Giuliana Pincelli.
- 4. The project 'Osiamo! Le giovani generazioni verso il contratto di fiume Ombrone' (Let's try: the young generations toward the Ombrone RA) involves several local associations and schools along the river and has been financed by the MPS Bank Foundation, see https:// www.fondazionemps.it/contributi/bando-sienaindivenire-i-contributi-assegnati/.
- 5. Both the capital cities are right wing, while all the surrounding little municipalities are left
- 6. The partnership of the project has been enlarged in July 2021, see https://www.regione. toscana.it/-/informazione-e-partecipazione-per-il-progetto-di-paesaggio-ferro-cicloviedella-val-d-orcia-dei-colli-e-delle-crete-senesi.



#### **Disclosure statement**

No potential conflict of interest was reported by the author(s).

#### **ORCID**

Carlo Pisano (b) http://orcid.org/0000-0001-8082-789X

#### References

- Albrechts, L., Healey, P., & Kunzmann, K. R. (2003) Strategic spatial planning and regional governance in Europe, *Journal of the American Planning Association*, 69(2), pp. 113–129. 10.1080/01944360308976301
- Allmendinger, P., Haughton, G., Knieling, J., & Othengrafen, F. (Eds) (2015) *Soft Spaces in Europe: Re-negotiating Governance, Boundaries and Borders* (London: Routledge).
- Balz, V. (2018) Regional design: Discretionary approaches to regional planning in The Netherlands, *Planning Theory*, 17(3), pp. 332–354. 10.1177/1473095217721280
- Balz, V., & Zonneveld, W. (2014) Regional design in the context of fragmented territorial governance: South wing studio, *European Planning Studies*, 23, pp. 1–21.
- Bozzuto, P., Costa, A., Fabian, L., & Pellegrini, P. (2008) Storie del futuro (Roma: Edizioni Officina).
- Carta, M. (2009) La rappresentazione identitaria dall'Atlante del patrimonio allo scenario del master plan, in: S. Giacomazzi, and A. Magnaghi (Eds) *Un fiume per il territorio: Indirizzi progettuali per il parco fluviale del Valdarno empolese*, pp. 125–132 (Firenze: Firenze University Press).
- Cavalieri, C. (2013) Sinking lands. Mapping spatial paradigms in the Veneto Region, in: V. Banndieramonte, C. Cavalieri, I. Guida, and K. Rashidzadeh (Eds) *The Next Urban Question*, pp. 193–206 (Roma: Officina Edizioni).
- Cialdea, D., & Cacucci, S. (2017) The river's contract: An opportunity for new landscape planning activities ProQuest, *International Journal of Design & Nature and Ecodynamics*, 12(3), pp. 314–323. 10.2495/DNE-V12-N3-314-323
- Danese, D., & Chicca, C. (2007) Grado di attuazione degli interventi sulla base degli strumenti di pianificazione: L'esperienza dell'AIPO sul fiume Po, Presented at the Fiume, paesaggio, difesa del suolo: Superare le emergenze, cogliere le opportunità: Atti del convegno internazionale (Firenze: Firenze University Press).
- Davoudi, S. (2008) Governing polycentric urban regions, in: A. Thierstein & A. Forster (Eds) The Image and the Region: Making Mega-City Regions Visible (Munich: Lars Muller Publishers).
- de Jonge, J. M. (2009) Landscape architecture between politics and science: An integrative perspective on landscape planning and design in the network society, (PhD) S.n., [S.l.]. Available at https://library.wur.nl/WebQuery/wurpubs/373004 (accessed1 September 2021).
- Faludi, A. (2000) The performance of spatial planning, *Planning Practice & Research*, 15(4), pp. 299–318. 10.1080/713691907
- Faludi, A., & Altes, W. K. (1994) Evaluating communicative planning: A revised design for performance research, *European Planning Studies*, 2(4), pp. 403–418. 10.1080/09654319408720278
- Förster, A., Balz, V., Thierstein, A., & Zonneveld, W. (2016) *The Conference 'Shaping Regional Futures: Mapping, Designing, Transforming!' A Documentation* (Munich/Delft). https://www.arc.ed.tum.de/en/re/research/research-item-single-view/article/2014-2015-shaping-regional-futures-mapping-designing-transforming/



- Fricke, C. (2015) Spatial governance across borders revisited: Organizational forms and spatial planning in metropolitan cross-border regions, European Planning Studies, 23(5), pp. 849–870. 10.1080/09654313.2014.887661
- Friedmann, J., & Weaver, C. (1979) Territory and Function: Evolution of Regional Planning (London: Edward Arnold).
- Gehl, J., & Rogers, R. (2010) Cities for People, 1 ed. (Washington, DC: Island Pr).
- Goddard, J., Hazelkorn, E., Kempton, L., & Vallance, P. (2016) The Civic University the Policy and Leadership Challenges the Civic University: The Policy and Leadership Challenges (Cheltenham: Edward Elgar Pub).
- Hajer, M., Feddes, F., & Sijmons, D. (2006) Een Plan Dat Werkt: Ontwerp En Politiek in de Regionale Planvorming, 1 ed. (Rotterdam: NAI Uitgevers/Publishers Stichting).
- Healey, P. (1997) Collaborative Planning: Shaping Places in Fragmented Societies (New York: Macmillan).
- Healey, P. (2006) Urban Complexity and Spatial Strategies: Towards a Relational Planning for Our Times, 1 ed. (London; New York: Routledge).
- Helling, A. (1998) Collaborative visioning: Proceed with caution!: Results from evaluating Atlanta's vision 2020 project, Journal of the American Planning Association, 64(3), pp. 335-349. 10.1080/01944369808975990
- Ingaramo, R., & Voghera, A. (Eds) (2016) Topics and Methods for Urban and Landscape Design: From the River to the Project (Cham: Springer International Publishing).
- Innes, J. E., & Booher, D. E. (2010) Planning with Complexity: An Introduction to Collaborative Rationality for Public Policy, 1 ed. (Abingdon, Oxon; New York: Routledge).
- Keating, M. (2000) The New Regionalism in Western Europe: Territorial Restructuring and Political Change, New ed. (Cheltenham: Edward Elgar Pub).
- Kempenaar, A., Brinkhuijsen, M., & van Den Brink, A. (2019) The impact of regional designing: New perspectives for the Maastricht/Heerlen, Hasselt/Genk, Aachen and Liège (MHAL) Region, Environment and Planning B: Urban Analytics and City Science, 46(2), pp. 359-376.
- Kempenaar, A., Westerink, J., van Lierop, M., Brinkhuijsen, M., & van Den Brink, A. (2016) "Design makes you understand"—Mapping the contributions of designing to regional planning and development, Landscape and Urban Planning, 149, pp. 20-30. 10.1016/j. landurbplan.2016.01.002
- Langner, S. (2014) Navigating urban landscapes— Adaptive and specific design approach for the 'Landschaftszug' in Dessau, Journal of Landscape Architecture, 9(2), pp. 16-27. 10.1080/ 18626033.2014.931695
- Lingua, V. (2017) From tactics to strategies and back: Regional design practices of contamination, *Urbanistica*, 157, pp. 55–60.
- Lingua, V. (2018) Regional design for strategic planning: A vision for the metropolitan city of Florence, in: L. Velo & M. Pace (Eds) Utopia and the Project for the City and Territory, pp. 158-164 (Roma: Officina).
- Lingua, V. (2020) Regional designing and visioning in planning rescaling: An interactive governance perspective, in: V. Lingua & V. Balz (Eds) Shaping Regional Futures: Designing and Visioning in Governance Rescaling, pp. 13-25 (Cham: Springer International Publishing).
- Luukkonen, J., & Moilanen, H. (2012) Territoriality in the strategies and practices of the territorial cohesion policy of the European Union: Territorial challenges in implementing "soft planning", European Planning Studies, 20(3), pp. 481–500. 10.1080/09654313.2012.651806
- Lydon, M., Garcia, A., & Duany, A. (2015) Tactical Urbanism: Short-term Action for Long-term Change (Washington, DC: Island Pr).
- Mastop, H., & Faludi, A. (1997) Evaluation of strategic plans: The performance principle, Environment and Planning. B, Planning & Design, 24(6), pp. 815-832. 10.1068/b240815
- Meijsmans, N. (2010) Designing a Region (L. Vroomen, Trans), 1 ed. (Amsterdam: SUN).
- Millard-Ball, A. (2013) The limits to planning: Causal impacts of city climate action plans, Journal of Planning Education and Research, 33(1), pp. 5–19. 10.1177/0739456X12449742



- Nam, T. (2014) Citizen participation in visioning a progressive city: A case study of Albany 2030, *International Review of Public Administration*, 18, pp. 139–161. 10.1080/ 12294659.2013.10805267
- Neuman, M. (1996) Images as institution builders: Metropolitan planning in Madrid, *European Planning Studies*, 4(3), pp. 293–312. 10.1080/09654319608720347
- Neuman, M. (2000) Regional design: Recovering a great landscape architecture and urban planning tradition, *Landscape and Urban Planning*, 47(3), pp. 115–128. 10.1016/S0169-2046(99) 00079-1
- Paasi, A. (1991) Deconstructing regions: Notes on the scales of spatial life, *Environment and Planning A: Economy and Space*, 23(2), pp. 239–256. 10.1068/a230239
- Paasi, A. (2009) The resurgence of the 'region' and 'regional identity: Theoretical perspectives and empirical observations on regional dynamics in Europe, *Review of International Studies*, 35(S1), pp. 121–146. 10.1017/S0260210509008456
- Pisano, C. (2016) Venetian Bassorilievi. L'invenzione di una tattica territoriale, *Urbanistica*, 157, pp. 107–113.
- Pisano, C. (2018a) Patchwork Metropolis. Progetto di città contemporanea (Siracusa: Lettera Ventidue edizioni).
- Pisano, C., & Lingua, V. (2019a) Pratiche di Regional Design per costruire la comunità rivierasca: Verso il Contratto di Fiume Ombrone, in: *Presented at the Conferenza Nazionale SIU Confini, Movimenti, Luoghi Politiche e Progetti per Città e Territori in Transizione*, pp. 103–108 (Roma-Milano: Planum Publisher).
- Pisano, C., & Lingua, V. (2019b) The Ombrone river contract: A regional design practice for empowering river communities and envisioning basin futures, in: C. Gargiulo, and C. Zoppi (Eds) *Planning, Nature and Ecosystem Services*, pp. 502-512. (Napoli: FedOAPress).
- Pisano, C. (2018b) The patchwork metropolis: Between patches, fragments and situations, in: P. Viganò, C. Cavalieri, & M. Barcelloni Corte (Eds) *The Horizontal Metropolis between Urbanism and Urbanization*, pp. 93–100 (Cham: Springer International Publishing).
- Rauws, W., & van Dijk, T. (2013) A design approach to forge visions that amplify paths of peri-urban development, *Environment and Planning. B, Planning & Design*, 40(2), pp. 254–270. 10.1068/b38040
- Regione Lombardia, Regione Piemonte, Autorità di Bacino del Fiume Po, & A 21 Italy CdF (2010) Carta Nazionale dei Contratti di Fiume. Available at https://www.contrattidifiume.it/it/cosasono-i-cdf/cdf-a-livello-nazionale/ (accessed 9 November 2021).
- Reimer, M. (2014) Spatial Planning Systems and Practices in Europe: A Comparative Perspective on Continuity and Changes, 1 ed. (New York: Routledge).
- Roodbol-Mekkes, P. H., & van Den Brink, A. (2015) Rescaling spatial planning: Spatial planning reforms in Denmark, England, and the Netherlands, *Environment and Planning. C, Government & Policy*, 33(1), pp. 184–198. 10.1068/c12134
- Salewski, C. (2013) Dutch New Worlds (Rotterdam: nai010 publishers).
- Sanyal, B. (2005) Planning as Anticipation of Resistance, *Planning Theory*, 4(3), pp. 225–245. 10.1177/1473095205058495
- Sawhney, N., de Klerk, C., & Malhotra, S. (2015) Civic engagement through DIY urbanism and collective networked action, *Planning Practice & Research*, 30(3), pp. 337–354. 10.1080/02697459.2015.1054662
- Secchi, B. (2003) Diario 06 | Scenari. Available at http://www.planum.net/diario-06-scenaribernardo-secchi (accessed 4 February 2021).
- Steiner, F. (2011) Landscape ecological urbanism: Origins and trajectories, *Landscape and Urban Planning*, 100(4), pp. 333–337. 10.1016/j.landurbplan.2011.01.020
- Thierstein, A., & Forster, A. (2008) *The Image and the Region-Making Mega-City Regions Visible!*, 1 ed. (Baden: Lars Muller Publishers).
- Throgmorton, J. A. (2003) Planning as persuasive storytelling in a global-scale web of relationships, *Planning Theory*, 2(2), pp. 125–151. 10.1177/14730952030022003



- van der Stoep, H. (2014) Stories becoming sticky: How civic initiatives strive for connection to governmental spatial planning agendas. Available at https://research.wur.nl/en/publications/ stories-becoming-sticky-how-civic-initiatives-strive-for-connecti (accessed 9 November 2021).
- van Dijk, T., & Ubels, H. (2016) How Dutch professionals conduct interactive design sessions to foster 'shared understanding', Environment and Planning. B, Planning & Design, 43(3), pp. 464-479. 10.1177/0265813515617658
- Viganò, P. (2010) Territorio dell'urbanistica. Il progetto come produttore di conoscenza (Rome: Officina).
- Voghera, A. (2020) The River agreement in Italy. Resilient planning for the co-evolution of communities and landscapes, Land Use Policy, 91(C), pp. 104377. 10.1016/j. landusepol.2019.104377
- Voghera, A., & Avidano, V. (2012) Contratti di fiume. Una proposta metodologica per il torrente tinella, nel quadro delle esperienze italiane, Archivio di Studi Urbani e Regionali, 103(103), pp. 42-65. 10.3280/ASUR2012-103004
- Von Seggern, H., Werner, J., & Grosse-Bächle, L. (2008) Creating Knowledge: Innovation Strategies for Designing Urban Landscapes (Berlin: Jovis).
- Waterhout, B., Othengrafen, F., & Sykes, O. (2013) Neo-liberalization processes and spatial planning in France, Germany, and the Netherlands: An exploration, Planning Practice & Research, 28(1), pp. 141–159. 10.1080/02697459.2012.699261