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Landscape as a Scaling Strategy in Territorial Development

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Abstract: This article analyses how the established but still elusive concept of ‘landscape’ may strengthen territorial development processes in the face of complexity. In times of the Anthropocene, landscapes are best treated as spaces for experiential and relational being, rather than pure social constructs or rationalised physical objects. Using basic tenets of social-ecological and social-technical systems thinking, this article tests the hypothesis that landscape, considered as a socio-technical innovation, can be harnessed in territorial development as a scaling device to achieve resilient and adaptive territories. This approach opens the perspective that the transition towards landscape-territorial development and planning can proceed in three phases. Each phase reflects a society with different degrees of awareness of the landscape. The article reflects on ways to operationalise the proposed landscape-territorial approach. It is concluded that, rather than in calls for global landscape governance, it is ultimately in reconfigured place—that is, landscapes reclaimed, developed, protected, as the local actors require it—that new spheres of control and influence over the landscape emerge.

Keywords: landscapes; scale; complexity; transitions; spatial planning; relational ontology; social-ecological systems; socio-technical innovation; landscape entrepreneurs



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1. Introduction

During the first two decades of the 21st century, societal relationships with nature have been changing faster and more unpredictably than ever before. The drivers set in motion during the second half of the 20th century—for example, globalisation, urbanisation, neo-liberalisation, environmental pollution, shifts in geo-political gravitas, population growth, and the virtualisation of life—are now exhibiting unprecedented interplay. The effects of this interplay are proving difficult to control with our established tools of governance, at all scales. As governments and corporations are grappling with this challenge, citizens and civil society are developing new relationships with ‘nature’ in general, and the land more specifically. On the part of citizens and civil society, two broad trends may be discerned: first, a renewed interest in local spaces, places, and landscapes and, second, increasing awareness of a loss of control and influence over their spaces, places, and landscapes.

First, with the impacts of global change now encroaching on the life spaces of increasingly large segments of the world’s population, people are strengthening, developing, and discovering new relationships with the land and ‘nature’ more broadly. This trend may be considered as one manifestation of the Anthropocene. A disputed term [1], Anthropocene refers to a new geological epoch in which human activity is seen to have profound and irreparable effects on the environment [2]. Regardless of geological dating, debates converge towards the conclusion that today human history cannot be understood as separate from geological history. Therefore, the Anthropocene “signals the return of the Earth into a world that Western industrial modernity, on the whole, represented to itself as above the earthly foundation” [3]. The Anthropocene has also prompted scholars to rethink humanity’s societal orientations in the political sphere. Latour [4] has argued that between

post-human globalisation and nationalist withdrawal, the social-ecological questions posed by the current climate and biodiversity crises push society towards the “earthly ground”. Latour has thereby given new life to one of the fundamental questions in human geography: that of people’s individual and communal interrelationships with space, place, soil, country, and landscape [5–7].

The second consequence of society’s renewed, or shifting focus on ‘nature’ is that new meanings of local places—inhabited spaces where people live, whether they are cities or rural areas—are emerging, or deepening and changing in places where meanings have existed before. For many people, the flipside of this process has been an awareness of limited control over the future of spaces, places, and landscapes that matter to them. This is because regimes of globalisation, urbanisation, and virtualisation are controlled from elsewhere: far from the places where their material impacts are felt. One example is the transition towards renewable energy, which is gaining significant momentum [8]. Another example is the need for large-scale distribution facilities and data centres. All such phenomena require substantial space—beyond the human scale—and can therefore have a substantial impact on people’s local places and landscapes [9]. Yet, whilst such initiatives are bound by a range of legal directives, they are decided upon far from where their impacts will materialise in the landscape.

The complex interplay of drivers of change can result in a range of impacts that may be perceived, experienced, and valued differently by different actors. The ability of actors to control, influence, or have a say in the factors affecting their local places varies, depending on the socio-political context. Swyngedouw [10] has argued that “place matters, but scale decides”: place matters because the social construction of scale is always connected with nature in its objective spatial existence. However, argues Swyngedouw, the shaping of societal relationships depends on the existence of socio-political institutions. The latter means that scale decides, leaving people placeless where there exist discrepancies between place and scale [11,12].

The new ontological and political orientations of the Anthropocene pose challenges for spatial planning and territorial development (In this contribution the terms ‘territory’ and ‘territorial’ are used in the broader sense of the French ‘territoire’. This meaning encompasses a broader scope—including that of a social construct—than normally attributed to ‘territory’ in English. See Section 2 for further details.). For example, how can territories cope with sudden population dynamics and a need to accommodate large solar farms or the transformation of agricultural systems for reasons of climate change and food security whilst still maintaining a sense of local identity and meaning for its population? How can they ensure a territorial future in which there are suitable spaces—landscapes—for people to have a sensory experience of their relationships in and with the world? How can territorial development strike a balance between withdrawal and protectionism on one end of the extreme, and, on the other end, become a powerless entity subjected to the forces from above and beyond? The answer, it seems, may reside in the landscape. However, a major criticism towards landscape approaches is that they largely ignore the socio-political contexts of decision-making whilst heavily relying on expert knowledge and successful consensus building [13]. In other words, landscape approaches tend to ignore the political economy of scale and lack the sensibility to address strategic questions of space, scale, and topology [14,15].

This article places the notion of ‘landscape’ and its associated politics of scale in the context of territorial development in the face of complexity. Its purpose is to test the hypothesis that ‘landscape’ can serve as a scaling strategy for territories to navigate (control, mitigate, benefit from) local impacts from globally/remotely interacting drivers of change, thereby safeguarding territorial spaces where new experiential and relational ways of being can be enacted. The article’s primary interest is in understanding how ‘landscape’ might be positioned to play a stronger role in successfully navigating desired territorial states and futures. Deliberately refraining from the case study method, it will do so by briefly

exploring two interrelated concepts—landscape and territory—and assembling a rationale for scaling that is offered for discussion and future empirical testing.

The article is structured as follows. The next Section 2 will introduce the key concepts of landscape and territory, addressing both francophone and anglophone traditions. Section 3 introduces some basic tenets of complex adaptive systems theory and presents the notion of innovation as a method for addressing landscape as a socio-technical innovation in territorial development. Section 4 presents the results of the analysis. The Discussion (Section 5) synthesises findings and reflects on the means of the proposed landscape scaling strategy, and the effects that it might have. Section 6 concludes the article.

2. Territory and Landscape

To investigate how territorial transitions may be navigated (by landscape) in the face of complexity, this article builds on two fundamental concepts—that of *territoire* on the one hand, and landscape on the other. Both landscape and *territoire* stem from space and carry notions of identity. This section briefly describes the scientific state of the art, focussing on francophone and anglophone traditions.

2.1. *Territoire and Territorial Development*

The question “what is a territory?” is moot. It has no unequivocal answer and lends itself to lengthy treatises of theory, concepts, and lexicons. Over the past three decades, the French term *territoire* has mostly been used by French-speaking social geographers and has seen some use beyond the francophone community [16]. Scholarly understandings of ‘territory’ vary significantly between, and even within, francophone and anglophone literature despite the same Latin etymology [17]. Moreover, through the decades the term has been in and out of vogue. The anglophone traditions of scholarship have stayed close to the original ethological understanding of territory as an area with boundaries and controlled by a political power [18]. Francophone traditions, on the other hand, have gradually expanded the concept by adding social, symbolic, and cultural dimensions as well as transposing it to other scales than the nation state. The latter is, at least in part, due to the French decentralisation process that led to the creation of new local authorities [19]. Territorial approaches are also extensively used in sustainable development projects [20] and agricultural research [21].

Several types of territories exist and they are often intertwined. Whilst political and administrative territories correspond to the original meaning of ‘territory’, the concept of biophysical territories goes beyond the strict ethological notion of territory. Territories with a focus on sense of belonging have been highlighted in human geography when studying the links between territories, individual identities, and collective identities.

Caron [21] suggests that three key definitional elements of territory are generic and are acknowledged by all disciplines. First, territory is an element of continuous, bounded space. The second definitional element refers to identity and ownership: a territory is owned by a social group that identifies itself with the territory. Here, the notion of ownership goes beyond, but does not exclude, property rights. Nor does it necessarily match with administrative limits. The third element of the territorial definition is that it acknowledges specific modes of governance and control over the territory. Yet, territory is not necessarily governed or controlled in a formal sense: in many cases, there is no government of the territory. Its development emerges from cross-scale interactions among stakeholders. Caron [21] offers that the term ‘territory’ makes it possible to account for a spatial organisation and scales that have been ignored so far. Therefore, the heuristic of ‘territory’ is relevant for supporting new decisions and actions.

The anglophone literature offers a range of related concepts, aiming to overcome the emphasis on the identity and political dimension in the English term ‘territory’ [17,18]. Key related concepts include ‘space’ (quantitative geography), and ‘place’ (human geography). The concept of ‘place’ has been particularly explored and debated by British and North American scholars [5,7,22]. As Raffestin [23] (p. 126) has noted: “These authors invest

the word ‘place’ with a social, cultural and political dimension that contains a critique of political territory, its rigid delimitation, and the state control that is co-extensive to it”.

2.2. Landscape and Landscape Governance

A key concept that is intricately related to the term ‘territory’ is that of ‘landscape’. The question “what is landscape”? is perhaps even more difficult to answer than that of ‘territory’. It has been said that “landscape is a subject of study that belongs to no-one” [24] (p. 1). And John Stilgoe, a leading contemporary landscape scholar, offers that “Landscape designates something so complex and rich and overwhelming it is best not to take one’s inquiries too seriously.” [25] (p. 219). The scholarly literature on landscape is vast and has long traditions in geography [22,26–28], landscape ecology [29,30], landscape architecture [31], anthropology [32], and archaeology [33], with additional scholarship emerging in such varied disciplines as political sciences and environmental psychology. Two commonly invoked definitions of landscape are “The external world mediated through human subjective experience” [34] and “A space deliberately created to speed up or slow down the process of nature” [22]. In Europe, much of the recent landscape scholarship was triggered and inspired by the European Landscape Convention (ELC), signed in Florence, Italy, in 2000 [35–37]. The ELC defines a landscape as “An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors” [38] (p. 3).

In a seminal article, Olwig [39] addressed the disciplinary dematerialisation of landscape, favouring the deconstruction of the social construction of space, place, and landscape over materialist/realist perspectives. Olwig’s concern was the “virtual reality of postmodern landscape” and in his 1996 article he sought to recover the “substantive nature of landscape”. By substantive, he meant “real rather than apparent” and “belonging to the substance of a thing”. He was also concerned with landscape as a “real” phenomenon—fixed, permanent, or immovable, such as land tenements. In a more recent article, drawing from Latour and Heidegger, Olwig [40] addresses a parallel but rather different trend, namely that of landscape’s meaning shifting from being “a polity [...] treating substantive things *that* matter”, to becoming a “spatial assemblage of physical things *as* matter” (p. 251, emphasis added).

The juxtaposition invoked above—between socially (and politically) constructed landscape [39] and objectified landscape bereft of socio-political meaning [40]—reflects a broad dichotomy in landscape scholarship, both at the epistemic and methodological levels. Whilst the potential of the landscape concept continues to carry the promises of integration, reconciliation, and consensus, it is widely acknowledged that, at least in terms of methodology, the deep divide between positivist (scientific objectification of landscapes) and constructionist (social construction of landscapes) approaches remains and appears impossible to bridge [41]. Some have argued that a landscape design approach holds the best promise for bridging the divide [31] whereas others maintain positions of disciplinary primacies [15,26,42].

By placing the question of landscape in the broader context of relational ontologies—as per the Anthropocene argument, evoked in the Introduction section of the current analysis—we can shed some new light on the significance and relevance of this epistemological and methodological divide. Besse [43] suggests that four contemporary challenges prompt us to rethink our conception of ‘landscape’. First, the effects of the rapidly accelerating transition towards renewable forms of energy, which have material, large-scale impacts on our landscapes. Second, an increasing focus on the presence of non-human life (‘nature’) and humans’ relationships with these forms of life. Over and beyond humans, the landscape is continuously shaped and formed by non-human life. Even though the English word landscape comes from the old Frisian *landschop*—shovelled land—[25] (p. 2), we must accept that it is not only humans who shovel and alter space to ‘make’ place and landscape. Third, according to Besse [43], there is an increasing focus on the common-good dimension of land(scape), as is done, for example, by social movements focussing on the rights of

nature (land, soil) and the human right to nature. Fourth, and perhaps most significant in the context of this article's argument, is the increasing shift away from non-representational approaches towards approaches emphasising experience and relationality. In Besse [43]'s words [author's own translation from French], "The landscape isn't merely a visual spectacle but rather an experience open to all the sensory faculties, a poly-sensory experience" (p. 159).

These four trends, which can all be traced back to the event of the Anthropocene, call for philosophical reflection about (the disappearance of) landscape experience. One leading example of such scholarship is Tsing [44]'s exploration of landscapes exploited, emptied, and subsequently abandoned by capitalist endeavours. However, the four trends also call for methodological reflection on the role and use of landscape—as a concept and as an experiential space—in territorial governance. Territorial governance, as a socio-political institution, organises the structuring of the spatial dimensions of politics [15]. Within the broad context of territorial governance, the term 'landscape governance' [13,15,45] has been coined as an approach to address the interconnections between socially constructed spaces and natural conditions of places. Landscape governance explicitly addresses the politics of scale, defined by Brenner [46] (p. 604) as "the social production and political contestation of geographical scales and their orderings". For Görg [15], landscape governance is more than a mere instance of general governance. Landscape governance is concerned with complex reconfigurations of politics—with multi-level decision making and the transformation of statehood as well as with environmental problems in concrete regions and at particular places. Therefore, the landscape governance approach can open new governance perspectives and stimulate new research. Buizer et al. [45] operationalised Görg's concept of landscape governance as the interplay of discourses, institutional practices, and natural-spatial conditions to understand the politics of scale for the case of a farming and nature integration initiative in The Netherlands. They concluded that the analytical lens of landscape governance helped to shed new light on the development of policy integration 'from below'.

2.3. Territory and Landscape—One and the Same?

Is there a substantial difference between *territoire* (in its distinct French meaning) and landscape? Whilst anglophone scholars appear to give strong precedence to landscape, in addition to key terms such as space and place, francophone scholars are likely to argue that *territoire* and *paysage* (the French term for landscape) can be used interchangeably: the words *terre* (land, earth) and *pays* (land)—bear many similarities, and so do the spatial dimensions of the physical, logical, and symbolic aspects of the two concepts. Torquebiau [47], in English translated from the French, explains this similarity as follows (emphasis added):

"While some favour the term 'territory', a socially constructed space in which actors interact, others prefer the term 'landscape', a space where species and ecosystems interact. [...] Although collective action and governance are explicitly constitutive of the territory, which is not the case with landscape, it is possible [...] for one of these two terms to be used, even if other authors of the concerned domain would have preferred the other term. Moreover, the 'landscape approach' integrates many elements of the French *approche territoriale* [...], with the term 'territory' usually having generally a narrower meaning in English than in French, especially as regards the social construct".

Which of these terms is preferred will depend on disciplines, schools of thought, and the objects of study [47]. Ecologists will likely prefer landscape, especially if their specialism is landscape ecology, where human geographers and agronomists may prefer *territoire*. Landscape ecology explicitly considers space by recognising human actors as an integral part of the ecological system and by emphasising the spatial and temporal heterogeneity of the studied environments. Opdam et al. [29] propose "landscape sustainability science" as an interface between landscape ecology and sustainability science. They identify five key research challenges across a range of domains beyond landscape ecology, including

design, social science, and governance; integrating ecological and social mechanisms; connecting landscape ecology to governance science; linking scale levels in decision making; incorporating design in landscape ecology; and bridging the gap between science and practice. The landscape ecological conception of social-ecological interactions bears some resemblance to Social-Ecological Systems theory, which in turn has commonalities with the (French) territorial approach [16].

If we consider the emerging trends identified by Besse [43], especially the notion of non-human actors in the landscape and its implications for landscapes conceived as territorial spaces for experiential and relational enactment, it emerges that we should not seek to substitute one (heuristic) term for another or aim to arrive at a catch-all approach. Rather we must aim for a loose assemblage of such heuristic terms. The next section introduces elements of complex adaptive systems thinking as the materials and methods to elicit how landscape might be harnessed as an innovative lever of scale in territorial development.

3. Materials and Methods—Landscape as a Socio-Technical Innovation

Over the past twenty years, the concept of ecological resilience, originally proposed by Holling [48], has become widely adopted as the main conceptual framework in social-ecological research focussed on transitions [49,50]. In this context, ‘resilience’ is the capacity of a social-ecological system (SES) to absorb disturbance and reorganise while undergoing change so as to still retain essentially the same function, structure, identity, and feedback [51]. SES resilience is determined by key attributes that govern the dynamics of the SES, often portrayed using the metaphor of the ‘stability landscape’ or ‘basin of attraction’ [52]. The concepts of attractor and basins of attraction stem from system dynamics theory [53]. An attractor is a state towards which a system is inclined to evolve. Dynamic systems may have more than one attractor. Each attractor has its ‘basin of attraction’: the set of points from which the SES moves toward that attractor. The associated ‘ball-and-cup’ heuristic [54] explains the key idea of (social-) ecological resilience (Figure 1). The ‘cup’ represents the region in the basin of attraction in which the SES tends to remain. This ‘basin’ is defined by the totality of possible configurations of the system variables of interest. The ‘ball’ represents the state of the SES at any given time.

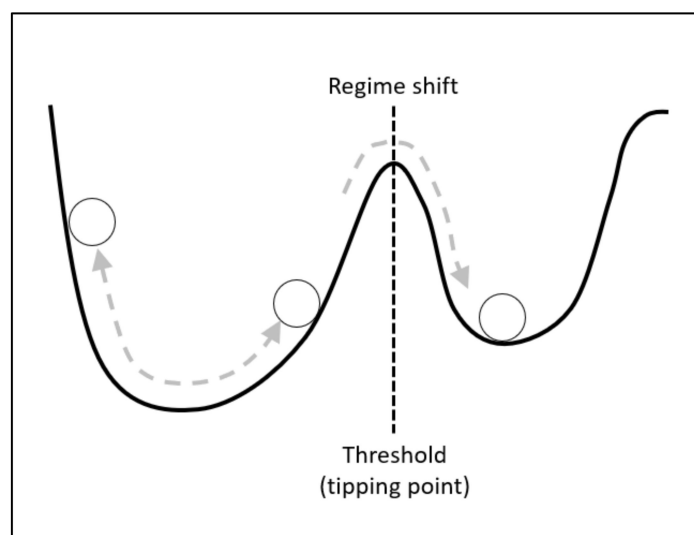


Figure 1. The ball-and-cup heuristic describing complex systems dynamics and regime shifts.

The ecological resilience concept assumes multiple regimes, hence more than one basin of attraction. The SES may move about within the basin, never settling at the bottom; it may also cross a threshold and settle in a new basin of attraction. Ecological resilience analysis is concerned with whether a SES can remain within the current basin. Social-ecological resilience analysis also considers alternate states of the system, including the normative

intent of ‘regime shifts’, or the desirability of transitions from one state to another. Two key concepts related to resilience are adaptability and transformability [51]. Adaptability refers to the capacity of actors in the SES to influence resilience. Transformability is the capacity of the SES (including its actors) to reconfigure and reorganise the system when the existing system becomes untenable or approaches collapse.

Extending the social-ecological interpretation of complex systems dynamics theory outlined above to social-technical systems and their management [55,56], an extensive body of literature has explored the role of innovation in navigating transitions. For example, Westley et al. [57] explored the role of innovation in shifts and large-scale transformations in domains like information technology, nanotechnology, biotechnology, and new energy systems. The focus of Westley et al., [57], analysis is on global sustainability outcomes. According to Westley et al., [57], current modes of governance, combined with the difficulty of grasping complexity, contribute to “lock-in” situations. Socio-technical innovations with the potential to change undesired system trajectories can be nurtured and connected to broad institutional resources and responses, so that ‘institutional entrepreneurs’ can work to overcome dominant institutional regimes and position viable shadow alternatives and ‘niche regimes’. Theorising socio-technical transition pathways, Geels and Schot [58] identify three interrelated levels that condition, foster, and determine how such niche innovation might create change towards sustainability: regimes, landscapes, and niches. For Geels and Schot [58], regimes are the rule sets operating in social networks, organisations, dominant artifacts, and prevailing infrastructures. Landscapes are conceptualised as the environment in which regimes evolve. Radical innovation originates in niches: small protected spaces in which new practice can develop, protected from scrutiny and objection from prevailing regimes.

In Geels and Schot’s [58] conception, ‘landscapes’ are primarily analytical constructs, operating in a certain regime, in which another analytical construct—that of the niche—evolves. As Westley et al. [57] put it: “Landscape factors are a major source of selection pressure on dominant regimes, and so, as landscapes shift, so do the possibilities for innovation and scaling-up of innovations” (p. 767). As such, this specific meaning of the term ‘landscape’ is not to be confused with the meanings invoked in Section 2 above. Placing the conception of landscape as a space for fostering experiential and relational action in the territory in the context of socio-technical innovation theory, ‘landscape’ can be considered a socio-technical innovation proper, rather than a conditioning context that shapes innovation.

Using the ball-and-cup heuristic introduced above, the next section will employ the landscape-as-socio-technical innovation conception to explore how ‘landscape’ could be harnessed in territorial development and create the conditions for navigating territorial complexity and scaling sustainable outcomes. To illustrate how ‘landscape’ might evolve towards becoming an effective scaling device in territorial planning, the analysis adopts Westley et al. [57]’s three stages of transition. I will also employ the term ‘landscape entrepreneurs’ to designate the actors working and collaborating to transform territorial planning processes. In this interpretation, landscape entrepreneurs are similar to Latour’s *terrestres*, variously translated into English as terrestrials, earthlings, earth-bound, or earth-dwellers [59]. Latour’s *terrestres*, in contrast to his *modernes*—those enacting modernist ontologies—have accepted that they are beings like other animals who live on the earth and are part of it. And so have the landscape entrepreneurs.

4. Results—A Landscape-Territorial Development Transition

The starting point, or baseline, for a transition towards landscape-territorial development is business-as-usual territorial planning as currently enacted by professional communities of practice. It should be emphasised that the notion of a baseline does not imply a fully static territorial planning system. Rather the baseline reflects that many contemporary spatial planning systems are rigid, inert, and not fit for purpose when it comes to dealing with the challenges of complexity [60,61].

The currently dominant modes of spatial planning and territorial development may be depicted as a ‘deep basin of attraction’ (the cup), with the ‘ball’ representing the dominant territorial planning regime. This does not necessarily mean that ‘landscape’ is of no consideration at all in territorial planning. Indeed, any contemporary territorial planning regime is likely to make use of at least some established representations of landscape, including landscape designs, digital maps, or three-dimensional landscape models [62]. The landscape innovation niche is absent where there is no current use of the conception of landscape as experiential space where new relational ontologies can be enacted.

Moving to Westley’s first phase of transition ($T = 1$, Figure 2), we can hypothesise the arrival of landscape entrepreneurs, that is to say, the commencement of their actions in and on the landscape. Those initial actions can emerge in many different ways, but would primarily emerge as grassroots initiatives. Examples can be found in civil society initiatives such as the French movement *Zones à Défendre* (ZAD), whose motto is “we’re not defending nature, we are nature defending itself”, or the Transition Town movement. Grassroots initiatives can also focus on cultural and natural heritage protection, for example, community-led purchases of land to counter urban sprawl, foster renewable energy alternatives, or enable local food production. If we conceptualise such grassroots initiatives in terms of the shape and form of the attractor basin in which the dominant territorial planning regime operates, we can notice landscape entrepreneurs—in their niches of innovation—opening up a new landscape regime; this landscape regime (i.e., not a particular landscape but rather a landscape *initiative* led by landscape entrepreneurs) is still shallow and unstable, whereas the dominant territorial planning regime is still deep and stable.

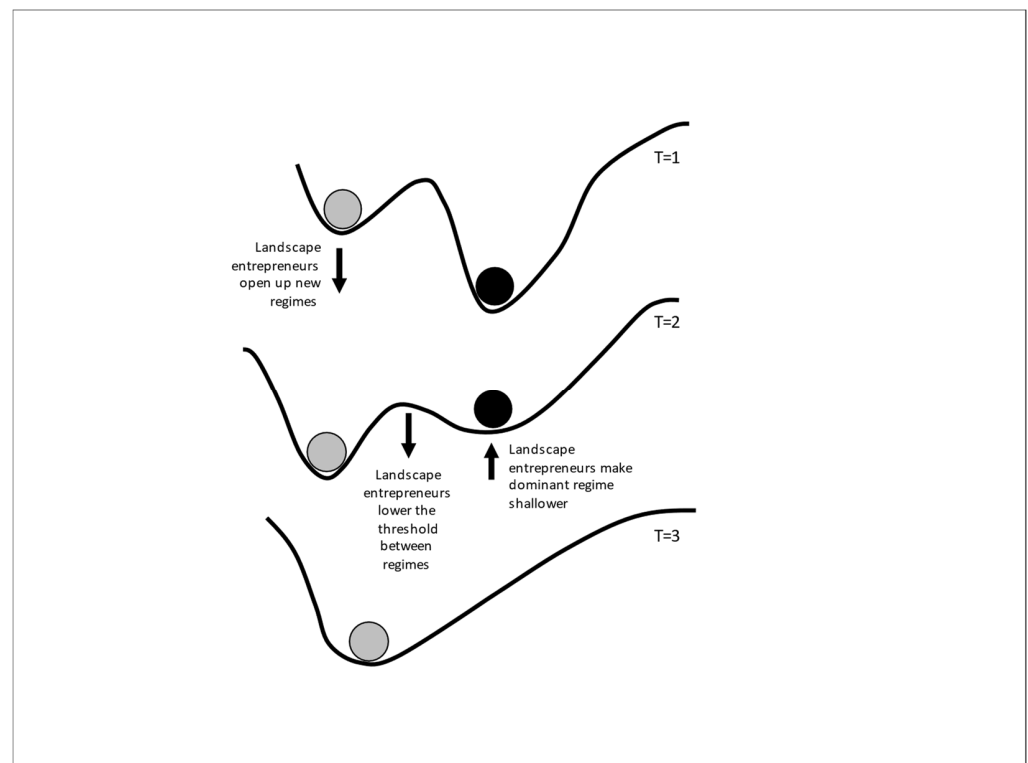


Figure 2. Three stages of transition towards a territorial development regime, instigated by landscape entrepreneurs. $T = 1$: The landscape regime (grey) is shallow, unstable; the territorial regime (black) is deep and stable; $T = 2$: The landscape regime’s basin of attraction is deeper and more stable; the territorial regime’s basin is becoming shallower, less stable. $T = 3$: The landscape regime’s basin of attraction is deep and stable; resources of the previously dominant territorial regime are now drawn ‘into’ the landscape regime to create a transformed system. Diagram adapted from Westley et al. [57].

We can anticipate that the landscape entrepreneurs are beginning to draw some attention from the dominant territorial planning regime. This may well be in the form of conflict. For example, where land is being defended, or landscapes occupied in unlawful ways, there will likely be sanctions, even when the perpetrators' intent may resonate with planners, or at least speak to the planners' own spatial dilemmas. In other cases, the noticing, the drawing attention may lead to synergies and initial collaborations, for example in cases where community-led work may produce artifacts usable in statutory planning. One example is the landscape biography—the documented life story of a landscape—which can inform future planning initiatives.

The second, intermediate phase in the transition process ($T = 2$, Figure 2), sees the landscape entrepreneurs lowering the threshold between the respective regimes: that of dominant territorial development and that of a landscape-based approach. The actions of the landscape entrepreneurs are making the dominant territorial regime shallower, and thereby less stable. We can think of this second phase of transition as being comprised of a range of diverse initiatives, addressing multiple landscapes (i.e., not innovation niches, but actual places in the territory) in multiple ways. Territorial planning is still conducted in a business-as-usual way, adhering to its legal requirements and established processes, but the professional planners by now are well aware, and appreciative, of the various new landscape initiatives. Some of these may still be grassroots, community-generated initiatives, and some may have emerged from the public bodies responsible for territorial planning. For example, the planning authorities may have issued a funding call for place-based initiatives and for communities to design and implement them in discretionary ways. Conflict is not ruled out in this intermediate phase of transition. That is, more militant, disobedient initiatives may co-exist and co-evolve with socially and legally accepted initiatives and government-endorsed projects. An important characteristic of this intermediate phase is that the 'earth-dwellers'—the landscape entrepreneurs—are inspiring and informing the established planning processes and initiatives. They have come out of their niches and word of their achievements is spreading through other parts of the dominant territorial planning regime.

The third phase of the transition towards a landscape-based territorial development regime ($T = 3$, Figure 2) is characterised by a deepened and stabilised landscape regime: the basin of attraction becomes deep and stable. The resources of the previously dominant territorial regime by now have been drawn into the landscape regime to create a transformed territorial planning and development system. In practice, this would mean a planning system that fully embraces 'landscape'—in its interpretation as an experiential and relational space—as a core planning principle. The new system endorses and funds landscape initiatives across the territory, fostering local governance and sovereignty (for example, community-owned renewable energy sources) and co-creation of initiatives in cases where formal jurisdiction is pertinent. The landscape entrepreneurs' intent in the third phase is not to supersede, or indeed to usurp, established territorial planning. The new, transformed planning regime is first and foremost a regime shaped and formed by the notion of landscape. It seeks to harness and integrate both regimes. In so doing, the risk of nourishing ontologically and methodologically conflicting initiatives in the territory is being reduced.

5. Discussion

This section first reflects on the results presented in Section 4. It does so by comparing the three stages of transition with extant literature. Next, some means for fostering a transition are discussed, and suggestions for future research made.

5.1. Towards a Landscaping Society

The three stages of transition towards a landscape-territorial planning and development regime, as presented above may be summarised and further elicited using the terminology of seminal French landscape scholar Augustin Berque. For Berque, landscape

is the translation of *oecumene*, an ancient Greek term for the known, the inhabited, or the habitable world [63]. Three decades ago, well before the notions of the Anthropocene and relational ontology had entered the scholarly environmental debate, Berque [64], contemplating the idea of a societal landscape transition, proposed the conceptual triad of *territoire à pays*; *territoire à paysage*; and *territoire à paysagement* (These terms may be freely translated, respectively, as land-based territory; landscape-based territory; and landscaping territory. In the latter term, landscaping refers to the landscape architectural meaning of the word. In all three terms, the term 'territory' refers to its French meaning.). Somewhat sweepingly, he relates each of these conceptions to a type of society, respectively, (i) a land-based society; (ii) a landscape-based society, and (iii) a landscaping society. Berque's starting point is a land-based society, where there is only a weak notion of landscape. A landscape-based society is aware of landscape and its potential and notes emergent landscape-based initiatives as ways of dealing with environmental problems. In a landscaping society, marking the full realisation of Berque's idea of a societal landscape transition, actors perceive their environment as ugly or incomprehensible. Society is massively aware of landscape (destruction) and the need emerges for an active consideration of the aesthetics of the territory: a landscaped development (in the landscape architectural sense). Here, Berque's landscape transition is successfully completed, with a landscaping society that is conscious, in the second degree, of its own beholding of landscape, just as the landscape society was, in the first degree, conscious of the land.

Whilst at the time Berque and his contemporaries appear to have placed strong emphasis on the aesthetic dimension of landscape [27], there is an elegant fit between Berque's three types of society and the three transition phases as presented above. The first, initial phase (T = 1, Figure 2) corresponds with Berque's land-based society, which practices a territorial planning regime where landscape notions are absent or virtually non-existent; Phase two (T = 2) corresponds with the landscape-based society, with its territorial development regime aware of landscape as an experiential and relational space, i.e., not merely a source of beauty and aesthetic pleasure. Phase three (T = 3), then, corresponds with Berque's landscaping society, that is, a society which embraces territorial planning grounded in the Anthropocenic notion of landscape, engaged in landscaping projects and territorial actions that go well beyond hobby gardening and traditional landscape architectural design, towards creating, developing, and preserving spaces for experiential and relational enactment.

This brief synthesis of findings invites a proposition to consider a new role for landscape in territorial planning both as a catalyst and as a synergist. First, landscape can be, and indeed must be, a catalyst because urgent action is needed for territories to mitigate and adapt to change. The call for urgent action to counter the myriad trends of environmental decline need not be repeated here. I suggest that landscape, when conceived as an innovation in territorial development, must act as a disruptive innovation [65], creating rapid change in territorial planning practices with material impact. Where understood and acknowledged, as would be the case in Berque's vision for a landscaping society, landscape accelerates territorial development and its ability to sustain the territory in uncertain times. Second, landscape is a synergist, working jointly, synergistically with territorial planning. As indicated in Section 4, landscape-based territorial planning and development should not be seen as a substitute for conventional territorial planning. Rather, landscape-based territorial planning is proposed as an amalgamated, innovative approach, equipped to deal with complexity.

5.2. Fostering the Transition

How can a culture of landscape-territorial governance be instigated and fostered? First, new ways of landscape thinking can be fostered and encouraged in participatory planning initiatives. For researchers, there remains ample scope to design participatory research activities more comprehensively around new, experiential notions of landscape. Many examples already exist (e.g., [66,67]). The challenge will be to integrate future landscape-

territorial development research with policy and planning initiatives, for example through co-construction and co-design. This will not be about monopolizing or claiming disciplinary landscape approaches (e.g., landscape services) as being ‘the best’, but rather about building ‘landscape thinking and doing’ into participatory work so that it works, as it were, invisibly, and creates fluid, reciprocal interactions with formal planning processes. This will require pluri- and interdisciplinary approaches where methods can inform and strengthen each other.

A major challenge that emerges, both for territorial planners and researchers studying or contributing to territorial planning, is that of representation. As evoked in Section 2 above, Besse [43] signals a trend towards non-representational, experiential approaches to foster new relations (also with non-humans) and polysensory experiences. How do we support this as researchers (other than through landscape architecture, design) and what role can maps (and indeed digital cartography) still play in all of this? How to best represent landscape in a context where traditional representations—maps, pictures, or models—become inadequate as tools to elicit and foster the experiential and representational dimensions of landscape? In other words, what non-representational approaches can be conceived and harnessed under a landscape-territorial approach? Can current approaches be extended, or should they be rethought? Some promising approaches already exist, for example, narrative cartography [68], which offers capacity to document landscapes and territories in diverse ways, ranging from traditional maps to geo-positioned (recorded) narratives and imagery. Another example is the development of spatial indices documenting dimensions of landscape-territorial equity [69] and diversity. Such approaches may be complemented, and indeed in some situations, replaced, with artistic expressions of landscape. Examples include land art [70,71] and other creative applications of landscape architecture [31] focussed on holism.

With the notion of landscape as an experiential, relational space rather than an externalised source of beauty, pleasure, or fulfilment, the onus for innovation and transition is placed on those who live with, in, and from the landscapes that comprise a territory. A modernist, rationalised top-down approach for governing the transition, for example, the designation, at the national level, of landscapes of outstanding beauty or socio-environmental significance, is unlikely to foster the transition to a landscaping society. Such initiatives would have no grounded ownership, and would therefore not speak to the new ‘earth dwellers’, the landscape entrepreneurs. That said, there is still a need for governments at all levels—local, regional, national, and transnational—to promote the idea of landscape, as has been done for two decades under the banner of the European Landscape Convention (ELC). A recently published manifesto [72] has identified knowledge gaps and new opportunities for the ELC. This manifesto shifts the discourse away from landscape aesthetics to broader appreciations of all landscapes—not merely beautiful landscapes but also ordinary and industrial places—as a priority for the ELC. There may well be scope elsewhere in the world for ELC-like legislative tools for the governance of landscapes. These would not formalise, generalise, or restrict landscape actions but rather encourage them where they already exist (for example, the Landcare initiatives in Australia) and initiate them where they do not exist.

So far, this section has elicited the potential for a landscape-territorial transition at the local level, where experiential and relational ways of being can be enacted. However, it is at this very same local level that current spatial planning systems may pose barriers to the proposed transition. How might such barriers manifest themselves, and how might they be overcome? The barriers presented by contemporary spatial planning regimes may relate not only to their rigidity, inertia, and inadequacy when it comes to dealing with the challenges of complexity. Other dynamics, such as historical path dependencies and (often related) hegemonic political and economic power regimes may exist. Whilst such factors may well be considered part of the complexity problem, they may be approached in different scholarly ways, for example through the lenses of political economy and political ecology, giving way to action that may not directly involve landscape. In many jurisdictions,

barriers to innovation and transition may persist due to vested forces with an interest in preserving the status quo and the political, technical, and policy instruments that allow this status quo to persist and consolidate. Where land and landscape are concerned, it is often the spatial planning system that would be the primary focus of such vested forces.

As this article has taken an ontological entry point, the argument that it develops is generic, and by definition applies to any jurisdiction, regardless of locational specificity. Therefore, the landscape entrepreneurs on their way to instigate a transition towards a landscaping society must be prepared to meet a range of barriers in their respective existing spatial planning systems. Where some existing systems may indeed exhibit problems of power, rigidity, or inertia, others will have embraced new approaches, often allowing non-statutory action, to face the challenges of the Anthropocene. In either case, barriers will exist—ranging from power and corruption to rigid zoning systems. The identification of such context-specific barriers and ways to overcome them will be critical for identifying the actions that are to be promoted to accelerate the transition towards a landscaping society. Place-specific enquiry into spatial planning systems in the face of a transition towards a landscaping society is therefore suggested as a priority area for future research.

5.3. The Promise of Scaling

We can now return to the hypothesis that ‘landscape’ can serve as a scaling strategy for territories to navigate local impacts from globally/remotely interacting drivers of change. Would such a promise of scaling materialise in a landscaping society, practicing landscape-territorial development and planning? It has been said that “good practices are poor travellers” [73]. Most initiatives and projects that have enjoyed local, place-based success require complex and diverse processes in order to effect larger-scale change [74]. They cannot merely be diffused or replicated elsewhere (scaling out) or repeated at larger scales (scaling up). This is most certainly the case for landscape initiatives, as each initiative is by definition rooted in a particular space, place, soil, or area of land. As such, it is suggested that there is no case to be made for governed scaling-up of landscape initiatives. Nor can landscape initiatives, as undertaken by the landscape entrepreneurs, be scaled out at the level of a single territory, even where some scope exists for communities of practice to exchange ideas and learn from each other. Rather, the potential for scaling resides in scaling out across territories of landscape as an innovation. If more territories transition towards a regime of planning and development representing Berque’s landscaping society (the third stage of the landscape transition process described in Section 4), we can anticipate substantial and material change, in the form of reduced material flows, reduced emissions, greater self-reliance, a stronger emphasis on local food, a stronger sense of community and more generally a greater sense of wellbeing and connectedness. Landscape—reconfigured, reclaimed, protected, developed—gives local actors—whether they are farmers, urban dwellers, walkers, fishermen, hunters, or artists, the ability to ‘be’ in experiential, relational space. The landscaping society nourishes and encourages such landscapes, so that its citizens, both individually and collectively, can experience a ‘sense in place’. It is ultimately in these reconfigured places—the landscapes of the Anthropocene—that new spheres of control and influence over the territory can be expected to emerge.

The method employed to develop the landscape-territorial perspective prompts two notes of caution. First, the proposed perspective might invite the recognition of a traditional scale hierarchy—that is, the territory made up of a finite number of landscapes. The sum of those landscapes, their area, their services, and functions, equals the territory. This is not the intent. Indeed, some territories are comprised of many landscapes, others of some, perhaps only one landscape. Moreover, landscapes within a territory may well overlap. If we move away from traditional (biophysical) representations of landscape, the logic of (physical) geographical space and hierarchy no longer holds and must be abandoned. Second, the perspective used to depict the regime shift necessary for landscape-territorial development to emerge—social-ecological and social-technical systems theory—has emphasised the notions of innovation and technology. The proposition to consider

landscape (and landscape entrepreneurship) as a technology of innovation, could, for some, imply a risk that landscape, like ecosystem services, may inadvertently become a technology of globalization [75]. Analogous to the argument laid out by Ernston and Sörlin [75], by the time landscapes (re)appear as objects of calculated value in territorial decision-making, they can no longer be viewed as merely reflecting an objective biophysical reality. Therefore, the gesture of landscapes being universal, and objective must be avoided. This will be unproblematic if the relational-ontological interpretation of landscape, as per Latour and other scholars of the onto-politics of the Anthropocene, is adhered to, and landscape is primarily conceived of as experiential, relational space.

6. Conclusions

The perspective developed in this article demonstrates that ‘landscape’, considered as a socio-technical innovation, can be harnessed in territorial development as a scaling device to achieve resilient and adaptive territories in the face of the Anthropocene. The transition towards landscape-territorial development and planning can proceed in three phases. Each phase reflects a society with different degrees of awareness of landscape. Rather than in calling for global landscape governance, it is ultimately in *reconfigured place*—that is, landscapes reclaimed, developed, protected, as the local actors require it—that new spheres of control and influence over the landscape can emerge.

This article has deliberately steered clear of empirically testing and demonstrating the validity and merits of the proposed approach in case studies with specific local conditions and existing spatial planning systems. This is an obvious next step and proposed here as a key priority for future research that can further inform the transition to landscaping societies and landscape-territorial planning.

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