

Hong Kong: New town, urbanised villages, warehouses and logistic zones. Tin Shui Wai, 2012



Tokyo; a collision of contrasting urban spaces. Saitama Prefecture, 2012



Los Angeles; Crystal Cathedral by Philip Johnson and John Burgee. Anaheim, 2013

MULTILAYERED PATCHWORK URBANISATION

THE TRANSFORMATION OF THE URBAN PERIPHERY

Paris; quartier Les Pyramides. Ville nouvelle Évry, 2023



MULTILAYERED PATCHWORK URBANISATION

 Multilayered Patchwork Urbanisation

 Historic urban centre

 La Défense financial district

 New Town Centre

 Airport with hub

 Logistics hub

 Iconic shopping mall

Local centralities

 Large-scale shopping zone

 Golf course

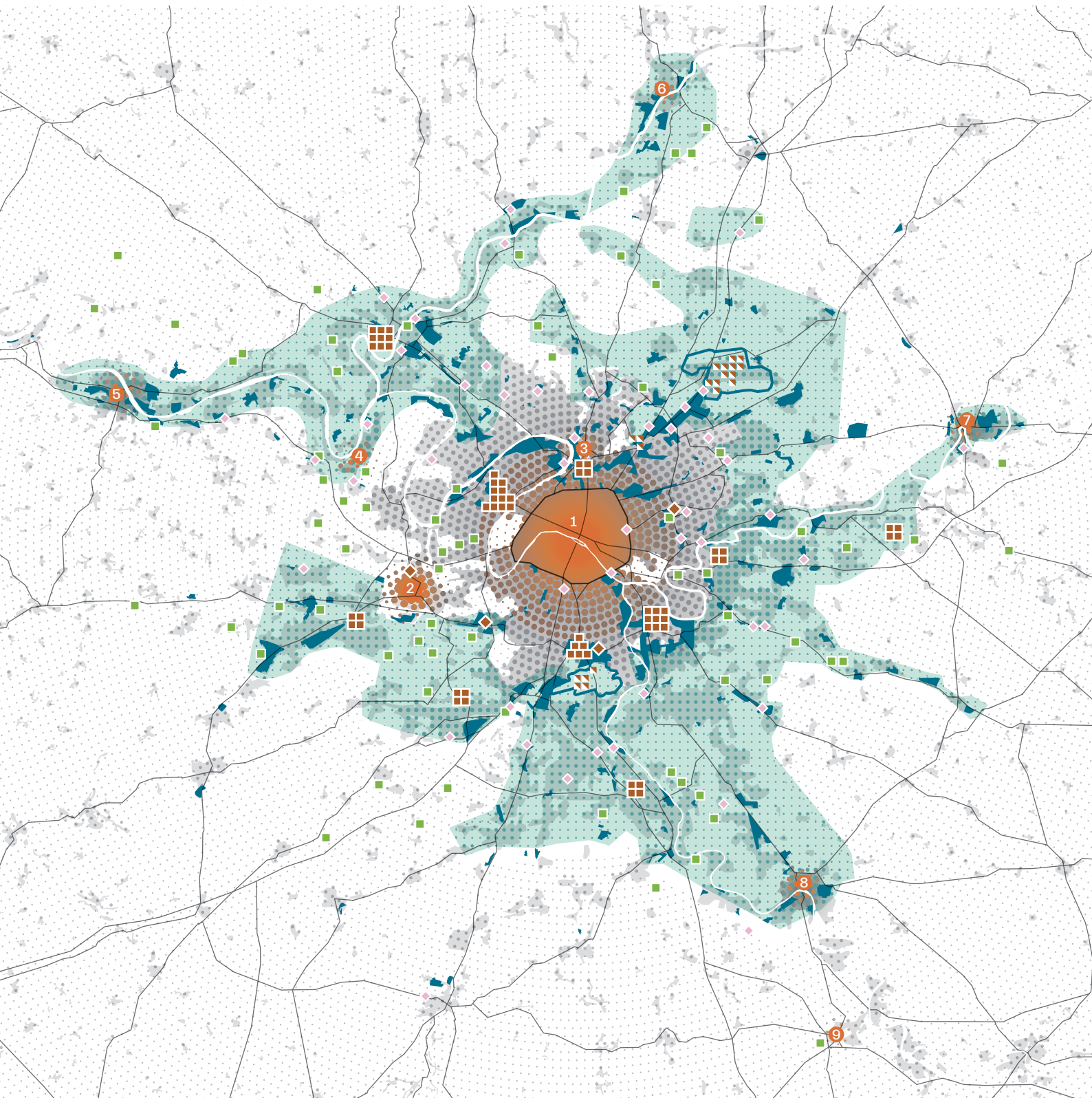
Industrial area

 Manufacturing site, business park or logistics area

 Urban footprint

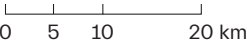
0 5 10 20 km

- 1 Paris
- 2 Versailles
- 3 Saint-Denis
- 4 Poissy
- 5 Mantes
- 6 Creil
- 7 Meaux
- 8 Melun
- 9 Fontainebleau

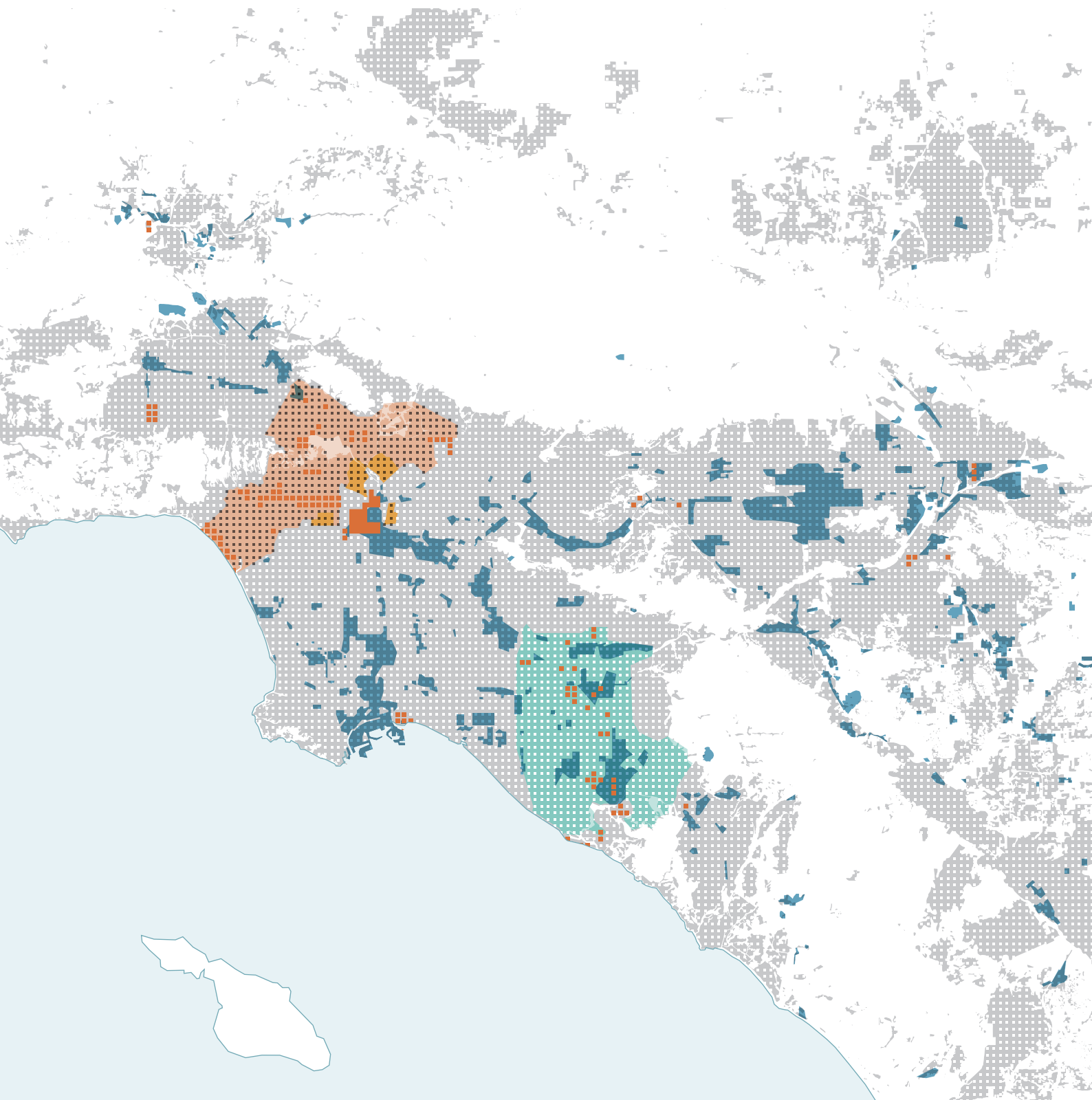


MULTILAYERED PATCHWORK URBANISATION

	Downtown LA	Having formed a small CBD for decades it is currently marked by processes of expansion, urban intensification and the incorporation of urban differences
	Regional centrality	Specialised and scattered over the territory; concentration in two main clusters: cosmopolitan urban and multilayered patchwork urbanisation
	Cosmopolitan urban	Relatively densely woven urban fabric, structured by the concentration of important centralities and venues.
	Multilayered patchwork urbanisation	Developed in the previously peripheral agricultural area of Orange County; marked by a complex urban pattern and the clustering of old and new centralities
	Gentrification	Crescent of gentrifying neighbourhoods stimulated by the rise of Downtown LA
	Industrial area	
	Urban footprint	

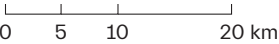


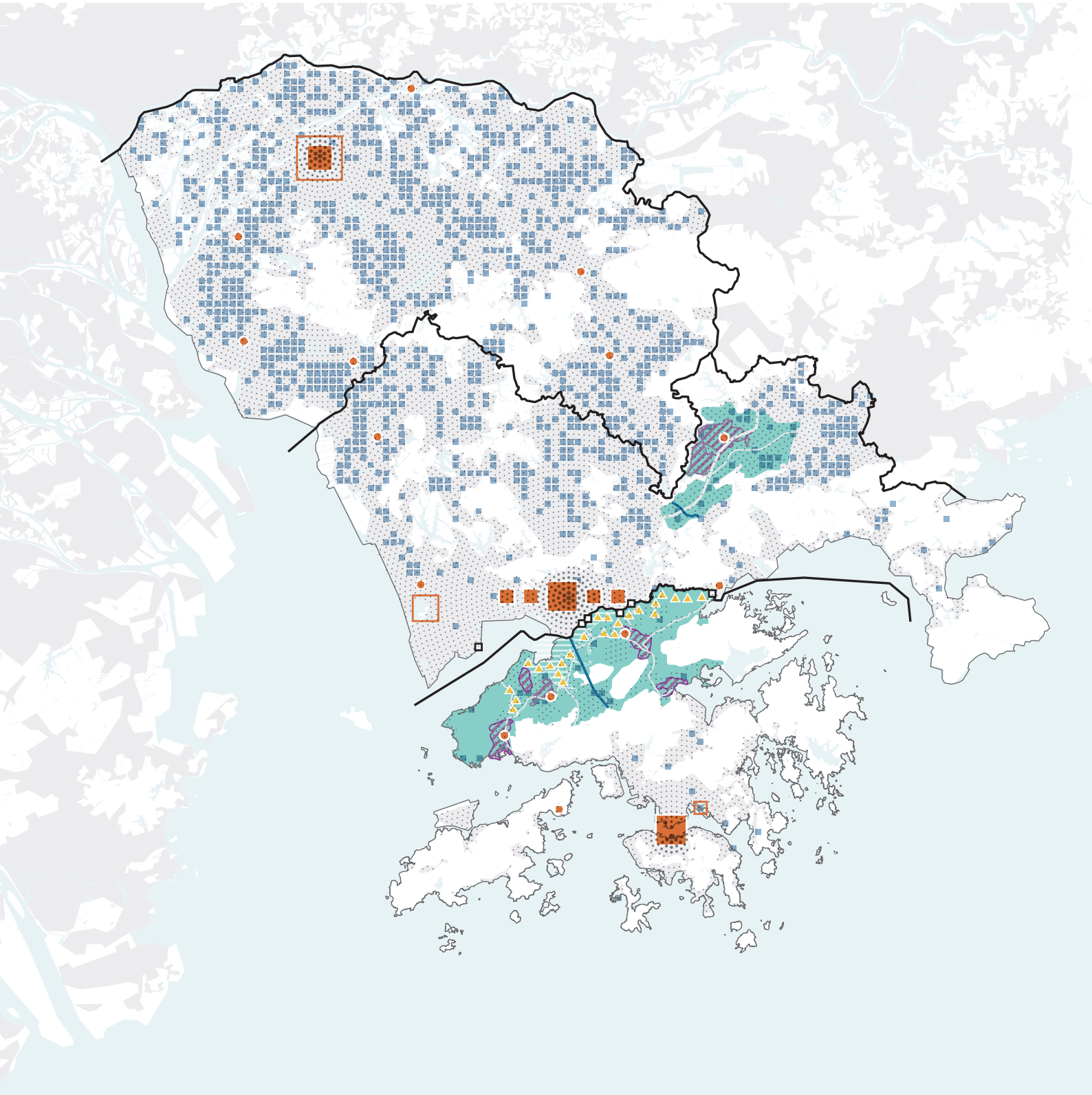
LOS ANGELES



MULTILAYERED PATCHWORK URBANISATION

	Main regional centrality	
	Expansion of centrality	
	Subcentre	
	Multilayered patchwork urbanisation	Transitional, heterogeneous and multi-territorial areas emerging outside or in between main regional centralities
	Contested development	Strategic developments aiming at the economic integration of Hong Kong into the Pearl River Delta; includes new transport and cross-border infrastructure, development areas for mass housing and a technology park, leading to evictions and conflict
	New town	Government planned, large-scale mass housing and condominium areas in Hong Kong and Shenzhen
	Industrial area	
	Wetland and fish pond	
	Urban footprint	
	National high-speed railway	 City-territory border
	Main highway	 Checkpoint





MULTILAYERED PATCHWORK URBANISATION

 Archipelago of main regional centralities

 Specialised regional centrality

 Pattchiwa-ku: multilayered patchwork urbanisation

 Military infrastructure

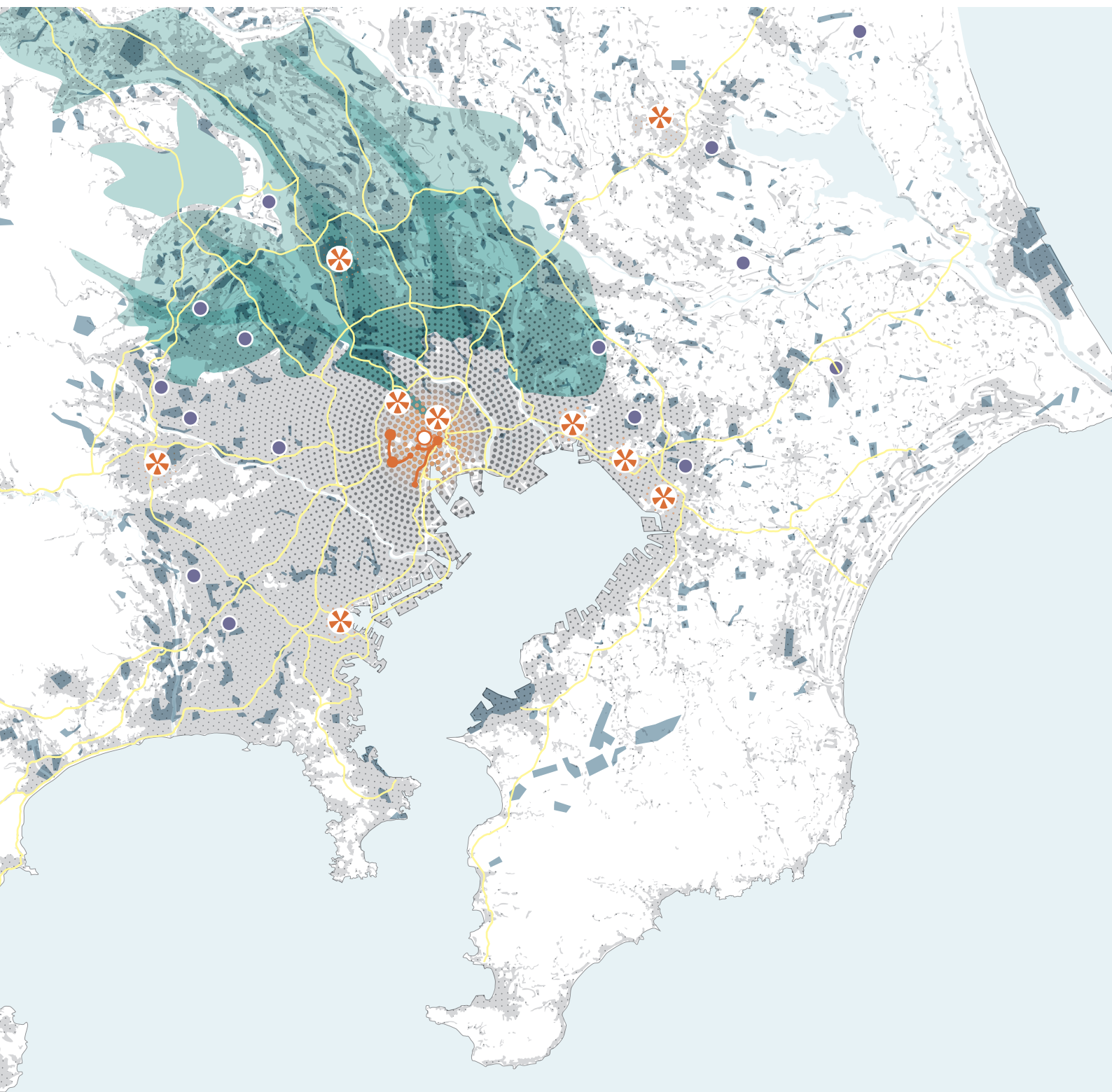
 Industrial site

 Urban footprint

Distinct urban pattern produced by different logics of urbanisation: established and new residential areas, local centralities, large-scale infrastructures, dispersed industrial clusters, agricultural areas and forests; resulting in a landscape of diverse morphologies, rhythms and historical trajectories

 Main road

0 5 10 20 km



NEW CENTRALITIES IN THE URBAN PERIPHERY

The concept of multilayered patchwork urbanisation emerged from an experience familiar to many urban researchers: driving through our field study site somewhere on the outskirts of a large metropolitan area (necessarily by car or train, because of its huge dimensions), we lose orientation and get lost among the contrasting, seemingly unrelated and disjointed urban fragments.

What distinguishes multilayered patchwork urbanisation from other urbanisation processes in the urban periphery is, first of all, the simultaneous presence of multiple logics that are determining the urbanisation of the territory, resulting in a pattern of urbanisation that appears like a complex, irregular and illegible patchwork. This situation is usually generated through the historical succession of several paradigms of urbanisation which produce different layers of the urban fabric. They are superimposed upon each other, without the earlier layers being erased. This leads to a particular pattern of urbanisation that is characterised by a multiplicity of spatial orientations and temporal rhythms and by a marked functional, social and spatial heterogeneity. In our research project we found similar processes in Los Angeles, Paris, Hong Kong, Shenzhen and Tokyo.

These fragmented and splintering urban spaces are often taken to be the defining characteristic of a modern metropolis, as in, for example Deyan Sudjic's *Hundred Mile City* (1992) and in *Splintering Urbanism* by Steven Graham and Simon Marvin (2001). However, what might seem to be no more than the normal characteristic of any larger urban region is, in fact, a very specific urban feature. Our analysis shows that such extremely heterogeneous urban configurations do not appear in all of those huge metropolitan territories but exist only in certain parts. They stand in stark contrast to other parts of the urban periphery, possibly in the very same metropolis, which are well structured and show a clear and regular urban pattern. We thus identified in these areas a different urbanisation process that conforms more to the classic North

American concept of the suburb as a mainstream, monofunctional middle-class area with detached single-family houses largely lacking in major centralities and public amenities. This process unfolds under specific geographical, socioeconomic and historical conditions; namely, when urban settlements expand almost unhampered into the surrounding hinterland, covering the territory like a carpet or laminated flooring. We therefore called this process 'laminar urbanisation'. In our research, we found this process only in two of our eight case study areas—in Los Angeles and Tokyo. This is to be expected, given that both metropolises are seen as almost paradigmatic examples of metropolises that consist mainly of suburbs. Laminar urbanisation and multilayered patchwork urbanisation are just two examples of the multitudes of urban configurations that are currently developing in urban peripheries across the world.

FROM EDGE CITY TO EXOPOLIS

Multilayered patchwork urbanisation is a new concept for a process that has developed over a long time, sometimes over centuries, but whose specific characteristic has become apparent only relatively recently. It thus has significant relationships with other concepts that have been discussed since the 1980s and have been used to designate seemingly new urban forms in the urban peripheries of western cities. In the 1980s, spectacular new discoveries were being reported from the 'urban frontier' and identified in middle-class suburbs, such as novel urban forms composed of huge shopping malls, hotels and conference halls, office towers, research centres and even corporate headquarters. Leinberger and Lockwood (1986) call these new forms 'urban villages'; Robert Fishman (1987, 1991) 'technoburb'; Joël Garreau (1991) 'edge cities' and Paul Knox (2008) 'metroburbia'.

Many scholars took these new urban forms to be indicators of a sea change in urban development. They proclaimed the onset of a new postmodern life style in suburbia and the dawn of a new post-suburban age: 'During the 1980s America discovered post-suburbia. By the close of the decade journalists and scholars were churning out articles and books on this remarkable and supposedly new phenomenon. With its postmodern office towers, its high-tech industries, and its state-of-the-art shopping malls, it seemed the embodiment of American life in the 1980s' (Teaford 1997: 161).

These observations were soon to be followed by similar discoveries in Europe, where these new urban forms were called *Zwischenstadt* (in-between city, Sieverts 2003 [1997]), *Netzstadt* ('networked city', Oswald et al. 2003) or 'technopoles'. In general terms, the new spatial forms of the exploding metropolis were captured by terms such as 'Exopolis' (Soja 1996a), indicating that these urban forms were

developing outside the urban agglomeration cores (exo-city) and did not resemble the familiar forms of a city (ex-city), '100-mile city' (Sudijc 1992), emphasising the spatial extension of the new urban developments and 'FlexSpace' (Lehrer 1994) highlighting the flexibilisation of urban structures. For an overview of these concepts see also Lehrer (2013).

However, all these concepts faced theoretical problems. Firstly, many of them focused on the emergence of new urban forms. But identifying an edge city or an urban village does not tell us much about the dynamics that generate this form, and naming it in this way may miss other manifestations of these dynamics. Often, these urban forms are analysed as isolated phenomena, but they are in fact part of broader urban configurations and should be understood as elements of more encompassing urbanisation processes. Furthermore, an urban form is generally a moment in the maelstrom of urban restructuring over time and is therefore constantly in flux. Today, most of those terms have disappeared from scientific discourse, as the urban forms they name have become blurred and have dissolved over the course of further development into even more complex and novel urban configurations.

A second problem is that it has often been claimed that these changes are directly related to the advent of a new urban lifestyle, a new model of urbanisation or a new regime of accumulation. Thus, they have routinely been interpreted as resulting directly from Post-Fordism and neoliberalism and at the time they were understood as the expression of postmodern urban development. However, as researchers like Fishman and Teaford argue, these new urban forms do not spring into being overnight; they result from long-term developments. We thus have to distinguish between what is called in German *Entstehungszusammenhang* and *Entdeckungszusammenhang*, which can be translated into English as the context of formation and the context of discovery. However, the German term *Zusammenhang* expresses more than just context, because it includes the totality of connections and relations involved in a process. In other words, a new urban form may develop gradually over a long time without being recognised. Then, suddenly, this form is discovered and declared to be a new form or formation. The confusion of discovery and formation can lead to misleading interpretations, particularly if the origins of a form are ascribed to present conditions and not understood in its historical development process. To give an example: an in-depth analysis of the development of new urban configurations in the urban periphery of Zurich North showed that they resulted from a succession of three different phases of urbanisation. In a first phase in the 1960s and 1970s Zurich North developed into a mixed agglomeration zone. It then turned into multilayered patchwork urbanisation during the 1970s and 1980s. Later, in the 2000s, a phase of urban intensification followed, which made the

splintered and fractured urban patchwork into a more coherent urban form (Nüssli and Schmid 2016, see also Schmid 2006 and Hitz et al. 1994). Keil and Addie (2015) offer a similar analysis for the Toronto and Chicago regions.

ANALYSING MULTILAYERED PATCHWORK URBANISATION

In order to understand these territories, we need to contextualise them in space and time. This requires extending the analysis onto the regional pattern of urbanisation and reconstructing analytically the pathway that has been taken. In our analysis, we therefore followed a three-step procedure to identify multilayered patchwork urbanisation by applying the horizontal and vertical analysis explained in Chapter 2. In a first step, we position the analysed urban configuration in the context of the wider territory. A horizontal or synchronic analysis of the patterns of urbanisation allows us to identify other urbanisation processes at work in transforming this territory and develop a comprehensive understanding of how they expanded and interwove with each other. This analysis freezes the urban process conceptually so its various constituents can be discerned and the pattern of an urban territory examined as it appears at a given moment. It thus helps to understand the broader regional context. We then focus on the multilayered patchwork urbanisation process itself and identify the different elements that constitute it. This results in a list of the range of elements that constitute multilayered patchwork urbanisation.

In a second step we have to identify underlying principles and thus the history of the production of these elements. This necessitates a vertical analysis that reveals when and how these elements were produced over time and which layers constitute this territory. We do this using a regressive-progressive analysis: by descending in time to reveal the origins of the process and then ascending with a genetic analysis that shows the evolution of the different elements and the superimposition of the different historical layers. As André Corboz (1983) shows, the territory can be understood as a palimpsest, a parchment that has been overwritten again and again while retaining traces of earlier writing. This analysis helps us to understand which layers subsist and why they subsist. And it helps to answer a key question: at what moment does multi-layered patchwork urbanisation appear?

Finally, we return to the present and analyse the current pattern of urbanisation. What are the effects of this urbanisation process? What is the relationship between the different principles? What effects are resulting from the superimposition and confrontation of these principles? What kind of friction and conflicts emerge? And what are the potentials for a possible future development?

GRANDE COURONNE, PARIS

Our starting point for the conceptualisation of multilayered patchwork urbanisation was Paris, where large parts of the outer banlieue developed into a bewildering patchwork of all sorts of uses and functions in the last decades. The fragmentation and recombination of the urban fabric mainly unfolded in an area of the outer banlieue that begins close to the second ring road and stretches to the zone where transport connectivity slowly fades out. This is by far the largest urban configuration that we identified in the Paris Region. It mainly includes the départements of Yvelines, Essonne, Val d'Oise and Seine-et-Marne. In the next paragraphs we identify the five layers of urban development that have unfolded over the last five centuries.

The first layer developed in the 16th and 17th centuries on the surrounding productive hinterland of Paris within a radius of about 30 to 50 km. It constituted a crucial space for supplying the city with all sorts of products and it established a strong reciprocal relationship with the city of Paris. According to Fourquin (1964), the concept of *contado*, which characterises the unity of Italian city states with their rural hinterlands in the Renaissance, can be accurately applied to the Paris Region. In the 17th and 18th century the population of Paris doubled and the hinterland around Paris was reoriented to meet the needs of the growing bourgeoisie. Agricultural production was improved by the construction of drainage systems, new



Paris; single family homes and powerlines.
Champlan, Essonne 2023



Paris; shopping centre Villebon 2
in the grande couronne. Villebon, Essonne 2023



Paris; Chateau de Rentiilly (16th century) and a distribution centre of Cibetanche.
Ville nouvelle Mame-la-Vallée, 2023

roads, bridges and canals (Picon 2012). As a result, this region—and not the city of Paris itself—became the centre of French absolutist power and its colonial empire. The marks of this period are still visible today, such as the winding narrow street patterns that the banlieue inherited from the former villages and which today generate traffic jams in dense urban settlements, and also the châteaux that have become historic monuments and the large feudal estates and hunting grounds, some of which have been transformed into public and private parks.

With the beginning of industrialisation, the entire structure of this hinterland changed profoundly, when agricultural products began to be imported from the most remote corners of France and from abroad. To protect Paris against all sorts of real and imagined threats from outside, a massive new city wall was constructed in 1845. This wall defines and demarcates the city to this day; when it was demolished in the 1930s, it was replaced by a circular motorway, which still forms a material and symbolic division between the inside—the city—and the outside—the banlieue. At the same time, the city of Paris underwent the most spectacular and brutal transformation in the era when Baron Haussmann, prefect of the Département de la Seine under Emperor Napoleon III, transformed the city of Paris over 15 short years into a modern metropolis, determined by commodity production and controlled by the bourgeoisie (see Chapter 9).

Beyond the wall that demarcated the boundary of the city of Paris, the banlieue was produced, the outskirts and the ‘other side’ of Paris. During the Belle Epoque and the interwar period the process of urban extension was marked by the construction of *pavillons*, usually small, working-class or lower middle-class single-family homes, some of which were at least partly self-built by its owner-occupiers. The inner zone of the banlieue, the *petit couronne*, was gradually densified and thus developed into a huge, industrial district with working-class housing. In the outer zone, called the *grande couronne*, the urban fabric extended along main roads and train lines, transforming towns, villages and hamlets.

The thorough urban transformation of the grande couronne started with the *trentes glorieuses*, the three decades of economic boom from 1945 to 1975 that were marked by the Fordist-Keynesian development model, which included the creation of a welfare state, mass production and mass consumption. As a result of the Fordist boom, the Paris Region underwent a wave of intense immigration from peripheral parts of France as well as Spain and Portugal. Additionally, the Algerian War and the process of decolonisation drove about one million refugees to France, many of whom fled to Paris. This massive population growth aggravated the already existing housing crisis in both the Paris Region and other French cities. In response, the central state launched a huge national programme of mass housing urbanisation, which is analysed in

detail in Chapter 16. The result was what contemporaries called *urbanisme parachuté*: entire settlements, called *grands ensembles*, with usually more than 500 housing units, were parachuted into the interstices and meshes of the urban fabric. To make housing affordable in a time of sharply rising land prices in the Paris Region, many *grands ensembles* were constructed on cheap land in territorial enclaves placed adjacent to motorways, rail lines and industrial sites and cut off from local centralities (Vadelorge 2014: 106, 116). This led to the logistical peripheralisation of the *grands ensembles*. Territorial isolation and inadequate public transport resulted in the creation of a double periphery: many *grands ensembles* were peripheral to the centre of Paris and also cut off from easy access to local centralities and the essential amenities of daily life, what sparked widespread criticisms and protests (see Chapter 16).

At the beginning of the 1960s a new strategic intervention was prepared to restructure and redefine the outer banlieue of Paris. It proposed to construct five state-planned *villes nouvelles* (new towns) with their own urban centres. In 1965 a regional master plan was launched, called the SDAU-RP (Schéma Directeur d'Aménagement et d'Urbanisme de la Région Parisienne), in light of the estimate that the population in the Paris Region would swell to 16 million inhabitants at the end of the 20th century (Murard and Fourquet, 2004). However, although they had the same name, the Parisian *villes nouvelles* were based on a very different concept from the new towns that were developed at the same time around London. Based on the New Towns Act of 1946, individual new towns were constructed at a distance of about 30 to 70 km from London. In Paris, however, the main goal was to reorganise and decentralise the entire metropolitan region. For this purpose, the new plan envisaged to build new centralities together with a new regional express transit system, the RER (Réseau Express Régional).

The design of the SDAU-RP as well as the process of implementation of the *villes nouvelles* followed an almost classic top-down procedure. For each *ville nouvelle* a parastatal real estate company was founded, an *établissement public d'aménagement* (EPA), tasked to urbanise the territory and thus realise the interests of the state on the terrain. The state actors involved in the planning and implementation of the *villes nouvelles* had a great degree of autonomy. They decided where the perimeter of the *ville nouvelle* should lie, secretly purchased the first parcels of land from farmers and had the right to expropriate the rest of the land. The EPA of each *ville nouvelle* developed the infrastructure and the public facilities and sold the land on to private developers, then reinvested the profit into public amenities and schools. All this was done without the participation of local actors in decision-making and without the support of

existing local and regional administrations and local politicians, and thus without being legitimised via democratic procedures and elections.

The construction of the five *villes nouvelles* that were laid out in the plan began at the end of the 1960s. However, the high expectations for these towns did not materialise. Changes in public strategies transferred the initiative for urban development into the hands of private investors in 1969, and followed by the economic crisis of the mid 1970s, markedly slowed down the accomplishment of this plan. As the population growth of the Île-de-France was much lower than predicted, the number of planned housing units had to be drastically reduced (Vadelorge 2014). Furthermore, a subprime mortgage crisis struck in the early 1980s triggered by the neoliberal reforms of 1978 (see Chapter 16).

The *villes nouvelles* thus never became the kind of independent cities that the original concepts promised. While Cergy-Pontoise and Evry had a clearly defined urban structure and identity, others, especially Marne-la-Vallée, developed into a patchwork of old and new settlements that were seamlessly interlaced into the existing structure of the *grand couronne*. Due to the urban densification outside the perimeter of the new towns, a huge urban zone emerged in which large parts of the *villes nouvelles* had merged into their surroundings to form an additional layer of multilayered patchwork urbanisation.

The main impact of the *villes nouvelles* was to create new centralities that tied the development of the *grande couronne* towards a polycentric urban structure. Together with other centralities that were independently planned and built, such as the business hubs around the airports Orly and Paris Charles de Gaulle, they generated the structure of multilayered patchwork urbanisation that we see today.

In the 1980s and 1990s, the *villes nouvelles* absorbed a large part of the massive population growth within the *grande couronne*. At the beginning large-scale urban developments continued to dominate the built structure, but in the course of the 1970s, low-rise, mainly family-oriented housing for middle-class households was constructed with pedestrian zones, kindergartens and playgrounds that became 'children's paradises'—but had little to offer adolescents, who felt isolated in these relatively monotonous settlements. Since the 1990s the process of *embourgeoisement* in the city of Paris and in parts of the *petite couronne* have pushed middle-class residents into the *grande couronne* (see Chapter 9). The arrival of relatively affluent people has strengthened local centralities, and fewer residents in the periphery are willing to undertake long commutes into Paris, preferring to find work opportunities nearby. Additionally, population growth has slowed and the existing population has aged, leading to a more locally oriented form of residence and community life (Berger et al. 2014).

The long-term transformation of the grande couronne makes clear that the urban periphery offers many possibilities for urban development, and can also accommodate contradictory dynamics. It is particularly interesting to see how specific state-driven urban strategies played out on the terrain. The modernist strategy of mass housing urbanisation, conceived in the 1950s, was missing a clear urbanistic focus, and led to a fragmented urban development. The encompassing regional strategy of the villes nouvelles, conceived only 10 years later, tried to correct the shortcomings of mass housing urbanisation by designing new centralities as pivotal points for the restructuring of the entire region. However, this regional strategy did not succeed in producing a well organised region, but instead created the decisive layer for the emergence of multilayered patchwork urbanisation.

ORANGE COUNTY, LOS ANGELES

The story of Orange County has a very different starting point to that of Paris. While the construction of the villes nouvelles in Paris was the result of strategic planning that was conducted over many years, the configuration of multilayered patchwork urbanisation in Los Angeles developed for a long time under the radar of public debate and scientific discussions. It surfaced suddenly in the late 1980s as part of the discussion on (postmodern) urban development in the urban periphery discussed above, fuelled by the rise of the Los Angeles School of Urbanism (see Chapter 11). It was in this context that Orange County became the paradigmatic example of a polycentric, multinucleated postmodern development (Gottodiener and Kephart 1991: 51; Jackson 1985: 265).

Two of the most important contributions to this discussion were by Allen Scott and Edward W. Soja, and both took Orange County as the key example of postmodern urban development. In his research on the industrialisation of Los Angeles, Allen Scott made an unexpected and astonishing discovery. He found in the seemingly unspectacular suburbs at the southern periphery of the endless Los Angeles metropolis a huge high-tech complex in the defence and space sector similar to the one that had emerged in Silicon Valley in the Bay area. He took this as a paradigmatic example of the new patterns of industrialisation and urbanisation in Western countries, with their transaction-intensive economies,

Los Angeles; incorporation of differences in the centre of Santa Ana, 2013



their deeply segmented local labour markets and their regressive labour relations. Scott showed that industrial production began to emerge in Orange County after the Second World War, then grew rapidly in the following decades so that by the early 1980s the manufacturing industry was employing about a quarter of a million workers. In the mid-1950s Orange County was a quiet backwater, while Los Angeles was already a major centre for the aerospace and electronics industry. As this industry grew in response to new military and space programmes, it started to decentralise and relocated branch plants to the suburban fringes, particularly to Orange County. In the 1960s manufacturers began to form an industrial complex by using a common pool of labour and various infra-structural services. The branch plants were thus complemented by small-scale service and supplier firms. By the early 1970s this complex had become a tightly woven network, concentrated around two subsystems: around Anaheim and Fullerton to the north, and around Irvine farther south. In the following years, industrial land use further intensified and the production diversified towards electronic components, computer and instruments industries. By the mid 1980s, the industrial complex was fully developed.

At the same time, partly based on Scott's findings, Edward W. Soja identified the new form of the urban that encompasses all other new urban forms: 'Exopolis, the city without, to stress their oxymoronic ambiguity, their city-full non-cityness. These are not only exo-cities, orbiting outside; they are ex-cities as well, no longer what the city used to be. Ex-centrally perched beyond the vortex of the old agglomerative nodes, the Exopolis spins new whorls of its own, turning the city inside-out and outside-in at the same time, unravelling in its paths the memories of more familiar urban fabrics, even where such older fabrics never existed in the first place' (Soja 1996a: 238-239).

Soja then invites us in his text to a journey through exopolis, and combines his account with adverts and promotion texts selling a bewildering imaginary world. Soja starts his trip in Knott's Berry Farm and in Disneyland and visits the Richard Nixon Presidential Library in Nixon's hometown Yorba Linda. Soja then takes us to the campus of the University of California and the neighbouring business complex in the private new town of Irvine. He shows us the 'Grand Axis-Mundi of exopolitan Orange County' (Soja 1996a: 259), running from Santa Ana to the John Wayne Airport all the way down to the Fashion Island shopping mall and the beach resort in Newport. He then moves north to Costa Mesa and the South Coast Metro Center, California's largest shopping mall, and the adjacent Orange County Performance Arts Center. He ends his trip at the El Toro Marine Corps Air Station, built during the Second World War on remote bean fields and orange groves. In the 1980s the station

was engulfed by tracts with tightly packed housing. In 1999, after Soja had published his text, the station was decommissioned and transformed into a public park.

These two very different accounts deliver a vertical (Scott 1988) and a horizontal (Soja 1996a) analysis of Orange County's urban development that would allow us to reconstruct the process of multilayered patchwork urbanisation. But both accounts have a narrow perspective on urbanisation. Scott offers a precise analysis of the development of an industrial complex from its early beginnings to the fully unfolded model and he explains how this complex took shape on the terrain. But he does not explain the urbanisation process in the wider region, nor does he illuminate the context of the urbanisation process in Orange County itself. Soja, on his part, conveys an illuminating trip through the postmodern urban landscape of exopolis, but he does not offer an overall picture of the urbanisation of Los Angeles, even if he has written a whole range of impressive articles on the topic. Furthermore,



Los Angeles; Segerstrom Hall, Segerstrom Center for the Arts, Costa Mesa, 2023



Los Angeles, City Hall, Fullerton, 2014

we do not really understand the pathway of development, because Soja portrays this urban landscape only in its simultaneity. However, this exopolis did not emerge like a mirage in the desert. It is the result of a full century of urban development. At what moment can this continually changing landscape be called an exopolis; or in the bigger picture of Soja's conception, at which moment is this landscape a postmodern one?

Nevertheless, there are other analyses of North American urban peripheries that examine this pathway more closely. One such by Fishman reconstructs step by step the transformation of the North American suburb, and another by Teaford (1997) presents a detailed historical comparative analysis of several exemplary case studies. Further insights can be found in the edited volume *Post-suburban California* by Kling et al. (1991). According to Janet Abu-Lughod, Orange County is 'not simply decentralized but organized around many distinct specialized centres which differ markedly from one another in terms of land use, social classes, and ethnic composition, in a complex of and decentralized mixture of urban, suburban, and rural spaces' (1999: 361). Jackson (1985: 265) notes that Orange County began to evolve from a sleepy rural backwater into 'a new type of centreless city'; a collection of medium towns and small cities, none of which is dominant over the others. By 1980 there were 26 cities, each with their own centres, shopping malls and amenities.

In our own analysis we embedded the development of Orange County in the wider context of regional urbanisation. As our map at the beginning of this chapter shows (see also the map in Chapter 11), Orange County is a unique urban configuration in Los Angeles. Despite the fact that Los Angeles is often seen as the prime example of a polycentric metropolis, our map shows that centralities are distributed very unevenly across the territory. They are in fact almost completely concentrated in two zones: one of which is Orange County and the other is a configuration that we called 'cosmopolitan urban'; it is extending out from the Hollywood Hills in the north to South Central Los Angeles in the south and from Pasadena in the east to Santa Monica in the west, and thus covers the entire urban core area of Los Angeles. Beyond these two configurations Los Angeles has various zones of laminar urbanisation and exurbanisation, forming huge zones of classically suburban areas that often also contain industrial and logistics zones, because Los Angeles is, after all, an industrial metropolis. But these are all commuting territories without major centralities. So why is Orange County so different?

I cannot develop a broad analysis of the pathway of multilayered patchwork urbanisation in Orange County in this chapter, but instead give a short overview. Gaspar de Portolà, a Spanish explorer, came to the area in 1769. His expedition

led to the establishment of forts and missions by the Spanish Crown. After Mexico won independence from Spain in 1821 the Mexican government secularised the missions and began distributing their land to Mexican citizens, who built huge haciendas upon them. After the Mexican-American war, California became part of the USA and the first American settlers arrived there. When Orange County split from Los Angeles County in 1889 it counted about 13,000 inhabitants. Basically, it had a mixed agricultural economy and its new name served to attract prospective home-owners; it is continuing to shape the image of this territory to this day, even if urbanisation has in the meantime almost completely erased all the orange groves.

Early urbanisation started along the railway lines. By 1877 a branch line from Los Angeles to Santa Ana, the seat of Orange County, was built by the Southern Pacific Railroad and 10 years later the California Central Railway offered a service between Los Angeles and San Diego by way of Santa Ana. By 1905 the Los Angeles Interurban Railway, a predecessor of the Pacific Electric Railway (Red Cars), was extended from Los Angeles to Santa Ana. Firestone Boulevard, the first direct automobile route between Los Angeles and Santa Ana, opened in 1935 and was enlarged to become the Santa Ana Freeway in 1953.

At the beginning of the 20th century the oil boom in Los Angeles started and oil fields were also discovered in Orange County north of Fullerton, which soon was dotted with derricks, refineries and oil terminals. Petroleum extraction became the basis for further industrialisation in the county after the Second World War. As explained above, the development of the Orange County industrial complex started in the 1950s. Manufacturing employees increased from about 6000 in 1947 to 97,000 in 1963. With all these economic activities, Orange County was no longer a classical commuter area. In 1970, out of more than 1.4 million inhabitants, only a quarter (26%) were commuting to Los Angeles (Teaford 1997: 95).

After the Second World War the urbanisation of Orange County started in earnest. Its geographical position between Los Angeles and San Diego, the abundance of open space, cheap land, excellent transport connections, agricultural and natural landscapes, appealing beaches and abundant recreational facilities made it attractive to relatively affluent middle-class families (Scott 1988: 166). In the early 1960s, when southern Los Angeles was fully developed, more and more housing units came to Orange County, mainly detached single-family homes, but increasingly also apartments and condominiums (Davis 1990: 174), leading to a suburban explosion in Anaheim, Fullerton, Buena Park, Santa Ana and other municipalities in northern Orange County. At the time, Orange County was commonly seen as a business-friendly bastion of conservatism and later as a Reaganite county.

This, however, did not prevent protests and mobilisations against further urbanisation. In the 1970s and 1980s, protests erupted in various cities and slow-growth movements tried to restrict density and preserve open spaces (Davis 1990: 176).

The entertainment industry was another important attractor to Orange County. Knott's Berry Farm, which started in 1923 as a roadside fruit stall, developed into a modern amusement park after the Second World War and in 1955 Disneyland opened, making Anaheim not only a centre of tourism but also a huge centre of employment (Teaford 1997: 56). In his essay, 'How Eden Lost Its Garden', Mike Davis points out that the Anaheim area is brimming with contradictions (1996: 179–180). Just south of Disneyland is Crystal Cathedral, a drive-in theme park and postmodern flagship project designed by Philip Johnson and John Burgee, completed in 1981. It was originally the principal place of worship for one of the foremost mega-churches in the USA, founded by the Rev. Robert Schuller, who called himself a Christian capitalist. After the church filed for bankruptcy it was sold to the Roman Catholic diocese of Orange.

Just on the other side of the freeway is another attraction that is today called the Platinum Triangle—a wedge of land that ends in a cone between the Santa Ana and the Orange Freeway that includes the Angel Stadium, which had been built by 1966. It is the location of the Los Angeles Angels baseball team and also hosts college football games, concerts and other events. Another stadium, the Honda Center, which is the home of the National Hockey League team Anaheim Ducks, was completed in 1993; recently a huge new development project has been launched with apartments, hotels, offices and entertainment venues surrounding the stadium.

A very different pathway of development occurred in the southern part of Orange County where large ranches—a legacy of the Mexican period—were sited, which for a long time had resisted urbanisation. The largest of those was the Irvine Ranch, which was left untouched until the 1950s. The ranch formed a huge barrier cutting through the middle of Orange County from the south-west to the north-east. From the 1960s onwards, this huge tract of land was transformed step by step into a science hub that included several university campuses and a business centre for the technology and semiconductor sectors, with several national or international corporate headquarters and a privately planned new town. Nearby, in 1966 in Costa Mesa, on another ranch owned by the Segerstrom family, who were famous for the production of lima beans, opened the South Coast Plaza, a huge shopping mall complex that today constitutes the core of Orange Counties 'postmodern downtown'. In 1986 a performing arts complex called the Segerstrom Center for the Arts opened on the other side of the road. In the

following years this complex was continuously extended and today contains an opera house style theatre, a concert hall, an arts museum, and some other theatres and venues.

Another example of Orange County's urban diversity is Santa Ana. At the beginning of the 20th century, this settlement had a relatively affluent population, and many of its residents had migrated from confederate states following the American Civil War. After the Mexican Revolution from 1910, a first major wave of Mexican immigration arrived; many of these immigrants found jobs in the agricultural industry. In the 1950s, Santa Ana became a boom town driven by the rapid growth of the defence industry. During the 1960s and 1970s, more working-class families from Mexico arrived in Santa Ana and found low-skilled and low-paid jobs. At the same time, more and more white middle-class families relocated from Santa Ana to surrounding suburbs, an example of the 'white flight' that occurred in many US cities at the time. As a result, the socioeconomic and ethnic composition changed, and by the 1970s Santa Ana had become a 'Latino city' with a vibrant downtown mainly attracting Mexican working-class immigrants. With the argument that it needed to 'restore the economic and social health of the downtown area', the city council proposed a downtown redevelopment plan in 1973 (González 2017: 26). As Erualdo González shows in detail, this plan was soon opposed by residents and grassroots activists, and the controversy that followed led to political change. By the mid-2000s, all members of the city council of Santa Ana were Latinas and Latinos. Nevertheless, they continued to propose urban redevelopment strategies, oriented to 'creative city' narratives and 'new urbanism' concepts, which today have resulted in urban upgrading and gentrification.

These different histories illustrate the specificity of Orange County's urban development. It is composed by a multiplicity of individual territories, each with their own pathways of urbanisation, creating a wide variety of logics. In the course of this development, the intensification and densification of the urban fabric continued until there was almost no vacant space left for further development. Today, Orange County forms a metropolitan area of its own. Between 1950 and 2000 its population increased from 200,000 to 3.2 million. During this time its social diversity also increased, propelled by immigrants from Latin America and Asia. Gradually, its political orientation also changed. In the 2016 presidential elections, Orange County voted for the first time for a democratic candidate—Hillary Clinton. As with the *villes nouvelles* in Paris, a certain maturity or normalisation arrived. All these centralities, venues and attractions that so greatly excited people 30 years ago are no longer new or spectacular, because they have become part of everyday life in a dense, polynucleated and fairly cosmopolitan urban space.

NEW TERRITORIES, HONG KONG

In Hong Kong a comparable urban configuration of multilayered patchwork urbanisation emerged in the New Territories area, which for a long time has formed a peripheral frontier zone between the former colony and China. Today, it is a strategic zone connecting the two metropolitan centres of Hong Kong and Shenzhen. The New Territories constitute one of the three main regions of Hong Kong, together with Hong Kong Island and the Kowloon peninsula. It encompasses about 86% of the territory of Hong Kong and is home to around half its population. The southern part, currently dominated by dense mass housing estates, has been integrated into the central urban area under the colonial system (Nissim 2012). The outlying islands include the international airport and Disneyland, as well as tracts containing peripheral residential areas and dispersed urbanised villages. The northern part of the New Territories between the Kowloon mountain range and the Chinese border is marked by a patchwork of regional town centres, condo towers, large-scale mass housing estates, urbanised villages, various public and private facilities, farmlands, open storage fields, country parks, wetlands and ecological zones, as well as cross-border transport infrastructure such as highways, metro lines and a high-speed railway.

The British Empire founded the colony of Hong Kong in 1841 on the small and rocky Hong Kong Island that was ceded by China. In 1860 this

small territory was extended to the Kowloon peninsula. In order to get an additional buffer zone to protect the colony against rival imperial powers, the British government leased the New Territories in 1898 for 99 years from the Qing government. In the second half of the 20th century, this area would become a strategic land reserve to ensure the colony's self-sufficiency and further development.

The land lease contract with China was a political invention that changed Hong Kong's territorial system. While the British Crown had full prerogative authority over the ceded territories of Hong Kong Island and Kowloon, it was obliged to respect the customary rights of several hundred 'recognised villages' that enjoyed special privileges and rights, and thus consultations and negotiations with village leaders were necessary to implement local administration (Wesley-Smith 1980: 90; Merry 2020: 187; Hayes 1993; 2006). The resulting territorial regulations fundamentally changed the existing territorial system, uprooted the power of the great family clans and legalised ancestral land and customary family landholding institutions. It also contributed to the development of a new social space, enabling villagers to adhere to their customs (see e.g. Baker 1966; Chun 1990; Nissim 2012; Wesley-Smith 1980). At the time the New Territories included large rural areas clustered around old market towns (e.g. Tsuen Wan, Taiipo, Yuen Long and Sheung Shui) and walled village settlements with ancestral estates and temples surrounded by agricultural land, rivers, hillsides and fengshui forests (Hayes 2006; Merry 2020).

Hong Kong; intensive juxtaposition. Yuen Long, 2012



In the second half of the 1940s, the Chinese civil war and the rise to power of the Communist Party fundamentally changed the urban dynamics of the New Territories. The colonial government had to address a series of challenges and crises, such as the arrival of a large number of refugees from China, an international trade embargo on China that greatly affected Hong Kong's economy, and socio-political unrest and anti-colonial activities in Hong Kong. In the mid-1950s the government constructed resettlement housing to clear the squatter settlements, and started to develop entire industrial towns in Kwun Tong and Tsuen Wan to relocate families and allow Chinese industrialists to set up new factories. In the following years, mass housing urbanisation became the motor of post-war industrial development that established a new territorial order for the colony: While Hong Kong's core area developed into an international commercial and financial centre, industrial plants and mass housing settlements were relegated to the peripheries. Similarly to the Parisian banlieue, the New Territories became the space for the reproduction of the industrial working class (see Chapter 16).

The urbanisation strategy of the colonial government changed in the aftermath of two riots in 1966 and 1967. Urbanisation was made a key component of the new social reform agenda, by which the government sought to rebuild its legitimacy in society, to establish a new Hong Kong identity and to increase its bargaining power in negotiations with China over the future of Hong Kong. The new strategy was based mainly on

constructing high-density new towns along major roads and railways in the New Territories, including areas in Shatin and Tuen Wan and around market towns in Taipo, Fanling and Sheung Shui. In addition to providing housing and local employment opportunities, the government also implemented policies to improve public facilities, infrastructure and transportation and to maintain food, water and border security in the colony. This included constructing water reservoirs, supporting agricultural cooperatives and expanding land for cultivation, together with constructing military camps and barracks. Thus, a large-scale process of urban extension was initiated in the New Territories during the 1970s.

However, as villagers held most of this land the colonial government had to expropriate farmland from the villagers. It had thus to negotiate with the Heung Yee Kuk, a statutory rural organisation founded in 1926 to represent the interests of the indigenous villagers in the New Territories (Chiu and Hung 1997; Merry 2020). To circumvent the process of expropriation and the resultant monetary compensation it needed to offer by law, in 1960 the government began to issue land exchange entitlement certificates, which granted leaseholders the right to plots for building in exchange for surrendering ownership of their agricultural land. The villagers were allowed to sell their entitlement certificates to investors (Chun 1991), and by this means developers built up huge land banks for future housing developments and were able to let vacant land or lease it for informal use (Poon 2011: 71). In 1972 the negotiations



Hong Kong; urbanised village. Yuen Long, 2012

between the government and the Heung Yee Kuk led to a territorial compromise, called the 'small house policy'. It allowed male villagers to build three-storey houses on their land without paying a land premium, or on government land at a concessionary premium and with exemption from major building control. However, most of these new village houses, called 'Spanish villas', were built to lease or sell to developers for profit (see Merry 2020; Huang 2017).

In the 1980s, when China initiated its opening up politics and economic reforms, Shenzhen became China's first Special Economic Zone, sparking off a spectacular process of export-oriented industrialisation. In parallel, Hong Kong developed into a global city, a process that was accompanied by fast deindustrialisation and the relocation of industrial activities to Shenzhen and Dongguan. The government adopted a strategy of metropolisation that included large urban renewal programmes in the central areas, leading to the peripheralisation of many low-income families (see Chapters 6 and 16). The New Territories were integrated into this strategy by the expansion of a public transport and highway system, which improved connectivity between the new towns and the city centre and facilitated the construction of more new towns (Ho 2018). While the coupling of public housing and industrial production had been guiding the development of new towns for decades, the private real estate sector now became the motor of territorial development (see Chapter 16), and private housing estates and condominiums were built in areas close to or above new railway stations and adjacent to wetlands to capitalise on the 'natural scenery'. With the increase of interactions and trade relations between Hong Kong and Shenzhen, the New Territories developed into an in-between zone that facilitated all kinds of cross-border activities and mediated the process of metropolisation in Hong Kong with industrialisation in Shenzhen and Dongguan. During this process, villagers began to convert farmland informally into container yards, open storage facilities and truck parks to capture higher land rents, which resulted in severe environmental degradation in these areas (Tang and Leung 1998). Thus, in the New Territories, a number of juxtaposing and conflicting land-use patterns coexisted, together with the activities that went with them, and the region thus became a place where conflicts arose between the colonial government, private developers, villagers and residents. In this way, multilayered patchwork urbanisation emerged in the New Territories.

Following the transfer of Hong Kong's sovereignty to the People's Republic of China, the Hong Kong government strengthened the strategic importance of the New Territories by promoting a process of regional integration and real estate expansion. It introduced new incentives to encourage private developers and launched three new town

projects as public-private partnerships located in areas where developers held large reserves of farmland for speculative purposes, leading to the eviction of residents in some non-indigenous villages (see Hui and Au 2016). The government also constructed new highways, railways and cross-border infrastructure to connect new towns and other real estate projects with Shenzhen's booming centres. This combined urbanisation strategy entailed a large-scale process of re-territorialisation that reshaped multilayered patchwork urbanisation. In this process, non-indigenous villages were evicted to give way to new development, leading to various forms of resistance. On the other hand, the large areas occupied by indigenous villages have been generally filled with different forms of illegal houses.

Multilayered patchwork urbanisation in the New Territories is not simply a result of spillover effects of urban development from the city centre to the periphery. Rather, the urban space of the New Territories has been reconfigured and re-territorialised by several rounds of urban strategies that the colonial and the SAR government implemented in a period during which geopolitical dynamics with China were in flux. At the same time, the pathway of urbanisation was also determined by continual negotiations between the Hong Kong government and the indigenous villagers who maintained their stronghold over the land. Urbanisation was further shaped by interactions between different social forces and actors, including investors and developers who promoted and championed their own urban strategies. The case of the New Territories shows that multilayered patchwork urbanisation is an emergent process that is constantly being transformed by various conflicting forces and logics. Under those conditions, the outcome is uncertain and unpredictable.

PATTCHIWA-KU, TOKYO

A similar situation to that of Los Angeles can be found in Tokyo, where we identified both processes, laminar and multilayered patchwork urbanisation.¹ While large parts of the territory of the Tokyo metropolitan complex are dominated by laminar urbanisation (the two urban configurations of Tōkaidō and Yamanote, see Chapter 5), a heterogeneous urban configuration evolved in the adjacent northern part of the region, which we call pattchiwa-ku urbanisation. It extends from the edge of the core city towards Japan's central mountains in the north and gradually transitions to the peripheral configuration of Kōhaichi, dominated by agricultural production, in the east. The term pattchiwa-ku is an adapted translation of the English term 'patchwork' into Japanese. This configuration is shaped by the simultaneity of contrasting logics, rhythms and urban dynamics; it comprises agricultural territories, forests, housing areas, industrial plants, logistic hubs, airports, transport infrastructures and large-scale military zones.

Terry McGee's (1991) concept of *desakota* comes close to describing the urbanisation processes in pattchiwa-ku. He refers to the Japanese term *konjūka* to characterise a particular type of *desakota* landscape. *Desakota* describes a densely populated, smallholder agricultural territory close to a large city with a well-developed infrastructure. It offers cheap and flexible labour and generally high mobility for people and goods and slowly urbanises along existing transport axes. Pattchiwa-ku urbanisation, however, diverges from McGee's definition, because it is located inside the metropolitan region and is the result of a longer and more complex pathway of urbanisation than a *desakota*.

As an example, we point to a description of Tokyo's northern edge by Andre Sorensen, who has researched urban sprawl and city planning in Japan: 'Why, in a country that has practiced land use zoning since 1919, is there such a great intermixture of residential, agricultural, commercial and industrial land uses? [...] Why are there so few of the exclusive residential developments for the affluent that have recently become common in other similarly wealthy nations? Why does intensive agriculture persist as small patches of vegetables or rice paddy in areas that are otherwise mostly built up while at the same time small clumps of houses are scattered throughout areas that are still mostly agricultural?' (Sorensen 2001a: 247). This perplexing situation can only be understood if we look at the genesis of this specific type of multilayered patchwork urbanisation that developed in Tokyo.

During the Edo period (1603–1868), this area consisted of small farms and villages scattered over extended landscapes consisting of rice fields, a pattern that can still be observed today in rice-based cultures in East and South-East Asia.

The practice of intensive rice farming can sustain a large population on a comparatively small piece of land. In Japan, these settlements were connected with the Tōkaidō road network, which linked Edo, the historical city that preceded Tokyo, with the main centralities at the time, and thus generated a continuous stream of goods and people along its axes. This network gave farmers access to markets and the villages located along the roads could generate income by hosting and catering to travellers. Due to the imposition of alternating residences for feudal lords and their retainers and households between Edo and their respective homelands, a significant part of the population was continuously travelling along these routes on their way to Edo or back home (see Chapter 5).



Tokyo; peripheral centrality, Ōmiya Station, Saitama Prefecture, 2012

Tokyo; detached houses, paddy field and public housing estate, Kitamoto, Saitama Prefecture, 2013



After the Meiji Restoration of 1868, which opened up the country to the West when modern Tokyo began, Japan developed a modern transport system connecting the centres of Tokyo, Osaka and Kyoto. The first to be built were the railroads that crossed the country in the 1870s, providing efficient means of transportation for agricultural products and securing access to remote villages (Ericson 1996; Noguchi 1990). However, in the favoured residential areas in the west and south, railway electrification as well as urban development were prioritised and both were much slower in the area of pattchiwa-ku.

Subsequently, the area offered the space for siting the large-scale military infrastructure that became crucial for Japan's increasing military engagement in the region at the beginning of the 20th century. The first airbase was established in 1911 in Tokorozawa and in 1922 the Tachikawa Airfield opened further south-west, soon becoming the centre of an aircraft industry. The concentration of war-related industries raised the concern of local authorities, who demanded they should be relocated beyond a 30 km radius from the city centre (Allinson 1979: 56). Outside this circle, military out-posts and aircraft stations were developed along the newly expanded transport routes.

After the Second World War, land reform carried out under US occupation contributed to the further fragmentation of agricultural land, as landholdings larger than 2 ha had to be subdivided to prevent the establishment of powerful conglomerates. This fragmentation and the relatively small amount of land under public ownership made a comprehensive development of the area

challenging (Sorensen 2001a: 251; Teruoka 1989). The National Capital Region Development Law introduced in 1951 to regulate urbanisation restricted the construction of industrial plants and universities within Tokyo's core area, and thus pushed industrial and infrastructural development out towards more peripheral areas. Since the western part of the Tokyo region was already largely developed, many of these of urban functions settled on the northern edge of Tokyo along already established infrastructural connections. This gave rise to the industrial layer in the pattchiwa-ku configuration.

The National Capital Region Development Plan released in 1958 then proposed an extensive green belt around Tokyo as a cordon sanitaire, which was intended to be framed by various satellite cities serving the centre (Sorensen 2001b: 16). However, this plan was only partly implemented and the designated greenbelt area was soon overrun by a fast-growing population seeking housing opportunities in the metropolitan region. The designated greenbelt area, consequently, became an area of urban growth during the course of the 1960s and 1970s with detached houses and new towns progressively pushing the frontier of the built-up area further and further outwards. Just as in the western side of Tokyo, these developments expanded along the railway lines, which were gradually extended. New types of urban housing were built in-between traditional estates while open spaces and agricultural activities receded.

In 1968 the revised city planning law introduced a new urban development control system called the *senbiki* system ('drawing a line'). It provided two new planning tools: the Urban Control Area plan that restricted urban development to prevent the uncoordinated conversion of land and, in contrast, the Urban Promotion Area plan that promoted new developments. This differentiation was of great significance on the urban fringe where large areas of agricultural land and forestry still existed. Based on these regulations and a new land taxation system it became more lucrative for farmers to convert their agricultural land to buildings than to farm. Various loopholes in the *senbiki* system and the traditional political weight attached to farmers' interests in Japan (Hohn 2000; Sorensen 2001a: 253; Yamamura 1992: 47) led to the failure of this system and thus urban sprawl continued (Saizen et al. 2006).

In 1965 the core area of Tokyo reached a peak of close to 9 million inhabitants and subsequently the city lost about 900,000 inhabitants in the following decade, while the total population in the prefecture of Tokyo as well as in the adjacent prefectures continued to grow (Japanese Statistics Bureau 2010). One cause of this demographic shift was the increasing environmental pollution from industrial sites in the core area which led to deteriorating living conditions. This trend is reflected



in what is called the J-turn migration. Young people who had migrated to Tokyo from different parts of the country when the economy started to boom after the Second World War became disenchanted with the reality of urban life. Rising costs, limited living space and increasing environmental pollution reduced the quality of life on a daily basis. They thus moved to areas that were in commuting distance to the centre and where property prices were lower, but which were still in reach of urban amenities (Nakamura and White 1988: 126).

In order to accommodate the population influx in the area and to alleviate pressure from the centre, new satellite cities have been constructed since the 1960s. Upon completion, each of them had a population of more than half a million people and usually its own employment centre. Concurrently, new policies that restricted the number of centrally located industrial sites propelled their relocation to the urban periphery in the 1970s and intensified the industrial layer of the patchwork. Economist Kazuji Nagasu calls this general trend towards the periphery in the 1970s *Chihô no jidai*, the 'era of the extended urban region'—in contrast to the previous 'era of central power' (Nagasu 1978). This trend was also intensified under the Third National Regional Development Plan using the slogan 'from the centre to the provinces'. Consequently, political decision-making processes were gradually decentralised and private investment was drawn towards new facilities and infrastructure in the periphery, which then gained a new political role within the metropolitan complex. Today, the pattchiwa-ku configuration spreads over the prefectures of Saitama and Chiba and extends into Gunma and Tochigi, with an overall population of about 7 million. Its daytime population is about one-third lower than its night-time population, as many people still commute daily to the central area. Nevertheless, the patchwork of industrial zones, agricultural areas and housing clusters has contributed to the formation of local centres that offer commercial activities, services and employment.

The configuration is today greatly affected by economic stagnation, demographic change and the territorial effects of neoliberal policies. Since the 2000s, investment has again focused on the metropolitan core area, where a new appreciation of urban quality is increasing the demand for housing in the centre and urban facilities. Young people are being drawn back to a metropolitan centre that offers better connectivity and amenities. At the same time, the consequences of a rapidly ageing society have left a population of elderly people behind in the outskirts. There are numerous areas where more than 25% of the inhabitants are over 65 years old. This poses new challenges to the municipal welfare budget as well as to communal cohesion and integration (Ochiai 2013). At the same time, the restructuring of the labour

market has proved difficult for local industries, which in many places have fled the metropolitan periphery and moved their labour-intensive factories to other locations in South-East Asia.

The fact that patchy urban development continued is partly to blame for the weak City Planning Act from 1968, which failed to channel the population influx and economic growth (Saizen et al. 2006). The revised City Planning Act of 2000 did not bring about any significant change. Given the powerful actors that were involved in making each urban layer, the different layers have never merged. Instead, they have produced a landscape consisting of largely discrete morphologies and practices. From the vantage point of the core area, the area of pattchiwa-ku is still often pejoratively referred to as the *inaka* (or 'country-side'). However, with its diverse identities and dynamics that are tied to regional as well as global flows, the area offers greater flexibility than other, more coherent and consolidated areas in the region. This presents a point of departure for much needed socio-spatial adaptation in the context of an ongoing regional restructuring.

COMPARISON

These four case studies illustrate very clearly the focus and the extent of the concept of multilayered patchwork urbanisation. Firstly, as we have seen, the identification of this process requires us to analyse the wider territory from a relational perspective. It becomes visible only if set in relation to other urbanisation processes shaping the territory. Secondly, to understand the superimposition and imbrication of different territorial logics requires us to analyse the pathways of urbanisation over time and thus take a historical perspective. Thirdly, the outcomes of the simultaneity of these different logics have to be analysed. What effect does the confrontation of these different logics have on the ground and what are the main lines of conflict?

In Paris, the first layer of multilayered patchwork urbanisation was constituted by the traces of the hinterland of the capital that developed in the 16th to 18th centuries. With the beginning of urbanisation and Haussmann's radical transformation of the city of Paris, a main contradiction was introduced: the relationship between the city of Paris and its periphery, the banlieue outside the city wall. The areas closer to Paris developed into dense working-class neighbourhoods and became the *couronne rouge*. The more remote parts of the banlieue, the *grande couronne*, developed through the erection of small, sometimes self-built working-class or lower middle-class houses stretching out into the surrounding periurban areas mainly along train lines, forming the second layer. This urban development changed radically during the period of French Fordism, when mass housing urbanisation and the production of *grands ensembles* led to the rapid transformation of the *grand couronne*. This urban strategy constituted a territorial compromise between Gaullist top-down politics and local initiatives based on municipal socialism. As a result, the *grands ensembles* were built pragmatically in places where there was the least resistance to them and where land prices were the lowest. Thus, the interstices and grids of the urban fabric were filled in with *grands ensembles*, as well as shopping malls and all sorts of infrastructure. This third layer thus led to the peripheralisation of parts of the population. In the 1970s a new phase began with the construction of five *villes nouvelles*, state-planned new towns with their own urban centres, which were designed to restructure and redefine the huge urban periphery of Paris. However, as a result of urban densification outside the planning perimeters and the further fragmentation of the urban pattern, a huge zone emerged in which the *villes nouvelles* merged together with their surroundings and became just one additional layer of the emerging encompassing urban patchwork. This was the moment when multilayered patchwork urbanisation became a social reality.

In Los Angeles, a very different situation unfolded. At first sight, the development of Orange County appears disturbing or even chaotic. As has become obvious, it is not possible to identify clear historical layers of urban development. Orange County is best understood as a collection of different urban fragments; it is determined by numerous logics, none of which holds overall sway, yet all of which give the area a heterogeneous, variegated texture which defies easy categorisation. The history of Orange County is a collection of local pathways of urbanisation that developed sometimes over decades, filling up the landscape, effacing the traces of agriculture and finally leading to a dense conglomeration that is full of surprises. Despite the difficulty of tracing the layers of urbanisation in this region there are nevertheless certain overarching tendencies that guided this urbanisation process. At the beginning there was a dominant agricultural production with mixed crops, from citrus plantations to beans and dairy products. This first layer lives on in the name but has slowly faded away, eaten up by industrialisation and urbanisation, until it has been completely consumed. A second layer developed after the Second World War as a result of the massive influx of relatively affluent middle-class families spilling over from southern Los Angeles County who were attracted by the location, the good connectivity, the beaches and the climate. This process has continually moved south over half a century. A third layer was formed by the oil economy, which laid the foundation for further industrialisation and led in the 1960s and 1970s to a fully developed industrial complex, which in turn generated more new business and technology centres. In itself this urbanisation process is not very spectacular. What makes it special is the development, step by step, of a huge variety of centralities that were based on local and often also private initiatives. Some of these centralities developed over a long period of time and led to a multicentric territory. At what moment can we call this configuration multilayered patchwork urbanisation? There is no clear event, no defining development that would mark a specific point in time in which this urban configuration emerged. It was a gradual process in which the density and diversity of the urban pattern reached a certain degree of saturation. Sometime during the 1980s the full dimensions of multilayered patchwork urbanisation became visible and tangible, and that was the moment when Soja made his journey through Orange County and declared it the paradigmatic example of postmodern urban development. In hindsight it is not difficult to see the time-dependency of this interpretation. Orange County is not a post-modern phenomenon. In the *longue durée* we see that it is the result of a long-lasting, complex and differentiated pathway of urbanisation that continues to this day.

The New Territories in Hong Kong show another variant of multilayered patchwork urbanisation. The urban development of this zone is marked by a double problematic: on the one hand it forms a border zone between Hong Kong and China, and it is therefore influenced by the development of both Hong Kong and China and their mutual relationship. On the other hand, the basic conditions for the New Territories was the establishment of the lease contract that gave the indigenous villages a strong and lasting influence on the further development of the territory. Furthermore, this lease determined the fate of the entire colony, as it stipulated that Hong Kong would be handed over to China after a century. The New Territories were thus the linchpin of the further development of Hong Kong. In this area, urbanisation took place according to both colonial and customary laws. Thus, the 'rural' element heavily influenced the whole urbanisation process and imposed on Hong Kong the direction of patchwork urbanisation from the very beginning (see also Tang 2014). During the first phase until the Second World War, this area was a typical periphery; a border zone between Hong Kong and rural and peripheral China, dominated by villages and traditional market towns. This began to change in 1949 with the rise of the Chinese Community Party, first of all by generating a huge wave of refugees that turned the New Territories into a political frontier zone. As Hong Kong started to accommodate the immigrant people, a second layer of mass housing urbanisation and new town development evolved. The New Territories became the home of the industrial working class, very similar to the situation in Paris. In the 1980s, with the new economic strategy of the People's Republic of China, a further radical change occurred. Soon, there was no longer a rural periphery on the other side of the border: it was the world's fastest growing industrial metropolis. The tactics of the Chinese government to dock Shenzhen directly onto Hong Kong and to locate the main centralities immediately at the border meant that the New Territories were no longer on the edge: they were in the geographical centre of two thriving global metropolises. Thus, the area of the New Territories that once formed an edge of Hong Kong was suddenly located in between the two main metropolitan centres on the eastern Pearl River Delta, leading to a fundamental re-territorialisation. This was the very moment when the configuration of multilayered patchwork urbanisation came into being. The last defining change arrived when the colony was handed over to China, which led to cross-border territorial strategies of metropolisation and regional integration.

In comparison with these spectacular developments, the pattchiwa-ku configuration in Tokyo underwent a slow and gradual transformation. As in Orange County, it started as a peripheral agricultural area, a quiet backwater of the growing metropolis. In contrast to Orange County however, this layer

is still present, as the rice fields subsist to this day. A second layer was established when large-scale infrastructure and military industries started to move in during the 1920s and 1930s. This prepared the ground for the third layer that has been developing since the Second World War: the industrial layer. This area functioned as a kind of spillover basin to accommodate industrial plants and infrastructure that had been relocated from the central part of Tokyo. A fourth and defining layer emerged when wave after wave of detached houses and satellite towns were built in the area. In this respect, pattchiwa-ku has clear similarities with Los Angeles. However, the lack of strong centralities gives this area a very different character. Today, with its ageing population, residential areas are slowly emptying out and the number of commuters from pattchiwa-ku to the core area of Tokyo is rapidly declining. This has laid bare the lack of local amenities and services necessary for daily life in this area, while new services catering for the requirements of the ageing population are urgently needed. Simultaneously, people are spending more time in the area and have begun to invest in building communal activities and networks. This shows certain similarities with the *grande couronne* in Paris, which is also developing a more local orientation of daily life.

POLYCENTRALITY

Looking at these four case studies together, we detect some clear commonalities: All of these territories have agricultural origins, which are still visible as traces inscribed into the terrain, from farm houses to ancient village cores and windy street patterns; though in Orange County, these traces have been almost completely effaced. All four territories have also become arenas of industrialisation and the mass construction of housing units, which are oriented to the middle class in Los Angeles and Tokyo, and a social mix in Hong Kong and Paris. However, such characteristics are not unusual for urban peripheries—so what makes multilayered patchwork urbanisation a distinct process, and what are its consequences?

Firstly, all of these territories have been fundamentally reorganised in recent decades by the production of new centralities. These centralities are either planned (as in the cases of the *villes nouvelles* in Paris and the new towns in Hong Kong and Tokyo) or emergent, especially when circumambient to infrastructural nodes (as in Los Angeles and in Tokyo). Often, pre-existing centres are integrated into the urbanisation process. Furthermore, these territories are strongly influenced by both entrenched and newly produced centralities in the wider territory, as becomes visible in the maps at the beginning of this chapter. Overall, this gives these territories a strong polycentric and even ex-centric orientation.

Polycentricity as such is both a problem and a potential: on the one hand, the dispersion of centrality leads to the formation of partial centralities and reduces the power of attraction. It also makes access to centrality more difficult by generating logistical problems. Thus, transport infrastructures (trains, motorways, airports) become an important part of the patchwork structure of these areas, as they create material divisions and ruptures, which may lead to territorial enclaves and logistic peripheralisation. On the other hand, polycentricity results in multi-functional spaces: all these territories include not only housing, but residential uses combined with industrial, commercial and cultural production as well as recreational functions. As a result, these erstwhile peripheries are not peripheral anymore: over decades, they have been integrated into vast urban regions, comprising significant areas of Paris, Hong Kong, Los Angeles and Tokyo. By developing their own centralities these territories assemble all elements of urban core areas, which give them a relative autonomy and a certain form of urbanity.

Secondly, these territories are dominated by multiple, diverging and changing political agendas, and reflect the inscription of different regimes of territorial regulation during several rounds of urban transformation. The New Territories and the *grande couronne* are to a certain degree the results of specific territorial compromises between state strategies and local initiatives and struggles. Similarly, the *pattchiwa-ku* area is marked by the exploitation of certain grey zones in planning law by local landowners. In Orange County, various initiatives and projects of individual actors and local power constellations in the municipalities have created a patchwork of centralities. In recent years, Hong Kong's New Territories have been integrated into the overall planning of the Pearl River Delta by the Chinese central state at the provincial level, resulting in conflicting agendas and struggles between non-indigenous villages and the governments of Hong Kong and Shenzhen.

Thirdly, as a result, all these territories are marked by the superimposition of several logics of urbanisation and a multiplicity of spatial orientations and temporal rhythms. The co-presence of very different patches or enclaves often leads to a disorienting daily experience. However, there are still various degrees of interaction and inter-relationship between these patches: while they sometimes strongly interfere with each other, they may also develop into complementary poles. These varied dynamics contribute to the unpredictability of this particular urbanisation process.

All of these territories have undergone a certain kind of consolidation in recent years. In Los Angeles and Paris, we observe an intensification and densification of the urban fabric. As a result, 'edges' and 'holes' in this fabric (such as agricultural land, *terrains vagues*, or industrial

brownfield sites) have been filled in by new development. In Paris and Tokyo, a re-territorialisation of everyday activities can be observed, which is strengthening local centralities. And the New Territories have developed into a strategic in-between space that faces an uncertain future.

In this way, the strong centre-periphery relation that originally dominated all four territories has given way to a complex polycentric patchwork integrating various urban functions. Multilayered patchwork urbanisation has thus become a key process in metropolitan areas, revealing a variety of urban potentials and specific urban qualities. From a broader perspective, these territories could demonstrate the potential to nurture a new form of urban intensity identified by Nüssli and Schmid (2016) and Keil and Addie (2015), and to develop some of the new forms of centrality called for by Henri Lefebvre (2003 [1970]: 119-120), who imagined the introduction and invention of new urban forms, polycentric cities, and differentiated, renewed, even mobile or floating centralities. In this sense, such territories not only illustrate the obsolescence of the conceptual distinction between 'urban' and 'suburban' areas but also may serve as examples for the urban potentials of polycentric territories.

1 This section is largely based on the section entitled *Pattchiwa-ku urbanization* in Hanakata 2020: 159-173.