Imagining the Region

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Intelligence for the Future Cities: Supercities

Living in an age of such deep changes we can intuit a change of epoch. The environmental, economic, and social challenges are generating a provisional agenda in which cities display a particular role. In fact, in the early 21st century, urban change has surprised in speed and scale, and needs to be interpreted using new tools. It is also a time of opportunities set forth by the new scenarios that offer an unprecedented incentive to face the transformations of city regions. We highlight two factors to interpret urban regions today: the crisis of the city concept, related not only with megaregions but with the dominant model of spread-out urbanization; and new technologies' impact on urban, in a globalizing context.

The regional dimension in the approach to cities has become more and more evident. Overcoming all administrative boundaries and settlement structures at a regional scale demonstrates an unknown complexity. In 2010, there were 442 urban regions with over one million inhabitants. By 2020, the number will be 538 (UN Habitat 2011). Agreeing with Choay's intuition (1994), the current urban development implies the death of the city. At least, the city in its classic understanding, because the city concept itself is reclaiming a new definition (Amin and Thrift 2002).

Megalopolises such as Tokyo, Mexico, Cairo, Shanghai, Mumbai, or Sao Paolo show an extended metropolitan space over a wide geography, with influence over a great diversity of territories. In the origins of this phenomenon, Gottman coined the concept "Megalopolis" (1961) to interpret the great urbanized continuum in the American East Coast, Gutkind expressed the "twilight of cities" (1962), and Doxiadis proposed the "Ecumenopolis" (1968) to explain, in a linear manner, the potential spread of dynamic conurbations, connecting regions. But they could not imagine the magnitude and complexity of the current urbanization.

The dynamism of urban areas generates deep changes everywhere, leading to the transformation of a broader territory, including medium cities, rural and natural areas, in a phenomenon described as the "metropolitanization" of territory (Indovina 2003). This discontinuous and disparate built environment, with conjoint growth and decay processes along with the permanent convergence of regional and local scales, lead us to believe that any idea to intervene holistically is impossible. As Secchi wrote:

the future of the city and the territory, currently identified with the dimension of the "city-region", of the metropolitan extension and the "urbanised rurality" do not seem foreseeable in the usual simple terms; as if complexity would need at the same time a greater level of abstraction and precision.

(Secchi 2000, 139)

For re-inventing the urban it is imperative to overcome the homogenization trend of generic cities (Koolhaas 1995), in contrast with cities and city regions that maintain specific identities or a singular role in the global world. While many still think that only the economy and real estate speculation are the drivers of urbanization, in some cities around the world urban planning carried out by competent governments is yielding relevant results.

Actually, the relationship between our societies and the environment is altered, and the productive and social relations within cities are affected by the technological scenario, fostering innovation at a global scale. A specialized complex service arises in the main urban areas, particularly those with critical mass, competing to host the new actors and facilities of the knowledge economy. Cities and urban regions with the capacity to provide economic opportunities and a high quality of life are part of this competition. This situation, that dramatically affects urban ecosystems, generates a constant uneasiness regarding the uncertainties of the future. Twenty-five years ago it had been pointed out that "cities are exposed to global competition" (Sassen 1994). The discontent that has stemmed from the increase in inequality, perceived as a result of the prevailing model of globalization, could be managed in a different manner, by introducing rules and governance strategies to go further than merely the market interests (Stiglitz 2002, Judt 2010, Sennett 2018). Nowadays, most factors of innovation can be considered mobile, such as ideas, commodities, technology, capital, and people. However, some remain immovable, such as the local identity, with its features of climate, landscape, and culture. Authors as diverse as M. Porter, M. Castells, and R. Florida have valued the "power of place" as key in the future of cities, as a combination of social intelligence and local identity.

In this context, the ability of a society to envision its own future and going forward is critical. Urban policy and planning should activate that capacity for social integration, fostering citizens equitable access to infrastructures and enjoyment of the city. Responding to this framework, *Fundación Metrópoli* proposed the idea of "intelligent territories" and, later, the "supercities" concept (Vegara and De las Rivas 2004, 2016).

The origins of this perspective takes place with the CITIES Project. This project was born at the University of Pennsylvania in 1998, as a global research involving 20 innovative cities in five continents (Figure 22.1). With the collaboration of an international network of cities, universities, and research centers, *Fundación* selected predominantly medium-sized cities on the global scale, with an open attitude towards cooperation with other cities around the world. They belong to countries with different levels of development, culture, and political or social organization. Since then, the project evolved into the "Cities Lab", a permanent research lab continuing its activity in urban regions. It also conducts collaboration on new polycentric territories such as Urban America 2050, the European Diagonal, the Malacca Straits Diagonal, the Caribbean Santanderes Diamond, and Euskalhiria.

The research methodology proposed the "excellence cluster" concept to identify the strengths of each city. This involves the mapping of critical issues, indicators, visions, and attitudes with local leaders. Most cities and territories have specific components that contribute greatly to the distinctiveness of the region. Those features with remarkable appeal are related to the physical and functional structure of the urban region. This has enabled the analysis, in an international context, of the main urban innovations taking place there, establishing the key factors of

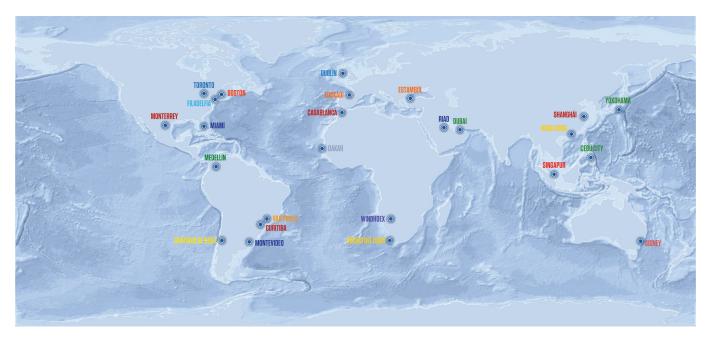


Figure 22.1 CITIES project, participants

their strategic projects. The CITIES Project aims to identify the interrelated components of the cluster, in order to establish a unique urban profile for each city. Detecting "cities with a project" and "cities without a project" has shown that the excellence components are well developed in some cities, and in other cases less so. Detecting "cities with a project" and "cities without a project", strategic choices or critical projects were identified through research as well as through views expressed by main urban actors, thanks to a precise institutional participation process.

As a result, the description, analysis, and combination of excellence components developed by the CITIES Project established the conditions of potential "innovative urban ecosystems" as a basic distinction between cities regardless of their size, economic development, or urban profile. Learning from the experience of these cities and territories, particularly on the way they operate to achieve positive results, "intelligent territories" arise as those capable of striking a balance between economic competitiveness and social cohesion, as well as between cultural and environmental sustainability. The identified innovations cannot be directly translated into another city or context, but nonetheless function as useful references.

The main traits identified in the "intelligent territories" include:

- Active communities capable of organizing its future, with coherence and continuity in political leadership.
- Environmental awareness and climate change responsibility, investing in the environment, reducing energy consumption and using renewable energy.
- Ability to create competitive advantage, with a high quality system of infrastructures and attractiveness for human resources.
- Commitment to cohesion and social development, encouraging the sense of belonging, with an open, affordable, regenerative, and accessible system of services.
- Coherent governance, avoiding the risk of fragmentation with inappropriate administrative or political structures.
- *Dialogue with the surroundings*, in a polycentric and related territory, as well as between cities as with rural and natural landscapes, with strategic projects at different scales.
- Commitment with innovation, based on the accumulated knowledge in cities and territories.
- Connections with city networks, urban diplomacy, collaborative learning from other experiences from other examples and strategies and receive external support.
- Integration of the virtual and physical world, supported by the exchange of ideas and open collaboration, mixture and broad connectivity.

We have learned that integration of the physical dimension of the city with its social and economic dimension is the key. It must be rooted in a full understanding of urban reality, to identify critical projects and basic priorities. This can often be affected by limitations in human and economic resources, as well as the political regimes, because excellence components require a favorable environment and a high degree of know-how. What we call the concept of "supercity" expresses the capacity of some cities and regions to discover the intelligence of their own territory.

The notion of supercity merges two basic concepts: super-intelligence and the capacity of a city-region to define its own project of future. Super-intelligence refers directly to the social and political capital of a territory, in the combination of collective intelligence and artificial intelligence as a foundational resource. Supercities are healthy and hyper-connected urban territories, in the sense of physical, digital, intellectual, and institutional connectivity. But also territories with capacity for reimagining themselves. The supercity is the intangible result of that imagination, those collective spaces of good government oriented by their own creativity, where planning and governance can create a common ground by flexible and dynamic projects.

Focused in concrete problems, the cluster of excellence and critical projects methodology helps to define the backbone for an integrated city project, playing with all spatial scales, from region to singular places, with eco-systemic vision. The connection between local or regional features and opportunities, established by this method and based in the territorial research, addresses the definition of urban design patterns capable of stimulating local innovation ecosystems. Against an uncertain future where urban areas are both competing and cooperating for the training, attraction, and retention of intellectual assets, a new base for the creative planning is shaped. A field of action to answer the inquiry about how innovation, creativity, competitiveness, and economic development can be stimulated in cities through multi-scale planning and design.

Euskalhiria: Learning from the Basque City-region

In the Basque Country we can observe the evolution of regional planning from the conventional approach to a polycentric concept of territory, named Euskalhiria.² It stands for a territorial system structured by cities but including all the regional landscapes, urban, rural, and natural. The capacity of planning for innovation in a territory with deep identity connects with the planned reinvention of the region itself in a changing context. A region that believes in the utility of spatial planning in all its diversity of scales and as strategic box of tools to face the future.

In the process for EU integration, the Basque city-region has acquired prominence. It doesn't mean simply the way of organizing territories, but a construction process of a new territorial culture. The aim is to encourage a balanced economic development maintaining regional diversity. In 2011, the EU defined its territorial agenda for promoting "a smart, sustainable and inclusive society in an integrating, smart, sustainable European society of diverse regions". The agenda was a schematic document, a complement of the Europe 2020 strategy to drive responsible territorial management. Although the EU considers that urbanism, as a local issue, belongs to the competencies of each member state, cities are increasingly present in European policies (see also Chapter 2 of this volume). The rich European urban network is deemed essential in understanding regions and their interactions and strategic for the integrated sustainable development. With the Charter of Leipzig in 2007, the Pact of Toledo in 2010, and the Pact of Amsterdam in 2016, a new Urban Agenda has taken place in the EU.

In this evolutionary context, after the 1986 integration in the EU, the different autonomous governments of democratic Spain developed regional planning with the main scope of coordinating local plans, territorial actions, and sectorial policies. Little by little the new culture of territory, not without contradictions, is being consolidated in Spain.

Among the first examples of comprehensive regional planning in Spain can be found the Guidelines for the Territorial Planning of the Basque Country, initially approved 1993 and with final approval in 1997 (*Gobierno Vasco* 1994³). Supported by the Basque Territorial Planning Law 4/1990, this supra-municipal tool established the basis for an intense and innovative planning activity, developed on a minor scale by the Partial Territorial Plans and in a diversity of scopes and objects with the Sectoral Territorial Plans (Figure 22.2). The Guidelines organized the Basque Country into 15 functional areas as reference regions for planning. For each of the functional areas a Partial Territorial Plan was prepared by the autonomous government, in collaboration with the Provincial Councils and the affected municipalities. Later, in a review of the Guidelines and in the context of the CITIES Project, the Fundación Metrópoli proposed the idea of a polycentric urban region, *Euskalhiria*, as the expression of a project for the future rooted in the existing geographic reality. It was a political, economic, social, and territorial idea intended to provide spatial support, structure, and coherence to the city-region, positioning it within a

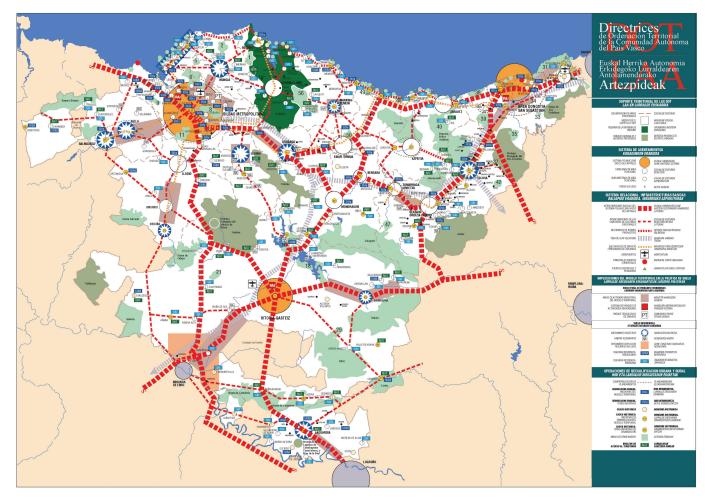


Figure 22.2 Basque Country territorial guidelines

competitive international context (*Fundación Metrópoli* 2002). With it, the Basque Country can aspire to become a true city-region with a population of over two million people, and a density of approximately 300 people per square kilometer.⁴

But none of the Basque cities have enough critical mass to be able to offer the network of specialized services, infrastructures, and options that successful global cities do. However, the structure of the Basque territory has important and unique advantages:

- It is located at the Paris-Madrid corridor, as well as in the Ebro and Cantabrian coast axes, a potential hinge between the Atlantic Arc and other dynamic areas in Europe.
- It has a polycentric system of three capital cities, well distributed, with complementary and distinctive profiles.
- It hosts an attractive network of middle-sized cities and rural centers that allow urban and rural integration, with 69 highly valued historic centers.
- It is home to a rich network of interconnected natural areas, providing the basis of the biodiversity, landscape quality, and leisure options.

Therefore, the opportunity to explore regional interrelationships and synergies is quite evident. The unique structure of the autonomous Basque Government goes by the strong identity and sense of belonging of its society, with an agile economy which is based on entrepreneurial spirit. They have demonstrated a capacity to adapt to changes and overcome difficulties. The Guidelines supply the regional vision needed for the improvement in infrastructures that allowed the population to access housing, work, education, leisure, culture, nature, and small urban centers. The rich urban framework offered the integration of the territory with more effective networking. The dense demography, rooted in the geography of valleys, mountains, and seacoasts, also provided a strategic value to a series of natural and rural spaces which are connected to each other through a series of green corridors. This has increased the global appeal of the territory. The Basque Country can thus establish the critical mass needed to face the challenges of the new economy and to create regional synergies, understanding the territory as a whole.

Today, Basque Country policies are involved in a new approach to regional and local landscapes. In the contemporary city regions, with complex patterns of urbanization, the interpretation of the landscape enables a certain level of territorial coherence. Without underestimating dysfunctions, do not forget that "cities are systems of access that pass through mosaics of territory" (Lynch 1976). Regional landscapes facilitate a structural understanding of the shape of the territory, where, from its physiographic substratum, it is possible to interpret and manage the large scale without renouncing to local variation and identities. Despite the apparent anarchy of urban systems, it is still viable to maintain the legibility in big urban areas through the landscape patterns that permit the coherent reading of the region. The *Euskalhiria* concept offers support to an integrated landscape-region interpreted from a new ecological imagination (De las Rivas and Miró 2014, Corner 2016).

The update of the regional Guidelines vision, using the *Euskalhiria Net* strategy, highlights the uniqueness of the Basque territory by prioritizing the relationship between the urban and ecological networks that define it. This also creates a visual order of the territorial components by the integration of natural, rural, and urban spaces, focusing on the diverse connectivity structures of the city-region: transport, green-blue, and virtual (*Fundación Metrópoli* 2012). This can be achieved by understanding the ecological substratum of human settlements linked to landscape interactions. The structure of the future city could be heavily based on this approach.

Nevertheless, for it to function effectively, rigorous and innovative effort in spatial knowledge would be required.

The transformation which took place in the urban area of Bilbao provides a complementary example of Basque commitment with planning in the long term. Although Bilbao's Guggenheim Museum can be considered as the image of that transformation, there is no "Guggenheim effect" as such. Instead, there is a long-term urban action plan, capable of combining a wide range of goals and strategies, led by the local governments and widely agreed upon. Such an "effect" happened neither by chance nor fate, but is the result of a well-conceived city project.

It is true that architecture can play a role in urban renaissance and is being used to lead it. In that sense, Bilbao is an exceptional case, with the Guggenheim Museum masterfully placed by Frank Gehry in one of the most difficult and dilapidated areas beside the Nervion River. Bilbao's Guggenheim has had an incomparable impact on the city.⁵ At the same time, it represents the first step of a more ambitious transformation. The re-industrialization process posed great challenges and the social and economic problems in Bilbao after the 1970s decay needed strategies that society could embrace with enthusiasm. The intangible function was to serve the great transformation of urban economy and space, concentrated in the backbone of the metropolitan area defined along the river, the heart of the disappeared industrial space. Bilbao was exemplary in deploying all available urban planning tools: in historic or singular spaces, local plans in every municipality of the urban area, and regional planning for the Metropolitan Bilbao. But also management tools, such as the public company responsible for the urban regeneration of all the metropolitan area, Bilbao Ría 2000. This public society is the result of a joint venture, with 50 percent of the funding from the Spanish Government and 50 percent from Basque institutions, including the Basque Government, Bizkaia Regional Council, Bilbao City Council, and Barakaldo City Council. The institutions involved were represented at the highest level, guaranteeing its credibility and efficiency.

The access to strategic land in Bilbao's center owned by its partners and the ability to reach agreements has made possible the realization of complex projects and obtaining important funds to accomplish large-scale infrastructure. Without a similar effort to rationally plan and face the future, the "Guggenheim effect" cannot be translated into other places by the mere construction of an iconic building. It symbolizes society's will for change, the trust and determination that it was possible to reinvent and rebuild 21st-century Bilbao over the ruins of an exhausted productive system. The Bilbao case shows how a city's governance concerns not only the whole administrative structure and its political credibility, but also social leadership and citizen action.⁶

However, the city refuses self-indulgence and keeps thinking about its future from a new point of view. Bilbao keeps innovating in a changing context, integrating new projects such as the Bilbao Art District or the Neighbourhood Hearts project, destined to achieve a complete city beyond the traditional center-periphery schemes. Considering the metropolitan space, the Bilbao Next initiative defines a city-territory project over 45-minute isochrones from Bilbao's center serving 1.5 million inhabitants. This project, through an alliance between the Bilbao and Bizkaia councils, aims to position this functional area within the international context as a mid-sized city as an economic engine for Southern Europe. The new, intense, and sustainable transformation effort of Bilbao wants to be not only physical, but strengthening the knowledge economy, the territory intelligence, as the key for the future. Educating, retaining, and attracting talent within an innovative environment around certain emerging economic clusters that will allow Bilbao to keep leading.

Quiet Growth: Envisioning the Future of the Singapore Megaregion in Bintan (Indonesia)

Other regions are encouraging specific policies to take advantage of territorial opportunities and carry out development projects on a global scale. This occurs in the strategic location of Southeast Asia, the Malacca Straits Diagonal (Figure 22.3). This initiative will connect a population of over 16 million along the western coast of the Malaysian Peninsula from Singapore to Penang, including the metropolitan areas of Iskandar and Kuala Lumpur, and a number of intermediate cities. The Straits of Malacca between this coast and the nearby island of Sumatra make up a strategic corridor, with the largest maritime traffic in the world. Its connection is planned through a high-speed train route connecting cities, ports, and airports. There is also the possibility of developing towards the North, stretching towards the southern regions of Thailand. The Diagonal is a key element for the role of Singapore as an advanced service center for positioning Kuala Lumpur as a high technology node and for the development of tourism in the region. It will also strengthen relationships with emerging areas around the Bengal Bay, Thailand, and Southern China. This space is an example of territorial synergy for two competing nations.

To manage the impacts that connectivity will create in the Malaysia-Singapore-Indonesia megaregion, by the Kuala Lumpur to Penang corridor, not only are new planning tools needed, but also leadership, intelligent government, international concert capacity, and territorial imagination. In one of the extremes of the megaregion defined by the KL-P corridor takes place the Bintan Eco Island project. It is a response to envision the future of the area of influence of Singapore, with the city-state as generator engine of the urban change. By means of a new settlement model based on the respect and re-composition of local ecologies, the Bintan strategic guidelines, developed by the *Fundación Metrópoli* (2011), evolve in a cooperative framework. Actually, in so singular a transnational context, the effort with which Singapore sets its urban future is deeply linked with the capacity of prognosis of this smart city-nation.⁷ The project



Figure 22.3 Malacca straits diagonal

is based on the existing settlement structures in the island. Their controlled transformation, through a polycentric logic, seeks to emphasize the character of the region. It is proposed that growth occurs in clusters, around well-defined nodes, interconnected by soft infrastructures for protecting the intermediate landscape. The local geography is the generator of a project that aims at controlled growth and active conservation of the existing natural spaces, including small rural structures. As most innovative urban projects of Singapore, such as One North, the "critical projects" proposed in Bintan maintain an "hybrid" initiative in a regional scale, to integrate urban design, innovation, housing, education, transport infrastructure, environment, talent attraction, and new technologies.

The Bintan project is related with the concept of eco-community and with Kisho Kurokawa's "Philosophy of Symbiosis". Kurokawa, recognized for his work developed in Asia, was involved in the first designs of the Malaysian Multimedia Super Corridor and the Kuala Lumpur International Airport. Overcoming the disconnection between humankind and nature, the responsible use of knowledge that ecology and other sciences can offer to planning is evident. The relationship between nature and city begins with humans and their capacity to establish a connection to ecology. The Japanese architect, without forgetting his metabolist past, draws upon the confluence between oriental and occidental cultures to integrate nature and artefact (Kurokawa 1991). The multivalency of contemporary culture allows for a nonconformist stance where ideals of Western progress can learn from the East. With silent eloquence (wabi) and aesthetic vision (hanasuki), the urban design processes can propose a creative narrative in the middle of order and chaos characteristic of cosmopolitanism. The dynamic mix of forms and ambiguity have to be prioritized in the urban space. Symbiosis exists in a state of flux and means competition and opposition, but also the search for consensus.

Synergy and symbiosis mean the careful understanding of complex territorial interactions. Infrastructure networks guarantee a level of accessibility, communication, and nodality that come with centrality functions; steering diffuse urban models towards polycentric regions. Urban fringe problems and processes of diffusion expressed in ideas, such as "edge city" or "exópolis" (Garreau 1991; Soja 2000), are in fact related with the "basins of life and labour" of metapolis (Ascher 1995) and demonstrate not only the review of urban boundaries but the intuition of a new urbanity.8 The power of space and exchange modify the limits and scope. The whole built environment responds to a union of life and knowledge experiences that need to be expressed with spatial coherence. The apparent disorder of urban areas does not have evident rules to govern planning and design (Indovina 2003; Solá-Morales 2004; Brenner and Schmid 2015). Population, labor, land use, transportation, or services in the city demonstrate, as in the ecosystems, the "self-organizing" capacity of urban economies where the coexistence of agglomeration and diffusion forces characterize the polycentric location of activities (Krugman 1996). In order to articulate the urban relationships regarding production, exchange, and consumption, the concept of a networked urban and non-urban systems must be introduced. The administrative organization of the territory faces an immense challenge in governance terms.

In Bintan the "functional region" coexists with the proposed spatial order to control unplanned urbanities and territory hierarchies, either spontaneously or directed by the market. Working simultaneously in the regional and local scales, it would be possible to review the goals for the creation of quality where natural processes are the basic source of inspiration and criteria for decision making. In the extremes of functional interpretation are the historic and natural traits of the region. Therefore, we must be mindful that historic urban structures and traditional typologies, their shapes and materials, and their relation to climate and topography can be drawn on to define other urban planning and ecological architecture manifestos.

A Project for the Caribbean and Santanderes Regions of Colombia

The complexity of a regional approach in planning could perhaps better understood in the context of "territorial ecologies" that face the risk of an unsustainable and segregated territory.

Combining innovative territorial strategies with the integrated regional vision is key in the Caribbean and Santanderes Diamond, a project led by Findeter and conceived by *Fundación Metrópoli* with the collaboration of Microsoft (*Fundación Metrópoli* 2014). It departs from territorial observation by tackling the region as a whole, all while transforming the initial motivation (the creation of tourist infrastructure) into a promotion project for the entire region.⁹

The scope of the project integrates cities and departments of the Colombian Caribbean with the Santander and Norte de Santander Districts. The aim is to establish an area with territorial coherence and strategic complementarities. Territorial landscape structures are crucial in the proposed methodology for this regional program, organized by an articulated sequence of projects in various scales. The Magdalena River shapes an ecological corridor connecting the Caribbean with the country's interior, especially with the Santander Department. Meanwhile, the cities of Barrancabermeja and Bucaramanga also discovered a new dimension through connection with the sea and the wider world. In a scenario marked by the hope created by the peace agreements with the *guerrilla*, especially in the inner rural zones, the main strategy is to promote a new territorial connectivity. In these regions connectivity means the improvement of infrastructure but, above all, to increase the linkages between urban centers, including the bypassed districts of intermediate, less inhabited regions.

What is truly unique to this project is the assumption of a new territorial scale, overcoming both the local or departmental visions, which typically have been limited by sectorial policies. The Diamond contributes a new governance and cooperation scheme, based around a shared project beyond administrative and political boundaries. Crucial to this initiative is the cooperation between Colombia's Development Bank, representing the National Government, with the departmental governors and city mayors. ¹⁰ The search for consensus became the guide for the project in a process that created by itself a previously non-existent cooperation framework between the administration and private agents.

The Diamond is home to a population of over 15 million. Unlike conventional city-by-city planning, the future strategy is conceived as a system of relations and cooperation. One of the project's main goals is the significant improvement of the territory's competitiveness, detecting its strengths and strategic opportunities. During the baseline research and the design of proposals, the territory itself is considered as the main factor of competitiveness. One unique trait of this initiative is the collaboration with a tech company, Microsoft. This allowed the use of digital technology to accelerate cooperation among the different actors involved.

The reconsideration of the territory's characteristics in terms of landscape, in addition to the different scales of interaction and specific territorial narratives, created a new spatial substratum to define synergies, foster cooperation among cities and territories, as well as identify future projects for the region. In the process, some hidden territorial traits were discovered. Against the emphasis on the nodes in the urban network, the Diamond project has carefully observed the landscape's ecology of coasts, river valleys, countryside, and natural areas. The Caribbean Coast stands out for its distinctiveness, namely the coralline systems, swamps and wetlands, mangroves, small islands, estuaries and deltas, cliffs and beaches. The Magdalena River is analyzed as an axis capable of structuring the territory in relation with urban and rural systems. The interior rural spaces have faced uncertainties in Colombia's recent history, but they possess extraordinary potential for development. The Diamond methodology allows discovering the territory's intermediate scales, highlighting the distinctiveness of its core (the Caribbean Delta). This approach,

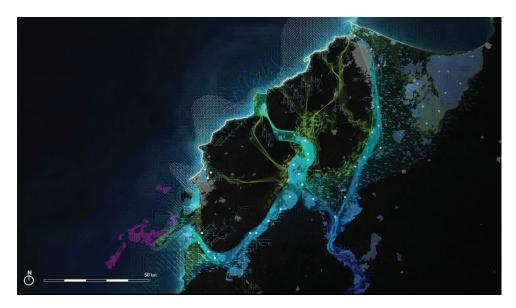


Figure 22.4 Landscape ecosystems in the Caribbean delta of Magdalena River

that guides the entire project, is inspiring new initiatives, projects, and collaborations in both the territorial and urban scales.

From the system of cities to the damaged rural territory, the basin of the Magdalena River, the project tries to combine existing ecologies with the idea of ecosystems of innovation (Figure 22.4). The critical projects defined insert a potential agenda in all the scales of the territory, such as the Metropolis of the Sea, connecting Cartagena and Barranquilla; the Digital Bay and Bolívar eco-boulevard in Cartagena; Bolívar; Santander Life along the river Magdalena; and the agro-cities or the Digital Diamond. For discovering the components of Diamond these projects try to reinvent – with an intelligent and innovative mapping – the regional land-scape by proposing new urban and rural networks to activate the connectivity of the territory, rethinking their urban nodes. The combination of landscape scales with innovation in urban-rural ecosystems allows imagining the future. It was an advanced social imagination, rooted in the institutional survey and resulting indicators, that combined with a spatial imagination which mapped regions, cityscapes, and fringes in a new way.

From Territorial to Digital Diamond: A Creative Synthesis

Fundación Metrópoli research has contributed to discovering the potential of mega-urban regions by proposing a radical twist in the grasp of their growth. Planning has to be not only strategic but also tactical, with simple shortcuts to dare complexity. Only a coherent understanding of the region's features and constraints create the suitable field for this tactical planning. It must be narrative, capable to order and channel a coherent territorial imagination. In the most dynamic areas of the world and parallel to the development of megacities, urban expansion must provide opportunities for regional scale integration. The Territorial Diamond concept not only describes a geographical reality, but also highlights the potential of certain territories to accomplish relevant improvements by working together. So it has happened in the European Diagonal research, undertaken with the University of Pennsylvania, in Urban America 2050 or

in the Malacca Straits Diagonal. The "Mediterranean Diamond" (Vegara and Ryser 2008) or the ten emerging megaregions identified within the United States (Ross 2009) demonstrated the Diamonds as an outstanding narrative to encourage regional collaboration.

As pointed out, the Diamond is a metaphor of what can be achieved in a territory made up by points, lines, and surfaces representing cities, combined with the connection between them and their environmental systems. To polish a diamond entails improving its cities, strengthening its connections, and recovering its environmental ecosystems. Sustainable development and competitiveness can be considered in the long term, with focus on implementing innovative urban policies, new investment schemes for infrastructure development, strengthening economic links, improving environmental systems, as well as providing urban and territorial strategic vision suited to this territorial scale.

Territorial Diamonds integrate polycentric urban systems, metropolitan areas, medium and small cities, as well as rural systems to constitute a territory capable of hosting an array of complementary activities. The Diamond's nodes of special urban intensity are crucial to the allocation of the most advanced economic sectors (Figure 22.5). These areas can boost connectivity and regional relations, promote territorial balance strategies, and counter poverty. With the support of an integrated global vision and strategic projects, catalystic change could be possible. However, they need coherent, inter-institutional participation and collaboration strategies that cross traditional political and administrative boundaries.

This effort to seek strategic complementarity provides territories with a new dimension. Designing a Territorial Diamond requires creative leadership, formulating an intelligent and shared vision, identifying a selected group of projects backed by the strengths of the territory, discovering emerging economic clusters, and identifying international strategic allies. Advancing the idea, it raises Digital Diamond as an alliance to combine the work of the territory's key players and find a symbiosis between urban intelligence and digital technology. From a digital point of view, it requires basic broadband connectivity infrastructure, cloud services, and access to Big Data for the different actors; education and digital culture support; and the creation of an innovation ecosystem capable of generating workers for the Diamond.

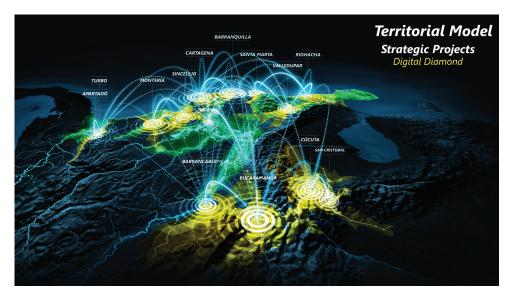


Figure 22.5 The Caribbean and Santanderes Digital Diamond

Imagining the Region: Beyond Smart, Beyond Urbanism

The contemporary debate about the city has been channeled by a set of adjectives, standing out among them sustainable, smart, inclusive, and resilient. They are easily used as the main drivers of change or as guiding principles to direct consensus on urban development. It is a debate very focused on the objectives and not so much on the way and on the effectiveness of the means to achieve them. There is more talk about the "what" than the "how". At the same time, as the research developed by the CITIES Project permits to verify, cities and regions try indeed to develop competitive advantages to generate attractiveness. Cities need to add value to their prevailing urban condition through the right decisions. Planning is a response to these challenges and is increasingly crucial to maintain the city's economic competitiveness, social cohesion, and environmental quality. But it cannot be ignored that these objectives generate contradictions among themselves and that, in plural and open societies, they are juxtaposed in permanent conflict, affecting opposed ideologies and sensibilities.

In that context, planning offers an opportunity to define a common ground. The driver of city planning and regional design is the quality of life: "better cities for better life", as the Shanghai Expo proposed in 2010, and "equity as the essence for sustainable development", as UN Habitat III established in Quito 2016. Both advocate for integrated urban development, proposing collaborative, inclusive, and coordinated planning and management. But it is also important to remember the idea of the city as an innovation space to highlight the importance of human capital and good governance, both factors that play a greater role in determining a city's prosperity than its infrastructures (Glaeser 2011).

Therefore, for imagining the region it is not only necessary to have a deep knowledge of the territory, the milieu, and their interrelations. Today, it implies to re-imagine the governance of regions. Beyond the smart movement to manage and invest in innovative infrastructures, or beyond the permanent discussion proper of urban studies, planning needs to maintain its indispensable role in the decision-making process. Even though spatial planning cannot provide an accurate anticipation of the future, it should remain as the more useful tool to tackle uncertainty, adapt to change, or facilitate urban resilience. For it, as the projects explained have shown, beyond the attempt to rearrange or redesign the whole city, urban policies require definition based on the city's assets and strengths. For decades, cities and regional governments have been organized through rigid administrative limits and sectorial departments. This provides scarce opportunities to build collaboration and synergy. Governance tools are required, in a new empathic context where "intelligent" projects make possible the performance of a new "regional thinking". ¹³

Patrick Geddes, pioneer of that thinking, defended a new regional equilibrium linking the urban, rural, and natural environments. With his survey approach and the motto of "diagnosis before treatment", the region provided organized knowledge on the territory, rooted in history, in science, and in the environmental conditions. Understanding that each urban setting is unique, Geddes spoke of the "city's soul", which relates to a place's character. Following Geddes, Lewis Mumford advocated passionately for planning on the regional scale:

Regional planning asks not how wide an area can be brought under the aegis of the metropolis, but how the population and civic facilities can be distributed so as to promote and stimulate a vivid, creative life throughout the whole region ... It sees people, industry, and the land as a single unit.

(Mumford 1925, 151)

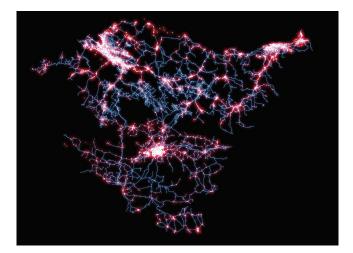


Figure 22.6 Euskalhiria, urban networks Source: Fundación Metrópoli.

There is no other way to ascertain the city's quality of life. Mumford, who anticipated the fourth migration as the dispersion of population in urban regions caused by new technologies such as railways, highways, telephones, and airplanes, proposed regionalism to achieve balanced relations between the wide array of human activities and territorial realities.

The focus on the development of megacities, particularly in Asia, Latin America, and Africa, has led to many issues in territorial government and inequality. The potential contrast of balanced systems, with diverse and complementary nodes and with stronger urban identities, could be the 21st-century response to organize urban territories (Figure 22.6). However, the search for excellence and long-term projects does not belong only to cities from developed countries. Coherence and balance can be achieved at different development stages. Developing nations need leverage on the possibilities opened up by the globalized era, creating their own advantages through leadership, social engagement, and intelligent planning. In a clever defence of the role of cities in the economy and in the construction of civilization, Jane Jacobs stated that "lively, diverse, intense cities contain the seeds of their own regeneration", and that they have "energy enough to carry over for problems and needs outside themselves" (Jacobs 1961, 448). Externalities apart, Jacobs' intuition detected that in a knowledge-based society, economic competitiveness depends much on social balance and environmental quality (Jacobs 1985).

To elaborate and direct projects in an uncertain context is one of the first principles of urban planning, putting goals before means (Ascher 2008). As J. M. Keynes used to say, the future is not foreseen, it is invented. The tendency to adopt a purely prospective approach based on historic trends or on the study of transformation phenomena experienced by cities in other contexts is insufficient. The conscience of a reality that is unattainable with precision cannot simply support the pre-established order. Thinking – planning is thinking – demands a critical attitude that allows aiming for the improvement of the present (Gadamer 1966). The city of the future will not be the mere extrapolation of historic trends, it will be the result of the creative capacity of each generation.

In a new formulation of the urban planner's role, as well as their relations with citizens and government, experts and politicians agree on presenting the idea of planning as a project, as the idea

of supercities proposes. Enhancing the strategic and dynamic approach, the plan/project responds to a wise play with the capacity to redefine the city's potential. It is a program for capturing the evolution of a territory and facing its future. The urban/regional imagination is a consequence, a strategic approach to the interaction between urban management, large urban projects, and spatial strategies. To the extent that the spatial contributes to the transformation of a territory, its outcome can be assessed in relation to the collective interest: planning projects that emphasize the implementation of previously imagined futures; as well as planning for the many instead of the few. An agreement should also be reached regarding what constitutes an improvement to the city, and how such achievements can be measured empirically (Panerai 1999, Healey 2010, Hall 2014).

Today, the more relevant preoccupations of development strategies are global warming and climate change, in a new agenda that also reclaims a new "right to the city" (UN Habitat 2016). The environment, both soft sustainability consensus and deep ecology knowledge, has become a crucial aspect of forward planning. Scientists who study these issues desire a better insight into the built environment and its potential to alleviate them. We cannot seek shelter in sectoral planning. We must promote new planning instruments to overcome frictions between space, administration, boundaries, and territorial governance; building bridges between existing solutions and the city regions we envision for the 21st century (Vegara 2008).

Without a collective creative effort, without a leap to imagine the future, spatial planning is limited to mere regulatory control (Neuman 1998, Vegara and De las Rivas 2004). In contrast, an innovative regional imagination invades the field of spatial planning and seeks creative solutions to social, economic, physical, and environmental problems affecting regional people. It needs to be focused on a selected group of imperative interventions that will have a positive "catalytic effect" on the city-region, rather than proposals with vague criteria or with limited capacity to engage the public and private actors. Planning that is capable of defining strategies and procedures to motivate stakeholders is required. Innovative action has to be less bureaucratic and instead be able to negotiate, to defend the public interest, and to have consensus-building capacities to accept the agreements and risks of identified solutions. Cities remain centers of creativity, health, vitality, and development; in spite of their inequality and the array of conflicts. The capacity to design programs with well-defined and measurable goals is one of the greatest qualities of the proposed strategies.

On the borders of globalization, inequality, and uncertainty in urban regions or in megacities, territorial intelligence means the will to discover the potentialities of each region/supercity: its diamonds. As Lewis Mumford states, in quoting Daniel Burnham, author of the well-known plan for Chicago in 1909, "make no little plans; they have no magic to stir men's blood". By triggering imagination, the utopia was, to Mumford, the opposite of unilateralism, sectarianism, partiality, provincialism, and specialization (Mumford 1922, 1925).

Notes

- The cities included are Toronto, Boston, Philadelphia, Miami, Monterrey, Medellin, Curitiba, Montevideo, Santiago, Dublin, Bilbao, Windhoek, Cape Town, Dakar, Riyadh, Dubai, Hong Kong, Shanghai, Ceba, Singapore, and Sydney. With the "Cities Lab" initiative, cities such as Moscow, Mexico City, Casablanca, and Yokohama were added.
- 2. "Basque City" in the Basque language.
- Initiated in 1989, the Guidelines were made by the company Taller de Ideas, under the direction of Alfonso Vegara.
- 4. The scale of the Autonomous Region is similar to that of other urban regions around the world: metropolitan Miami has a broader extension than the Basque Country's; whereas Sydney's city region, with a population of over four million residents, with an analogous extension to Euskadi, 7.234 km².

- 5. To understand it we can go back in time to Paris, when the Piano & Rogers project for the Beaubourg Museum was completed in 1977. Few were aware of what Baudrillard would later call the "Beaubourg Effect", namely the architecture like the symbol of the city's transformation capacity. Such a space is articulated on an ideology of transparency, visibility, versatility, consensus, contact, and enriched by a range of social relations (Baudrillard 1982).
- 6. Bilbao was recognized by the LKY World Cities Prize, awarded by Singapore's Government and also in 2010 the city was selected to present its transformation experience in Shanghai's World Expo, portraying its 25 main transformation landmarks under the motto "Bilbao Guggenheim ++", pointing out that it is still an ongoing project.
- 7. Singapore has developed several institutions to support creativity in urban fields. This is the role of the Centre for Liveable Cities (CLC), the World Cities and Mayor Summits, the City Solutions Expo, and the Lee Kuan Yew World Cities Prize. This long-term effort is allowing Singapore's become a major urban reference and laboratory.
- 8. Urban fabric is redirected towards a fragmented, and discontinuous model; in a varied and fluctuating exchange of functions between inner and outer cities. The term "urban region" itself, generically used to refer to the city's influence area or hinterland, is closer to the perception of a new urbanity. Urban diffusion leads us to consider space consumption and location options in more open systems where the elongated urban, diffuse city, or disperse city were the first steps (Monclús 1998).
- 9. The Caribbean and Santanderes Diamond project was recognised with the World Smart City award in the Barcelona's 2015 Smart City Expo.
- 10. Departmental governors of Atlántico, Bolívar, Sucre, Córdoba, Antioquia, Magdalena, Cesar, la Guajira, Santander, and Norte de Santander, in collaboration with leaders in the cities of Barranquilla, Cartagena, Barrancabermeja, Bucaramanga, Santa Marta, Riohacha, Valledupar, Cúcuta, Sincelejo, Montería, and Apartado. It involves different administration levels, in addition to forums for civil society leaders and institutions. Up to 2000 leaders have participated in the City-Territory Forums, with 249,200 references obtained.
- 11. UN-Habitat has revealed that the 40 largest urban agglomerations occupy a tiny fraction of the earth's inhabitable surface, but host at least 18 percent of the world population, 66 percent of the planet's economic activity, and around 85 percent of the scientific and technological innovation.
- 12. The "Digital Diamond" concept is being developed by *Fundación Metrópoli* and Microsoft to explore synergies between physical design and the digital platforms.
- 13. Among the emerging theories about the expansion of cities and instruments for urban regulation, two models from these earliest approaches prevail today, often combined. The idea of a continuous city has its origin in the European continental tradition, where cities are driven by a liberal economy struggling between the laissez-faire and state central control, embodied respectively by Adam Smith and Colbert. In short, it is about finding the equilibrium between the benefits of a free market and the political influence as the organizer of life on the other. The foundation for the western metropolis that came out of the industrial revolution is found in this dilemma. Beside it, we find the poly-centric model initiated by the Garden City movement, with its obsession for limiting the size of urban units and with a strong decentralizing tenet. It occurs where physical growth linked to liberal capitalism meet a "critical" juncture where the destructive nature of humanity and industry undermine their foundations. "Regional thinking" sits uncomfortably between both models, as an expectation of equilibrium that cannot be assured.

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