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The Futures of Regional Design

Michael Neuman and Wil Zonneveld

Thinking and Acting Regionally

Much has changed since we embarked on this project, emerging from the outcome of a panel on regional design at the AESOP congress of 2015. The climate crisis has grown worse, with impacts more severe, widespread, unpredictable, and what's worse, not dealt with globally in a meaningful way. Aggregate data worldwide clearly continued to point to more CO₂ and CH₄ accumulating in the atmosphere, at an accelerating rate (NOAA 2020). The climate emergency is revealing interconnections among human actions and our earth in ways novel yet unsurprising, if we fully appreciate the interdependence of all species and ecosystems as well as the planet as a whole. Finally, in 2019 it appeared that yet another global consensus was emerging to take more serious and immediate action to mitigate it, even as there were significant holdouts among nations. The devastating wildfires in Australia in late 2019 and the western USA in 2020 seemed to underscore that consensus, with tens of millions of acres, thousands of homes burned, many lives lost, including an estimated one billion animals.

That apparent consensus was overtaken by the global COVID 19 pandemic from the coronavirus of 2020. Yet as emerging evidence suggests, the climate crisis and ecological destruction are related to the increased creation and spread of novel viruses as the result of increasing interactions of species with humans (Vidal 2020). As humans and our constructions – roads, infrastructures, buildings – destroy and invade formerly intact habitats across the globe, species of all kinds interact in new ways. This results in new and more hosts transmitting viral vectors. Future globalization of viral epidemics is inescapable. Pandemics are an integral part of globalization, not a by-product, unintended consequence, collateral damage, negative externality, or any other euphemism we have created to obfuscate complex realities and obviate action. Zoonosis is now part of our daily vocabulary and will probably stay there.

We can go on to mention increasing social and economic inequities worldwide, and the reasons behind them (Piketty 2020). Regardless of the controversies about main causes, the facts of increasing inequities are indisputable. To this we add increasing political and societal polarization, which coupled with 40 years of neoliberal government policies and a dozen years of austerity as an outcome of the 2008–2009 crisis, and we easily can see ‘the fine mess’ we’ve put ourselves in. While this commentary refers to global aggregate data, there has been progress in some nations

and in some cities and regions. In order for current trends away from sustainability and equity to be reversed requires scaling up as quickly as possible those activities that overcome these maladies on as many fronts as possible. Collective human spirit, ingenuity, entrepreneurship, and solidarity would continue to come to the fore. There are many long-standing institutional and other 'business as usual' obstacles in the way of steering in a new direction quickly. Nevertheless, the aim of this book is to address these matters on a scale not customary by existing governments and other administrative entities. To do this means creating new tools and perspectives, as well as rescaling and recalibrating existing tools.

All these factors and others point to the need to think and act regionally, while being responsive to context, needs, and desires at the range of scales between local and global, simultaneously. It is now time, beyond time, to clarify complex realities and take action. The intent of this book and this conclusion is to go forward sustainably with renewed purpose and urgency in the realms of city, ecological, and hybrid regions. As we have seen across this book, regional design plays a key role in making us safer, more socially equal, resilient, and sustainable.

Take for example Lagos, Nigeria. It has an estimated population of over 20 million persons, growing from about 200,000 in 1960, in a nation of 201 million (UNFPA 2019). It is an instance of the explosive urban growth that has been occurring worldwide, accelerating since globalization has become the foundation of the world economy. Nigeria's annual population growth rate of about 6 percent means that it adds an equivalent of Houston's metropolitan population (7 million) or twice the size of the population of the Berlin-Brandenburg metropolitan region every six years (UNFPA 2019). Lagos is but one indicator in Africa, whose population is currently 1.2 billion, projected to double by 2050 to 2.5 billion, and quadruple by 2100 to 5 billion (UNFPA 2019). Africa is not alone. In Asia, two countries alone are projected to have three billion persons by 2050 – India and China. Most of this explosive growth is urban.

Revised, detailed estimates now place approximately 85 percent of the earth's human population in cities (Dijkstra 2018). In Lagos and many cities like it around the globe, all of the ills listed above, along with advances (progress), occur. Consider the multiple epicenters of the COVID 19 pandemic, all big cities: Wuhan, Milan, Madrid, New York, São Paulo, London, Los Angeles, and Beijing, among others.

As cities have grown into metropolises, megacities, and city regions, we witness the increasing urgency to plan and manage these behemoths so that their residents can lead healthy and prosperous lives, sustainably. For far too long, inequalities, xenophobias, pandemics, pollution, and climate change, as well as all the impacts and interactions stemming from our societies and economies, have increased in scale, pace, and scope. These conditions and others have far outpaced the capacities of governing institutions at all levels to cope in a meaningful way. Manuel Castells presents compelling arguments for the erosion of local identity and by extension, local governance, in the face of the global city and the network society in the second book, *The Power of Identity*, of his now generation-old trilogy (Castells 2010 [1997]). Further studies reveal the same at other levels of government, economy, and society; always interdependent (Kunkel 2017, Moore 2015, Malm 2015).

Another of the main reasons for the seeming ungovernability of city regions is the lack of capacity in governance, in part due to the steady spread of neoliberalism and austerity in many nations. A further reason is simply that most countries have not instituted new levels and instruments of government at a scale – the region – to handle these multi-fold issues. This is why regional design can become an imperative tool to begin to manage the spill-over effects that the myriad of local government units have not been able to handle, even with national and multi-national (e.g. European Union) support.

The contribution that regional design makes to resolving these conundrums is to highlight the relatively new arena of governance that comports with the actual spatial scale of urban phenomena now and into the future – the region. Perhaps a more significant contribution of regional design (in both verb and noun senses) is to create and apply new governance apparatus to the flows in and out of regions, in addition to focusing on spatial-territorial claims. The prior imperative of place management is giving way in this historic moment to flow (process) management. Fortunately, now we have the data, algorithms, and tools to govern flows, perhaps even *more effectively than we have governed territories*. At this juncture one can envision an update of or companion to the landmark regional planning treatise *Territory and Function* (Friedmann and Weaver 1979) to *Flows and Function*, with an emphasis on the interplay of flow and spatial form. Yet this will require new methods, new thinking, new learning, and new teaching that add governing flows to governing places. We are confident that the new generation is up to the task.

While the call for regional planning and design is not new, the imperative is. Over a century ago, Patrick Geddes addressed the need to deal with the “larger city region” (Geddes 1915, 16, 20). As Gary Hack points out in the Foreword, Daniel Burnham’s Plan for Chicago in 1909 was a regional design (Hack 2020). Forty years prior, Ángel Fernández de los Ríos pointed out the need for a regional perspective on city planning in his analysis of Madrid (Fernández de los Ríos 1868). For Peter Hall (1966, 1977, 1984) “world cities” were always quintessentially regional, therefore in need of regional governance. This book in your hands (or on your screen) presents examples where regional design or some approximation has been practiced, with local histories outlining its development. These places offer lessons and hope for the future.

As indicated, one theoretical foundation for the practice of regional planning and design was put forth by Friedman and Weaver’s *Territory and Function*, whose title suggested the interplay of the two key factors that comprise a region, at least up to the advent of radically networked globalization (Friedman and Weaver 1979b). More recently, Richard Forman’s book on urban regions advanced theory, especially as he wove nature into city regions ecologically (Forman 2008), as does Marina Alberti (2016). Most recently, Allen Scott’s career reflection (2019) reminds us of the complexity and evolution of city regions, while pointing to the paradoxes seemingly impossible to resolve in their governance, particularly if they are to be equitable and sustainable.

This present book expands the scope further, by adding ecological and bioregions, as well as deltaic and combined marine-terrestrial regions. It also addresses the paradox regarding governing networks and flows by governing places, a topic explored in Willem Salet’s chapter on institutions in this book, and in Andreas Faludi’s book *The Poverty of Territorialism* (Salet 2021, Faludi 2018). These flows of materials, goods, information, money, people, energy, and political power transcend spatial units, regardless of their scale. As such, they outstrip the capacities of governments to handle these flows by the very fact of government’s organization around territories and not flows. This adds to the ungovernability crisis outlined in the 1970s (Crozier, Huntington, and Watanuki 1975) and exacerbated by neo-liberalism, austerity, and other factors noted previously.

Our critique especially applies to the thinking by and about spatially centered government regimes. In other words, it goes beyond the recent and rich scholarship on how to redesign institutions for multi-scalar regions and multi-level governance. Neil Brenner and colleagues have published critical inquiries in this area that have important implications for the interplay of urban and regional governance and its design (Brenner 1999, 2019). That scholarship can go further. This book reveals that limited progress has been made to reorient territorial government toward new regimes that focus both on flows and places in ways that go beyond territorialism. We believe, along with Faludi and others, that we are at a new and qualitatively different threshold

for governance that has been ushered in by globalization. However, cumbersome institutions are slow and resistant to change. The historical question guiding governance: “who governs” (Dahl 1961) has been superseded in this era, in which “the flows of power have overtaken by the power of flows” (Castells 2010). This underscores the paradox of governing flows using the primary tool of governing places – the political-territorial institution.

In this context, we must reconsider the customary call to define terms such as region, and the different types of regions, whenever regions and their planning and design are dealt with. This further implies reconsidering the delineation of regional boundaries. Given the hyper-networking of urban activities and actors via the myriad of telecom and transport infrastructures that enable globalization and cities to blossom into mega-regions, there is no single or simple boundary line to encompass any individual region. Any political boundary drawn according to some – in the end, arbitrary – politico-administrative criteria tend not to conform to the full complexity of regional realities. In the end, a region is what we imagine it/define it to be. It is a human construct. The criteria used to define that construct serve to shape it.

This is so for at least three reasons. First, any border line is actually a border area, vague and fuzzy, that encompasses the hybrid social-ecological ecotone between one region and another. Second, regions extend their reach far and wide beyond their cores and even their peripheries. This is true whether referring to urban regions due to flows into and out of it, amplified by globalization, or to ecological regions due to flows that have also been heightened by human activities and visible in climate change, among other impacts. It also applies to hybrid regions and their flows for the same reasons. Third, the old view of a city/metropolitan area in interaction with its immediate geographic surrounds (hinterlands, environs) (Forman 2008, 116) no longer holds the same importance as in generations past. In the past, there was greater symbiosis between a city and its immediate surrounds. This was due to agricultural and other material flows such as water and building materials, as well as raw materials for industry going into a city, and flows like waste, pollution, sewage, and finished goods going out. Today, this symbiosis has broken down, and reconstructed in new configurations. For example, how does high speed rail (HSR) (>300 kph) effect an urban region? Today, Segovia, Avila, and Toledo are now part of the Madrid region, after their HSR connections. At the same time, given the importance of localism and reduced travel to attain sustainability, we may well see a resurgence in the importance of metro-hinterland interactions. All this questions the search for the exact perimeters of a region, which seems to be a pastime of some academics.

Yet design and manage regions we must. This underscores the tension between delineating a region and its planning and governance, always approximate and incomplete. While the circumstances of each region determine the most appropriate approach, we believe that the following criteria can help elaborate the new regional governance.

1. *The integration of design with planning.* In most countries these disciplines are distinct in practice as well as in teaching, even as they have some overlap. Design in this sense is not limited to spatial/physical design, and includes institutional design.
2. *The integration of places and processes, and the integration of urban forms with urban flows.* Processes determine and shape places – form follows flow. This perspective enables new ways to see governance, financing, planning, and design.
3. *The integration of infrastructure networks, including green and blue infrastructures,* so that eco-system services become the norm where feasible, to lessen the reliance on old, expensive, outdated, and unsustainable centralized built infrastructure systems. In other words, that ecological principles replace engineering ones, and open, interconnected networks replace closed ones.

4. *The sustainable integration of city regions with natural ecosystems.* Designing with nature in an updated sense so that hybrid regions respect all life and do not deplete natural resources and overwhelm the natural capacities of the planet and its ecosystems.
5. *The integration of the structures of governance and its mechanisms with the spatial and processual characteristics of the territories and functions to be governed.* This pertains to the architecture of governance institutions themselves as well as their policies, programs, plans, regulations, and investments. Hierarchical forms of government could be replaced with networked forms to correspond to the networks shaping economies, societies, and settlements. Instruments oriented to territorial units could be reoriented to specific flows and processes.

The emphasis is on integration because past practices – business as usual – have not been integrated in many ways. These past practices include disciplinary silos rather than interdisciplinary collaboration, different levels of government whose decisions and actions are contrary/conflicting rather than complementary/aligned, and the separation of urbanity from nature, and urban processes from natural ones, so that they are not sustainable, to name a few. Alas, many of these practices are not past – they are still present. It is our view that in city regions as in nature, integration is essential for full sustainability. Integrative thinking is creative and synthetic thinking, a far cry from the analytical thinking that prevails in schools and in practice. This shift is a tall order in a divided, siloed world. One prospect is embedded in a key regional design tool – the image. Through images, regional design is integrative. A well-conceived image can and does integrate thinking, whether spatially or politically.

The Paradox of Governing Flows Through Governing Places: Institutions for Multi-scalar and Multi-level Regional Governance

Willem Salet's chapter on institutions and governance is a critical one. To this we add emerging theories of regional design and governance in Verena Balz's chapter. In terms of regional design, Salet stresses "institutions in action", stressing the long shadow of agency as exercised by institutions – path dependence. He refers to "spatial design", to understand the regionalization of urban structures hand in hand with the development of proposals for critical spatial interventions, and to "capacity building", which deals with the development of effective and legitimate power at city region levels. This is sometimes referred to as "institutional" or "organizational" design (Neuman 2012, 2007). Salet addresses three key issues: 1) the regional manifestation of present day cities, 2) key problems associated with that, using Kevin Lynch's theory of city form, and 3) the connected need for new public norms and practices ("institutions in action"). Readers will need to link regional design with institutional design according to their own contexts.

In Europe, for example, one approach was the "federation of municipalities" on a supra-municipal level. In some countries its basis is found in 1970s legislation. These federated entities constituted voluntary collaboration between central cities and municipal environs, with a focus on public facilities/infrastructure (Eythórsson et al. 2018). In Belgium, Flemish cities were compensated by national government for fulfilling regional functions by the "Municipal Fund". Yet in practice they did not always work well or last.¹ An insightful study of supra-municipal practices in 26 European nations identified

four principal organisational models of associations of local structures. These are as follows: (1) the consolidated model (existing in Bulgaria, Czech Republic, Denmark, Finland, Greece, Latvia, Lithuania, Netherlands, Norway, Sweden), (2) the bipolar model (in Bosnia and Herzegovina, Croatia, Estonia, Italy, Slovakia, Slovenia, and Switzerland), (3) the

federative model (in Austria, Belgium, Germany, Spain), and (4) the fragmented model (to be found in France, United Kingdom, Poland, Hungary, and Romania).

(Kolsut 2018, 39)

While in these European countries, municipalities have organized themselves, often for political reasons; how metropolitan regions have organized themselves for self-governance is more revealing and pertinent. A global report on metro regions found four types of governance bodies: coordination entities, intermunicipal authorities, supra-municipal authorities, and special status “metropolitan cities” (OECD 2015, 21).

These and similar approaches have the potential to address three elements posited in this conclusion. One is the networked nature of city regions. A second is the spatial-institutional “matching” between the shape of a territory and its governance institutions. Another is a more balanced sharing of power. Other studies and experience suggest that a strong regional authority is needed. Can the two – networked municipal federalism with a unitary authority – be integrated or otherwise made compatible?

There are other approaches, too numerous to mention here. More studies on this topic are needed to support a robust vision of regional design and governance. Among other matters, there exists a need to address the overlooked peripheral spaces in city regions, as these seem to become ever more marginalized, which lead to protests in the ballot box or on the streets, or both. How do marginalized actors/places respond to regionalization and globalization? What strategies do they use? How are their needs incorporated into planning, policy, and design? This is fundamental, as being well-connected is seen as a measure of success. It also has critical implications for social and economic equity and opportunity. This has inferences for at least two areas of research and practice for regional design. The first is nature/ecological services, the second is transport connectivity as inter-related with communications connectivity. Both are briefly highlighted next.

As suggested above and in several chapters, nature services/ecological services are increasingly important in terms of sustainability, resilience, and overall city region viability. Their factors are increasingly incorporated into ecological and economic accounting schemes, into green infrastructure planning, into sustainable schemes to reuse wastes (cradle to cradle, circular economy), and into land and biological conservation. They can be partly represented in the “environs” of regional design’s spatial triad of centers (urban places), linkages/connective tissue (infrastructures), and environs (the places in between centers). In this case, farms, forests, nature preserves, and wild places, along with water bodies and oceans serve as “lungs” for cities and the planet. This clean image of environs and nature services becomes muddy and belies the hybrid nature of most regions, due to human incursions even in the remotest of places. Yet the principles of nature services can animate and inform regional design practices, especially infrastructures, as green infrastructures have the premise of being less expensive and harmful – thus more sustainable.

Then there are the logistical aspects of city regions and their economies, including food production, transport, communications, warehousing, distribution, and freight. These have become indispensable with the logistics associated with the rise of large online retailers and home delivery. Home delivery is also exploding for local residents and workers, as was seen in the wake of the coronavirus pandemic of 2020 and beyond. These activities are rapidly changing urban outskirts and city centers alike, along with their interactions. Journals such as the *Journal of Transport Geography*, *European Planning Studies*, *Transportation Research Record*, *Regional Science*, and *Economic Geography*, and so on, document these types of rapid transformations in city regions that design ought to take into account.

This partial sample suggests that our premise, that regional governance and regional design go hand in hand, is a central premise of the entire book. We link the two not merely for reasons of implementation – to put into action the plans, policies, and designs created by the practice of regional design. Equally important is the notion that governance can be, and always has been, designed. Our aim is to link the two more closely at the new scale of urban society, the region. While municipalities have a millennium of history as legal corporations (in Europe), and nation states have a few centuries, regions as objects of government have merely a few generations of history. Most of that regional history is experimental, one-off, and not widespread. Design can break loose the path dependence on these two old and historical units of government and seize the creative initiative on the relative blank slate of regional governance.

We recognize that other instructive case studies could have been included in this book. We considered many of these and would like to include at least some of them in future editions. Among others: the Flemish Diamond, Berlin, Moscow, Buenos Aires, Mexico City, São Paulo, Cairo, Mumbai, Jakarta, Shanghai, Beijing, and Tokyo. This would do more than expand the geographic reach. It would also include innovations in regional design. As city regions and hybrid regions gain in size and power, it is inevitable that regional design and governance will come to the fore. They will increasingly supplement, at first, and later perhaps supplant local governance as a locus of sub-national strategy, planning, and governance.

So what does the future hold? Human futures are designed. Without doubt, they are tied to regions. Perhaps Louis Albrechts qualifies it best – “the transformative power of regional design”.²

Notes

1. Per Louis Albrechts, personal communication, that amount was “a drop on a hot plate” – a small amount that evaporated quickly.
2. Personal communication.

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