

Landscape resilience and UNESCO Cultural Landscapes. The relation between resilience and the landscape identity in response to the anthropogenic variation of the systems.

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# urbanism research across the world: a PhD seminar



*2nd International  
European Urbanisms Seminar  
18-20 December 2019, Leuven*

**KU LEUVEN**

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# urbanism research across Europe: a PhD seminar

***2nd International  
European Urbanisms Seminar  
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## TABLE OF CONTENTS

### **Session 1: Urban-Rural Interface**

Jolein Bergers, KU Leuven

Charlotte Timmers, KU Leuven

Tine Segers, U Hasselt

Ward Verbakel, KU Leuven

### **Session 2: Constituents towards Urban Renewal/Regeneration**

Alberto Squizzato, ULB

Jan van Hoof, KU Leuven

Barbara Le Fort, UCL

Marie-Charlotte Dalin, UCL

### **Session 3: Urban Resilience and the Changing City**

Silviu Bors, Technical University of Cluj-Napoca

Fabrizio Aimar, Politecnico di Torino

Beatrice Galimberti , Politecnico di Milano

Giulia Verga, ULB

### **Respondents**

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Gabriele Kiefer, Büro Kiefer

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***Urban  
Resilience  
and the  
Changing  
City***



**Landscape resilience and UNESCO Cultural Landscapes. The relation between resilience and the landscape identity in response to the anthropogenic variation of the systems.**

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Angioletta Voghera (promoter)

abstract: In living landscapes, permanence and identity necessitate introducing co-evolutive resilience concepts in planning. Lack of adaptability is identified in the Management Plans of UNESCO “Cultural Landscapes” about discounting identity compared to newcomers. The “Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato” and the “Cultural Landscape of Honghe Hani Rice Terraces” case-studies are identified to investigate social adaptive changes, in a long-term. As preserving “the know-how and approaches to protect cultural heritage ... leads to the possibility of increasing the intrinsic resilience of a system”, “heritage can be used as a pivotal element to improve social resilience” (Brunetta et al., 2019). Consequently, what is the relationship between resilience and identity? What is the ratio of permanence to change, towards a community-led approach? Qualitative findings might encourage site managing bodies to “reinforce the community role and the adaptive capacity” (Moulaert et al., 2007; Brunetta et al., 2019) in critical systems (Coaffee, 2019).

keywords: landscape resilience; UNESCO Cultural landscapes; newcomers; landscape identity; UNESCO Management Plans

**Introduction**

As cultural expressions, rural landscapes are living and ever shifting on a timeline (Antrop, 2005). In a landscape planning perspective, persistence, identity and preservation of cultural values constitute pivotal elements demanding for the assimilation of co-evolutive resilience. Assuming that Cultural Landscapes represent the “combined works of nature and of man” (United Nations Educational, Scientific and Cultural Organization, 1994, art. 36), it follows that the social component therefore plays an important contribute in building a collective landscape image, through individual and public perceptions. To convert them into spatial plans and projects (Brunetta et al., 2019), the landscape resilience approach is the discursive concept gaining the centre stage.

Factually, is established a dearth of adaptivity in existing Management Plans of the UNESCO Properties on the World Heritage List included as Cultural Landscapes (1992), particularly on actualising the landscape identity compared to newcomers. The constant variability of the anthropogenic element embodies a key threshold in the stability of the landscape quality. In that sense, likely modifications might reduce the ability to interpret of its characters (Plieninger and Bieling, 2012) and jeopardize the reading of permanencies. As a result, the rural characterization of some out overall 114 UNESCO Cultural Landscapes risks to be threatened by several progressive adulterations (ICOMOS-IFLA, 2017) due to depopulation, “loss of traditional practices, techniques, local knowledge, and cultures” (Point C.1, p.3). However, assuming that “many rural systems have proven to be sustainable and resilient over time” (ICOMOS-IFLA, Point F, 2017: 4), it turns out that resilience is increasingly relevant to cultural heritage (Holtorf, 2018). Latter particularly refers to the United Nations Sustainable Development Goal no.11,

Target 11.4: “Strengthen efforts to protect and safeguard the world’s cultural and natural heritage” (2015) and, in addition, the “World Heritage Centre designation(s)” in Indicator 11.4.1 (2016). Seeking to build an approach to face these processes, two UNESCO case-studies have been chosen: the “Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato”, Italy (ref: 1390rev) and the “Cultural Landscape of Honghe Hani Rice Terraces”, China (ref: 1111). The comparison between these two sites refers to the institutional Arrangements signed during Chinese President Xi Jinping’s visit to Italy (March 23, 2019). In particular, no.15 provides for a twinning of the managing bodies of the respective sites, based on specific purposes already defined in art. 2 of the Statute of the Italy-China Cultural Forum (2016). Among them, point g proposes: “exchange of experiences and technologies in the protection and restoration of cultural heritage, in particular: dissemination and use of risk assessment technologies and conservation of cultural heritage”. Moreover, point j suggests “cooperation and exchanges between institutions and local communities of UNESCO World Heritage sites of the two countries”.

**Material and methods**

Every survey on the Cultural Landscape needs to comprehend that it “is fashioned out of the natural landscape” (Sauer, 1925) by the multi-layered social, economic, political and cultural dimensions of the contemporary society, which are permeated by the complexity of Anthropocene (Crutzen and Stoermer, 2000). Pondering interconnection and interdependence of global systems in their analytical level, reflexions be inclined to examine more the human contribution in the evolving framework to avoid threats in these robust-but-fragile systems (Carlson and Doyle, 2000; Coaffee, 2019). It may indicates potential lines in possible

methodologies overcoming divisive ideas behind resilience as a “boundary object” (Brand and Jax, 2007; Baggio et al., 2015) in communities also due to the scarce possibilities of complex adaptive systems to “have control over system boundaries or trajectories” (Ramage and Shipp, 2009; McGreavy, 2016). Therefore, strategies are needed to manage “ontological uncertainties” in order to face “hidden interdependencies, the complex risks that are lurking in the background” (Shaw, 2012: 292), in which the non-linearity, discontinuity, self-organization, and unpredictability are “the epistemological basis of evolutionary resilience” (Davoudi, 2018: 4). Moving within a theoretical framework, both the case studies were inscribed as a UNESCO Cultural Landscape. Precisely, the “Cultural Landscape of Honghe Hani Rice Terraces” (ref: 1111) in 2013 (Decision: 37 COM 8B.24) and the “Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato” (ref: 1390rev) in 2014 (Decision: 38 COM 8B.41). According to the UNESCO Operational Guidelines 2008, Annex 3, point 10, both fall in the (ii) category “organically evolved landscape”; in detail, in the “continuing landscape” sub-category (p.86). Latter includes evolution in its definition, as it: “retains an active social role in contemporary society closely associated with the traditional way of life, and in which the evolutionary process is still in progress. At the same time, it exhibits significant material evidence of its evolution over time.”

Prioritizing a specific interpretation of the landscape, the Dossier of the Italian UNESCO Property has deployed an analytic method listing natural, cultural-anthropic and perceptive components (p.39). A key emphasis within its “cultural-anthropic component” is due to the “social-

cultural structure”. It recalls to “the sense of belonging, rooting and recognition of the locations. From this point of view, the landscape is considered as ... a deposit for the collective memory... The ‘identity’ aspect of the landscape, made up not only of the resident community but of a much broader society of users, is of fundamental importance ... to consolidate the local identity.” This approach coherently descent by the European Landscape Convention of the Council of Europe (ETS No.176, 2000), that entry in force in Italy on 01/09/2006. In fact, it asserts that “... the landscape has an important public interest role in the cultural, ecological, environmental and social fields”. But in China, according to Han (2015), the method seems different. In the traditional Chinese culture, the concept of landscape is expressed by the word Fengjing, composed of two characters: Feng and Jing. Feng means flowing air, atmosphere but also implies the cultural sense, order or rules of a society etc.; instead, Jing signifies light, but even indicates the notion of scenario. This concept has evolved to date and includes both the natural environmental sphere and the cultural-humanistic ones. In addition, a modern term has emerged recently: Jingguan. Jing (scenery) and Guan (view or sight) corresponds to the theoretical idea of landscape derived from the Anglo-Saxon context.

In that perspective, resilience could be intended as a learning-based process on transformative dynamics. Aiming to resilient scenarios, multi-, trans-disciplinary and systemic methodologies are embedded in a qualitative approach feeding both speculative debates in the Academy, as well as collective actions in the local communities. If the aim is to “promote politics and practices with incentives to reinforce the community role and the adaptive capacity

MUNICIPALITY (by name)	TOTAL RESIDENTS (no.)	TOTAL NEWCOMERS (no.)	TOTAL MACEDONIANS (no.)	RATIO n.1 (Mac./res.)	RATIO n.2 (Mac./newc.)
Piacenza	103,942	19,915	1,672	1.6%	8.4%
Rome	2,856,133	382,577	1,652	0.06%	0.4%
Venice	260,520	37,554	1,459	0.6%	3.9%
Ravenna	157,663	18,546	1,067	0.7%	5.8%
Canelli	10,411	1,872	807	7.8%	43.1%
L'Aquila	69,478	5,556	716	1.0%	12.9%
Rimini	150,576	20,007	589	0.4%	2.9%
Nizza Monferrato	10,290	1,470	532	5.2%	36.2%
Pisa	88,880	12,301	509	0.6%	4.1%
Forlì	117,798	14,446	502	0.4%	3.5%

**fig. 1. Principal Macedonian communities settled down in Italian Municipalities, listed in descending order. Comparisons involve the total inhabitants and newcomers (no.), defining 2 ratios expressed in percentage values. (Sources: Italian National Institute of Statistics (ISTAT). Total residents (no.) refer to 31/12/2018; total newcomers (no.) and total Macedonians (no.) refer to 01/01/2019. Author’s elaboration)**



of systems” (Moulaert et al., 2007; Brunetta et al., 2019), managing bodies could decide to introduce proactive, landscape-resilient practices as part of renewals of the UNESCO Management Plans. In these upgradable documents, integrating resilience appears a need to comprehend the self-regulation of internal systems. As latter have to face different threats by their very nature, implementations have to be intended as ongoing processes of change due to “the evolving nature of the threat” (Coaffee, 2019).

### Theory/calculation

As landscape identity is a dynamic identity (Loupa Ramos, Bernardo, Ribeiro, and Van Eetvelde, 2016; Butler et al., 2019), a few intertwined questions emerge. What is the relationship between resilience and identity? What is the ratio between permanence and change, to achieve both the systemic robustness required by UNESCO and to cope with dynamic shifts? If the aim is to reach a community-led collaborative safeguard, comprehending the ratio between persistence-memory and ongoing adjustments emerges as vital on a vast zone, in a mid-period. That connection may address to “increasing the intrinsic resilience of a system” but as long as the territorial governance is able to “preserve the know-how, ordinary maintenance and approaches to protect cultural heritage” (Brunetta et al., 2019: 8).

Consequently, if one relates the abovesaid to newcomers permanently settled in the territories of both UNESCO sites, it becomes important “the need of local communities to reconstruct their sense of belonging, history or cultural identity” (Brunetta et al., 2019). In that perspective, the Italian town of Canelli (partially included in the 1390rev-

005 Component “Canelli and Asti Spumante”) records 1,872 foreigners out of a total of 10,411 residents (ISTAT, 2019), more represented by Macedonian (807), Romanian (327) and Bulgarian (200) people. The Macedonian community constitutes 43.1% of the entire number of immigrants in the town, and numerically it ranks fifth in Italy in terms of members, 807 citizens out of 63,561 (ISTAT, 2019). Similarly, Nizza Monferrato (partly comprised in the 1390rev-004 Component “Nizza Monferrato and Barbera”) shows the second numerous Macedonian community within this UNESCO serial site: 532 people out 1,470 total newcomers and 10,290 inhabitants (ISTAT, 2019). As in Canelli, it embodies the most relevant foreign group, equal to 36.2% of the overall number of immigrants, which classifies it in eighth place nationwide (Table I).

By contrast, resilience as a word and its implications aren’t plainly mentioned neither in the Dossier, nor in the Management Plan, notwithstanding social vulnerabilities. However, the SWOT analysis matrix in the Management Plan (p.58) embodies threats demanding close consideration, as the “poor social inclusion policies” set in a waning agrarian sector. Coherently, in support to the next nomination as a World Heritage site (2014, March 6), the International Council on Monuments and Sites ends its Advisory evaluation additionally suggesting Italy as a State Party to pay “greater attention to the social values that make an important contribution to the management and conservation of the property”, including “the transmission of expertise and know-how, popular traditions, etc” (p.319). Similarly, neither in the “Cultural Landscape of Honghe Hani Rice Terraces” Dossier and nor in its Management Plan, the term ‘resilience’ is cited. However, the related ICOMOS report embed it and its connotations both in the Brief Synthesis (“The Honghe Hani rice terraces are an exceptional reflection of a resilient land management system that optimises social and environmental resources”) and even in its Integrity criterion. However, some social contradictions seem to emerge. In fact, in the Nomination File (UNESCO, 2013) is reported that only the 69,8% of the entire population in the Nominated property is composed by the Hani minority, equal to 37,800 people out 54,100 (p.35). Moreover, ICOMOS, in its Advisory Body evaluation, specifies that: “In reality some 50% of Hani people farm terraces” (p.78) and it warns that although “the traditional system is currently robust and well protected”, “... the way that the traditional system adapts itself to modern demands, which are already drawing people away from the villages, ... could lead to difficult tensions” (p.79). These latent dynamics (Diamond, 2005) might increase “the degradation of memory and the community identity” leading to the “loss of the sense of belonging” (Brunetta et al., 2019). In perspective, these threats may expose the systems to a vulnerable condition, affecting the upcoming aspect of the landscape as well as the sense of communities, at various levels. Precisely, they could distort the Outstanding Universal Value (OUV) met under the Criterion (v) and Authenticity condition in the “Vineyard

Landscape of Piedmont: Langhe-Roero and Monferrato”, as well as in the “Cultural Landscape of Honghe Hani Rice Terraces”.

### Results and discussion

Moving from a pervasive idea of sustainability to the established frame of resilience, systemic robustness proves a connection with preparedness, in which being robust is “the capacity to enhance ... changes of resisting disturbances” (Brunetta and Caldarice, 2019) and stressors (Redman, 2014). However, as Folke denotes (2006), “Anderies et al. (2004) used the concept robustness to mean the maintenance of some desired system characteristics” (persistence), “despite fluctuations in the behavior of its component parts or its environment.” Similarly, Davoudi et al. (2013) summarize that in the binomial “Persistence – being robust” (Fig. 2, p.311). Moreover, Folke (2016) definitely postulated that: “Adaptability is central to persistence. It helps turn changes and surprises into opportunities; hence, it is an important part of social-ecological resilience (Berkes et al., 2003; Nelson et al., 2007)”. Therefore, persistence can perform through resilience as a “sources of memory ...” (Gunderson and Holling, 2002; Nykvist and von Heland, 2014; Folke, 2016), preserving this stock (Voghera and Giudice, 2019) also in landscapes. According to Butler et al. (2019), “Landscapes can act as autobiographical memory aids in self-formation, through which we uphold and consolidate our identifications (Knez, 2005)”. In this perspective, as “the landscape includes a cultural-heritage experience of the territory” (Brunetta et al., 2019), it is assumed that its active conservation needs to be centred on local capacity building (Pratt, 2015). So, in Cultural Landscapes, “heritage can be used as a pivotal element to improve social resilience” (Brunetta et al., 2019).

Subsequently, mobilising new approaches inherent to the prospective role of resilience appears desirable, “using feedback in a more responsive ways to track progress” (Coaffee, 2019) in advancements over a timespan. In the Management Plan of the UNESCO Property “Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato”, they could be incorporated both in the second objective, entitled “A ‘Social Landscape’: (Where to live)”, and in the fourth one, denominated “An ‘Efficient Landscape’: (Where to manage)”. If the first one accepts that: “A landscape is the mirror of local identity” (p.60), the subsequent instead urges: “... to efficiently manage the available resources” to develop “... activities of protection, conservation and requalification” (p.62). In the Chinese Management Plan of the “Cultural Landscape of Honghe Hani Rice Terraces”, instead, the aforesaid approaches could fall into general objective no.1, “to adjust and guide the value continuity mode” (art.51 – Objectives of Planning, p.37), in which a “multi-disciplinary coordinated comprehensive research system of value maintenance for Honghe Hani Rice Terraces” is needed (sub-objective no.4, p.38).

In conclusion, range and scope of appropriate actions

need to be harmonised by the Properties management bodies, which could drive the resilience agenda forward: the ‘Association for the heritage of Vineyard Landscapes of Langhe-Roero and Monferrato’ in Italy, and the ‘Hani Rice Terraces Cultural Heritage Protection and Development Management Committee’, in China. They oversee the governance of own territories and, moreover, for arranging “the implementation of the Monitoring Plan associated with the Management Plan” over time.

### Conclusions

Pondering to the changing circumstances of the social reality, the present study intends to progressively increase community resilience, embracing resilience as a crucial driver of territorial innovation (Rolando, 2015). This forward-(re)thinking approach in the decision-making should refine new forms of decisions and focused actions to strengthen the resilience of the whole system through the ability to accept, respond and adapt, supporting the landscape to cope with the investigated vulnerabilities and, to a greater extent, social-dependent ones. On-going dynamics are pushing to a continuous evolution toward novel integrated forms of territorial governance in linked systems that could be imagined, assessed, managed (Coaffee, 2019) and oriented, for instance in the field of social organisation (Coaffee, 2019). Consequently, interacting relations with contexts-depend approaches permit to build new abilities to reframe responses in a positive and proactive manner. Flexible policies and practices could sustain the intangible cultural heritage and even forage for the landscape identity (Butler et al., 2019) in newcomers. Options and short-term objectives could support mid-period goals within manifold adaptive pathways established by a roadmap. These soft paths may play a part to rebound or renovate daily relationships dealing with “new normal” spatial-resilience scenarios, based on ever-adjusting conditions. Despite China isn’t a State Party and Italy not ratified it, the Faro Convention (CETS No.199, 2005) offers a viewpoint of cultural heritage “as a resource ... in a constantly evolving society”, proposing set of actions potentially containable in the voluntary Management Plan renewals of both the above examined UNESCO sites. The Italian World Heritage site plans it with a ten-year voluntary deadline; instead in the Chinese case, potential practices could be already embedded in the long-term term step of the current Plan, in force from 2021 to 2030 (UNESCO, 2013).

### References

- Antrop, Marc ‘Why landscapes of the past are important for the future’. *Landscape and Urban Planning*. 70 /1-2 (2005), 21-34. DOI: 10.1016/j.landurbplan.2003.10.002
- Baggio, Jacopo A.; Brown, Katrina; Hellebrandt, Denis ‘Boundary object or bridging concept? A citation network analysis of resilience’, *Ecology and Society* 20/2 (2015). DOI: 10.5751/ES-07484-200202

Brand, Fridolin; Jax, Kurt ‘Focusing the meaning(s) of resilience:

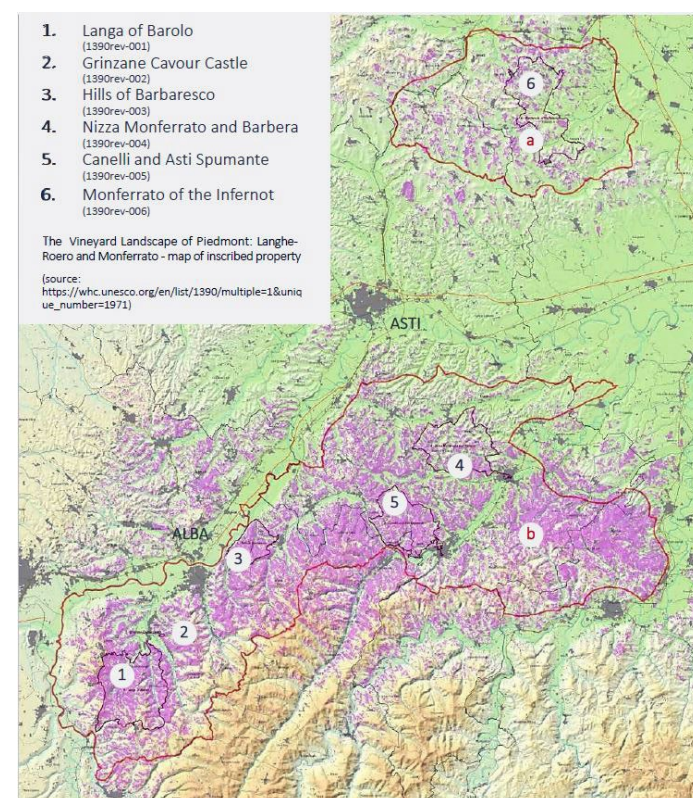


fig. 2.

resilience as a descriptive concept and a boundary object', *Ecology and Society* 12/1, 23 (2007). DOI: 10.5751/ES-02029-120123

Brunetta, Grazia; Voghera, Angioletta 'Evaluating Landscape for Shared Values: Tools, Principles, and Methods', *Landscape Research* 33/1 (2008), 71-87. DOI: 10.1080/01426390701773839

Brunetta, Grazia; Ceravolo, Rosario; Barbieri, Carlo Alberto; Borghini, Alberto; de Carlo, Francesca; Mela, Alfredo; Beltramo, Silvia; Longhi, Andrea; De Lucia, Giulia; Ferraris, Stefano; Pezzoli, Alessandro; Quagliolo, Carlotta; Salata, Stefano; and Voghera, Angioletta 'Territorial Resilience: Toward a Proactive Meaning for Spatial Planning', *Sustainability* 11, 2286 (2019). DOI: 10.3390/su11082286

Brunetta, Grazia; Caldarice, Ombretta 'Spatial Resilience in Planning: Meanings, Challenges, and Perspectives for Urban Transition', in: Walter Leal Filho et al. (eds.), *Sustainable Cities and Communities*, Encyclopedia of the UN Sustainable Development Goals (Basel: Springer Nature Switzerland AG., 2019). DOI: 10.1007/978-3-319-71061-7\_28-1

Brunetta, Grazia; Caldarice, Ombretta 'Putting Resilience into Practice. The Spatial Planning Response to Urban Risks', in: Grazia Brunetta et al. (eds.), *Urban Resilience for Risk and Adaptation Governance Theory and Practice* (Basel: Springer Nature Switzerland AG., 2019). DOI: 10.1007/978-3-319-76944-8

Butler, Andrew; Knez, Igor; Åkerskog, Ann; Sarlöv Herlin, Ingrid; Sang, Åsa Ode; Ångman, Elin 'Foraging for identity: the relationships between landscape activities and landscape identity after catastrophic landscape change', *Landscape Research* (2019). DOI: 10.1080/01426397.2019.1580352

Carlson J. M. and Doyle John 'Highly Optimized Tolerance: Robustness and Design in Complex Systems', *Physical Review Letter* 84, 2529 (2000). DOI: 10.1103/PhysRevLett.84.2529

Coaffee, Jon Future Proof - How to Build Resilience in an Uncertain World (New Haven and London: Yale University Press, 2019)

Council of Europe European Landscape Convention (Florence: Council of Europe, 2000). Retrieved in: <https://rm.coe.int/1680080621>

Council of Europe Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro: Council of Europe, 2005). Retrieved in: <https://rm.coe.int/1680083746>

Crutzen, Paul J.; Stoermer, Eugene F. "The "Anthropocene"", *Global Change Newsletter* 41 (2000), 17-18. ISSN 0284-5865. Retrieved from: <http://www.igbp.net/nload/18.316f18321323470177580001401/1376383088452/NL41.pdf>

Davoudi, Simin 'Resilience: A Bridging Concept or a Dead End?', *Planning Theory & Practice* 13/2 (2012), 299-333. DOI: 10.1080/14649357.2012.677124

Davoudi, Simin 'On Resilience', *disP - The Planning Review* 49/1 (2013), 4-5. DOI: 10.1080/02513625.2013.799852

Davoudi, Simin; Brooks, Elisabeth; Mehmood, Abid 'Evolutionary Resilience and Strategies for Climate Adaptation', *Planning Practice & Research* 28/3 (2013), 307-322. DOI: 10.1080/02697459.2013.787695

Davoudi, Simin 'Just Resilience', *City & Community* 17/1 (2018), 3-7. DOI: 10.1111/cico.12281

Diamond, Jared Collapse: How Societies Choose to Fail or Succeed (New York: Viking Press, 2005).

Di Fazio, Salvatore; Modica, Giuseppe 'Historic Rural Landscapes: Sustainable Planning Strategies and Action Criteria. The Italian Experience in the Global and European Context', *Sustainability* 10, 3834 (2018). DOI:10.3390/su10113834

Folke, Carl 'Resilience: The emergence of a perspective for social-ecological systems analyses', *Global Environmental Change* 16 (2006), 253-267. DOI: 10.1016/j.gloenvcha.2006.04.002

Folke, Carl; Carpenter, Stephan R.; Walker, Brian; Scheffer, Marten; Chapin, Terry; Rockström, Johan 'Resilience Thinking: Integrating Resilience, Adaptability and Transformability', *Ecology and Society* 15/4, 20 (2010). [online] URL: <http://www.ecologyandsociety.org/vol15/iss4/art20/>

Folke, Carl 'Resilience', *Oxford Research Encyclopedia of Environmental Science*, Oxford University Press (2016), 1-63. DOI: 10.1093/acrefore/9780199389414.013.8

Gunderson, Lance H., and Holling, Crawford Stanley Panarchy: Understanding transformations in human and natural systems (Washington, DC: Island Press, 2002).

Han, Feng 'The traditional Chinese View of Nature and Challenges of Urban Development", in: Francesco Bandarin, Ron van Oers (eds.), *Reconnecting the City: The Historic Urban Landscape Approach and the Future of Urban Heritage* (Oxford: John Wiley and Sons, 2015). DOI: 10.1080/09548963.2015.1095391

Holtorf, Cornelius 'Embracing change: how cultural resilience is increased through cultural heritage', *World Archaeology* 50/4 (2018), 639-650. DOI: 10.1080/00438243.2018.1510340

ICOMOS-IFLA Principles Concerning Rural Landscapes as Heritage (Paris: ICOMOS, 2017).

Jacobs, Keith; Malpas, Jeff 'The Language of Resilience: Ideas and Action in Contemporary Policy-making', *Housing, Theory and Society* 35/4 (2018), 394-409. DOI: 10.1080/14036096.2017.1308435

Keane, Robert E.; Loehman, Rachel A.; Holsinger, Lisa M.; Falk, Donald A.; Higuera, Philip; Hood, Sharon M.; Hessburg, Paul F. 'Use of landscape simulation modeling to quantify resilience for ecological applications', *Ecosphere* 9/9 (2018). DOI: 10.1002/ecs2.2414

Loupa Ramos, Isabel; Bernardo, Fátima; Ribeiro, Sònia Carvalho, Van Eetvelde, Veerle 'Landscape identity: Implications for policy making', *Land Use Policy* 53 (2016), 36-43. DOI: [doi.org/10.1016/j.landusepol.2015.01.030](https://doi.org/10.1016/j.landusepol.2015.01.030)

McGreavy, Bridie 'Resilience as Discourse', *Environmental Communication* 10/1 (2016), 104-121. DOI: 10.1080/17524032.2015.1014390

Mock, Gregory; Salvemini, Diana Assessing Landscape Resilience: Best Practices and Lessons Learned from the COMDEKS Programme (New York: United Nations Development Programme, 2018).

Moulaert, Frank; Martinelli, Flavia; González, Sara; Swyngedouw, Erik 'Introduction: Social Innovation and Governance in European Cities: Urban Development Between Path Dependency and Radical Innovation', *European Urban and Regional Studies* 14 (2007), 195-209. DOI: 10.1177/0969776407077737

Nykvist, Björn; von Heland, Jacob 'Social-ecological memory as a source of general and specified resilience', *Ecology and Society* 19/2, 47 (2014). DOI: 10.5751/ES-06167-190247

Plieninger, Tobias; Bieling, Claudia 'Connecting cultural landscapes to resilience', in: Tobias Plieninger and Claudia Bieling (eds.), *Resilience and the Cultural Landscape: Understanding and Managing Change in Human-Shaped Environments* (Cambridge: Cambridge University Press, 2012), 3-26. DOI: 10.1017/CBO9781139107778.003

Pratt, Andy C. 'Resilience, locality and the cultural economy', *City, Culture and Society* 6 (2015), 61-67. DOI: 10.1016/j.ccs.2014.11.001

Ramage, Magnus; Shipp, Karen Systems thinkers (London: Springer, 2009).

Redman, Charles L. 'Should sustainability and resilience be combined or remain distinct pursuits?', *Ecology and Society* 19/2, 37 (2014). DOI: 10.5751/ES-06390-190237

Rogers, Peter 'The Etymology and Genealogy of a Contested Concept', in: David Chandler and Jon Coaffee (eds.), *The Routledge Handbook of International Resilience* (London, New York: Routledge, Taylor and Francis Group, 2016), 12-23. ISBN: 978-1-138-78432-1

Rolando, Andrea 'The intermediate territories between Turin and Milan and the legacy of Expo 2015: tourism enhancement opportunities through the meshes of mobility networks', *Atti e Rassegna Tecnica della Società degli Ingegneri e degli Architetti in Torino* 1-2 (2015). ISSN 0004-7287

Sauer, Carl Ortwin The Morphology of Landscape (Berkeley: University Press, 1925).

Shaw, Keith 'The Rise of the Resilient Local Authority?', *Local Government Studies* 38/3 (2012), 281-300. DOI: 10.1080/03003930.2011.642869

Tainter, Joseph A.; Taylor, Temis G. 'Complexity, problem-solving, sustainability and resilience', *Building Research & Information* 42/2 (2014), 168-181. DOI: 10.1080/09613218.2014.850599

UNESCO / ICCROM / ICOMOS / IUCN Managing Cultural World Heritage (Paris: UNESCO, 2013). ISBN 978-92-3-001223-6

UNESCO Operational Guidelines for the Implementation of the World Heritage Convention (Paris: UNESCO World Heritage Centre, 2019).

Voghera, Angioletta After the European Landscape Convention. Policies, Plans and Evaluation (Florence: Alinea Editrice, 2011). ISBN 978-88-6055-565-6

Voghera, Angioletta 'Resilience Through Community Landscape Project', *Elettronico* 2 (2015), 103-108.

Voghera, Angioletta; Giudice, Benedetta 'Evaluating and Planning Green Infrastructure. A Strategic Perspective for Sustainability and Resilience', *Sustainability* 11/10, 2726 (2019). DOI: 10.3390/su11102726

Zebrowski, Chris 'The nature of resilience', *Resilience* 1/3 (2013), 159-173. DOI: 10.1080/21693293.2013.804672