Sea, Sun and Concrete

The Costa del Sol - a linear homogeneous urbanisation or fragmented realities?

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January 2018

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1. preamble

introduction

Mankind covers the world increasingly with impervious, built up surfaces, creating similar landscapes of urban sprawl all around the globe. From urban morphology to urban life, society, and ultimately humanity itself, the globalisation affects all aspects of life. Due to the resulting increased global mobility people travel and live abroad more than ever before, which has had an increasing urban impact for the regions accommodating the ever-growing leisure and work migration. For some regions, those impacts have been bigger than for others, an especially affected zone is the Mediterranean coastline.

Today's coastal Mediterranean fringe is an endless spread of cities, with Spain alone having half of its 10 biggest cities facing the Mediterranean sea[1]. One of the main reasons of this massive urbanisation is tourism. In 2014 Europe hosted 608 million visitors, out of which the Mediterranean alone accounted for 343 million, accommodating a third of all international travellers.[2] Consequently, the simultaneous expansion of infrastructure, accommodation and leisure facilities increasingly cover the remaining unbuilt areas and create a virtually continuous urbanisation on the Mediterranean coastline. NASA's night-time image "Black marble 2016"[3] accurately illuminates the linear expansion occurring along the region's northern and parts of its southern shores. The urbanised coastal zone is commonly referred to as a continuous and homogenous ribbon of urban sprawl. However, this notion is questionable. Is it possible to compare the regional development to a phenomenon which occurred mostly during the industrial revolution in northern European countries and through uncontrolled population dispersion in North American suburbs? What influence do millennia of historical developments and various appropriations of the territory have on today's urban fabric? Should the specific geographical context of the sea not have produced a different kind of sprawl, a heterogeneous, fragmented expansion rather than a homogeneous one?

This work aims to create a better understanding of the coastal Mediterranean urban development, starting with an introduction of the horizontal metropolis and the notion of the palimpsest, both valuable approaches while analysing and reviewing the present-day landscape. A brief overview of the evolution of European tourism concludes the chapter. In the second chapter, a specific territorial frame is analysed through a series of key historical moments in order to grasp their impacts on the region, before zooming into an example of a small city to test the hypothesis. Finally, the Mediterranean city and its change over time is discussed in relation to the examination's findings.

1. Stephen Starr, "The Mediterranean's Urban Sprawl: 'You Know a City's near by the Plastic in the Sea,'" *The Guardian*, January 20, 2015, sec. Cities, http://www.theguardian.com/cities/2015/jan/20/mediterranean-urban-sprawl-kayak.

2. "Ocean Atlas: Understanding the Threats to Our Marine Ecosystems," Heinrich Böll Foundation, 38, accessed January 8, 2018, https://www.boell.de/en/2017/05/30/ocean-atlas-facts-and-figures-about-our-relationship-with-the-ocean.

3. "Hyperwall: Black Marble 2016," accessed November 13, 2017, https://svs.gsfc.nasa.gov/30876.

Hyperwall: Black Marble 2016, © NASA's Goddard Space Flight Center

"The Pacific may have the most changeless ageless aspect of any ocean, but the Mediterranean Sea celebrates the continuity of man." [4]

4.   Ernle Bradford, *Mediterranean: Portrait of a Sea, by Ernle Bradford* (Sydney, Toronto, 1971).

Torremolinos (Málaga), ca. 1960

the territory as palimpsest

In his essay "Le territoire comme palimpseste" [5], André Corboz introduces the idea to use a new vision on the territory and the way it is perceived and represented. Instead of a static given, he describes it as an element in endless motion, a changing result of divers processes. Spontaneous modifications of the instable terrestrial morphology as much as human interventions both reshape the territory continuously.[6] As the territory can be seen as a construction or an "artefact" in the words of Corboz, the territory becomes a sort of product in itself.[7] Behind all intents of deformation and reshaping of the product lies ultimately the idea of a better, different version of the territory, a project. Therefore, he comes to the conclusion that there can be no territory without an imaginary of the territory, as well as it can't be reduced to only quantitative definitions.[8] It is always mythically, socially or politically charged and cannot be objectified as such.

In terms of representing a territory, Corboz identifies two fundamentally different ways, the landscape and the map, the first subjective and very personal, the second descriptive and abstract. The map as a mental representation is essential to understand a vast territory, however it has been a rather elastic notion in ancient times, whereas modernity asked for a more precise and absolute mode of representation.[9] The map became an object, created to be examined, by contrast the landscape induces a sort of sentimental value while being looked at.

Corboz argues that modern technology changed that clear opposition between map and landscape, merging the objective and subjective and leading to the territory's complete domination. Therefore, he suggests reading the territory as a palimpsest, a composition of different layers over time, some erased, others added, both intentional and accidental. He advocates for it no longer to be seen as a virtually abstract field but as a result of a very long and slow stratification.[10]

5. André Corboz, *Le territoire comme palimpseste et autres essais*, Collection tranches de villes (Besançon: Les Éditions de l'Imprimeur, 2001).

6. Corboz, 212–13.

7. Corboz, 214.

8. Corboz, 214.

9. Corboz, 219.

10. Corboz, 227.

Fuengirola (Málaga), ca. 1960

the horizontal metropolis

Conceived by Paola Vigano and Bernardo Secchi, the horizontal metropolis is an urban project that aims at establishing "both non-hierarchical relationships between its different parts as well as osmotic relationships between built and open space, between mobility infrastructure and dwelling places."[11] Envisioned for the city of Brussels and positioning itself against today's fragmentary and isolating tendencies, "the horizontal metropolis is not an archipelago"[12] but a place offering "a variety of urban functions and great ethnic and social diversity."[13] An important theme are the co-habitation and the connections of nature and the urban landscape, creating diversity and difference. The horizontal metropolis project focuses on the major potential to create high-quality living conditions in the current fabric of the city. Creating a dense network of elements providing direction, specificity and difference, the horizontal metropolis is a heterogeneous landscape and "only at first sight is it homogeneous and consensual."[14]

The question of the landscape's morphology and the implications of the homo/heterogeneity will guide the further investigation in this work, together with the research of the qualities and problems of the analysed Mediterranean urban condition. In the horizontal metropolis, the "environmental quality of life" is in direct relation "to the proximity of green and agricultural space as well as public space"[15], another important factor in the socially und morphologically diverse environments of Mediterranean cities.

11. Paola Vigano, "The Horizontal Metropolis and Gloeden's Diagrams. Two Parallel Stories.," *OASE (89)*, no. 89 (February 2013): 96.

12. Vigano, 99.

13. Vigano, 97.

14. Vigano, "The Horizontal Metropolis and Gloeden's Diagrams. Two Parallel Stories.," 101.

15. Vigano, "The Horizontal Metropolis and Gloeden's Diagrams. Two Parallel Stories.," 100.

Camping de Marbella (Málaga), 1960

a brief history of tourism

"Tourism is unquestionably one of the world's primary economic sectors. It shapes the working lives and living standards of travellers, the host countries travelled and the service providers encountered en route, and transforms every physical and cultural landscape that it touches."[16]

Tourism has triggered enormous movements of transnational mobility, labour migration, cash flow, social attitudes and cultural traditions. Arising from the 18th century aristocratic origins of the Grand Tour, the desire to travel and discover new cultures and environments has never stopped growing. Even in the age of globalisation, the original Grand Tour still influences the ideas of culture and sophistication surrounding the act of travel.[17] Historically a journey was undertaken to acquire a certain culture, nowadays the main goal is to experience sensations[18], with the travellers virtually consuming them. Suffering from the urban transformations of industrialisation, landscapes and regions became products for the affected urban population.[19] The resulting and relatively recent phenomenon of the mass tourist has transformed the holiday industry into one of the world's fastest growing commercial branches.[20] This introduction provides a brief overview of the social and political background of today's tourism in order to get a better understanding of its impacts on society and the territory.

Technological, social and economic progress have allowed for the development of leisure activities, ultimately leading to mass tourism as we know it today. Crucially, the introduction of laws regulating minimum wage, shorter working weeks and paid annual holiday made it possible for the working class to afford traveling for leisure purposes.[21]

The Soviet Union was the one of the first states to guarantee workers two weeks of paid annual leave in 1922.[22] The recreational activities were mostly operated through state organisations and came with the construction of the first resorts and sanatoria in places such as the Black Sea coast. In western European countries, legislation favourable to workers' rights was still a contested issue in the 1930s.[23] In 1937 leisure came into the focus of the architectural discourse with the 5th "Congrès internationaux d'architecture modern" (CIAM) in Paris dedicated to *"logis et loisirs"* after the French government made paid annual leave a constitutional right in 1936. As the title indicates, housing and leisure were the main themes of discussion. But the discussions also led to the interesting change of perception of the countryside from being anti-modern to becoming the central location of modern leisure activity.[24] The rural and the urban started to be seen as spatial categories that were directly related and mutually dependent. In neighbouring Germany, the NSDAP government also initiated programs

16.   Elke Beyer, *Holidays after the Fall: Seaside Architecture and Urbanism in Bulgaria and Croatia* (Berlin: Jovis, 2013), 35.

17.   Lisa Colletta, *The Legacy of the Grand Tour: New Essays on Travel, Literature, and Culture* (Rowman & Littlefield, 2015).

18.   Corboz, *Le territoire comme palimpseste et autres essais*, 223.

19.   Corboz, 224.

20.   D'Laine Camp and Jan de Graaf, *Europe: Coast Wise : An Anthology of Reflections on Architecture and Tourism* (Rotterdam: 010 Publishers, 1997), 12.

21.   Beyer, *Holidays after the Fall*, 37.

22.   Eric G. E. Zuelow, *Touring Beyond the Nation: A Transnational Approach to European Tourism History* (Ashgate Publishing, Ltd., 2011), 177.

23.   Beyer, *Holidays after the Fall*, 38.

24.   International Congress for Modern Architecture, *Logis et loisirs: 5e Congrès CIAM : (CIAM 5); Paris, (28 juin-2 juillet) 1937 : titre de départ: Urbanisme 37*, [Reprod. en facsimilé], Documents of modern architecture (Nendeln: Kraus Reprint, 1980), 339.

Playa de Las Rocas, Torremolinos (Málaga), 1944

to develop tourism, mainly through the state-operated leisure organisation *"Kraft durch Freude",* a part of the national German labour organisation. The most outstanding example of its developments and a sort of early anticipation of today's industrialised mass tourism was the enormous German Prora resort on the island of Rügen in the Baltic sea, built during 1936-1939.

World War II put an end to leisurely travel, which had grown increasingly popular in the prior years . However, all the technological advances and mass displacements experienced by the soldiers and refugees accelerated the post-war growth of international tourism. During the war, many people were away from home or abroad for the first time, although under terrible circumstances, the massive dislocation created a new ease of movement in society.

After World War II, manufacturers turned their attention towards civil markets and allowed for affordable mass transportation for many Europeans, offering a certain "democratization of travel".[25] Whether traveling by car on the new highways or by train on the new railway lines built during the war, the post-war society developed a growing desire of movement. In socialist countries, the provision of rest and relaxation for the working class became an integral part of the social policy agenda, including promotion of international travel and tourism to socialist sister states. In capitalist nations, more and more employers realised they could increase productivity by offering a certain amount of rest and relaxation for their workforce, which led to the development of "social tourism facilities"[26] in countries like England, France and Germany. Tourism was seen as a "cornerstone of a sound economic future"[27] for Europe in the post-war period, prompting reconstruction and economic recovery. A key element was the introduction of standardised holiday packages offered by tour operators, allowing for tourism to grow on an industrialised scale.

Although the different political schemes had very different motivations, the promotion of travel and leisure led to increased movement and mobility of all working and higher social classes. The right to a holiday became a symbol for the social progress of the welfare state and culminated in the Fordian mass tourism we know today. Ultimately, the similar developments of touristic architecture and urbanism in all political systems were primarily an economic exploitation of both leisure time and undeveloped land and have all contributed to larger processes of globalisation.[28]

25.   Beyer, *Holidays after the Fall*, 41.

26.   Beyer, 42.

27.   Zuelow, *Touring Beyond the Nation*, 5.

28.   Beyer, *Holidays after the Fall*, 53.
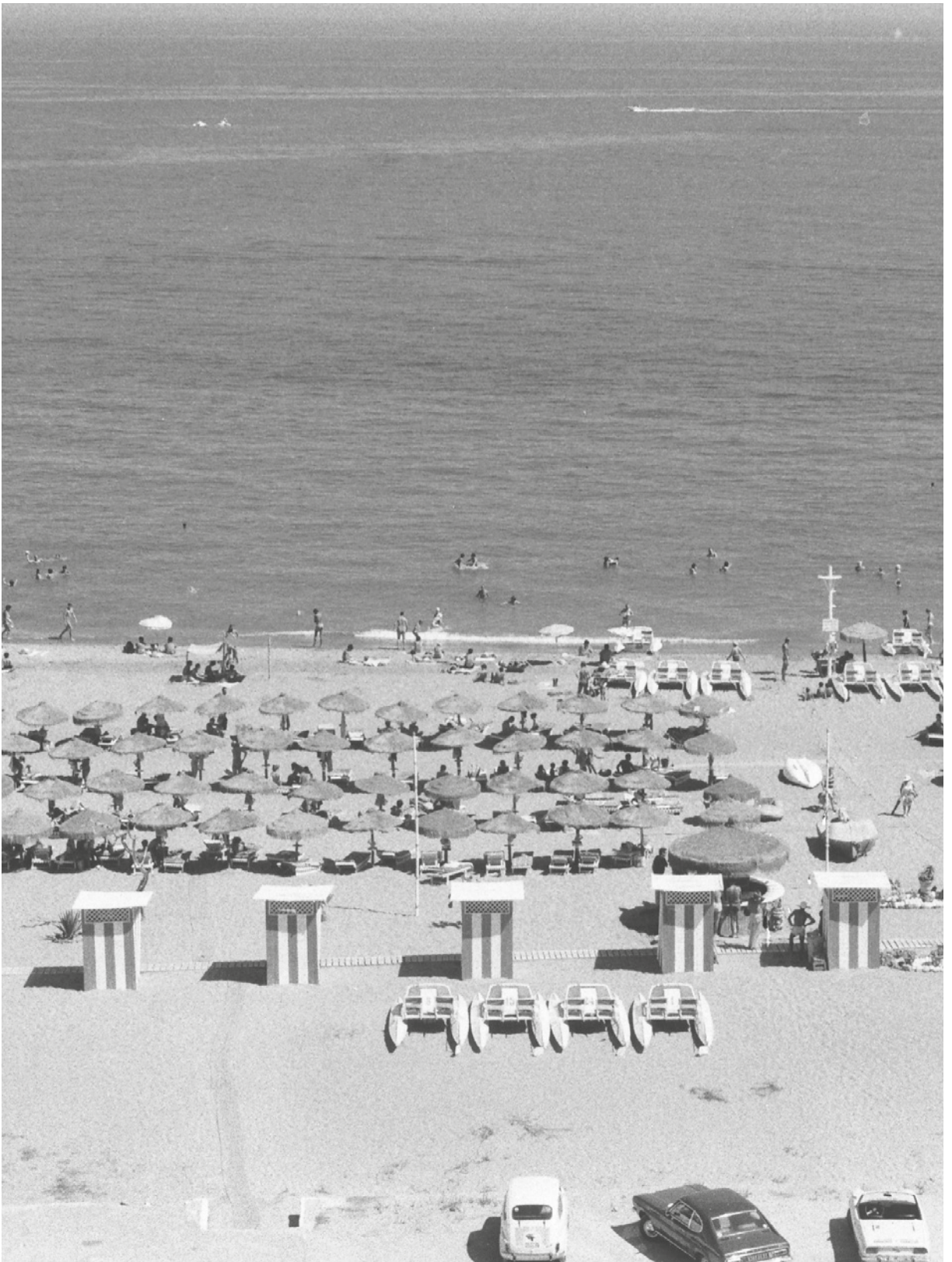
Playa de Torremolinos (Málaga), 1972

The seaside destination occupied a special place in this development, often figuring as a showcase of a country's social and economic progress. Western democracies, socialist states, as well as dictatorships all invested in new coastal resorts as crucial parts of more general modernisation programmes.[29] Starting in 1950s, many coastal areas, especially around the Mediterranean, started attracting unprecedented masses of tourists from mainly northern European countries. Being set up and sold as sea, sun and beach experiences, these locations attracted people from various social classes, all benefiting from growing incomes and longer holidays. Starting in Spain and Italy, the development was quickly followed by Greece, Malta, Cyprus and the Balkan states. The impact of the resulting urbanisation was especially prominent around the Mediterranean as large coastal regions have been relatively undeveloped.[30] With many countries initially allowing nearly uncontrolled construction along their shores, the industry has had far reaching implications for the local cultures, urban morphologies, territorial systems and the often fragile coastal environments.

The aging infrastructure and environmental decay, as well as changing sociocultural expectations of the visitors and the growing competition of a global world have led to new challenges.[31] Many coastal vacation regions have responded with a greater product diversification, targeting different social classes with special facilities like marinas, golf courses and casinos. While those measures continue to bring growing numbers of visitors to the Mediterranean shores, the social, cultural and urban problems created since the beginning of the boom largely remain present.

29. Beyer, 42.

30. Bill Bramwell, *Coastal Mass Tourism: Diversification and Sustainable Development in Southern Europe*, vol. 12, Aspects of Tourism (Clevedon: Channel View, 2004), 1.

31. Bramwell, 12:2.

2. Costa del Sol - a linear urbanisation

introduction

In this analysis, the focus lies on Spain, the main touristic destination on the Mediterranean and subject of a complicated political history with a sudden and fierce opening to tourism under the Franco dictatorship. Today, the country is the third-most visited country in the world, receiving seven times as many tourists as Switzerland and representing the highest growth rate of the five leading tourist nations.[32]

The frame of analysis will be the Costa del Sol, a product of clever promotion that became an important tourist destination in Spain today and represents an extreme model of linear urbanisation. Maps of the area will show the territorial impacts of briefly revealed historical turning points, characterising the influence of the Mediterranean's legacy and culminate with a reading of today's condition. The glimpses at certain key moments will serve to get a better understanding of the formation, composition and apparent continuity of the current urban fabric.

The Mediterranean Sea, or *mare nostrum* as it was called by the Ancient Romans, stimulated exchanges of culture, knowledge, goods and people between its bordering nations, a process which deeply altered the involved cultures and their built environment. As a result, the affected territory figures as a palimpsest[33] of the Mediterranean's legacy, a concept of André Corboz introduced in the previous chapter. His proposal implies analysing elements of permanence and disappearance, an approach which seems especially valuable for the historically significant environment of the Mediterranean.

In their book "Costa Iberica"[34], MVRDV identify the coasts of Spain and Portugal as the main European attraction for sun seekers, hosting millions of visitors every year and occupying a rather special place in today's European urban fabric. In their analysis, the authors go as far as to perceive the transformation of the Iberian Peninsula's entire coastal fringe into one linear and continuous "city". However, it is questionable if the present urban fabric is it as homogeneously urbanised as it appears to be and if it can therefore be referred to as a city.

32.   "UNWTO Tourism Highlights: 2017 Edition | World Tourism Organization," accessed December 11, 2017, https://www.e-unwto.org/doi/book/10.18111/9789284419029.

33.   Corboz, *Le territoire comme palimpseste et autres essais.*

34.   Winy Maas and MVRDV, *Costa Iberica* (Barcelona: Actar, 2000).

Málaga Airport ●
low cost connections ●

Costa del Sol

🕐 1:50'000'000

the Costa del Sol – a successful brand

The Costa del Sol region lies on the Mediterranean coast in the province of Málaga, in between the British overseas territory of Gibraltar and the city of Málaga, at the southern end of Spain. The coastline was branded with its name in the 1960s in order to promote its main qualities and initiate the touristic development. Due to its constrained geographical context, squeezed in between the sea and a mountain range, the region exhibits a typical linear urbanisation. In the late 20th century, the region was one of the world's most rapidly developing shorelines[35], attracting unprecedented numbers of visitors. The development brought along a shift in its urban fabric, transforming from small villages and contained cities into one extensive urbanisation along a 120km strip of coastline.[36] The impact of this new, physically built shoreline on the environment has been severe. Although the financial crisis of 2008 and the Spanish property bubble heavily affected the region and slowed down its growth, the Costa del Sol tourism continues to be an important factor for the Andalusian and Spanish economy. In 2016, the region has accommodated nearly 5 million tourists, representing a little less than one third of all Andalusian and one twentieth of the whole countries 100 million visitors.[37]

The main economical and infrastructural centre of the administrative region as well as its namesake is the metropolis of Málaga. As a mainly northern European summer vacation and retirement destination, the region is very well connected by air through the Málaga–Costa del Sol Airport, which was branded together with the adjacent coastline in the 1960s. At the 4th busiest airport of Spain[38], low-cost airlines make up the most important part of the passenger volume (68%)[39], with more connections to airports in the UK than in Spain and ensuring an ever-growing number of tourist arrivals. Complementing the air route, several highways together with a recently inaugurated high-speed railway line complete the transport system and secure the arrival of Spanish tourists to the city of Málaga. From there two coastal highways (A-7 and AP-7) and a regional train route allow access to the thin strip of the Costa del Sol. While the two highways distribute the entire coastline, the train connection only extends as far as Fuengirola.

35. P. P. Wong, *Tourism vs Environment: The Case for Coastal Areas*, vol. 26, The GeoJournal Library (Dordrecht [etc.: Kluwer, 1993).

36. P. P. Wong.

37. "Documentos - Turismo y Planificación Costa Del Sol," accessed January 9, 2018, https://www.costadelsolmalaga.org/5304/com1_bs-Observatorio%20Tur%C3%ADstico/com1_gs-0/com1_mn-0/com1_tc-43/com1_md1_pg-5/.

38. "Estadísticas - Aeropuertos Españoles - Aena.Es," accessed December 16, 2017, http://www.aena.es/csee/Satellite?pagename=Estadisticas/Home.

39. "Introduction - Málaga-Costa Del Sol Airport - Aena.Es," accessed December 13, 2017, http://www.aena.es/en/malaga-airport/introduction.html.

Marbella

San Pedro de
Alcántara

Estepona

Costa del Sol

Málaga

Torremolinos

Benalmádena

Fuengirola

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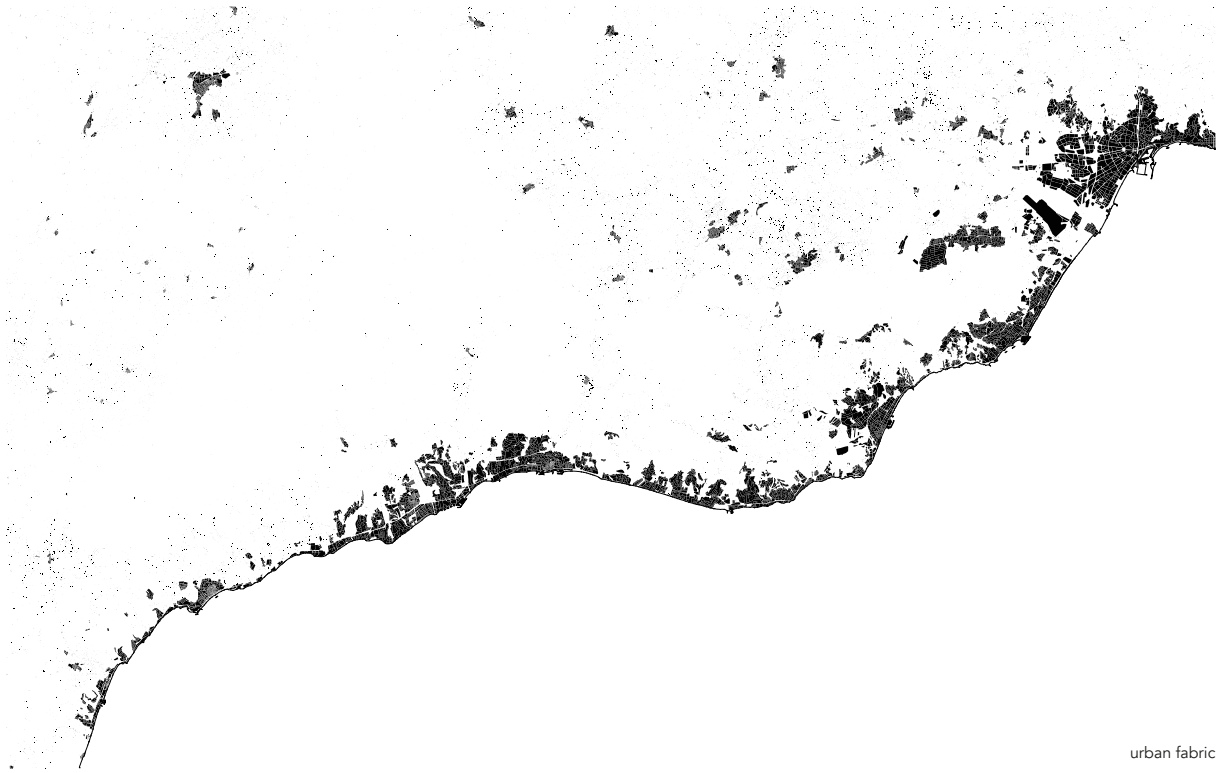
urban fabric

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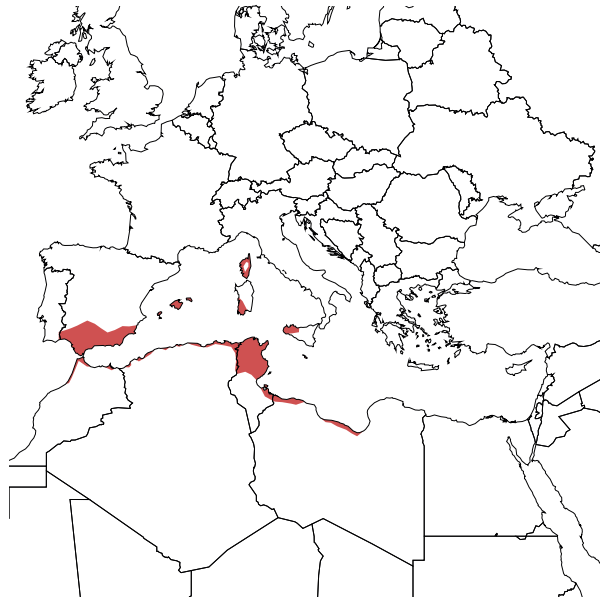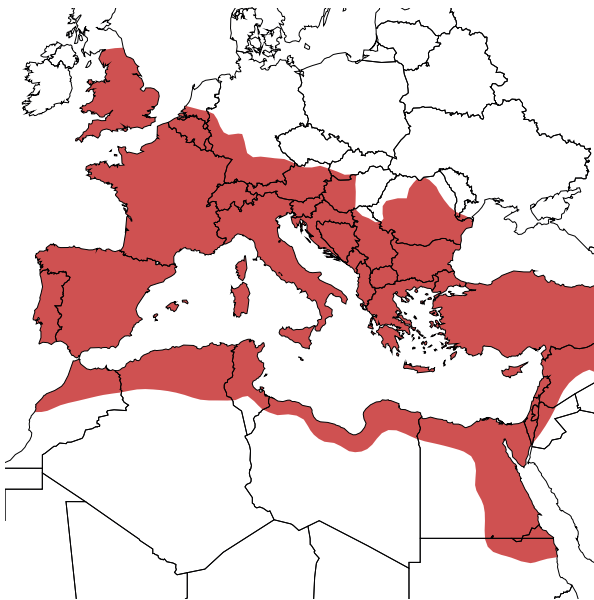
Costa del Sol

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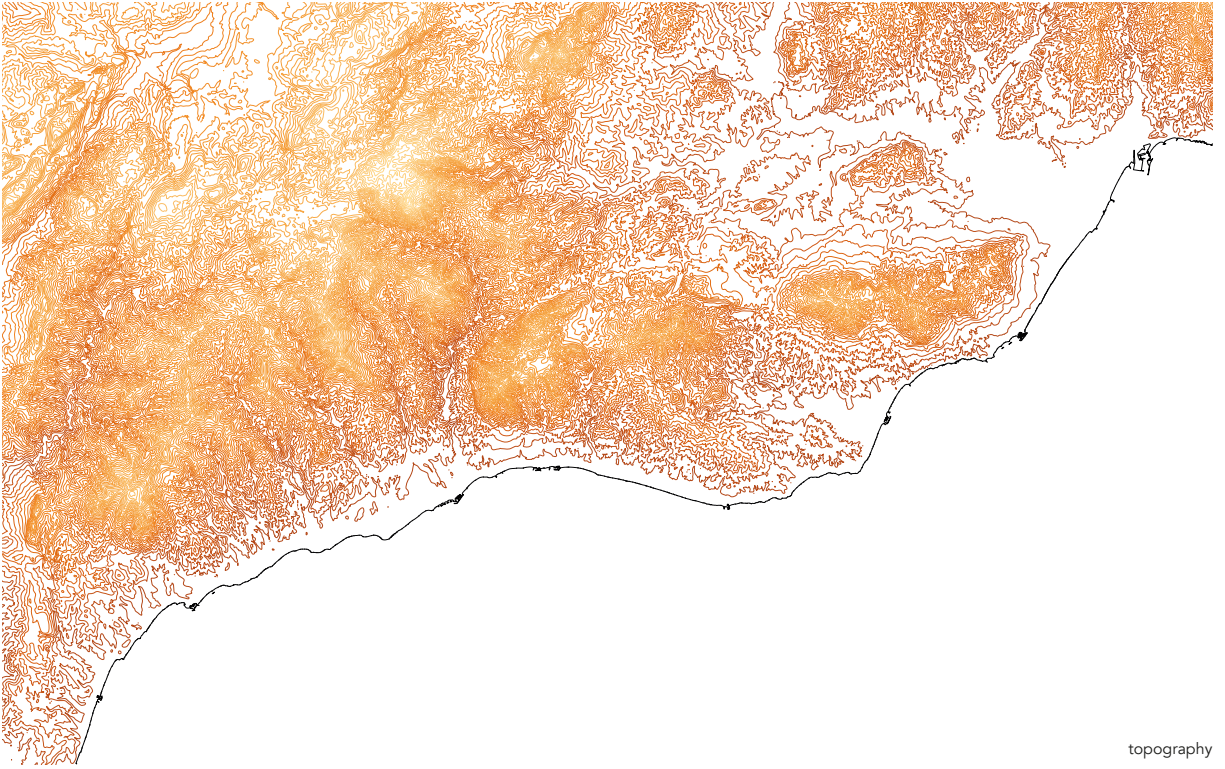
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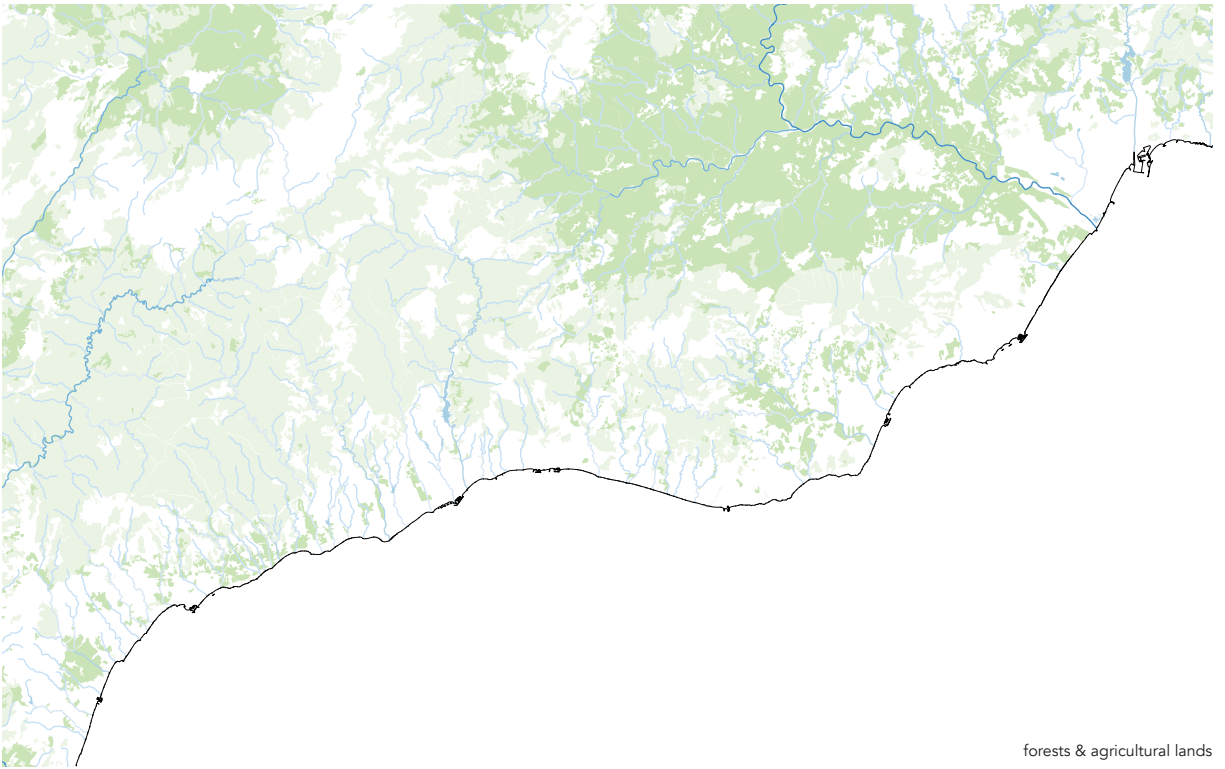
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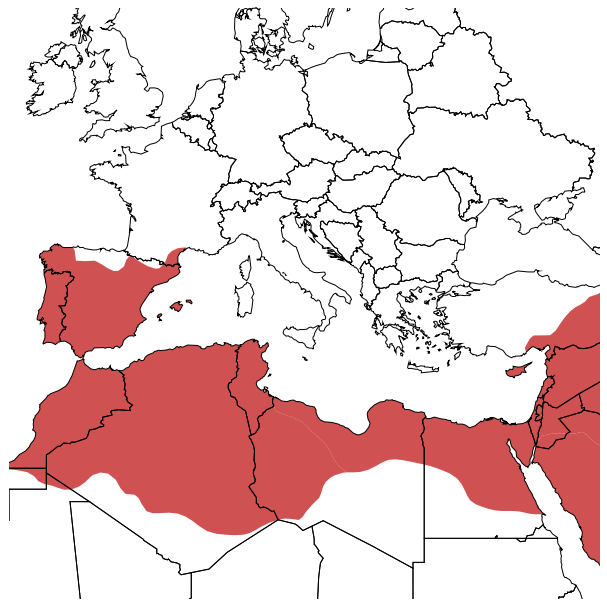
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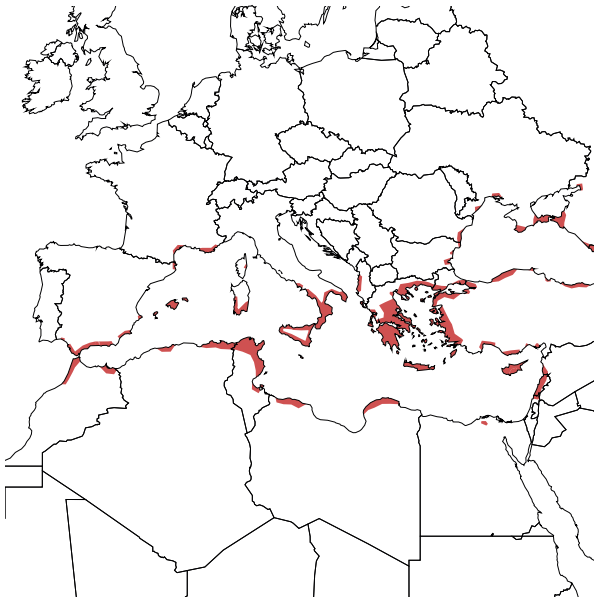
Phoenician & Greek reign 600 BCE

Carthaginian domination 264 BCE

Roman empire 117 CE

Arabic caliphate 750 CE

1:75'000'000

mare nostrum

The history of the Iberian Peninsulas coast is marked by Phoenician, Punic and Greek colonisations. All located on a thin coastal strip, the new towns and necropolises articulated the territory's interior with the cultures of the Mediterranean. The foundations were strategically positioned on islands, peninsulas, forelands of bays, inlets, estuaries and near river channels, facilitating the navigation and communication between the land's interior and the sea.[40] Many of the current cities on the Mediterranean littoral are testimonies of their colonial founders' choices, typical examples are Almeria or Málaga, located at river mouths on the first hill behind the delta.

40. José Díaz Quidiello, Fernando Olmedo Granados, and Manuel Clavero Salvador, *Atlas de la historia del territorio de Andalucía* (Sevilla: Junta de Andalucía, Consejería de Vivienda y Ordenación del Territorio : Instituto de Cartografía de Andalucía, 2009), 87.

Following the decline of the Phoenician domination, the Carthaginians became the ruling sea power in the western Mediterranean and collaborated with the coastal Phoenician towns. Under Carthaginian reign, Andalusia and its main coastal road accommodated Hannibal's historical assault against the heart of the Roman Empire, leading to their defeat and to the Romanization of Spain. With the arrival of the Romans, the Spanish coastline was fully incorporated into the Mediterranean shores shared by the empire. The *mare nostrum* (Latin = "our sea") was at the very heart of the Empire, defining its territories and creating a new common identity. For the first and the last time until today, the entire Mediterranean region became one political and cultural unity. The reign of the sea lasted for several hundred years, until the late antiquity and the eventual collapse of the empire.[41]

41. Abulafia, *The Great Sea.*

Experiencing a period of diminished importance following the turbulences of the shattered Roman Empire, the coastal fringe regained its ancient strength under the Islamic reign from the 10th and 11th century onwards. The development of the region next to the strait of Gibraltar and the neighbouring Costa del Sol stood out in particular, where important ports like Málaga and Almeria permitted exchanges with the African continent, Italy and further east along the Mediterranean.[42]

42. Díaz Quidiello, Olmedo Granados, and Clavero Salvador, *Atlas de la historia del territorio de Andalucía*, 95.

While the Phoenician remains are hardly visible apart from their strategic choices of settlement locations, the roman empire left traces in the urban fabric as well as in the culture and the language of the present population. Ruins of roman estates and villas as well countless foundations of cites throughout the Iberian Peninsula bear testimony of the sudden urban development. The Islamic reign introduced another, more informal type of urban morphology, while mostly reinforcing previously existing settlements. The Arabic medinas and alcazabas (fortifications) still compose the heart of many present-day cities along the coast, notable examples are Malaga, Marbella and Estepona.
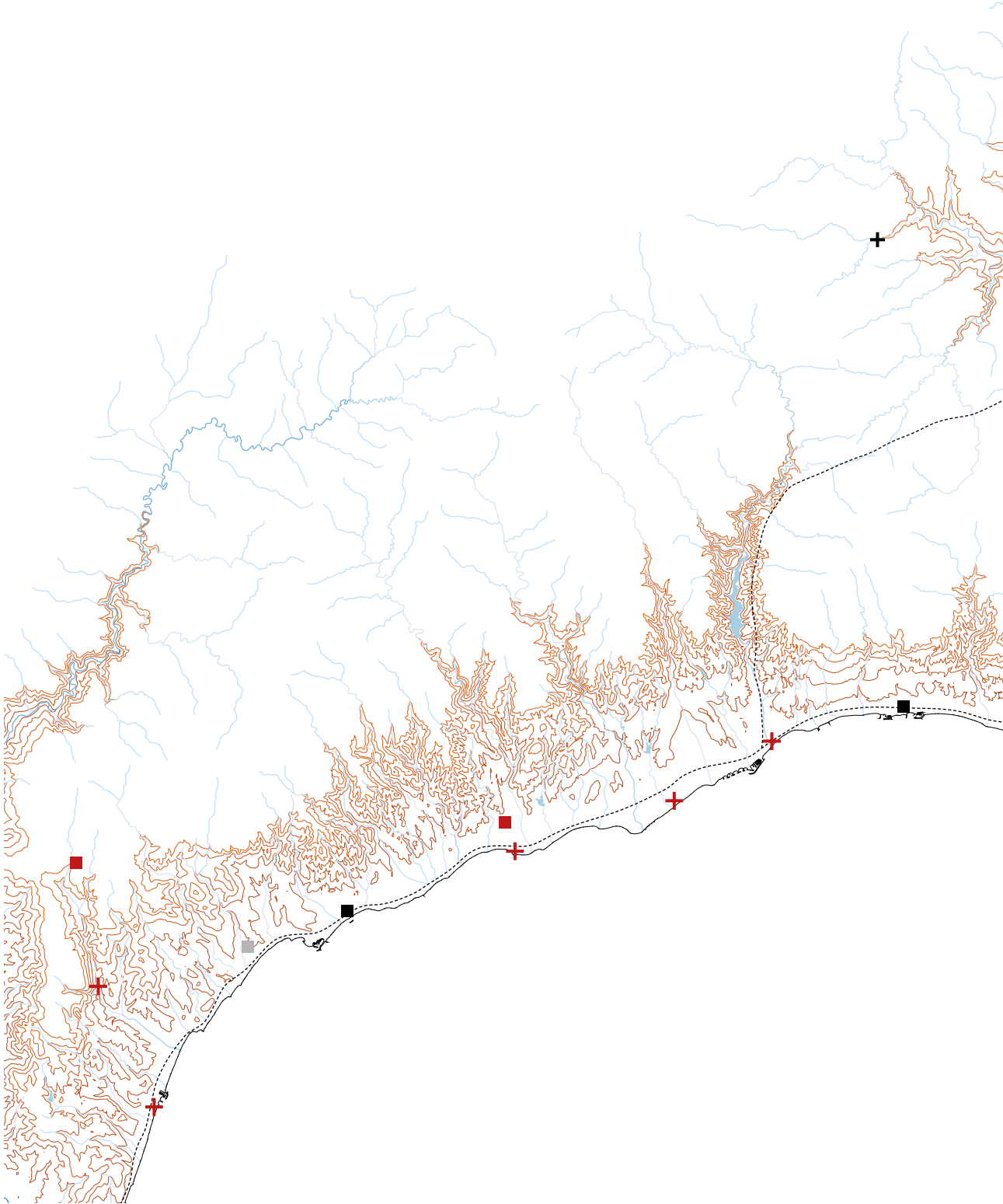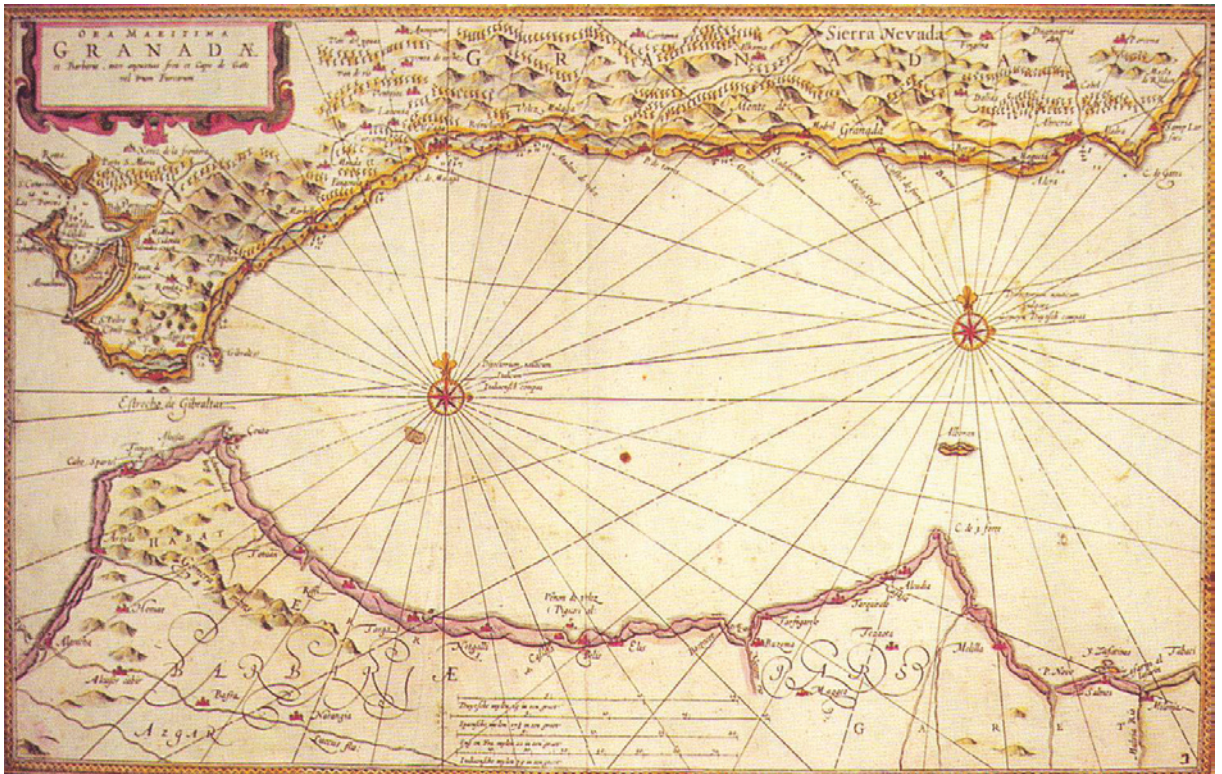
mare nostrum
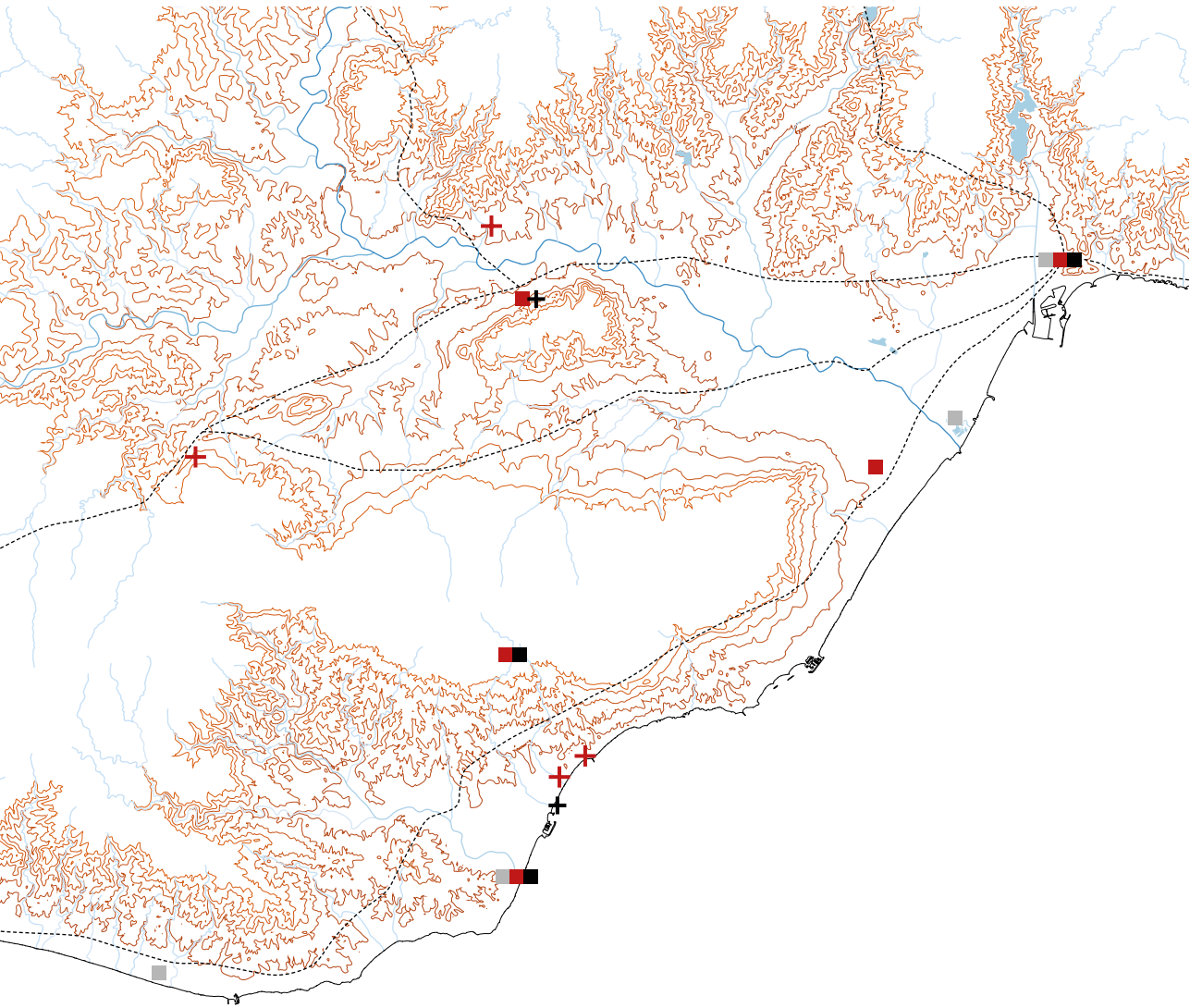
phoenician ⬜
roman 🟥
arabic ⬛

roman villas & baths +
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roman road ⋯
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🕐 1:250'000

nautical chart of the Andalusian coast ca.1700

contested border

contested border

Following the *Reconquista* of the Iberian Peninsula, the seafront completely changed its status from being the main connection and an important settlement zone to the physical manifestation of a border. The Christian conquest, terminating in 1492, set the southern limit of European lands and culture, creating a line of vigilance against African shores. The coast became an insecure area, virtually drained of its rural population, which moved to cities, well-defended inland settlements and small hermitages. The medieval movement of people also opted for the safety of the interior lands and did not frequent the coastal road network as much as under Roman or Islamic reign. Being a vast and vulnerable border, military defence was a priority at the coast throughout the entire Christian reign, a tendency that is still apparent by the extensive number of lookout towers marking the coastline today.[43] Together with the castles, the evenly distributed coastal towers formed the backbone of Christian domination, assuring the control over the territory against threats such as the Berber tribe attacks. In case of an enemy vessels sight, fires were enlightened on the towers terraces to signal the approaching attack.

The Christian reign inversed the denotation of the coastline as well as it intervened into the very heart of the reconquered cities, destroying or transforming nearly all mosques in order to install churches and creating a new layer of the territory's palimpsest. The castles as well as most of the originally freestanding watchtowers have been swallowed by recent developments and now figure as tourist attractions in the modern urban fabric of the coast.

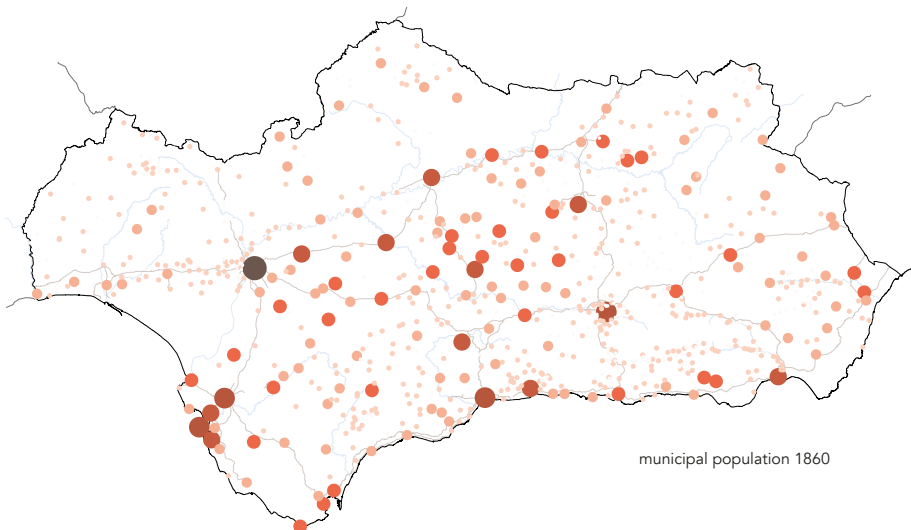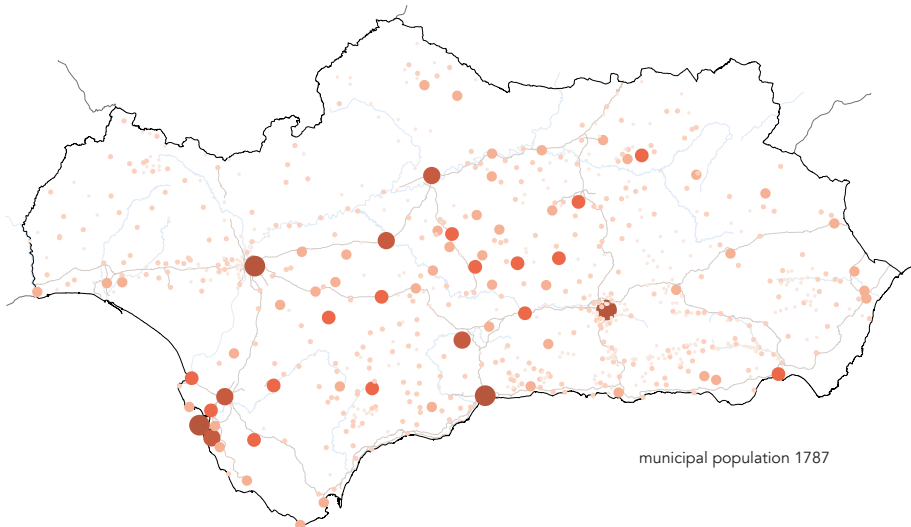43. Díaz Quidiello, Olmedo Granados, and Clavero Salvador, 190.
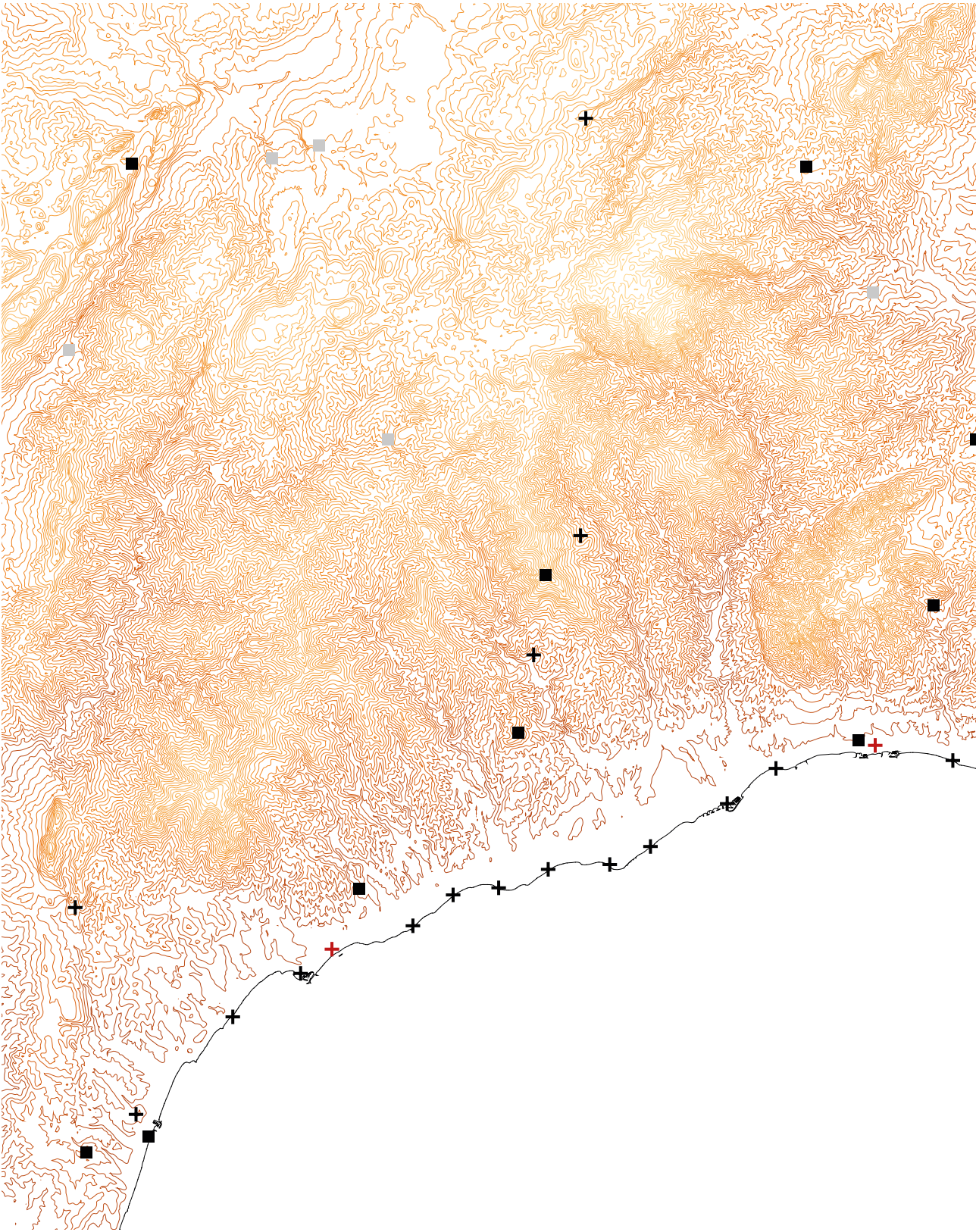
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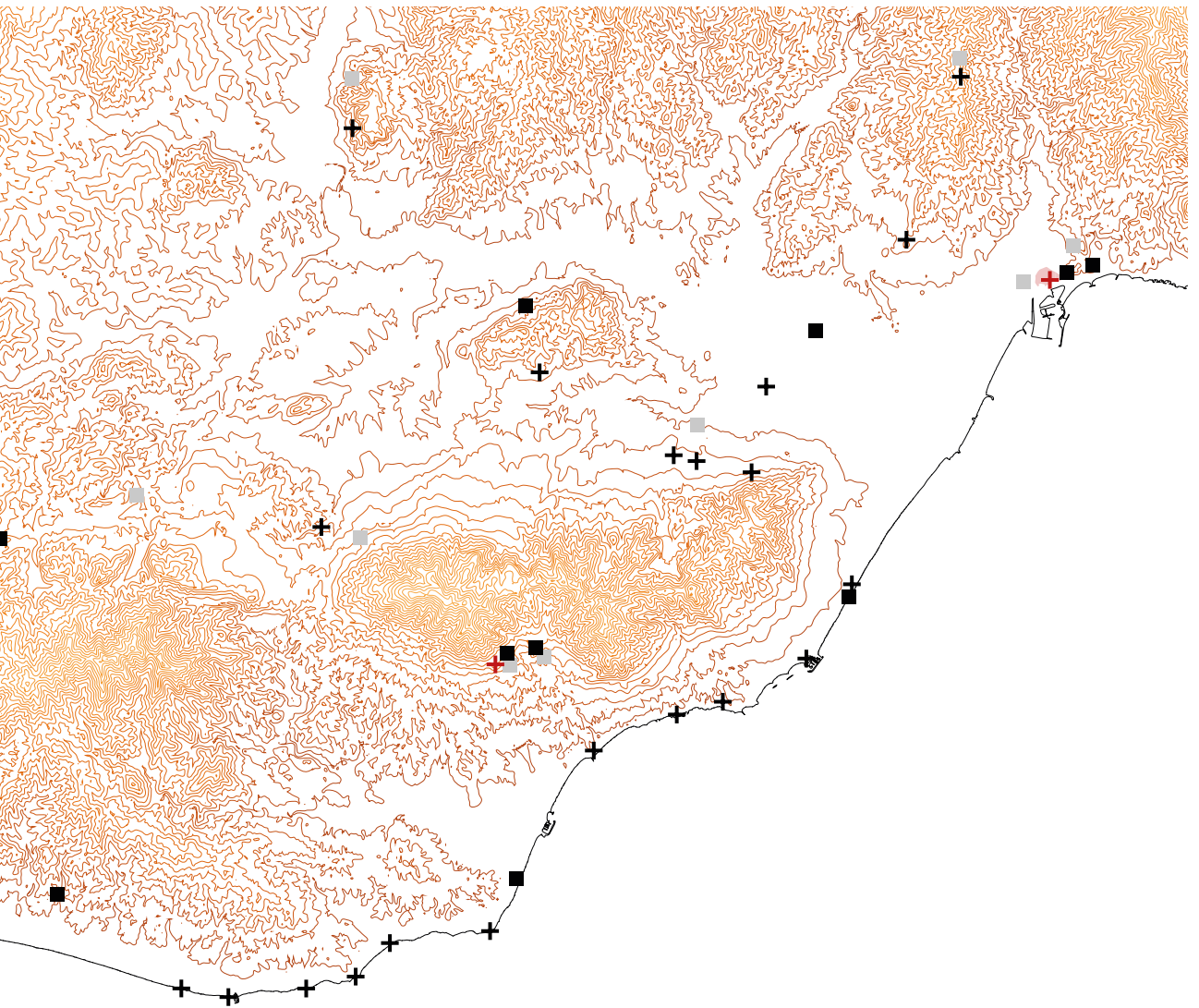
watchtower +
castle ■
hermitage ■

mosque replacement +
arabic medina ■

contour lines 50m —

🕐 1:250'000

municipal population 1787

municipal population 1860

agricultural hinterland

42

agricultural hinterland

From the 18th century on the commercial power and wealth in Europe, concentrated for centuries around the Mediterranean, shifted to its north-western areas, which became the epicentre of the industrial revolution. Southern Europe was largely bypassed by this development, with the Mediterranean economies lagging behind their northern neighbours.[44] Nonetheless, the Costa del Sol gained a brief new prominence during the 19th century, becoming a pioneering region of the first industrial revolution in Spain. The discovery of mineral resources led to a veritable mining fever, especially in Marbella, where the first blast furnaces of the Spanish iron industry were put in operation.[45] At their peak of production, 75% of the Spanish iron were melted in the two local establishments.[46] Due to the absence of a distant rail connection, a pier and a short mine railway was erected to load the ore and iron onto ships. As fast as it rose, the industry's importance declined rapidly due to stiff competition working with much cheaper stone coal in northern Spain and it eventually vanished during the Great Depression of the 1930s.

Even though some mines remained active for extraction, the decline of the iron industry triggered high unemployment and many workers were forced to focus back on fishing and agriculture to survive. The poverty led to large migrations of workers to the industrial centres of Andalusia and the northern regions of the country. Following the decline of the mine industry, large agricultural colonies were created. Precursor of today's San Pedro Alcántara, a village just east of Marbella, one of the largest cultivations of the country was founded, dedicated to sugarcane and beet.[47] Apart from big cities like Málaga, the whole Andalusian coast as well as many other Mediterranean regions continued to be poor, agriculturally-orientated hinterlands until the beginning of the 20th century and the rise of a new commercial sector, tourism.

44.   Bramwell, *Coastal Mass Tourism.*

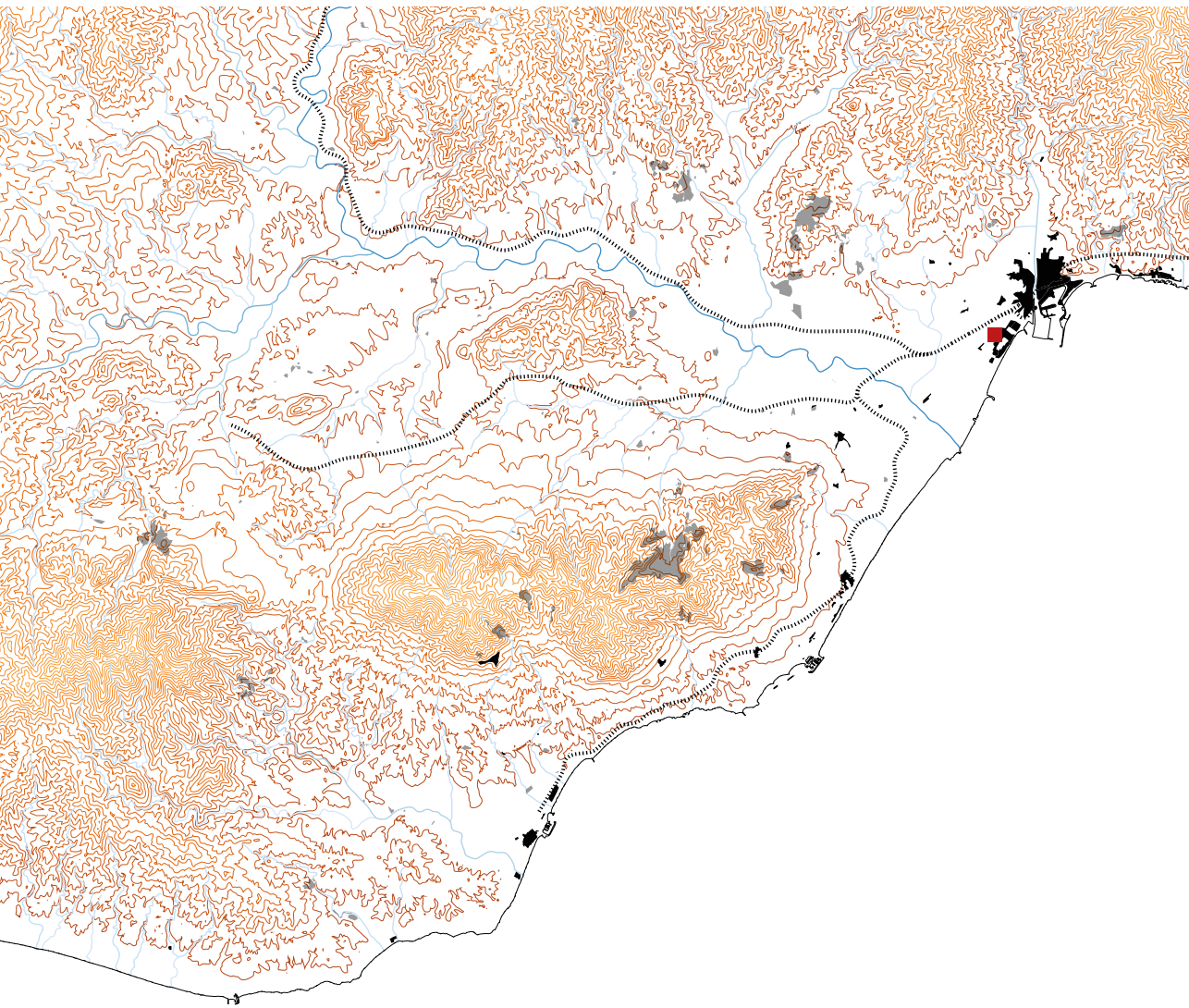45.   Díaz Quidiello, Olmedo Granados, and Clavero Salvador, *Atlas de la historia del territorio de Andalucía*, 190.

46.   "Historia de Marbella," July 1, 2018, http://www.malaga.es.

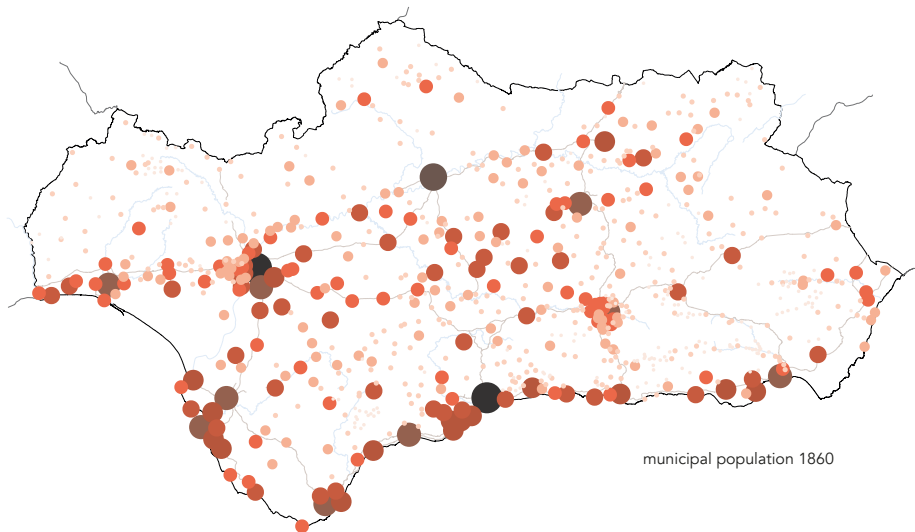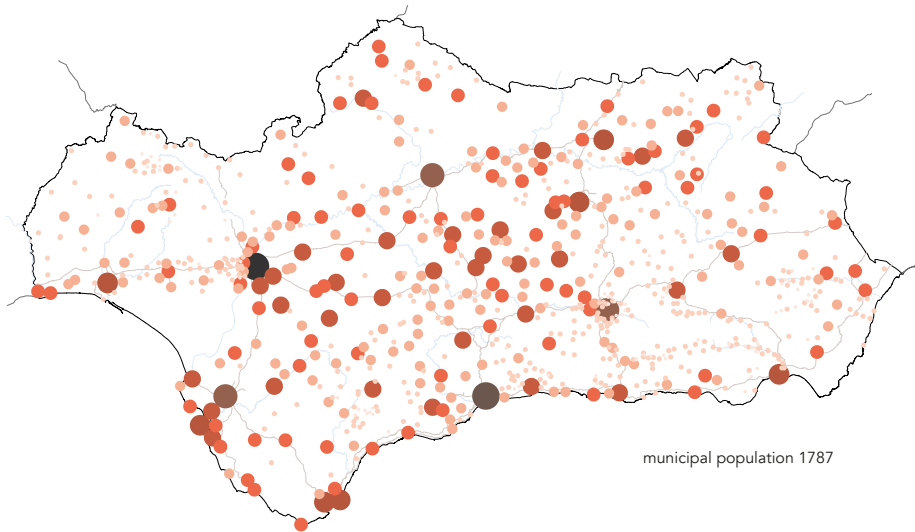47.   "Historia de Marbella."
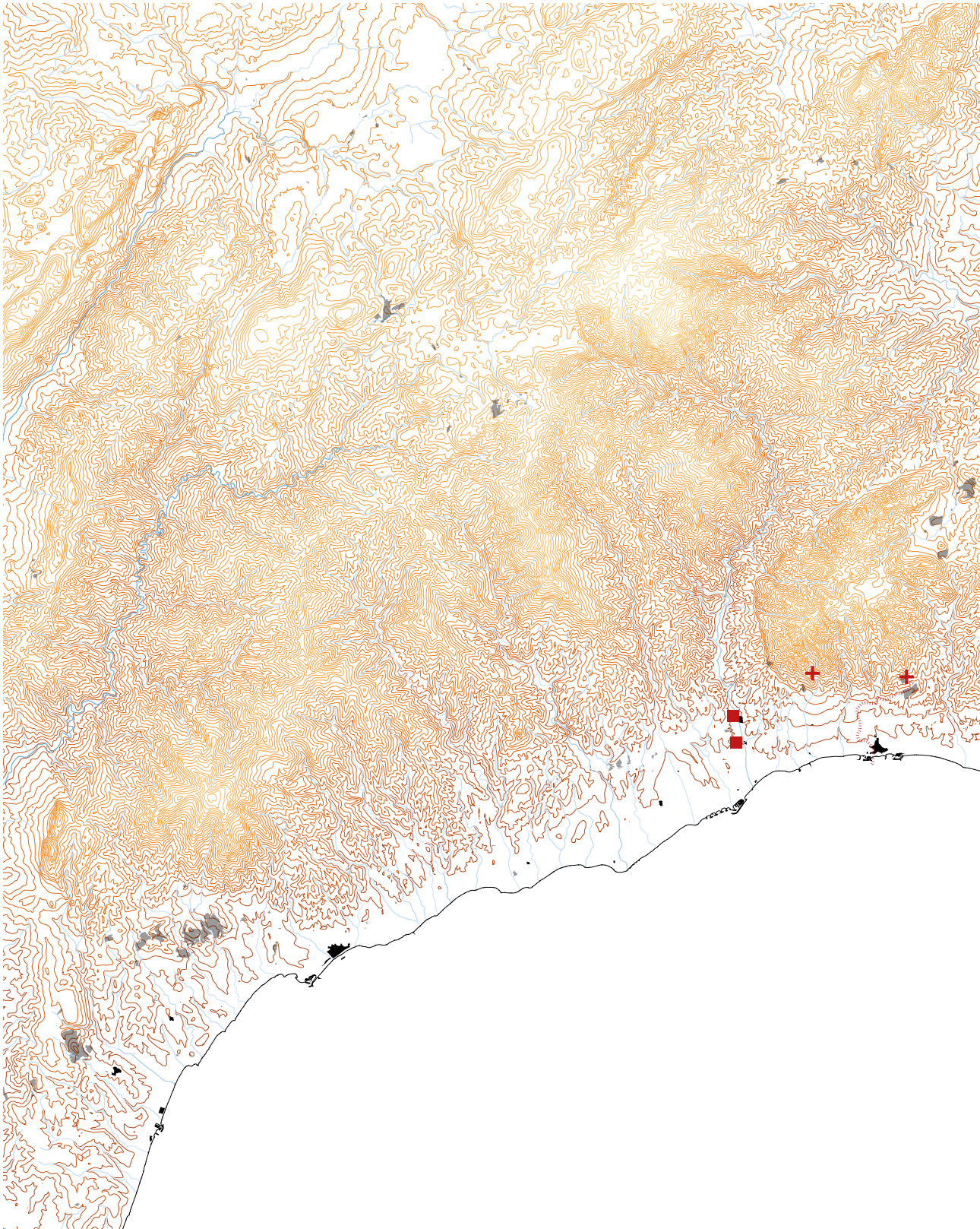
agricultural hinterland

urban 1916 ■

mine ▨
blast furnace ■
iron mine Marbella ✚

railways ⋯
mine train ⋯
contour lines 50m —

🕐 1:250'000

municipal population 1787

municipal population 1860

destination dictatorship

destination dictatorship

Ironically, it was the population of the industrialised countries and regions that initialised the Mediterranean's "rebirth" via the initial development of the tourism industry, which eventually led to modern mass tourism. Together with intensive agriculture and industrial developments, the tourist economy has fuelled the economic growth of southern European countries up until today.[48]

Beginning in the 1920s, the Spanish government started building new infrastructure and publicly owned hotels to initiate a tourist development in cities like Madrid, Sevilla and Málaga. The joint action of foreign tour operators and the dictatorships of Primo de Rivera (1923-1930) and Francisco Franco (1939-1975) facilitated the radical transformation of the Spanish tourist sector. [49] Many coastal villages focused on fishing and agriculture before were heavily converted by state interventions to accommodate the growing number of mainly foreign visitors. The first actions of the Primo de Rivera dictatorship slightly opened up the country's economy and created the first touristic centres, notably along the Costa del Sol. The real boom however occurred in the 1960s under the Franco regime, when the country abandoned the political autocracy and explicitly turned towards mass tourism in order to generate much needed financial means.[50] The Spanish state was the driving force in the evolution of many tourist destinations, building hotels, promoting professional training, favouring the construction industry and offering new infrastructure. In particular, the rebuilding of today's Málaga–Costa del Sol Airport in 1935 triggered the very intensive development of the region, facing only few obstacles and regulations. [51] The tourist expansion followed the coastline and the coastal highway as its main lifeline, incorporating the old villages and cities en route.

48. Bramwell, *Coastal Mass Tourism.*

49. Mikael Hård, *Urban Machinery: Inside Modern European Cities,* Inside Technology Series (Cambridge, Mass: The MIT Press, 2008), 115–16.

50. Hård, 115–16.

51. Hård, 115–16.

destination dictatorship
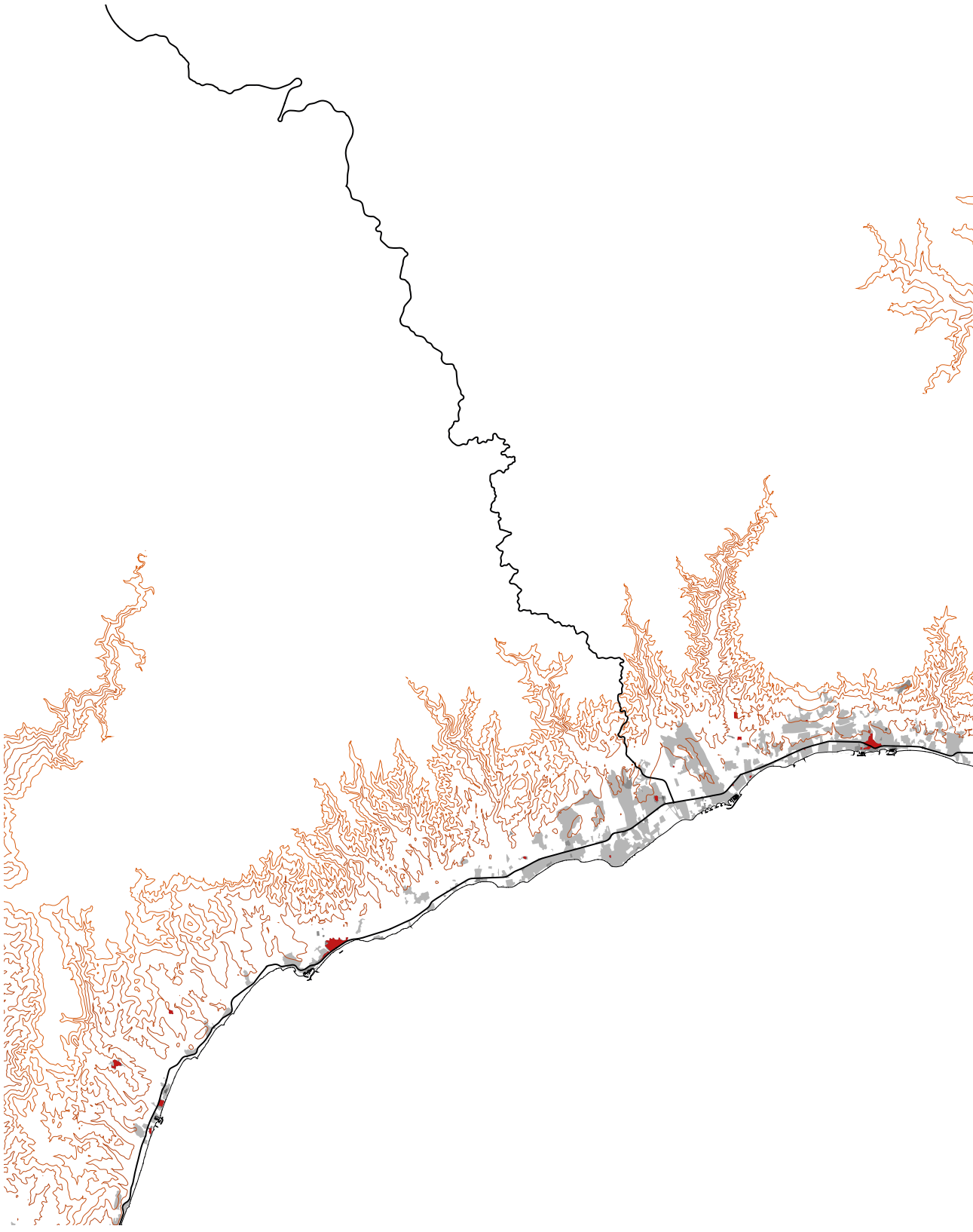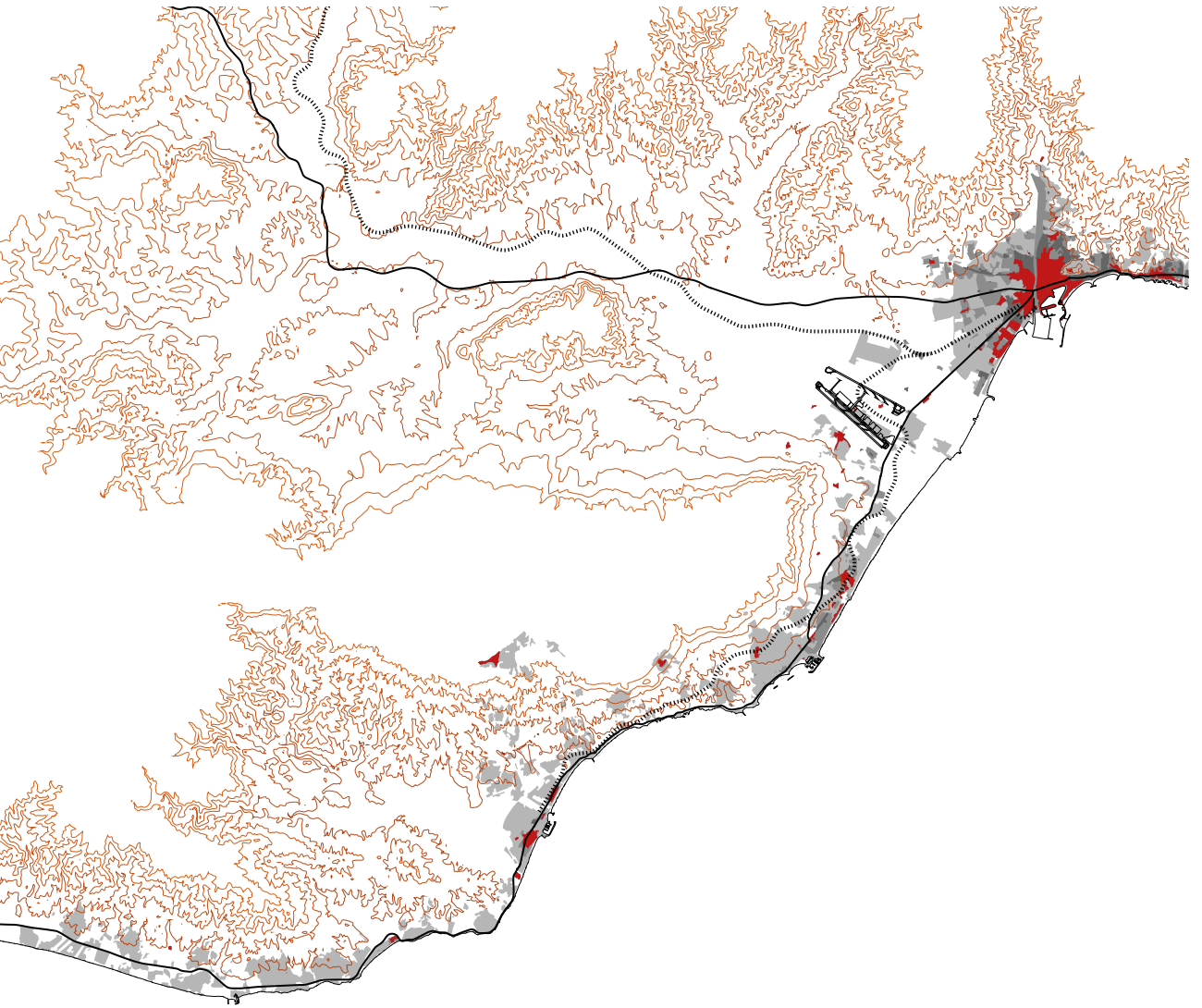
urban 1916 🟥
urban 1916-1978 ▨

main roads —
railways ⋯⋯
contour lines 50m (0-250m) —

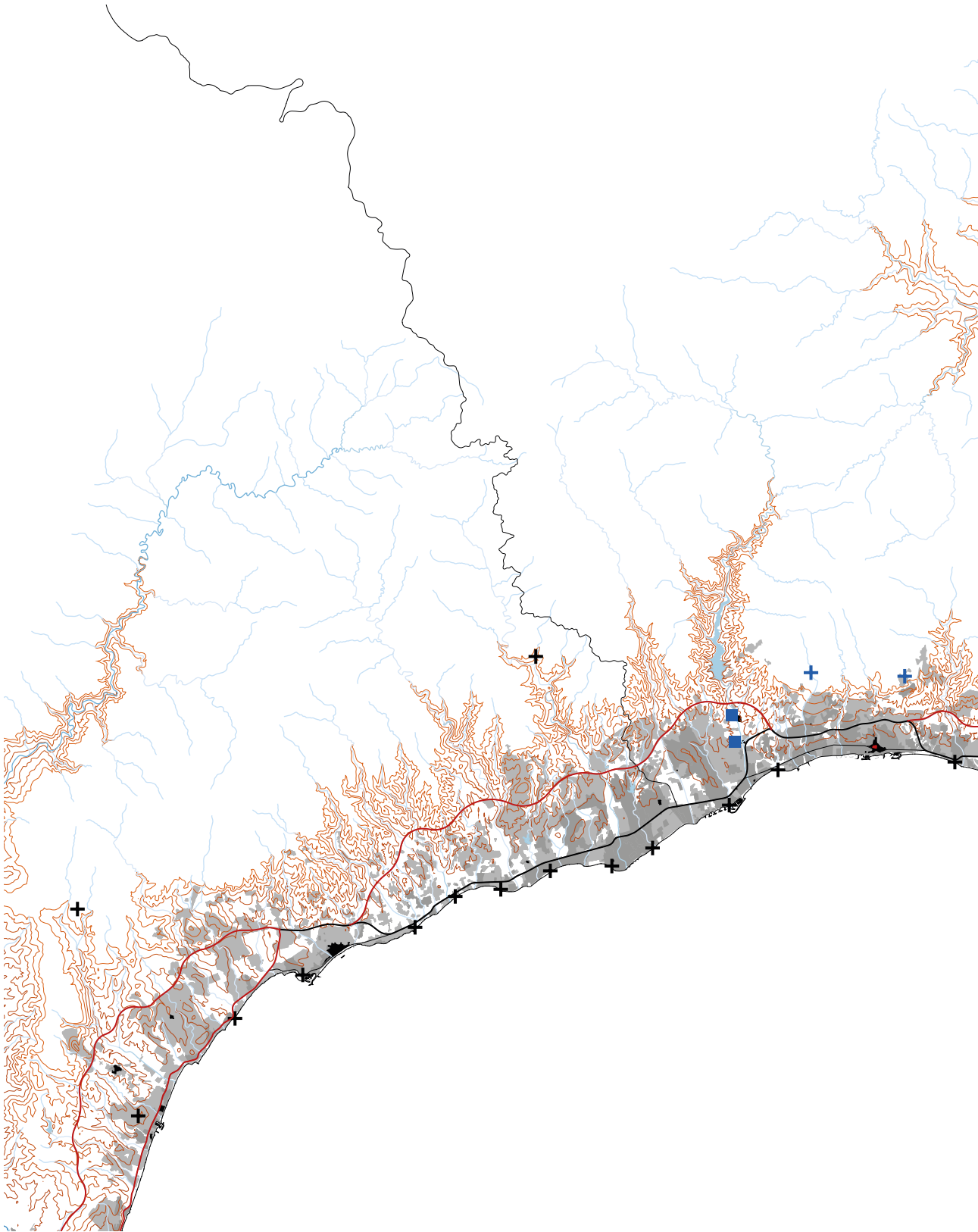🕐 1:250'000

linear homogeneous urbanisation?

Despite the region's extensive and turbulent history, it was mainly the transformations of the second half of the 20th century that radically modified the coastal functions, landscapes and the pre-existing territorial order. Today, the two prevalent functions in Andalusia are leisure-orientated developments together with the intensive agriculture of forced crops and greenhouses which is occupying the coastal plains in the less touristic areas. Both sectors compete for land and scarce water resources, while the infrastructure barely manages to keep up with their rapid growth. Whereas agriculture is creating huge areas of greenhouses, tourism creates zones of conurbation between population centres, also referred to as a "built-up continuum" [52]. With their combined impact, the two industrial branches act as different kinds of monocultures, both resulting from the ideal climatic conditions and both affecting the territory.
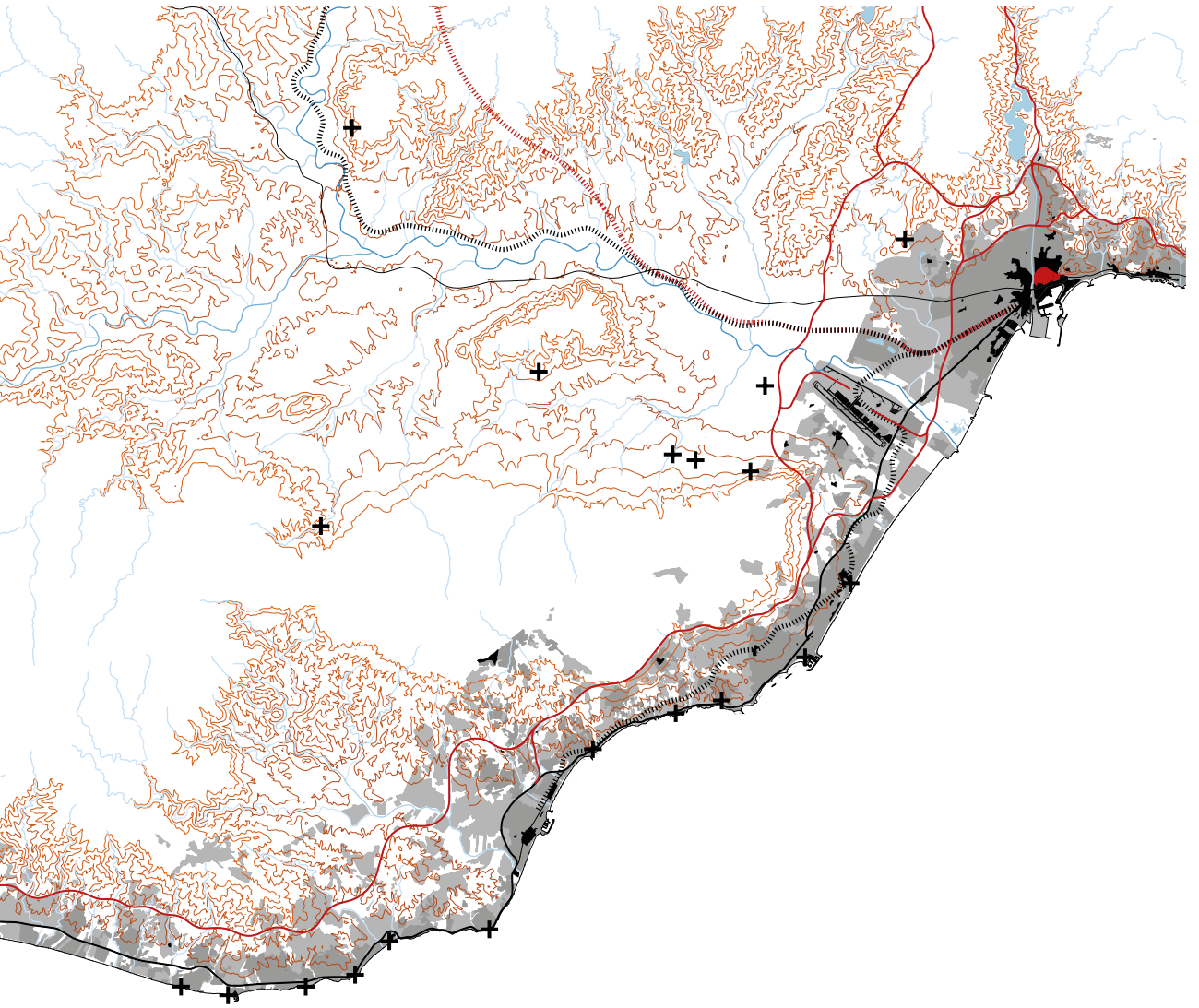
At the scale of the Costa del Sol, the urbanisation does appear to be one long ribbon of urban fabric, blurring the borders between the historical cities and the new developments but not erasing them completely. It shows its highest density right at the shoreline and around the pre-touristic settlements, whereas other areas show a rather diffuse, car-related fabric. In his book "Young-Old", Deane Simpson claims the: "Costa del Sol may be understood as a linear form of ex-urban development, forming a metropolitan condition without a clear organizational or productive centre of gravity – apart perhaps from the role the airport of Málaga plays in facilitating the trans-national mobility necessary for the realisation of such a condition."[53] Simpson's statement is arguably a simplification, as the historic centres still act as the main nodes of the mesh-like urbanisation articulated by the road network.

Having analysed the historical formation of today's urban condition, the built environment represents the assumed linear organism, but the first impression of an apparently homogenous urbanisation gets challenged and raises questions about articulation of the different fabrics on the territory. As the historical glimpses of this chapter have illustrated, the Costa del Sol has seen diverse types of exploitation and developments which still appear to impact the current urban condition and point to a fragmented reality rather than homogenous urbanisation. Therefore, an analysis at a smaller scale is needed in order to verify the hypothesis of this urban fragmentation, looking at the composition of the urban fabric on a more detailed level.

52. Díaz Quidiello, Olmedo Granados, and Clavero Salvador, *Atlas de la historia del territorio de Andalucía*, 190.

53. Deane Simpson, *Young-Old: Urban Utopias of an Aging Society* (Zürich: Lars Müller Publishers, 2015).

linear homogeneous urbanisation?

arabic medina
urban 1916
urban 1916-1978
urban 1978-2011

watchtower
iron mine
blast furnace

A-7 1986-1990
AP-7 1996-2008
railways
AVE highspeed
contour lines 50m (0-250m)

1:250'000

3. Marbella – fragmented realities

introduction

This chapter focuses on a specific area on the Costa del Sol, the conurbation of Marbella. As one of the first and most important regional tourist centres, the city exemplifies the stages of the urbanisation process that are common to a large part of the Spanish coast. [54] The area's present urban fabric is analysed in search of proving the hypothesis and highlighting its implications and problems. The findings of the previous chapter help place the local occurrences in the wider context of the coast and finally within the whole Mediterranean region. The two following readings highlight different aspects and lead to the recurring question of the definition of the so-called Mediterranean city and its particular type of urbanity.

In Marbella, the first expansion happened around the historical nucleus of the Arabic medina, followed by a dense occupation of the coastal front with open block typologies, new housing developments towards the hillside and finally by the colonisation of the rest of the space with low density villa and apartment typologies. Aerial images of 1956, 1977 and 2017 on the following pages illustrate the different stages of development, showing the big transformation of the rural coastline into a holiday resort and finally one ribbon of urban sprawl. The urban framework of Marbella presents several, distinct types of developments. Each shows a significantly different density, porosity and urban morphology and together they create a highly fragmented urban reality.

On the western section of the city, the historical centre is clearly visible. It exhibits a very dense fabric dating from Roman and later Islamic reign and is marked by a high porosity due to the many small roads and passages. Like many smaller towns, it is historically set back from the shore and its dune landscape for security reasons, meaning that today the historical fabric is cut off from the sea by the main coastal road and a row of hotel and apartment developments occupying the beachfront. Those much bigger constructions show completely different characteristics and represent a global instead of a local context. They are mainly composed of rectangular blocks lying on top of wider base buildings, which accommodate the service functions. Together with privatised outdoor areas they usually occupy the entire available plot, only offering some sidewalks and the beach promenade as public amenities to non-residents. To the east of the historical centre, another type of building appears, the working-class apartments. As the ever-increasing demand of tourist services requires a large number of workers, the city built very straightforward and dense block typologies to meet the demand of affordable flats. As they satisfy very different needs than those required by a tourist or a temporary resident, they attract a very

homogenous population. Juxtaposed to the city on its north lies the most central villa development, again showing a radically different typology of low-density suburbia, composed of single family homes or small apartment blocks with private gardens and sinuous streets. The last evolution of this type are the so-called urbanisations growing everywhere around the city, preferably at the beachfront or on small hills. Some of those developments specialise in offering pools, tennis facilities and golf courses to their tenants and occupants, creating communities of shared interest in a gated environment. Often possessing only one or very few entrances, the suburbs are a car-orientated fabric with virtually no public transport.

The main access to the city is granted either by the A-7 following the coastline, also called Autovia del Mediterráneo, or the by the new privatized coastal highway AP-7 dating from 1990s. Instead of crossing through the city centre, the path of the A-7 gets diverted around the city and merges with its new neighbour, whereas the former coastal road continues to cut through the fabric. Disconnected from the rail network, a bus network represents the city of Marbella's only public transport for close-by as well as regional destinations like the airport of Málaga. The city possesses two, mainly leisure orientated ports, with the Marina La Bajadilla also accommodating small scale fishing activities.

Marbella 1956

Marbella 1977
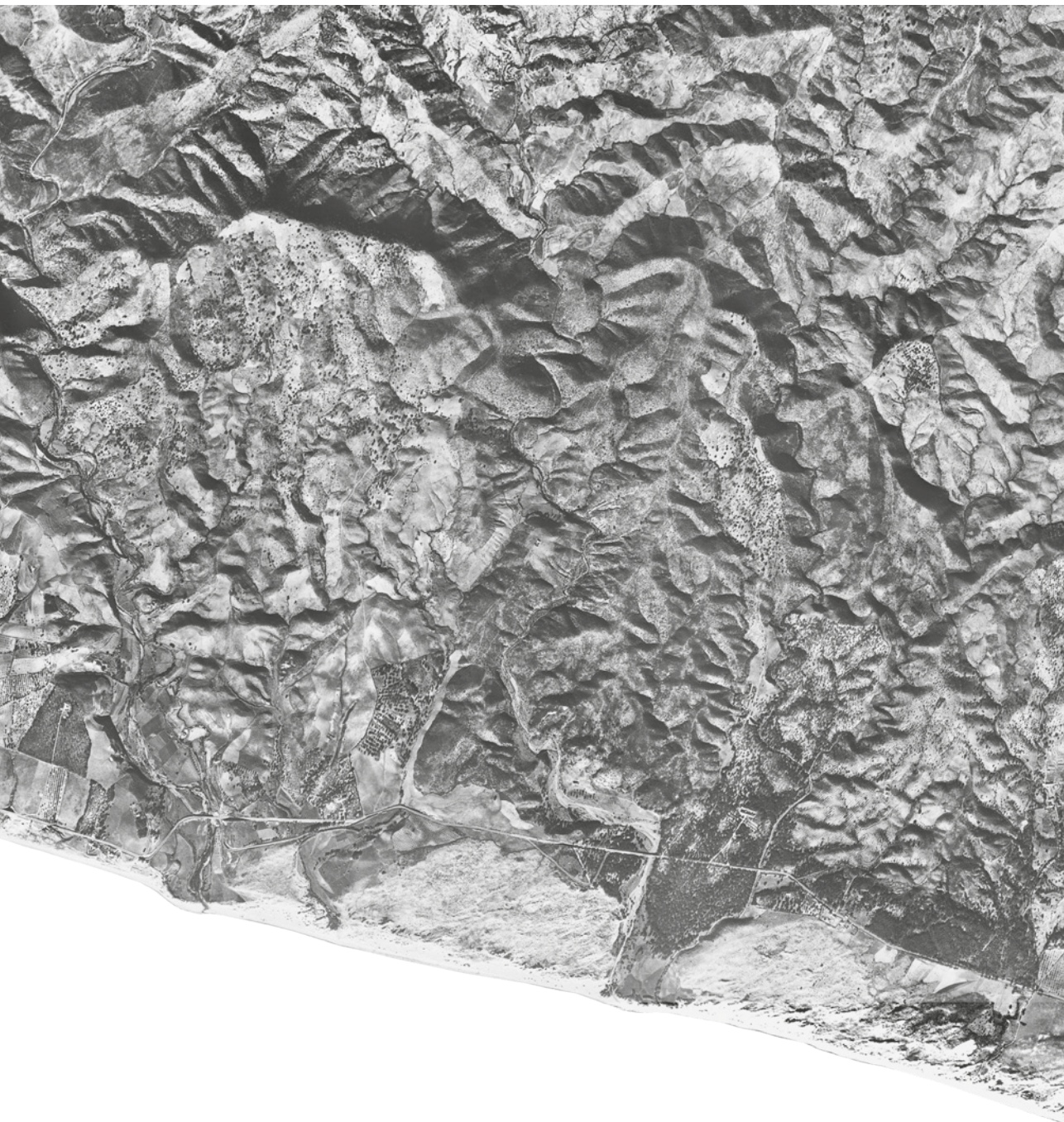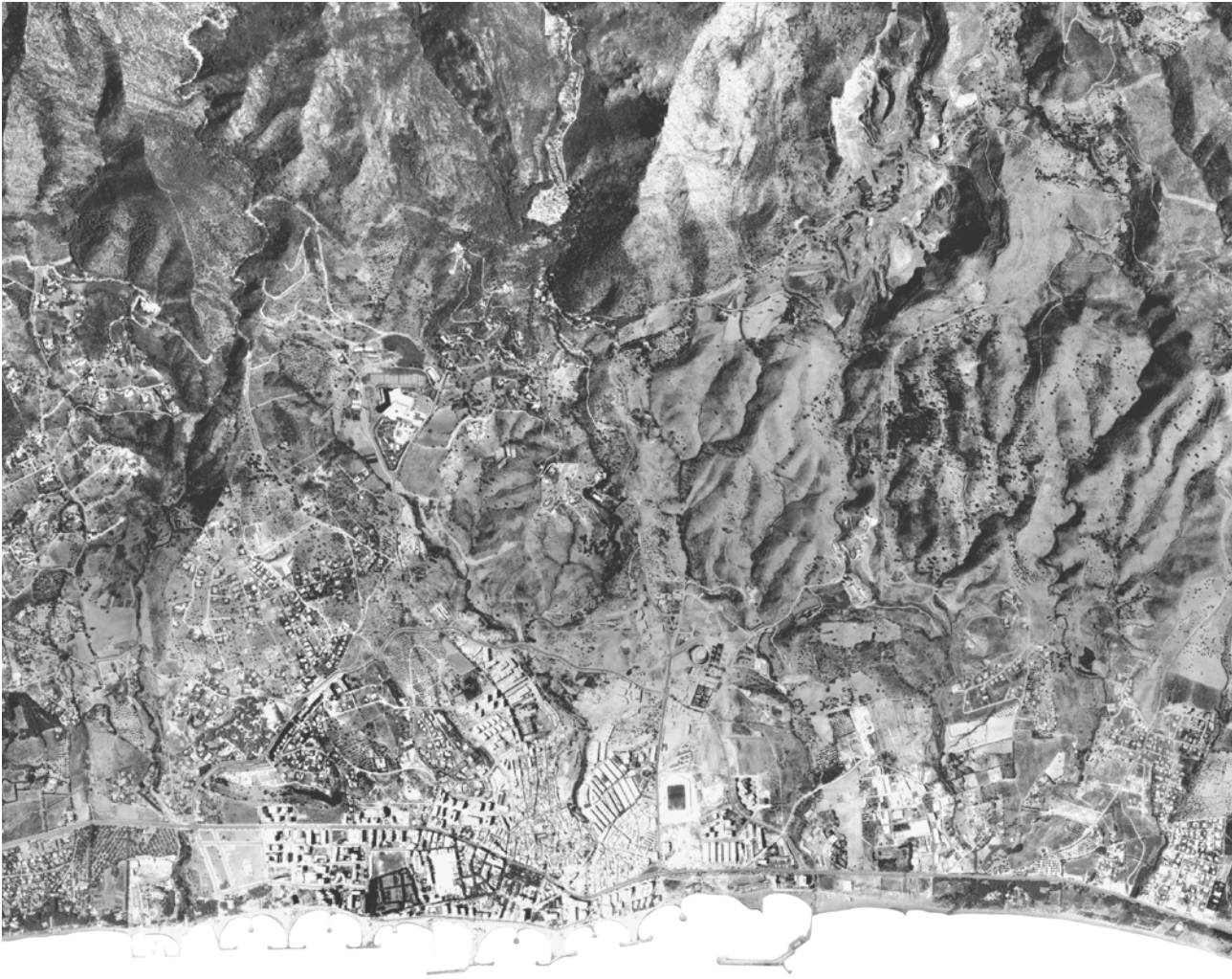
Puerto Deportivo

Marbella

Marina La Bajadilla

Marbella 2017

Urbanización Los Monteros

Urbanización Las Brisas

Urbanización Bahía de Marbella

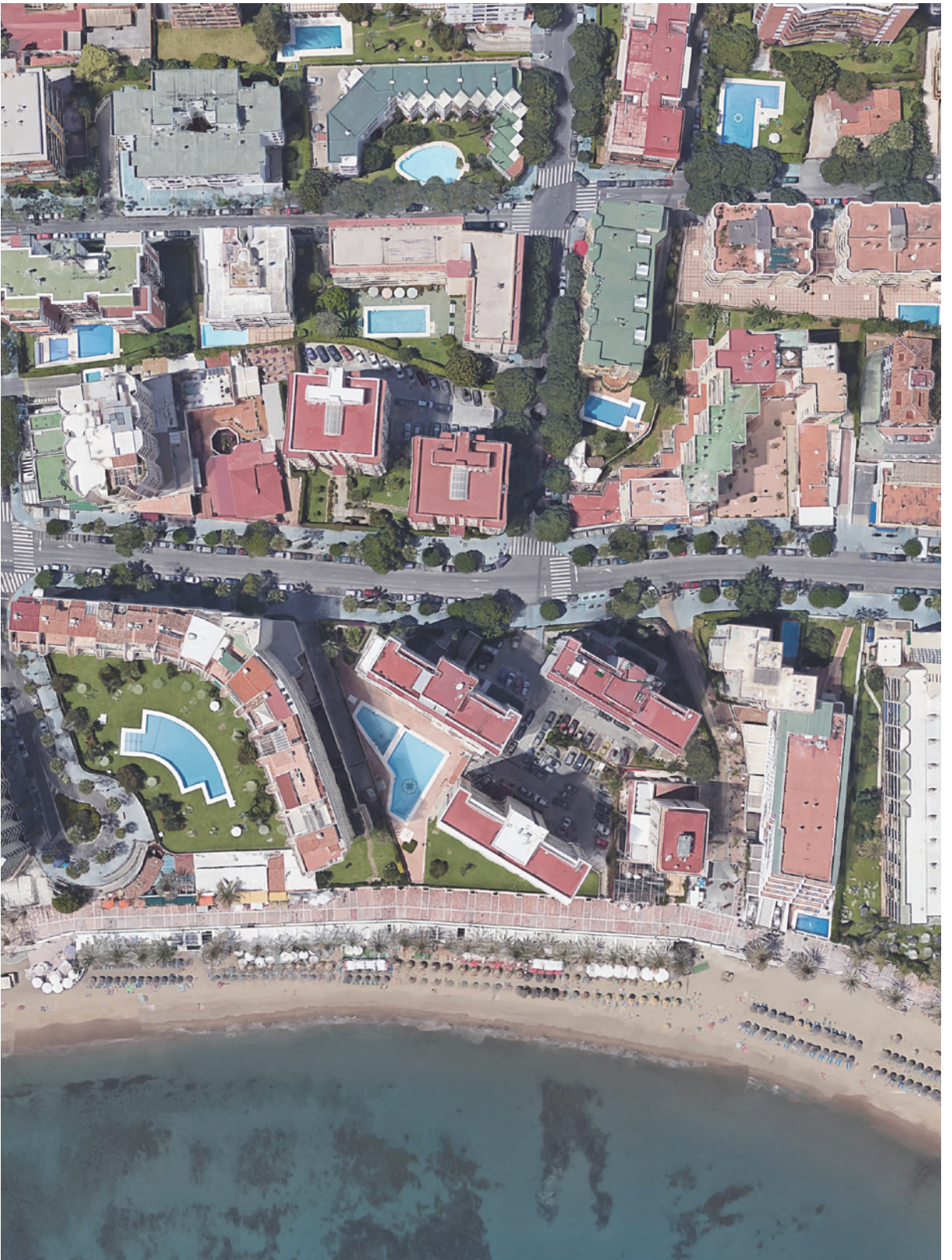Urbanización Los Monteros

Las Chapas

Urbanización Costabella

Urbanización Vistamar

Urbanización Jardín de los Pinos

1:30'000

historical centre

workers housing

bechfront developments

viilla neighbourhood

A-7

AP-7

mobility

The mobility and pedestrian porosity of the transport infrastructure compose the first framework for understanding the qualities and issues of the analysed section, being an important factor for the apparent linearity of the Costa del Sol's urban fabric.

The historical fabric of Marbella's centre is very porous, dissected by countless streets and alleys, mainly a heritage of the Islamic consolidation of the city. The outline of the medina together with the trace of its citadel are still visible today, with its main commercial roads historically orientated towards the sea.[55] From the 1960s on, the ancient centre was deprived of its direct access to the sea through the construction of the first coastal highway and a row of hotel developments. Along with many other Mediterranean examples, Marbella experienced the often traumatic invasion of cars into the historical urban fabric, a "process that has deeply affected not only the general functioning of cities but also the form of Mediterranean urbanity that they materialized." [56]

Partially, what the urban space lost to the car has been reclaimed through the partial diversion of motorized traffic around the city, but the highway's former presence still leaves a deep scar in the urban fabric in the form of a four-lane road. Although the city's porosity towards the sea has increased since this transformation, this is still not the case just outside the city with very few passages crossing the coastal highway. Even inside the city limits the number of crosswalks decreases quickly from the historical centre to its borders. Outside the city many inhabitants are forced to make large detours to reach pedestrian bridges, the highway with its heavy and fast traffic acts as a physical barrier. In some sections, the bridges present the only pedestrian access to the sea, a problem accentuated because of the road's proximity to the coastline. As most of the remaining free space has been built up with sprawling developments, there seems to be no apparent solution to this constraining condition apart from creating more crossing points. The A-7, the main coastal road distributing most settlements can hardly be dislocated and will continue to be used even if the upper privatised highway AP-7 became public and free to use. The AP-7, located further up the hill and parallel to the old one, demands toll fees and is therefore sparsely used by the local population which leads to further congestion of the old system.

The lack of space is also a problem for the promotion of public transport. Planned to be a tunnel for most of its length, the project for a new train line connecting all of the Costa del Sol from Málaga through Marbella to Algericas seems to have been virtually abandoned due to uncontrollable costs.[57] Being discussed for over a century, it is not even clear whether

55. "Descripción Del Casco Histórico de Marbella," accessed December 31, 2017, http://www.marbella.es/cultura/patrimonio/casco-historico/descripcion-del-casco-historico.html.

56. Antonio Petrov, *The Mediterranean*, vol. 5, New Geographies (Cambridge, Mass: Harvard University Graduate School of Design, 2013), 238.

57. "La Mayoría de Las Inversiones Públicas Prometidas Este Año En Málaga No Se Han Ejecutado," Diario Sur, December 26, 2017, http://www.diariosur.es/malaga/mayoria-inversiones-publicas-20171226194344-nt.html.

pedestrian bridge over the A-7, 36°30′06.7″N 4°48′16.4″W

mobility

crosswalk in the centre of Marbella, 36°30′41.2″N 4°48′51.0″W

the new line would connect to the existing and overloaded regional rail tracks currently terminating in Fuengirola or if it would be a completely new, high-speed layout with only few stops. Originally imagined in order to transport ore from the mines in the region to the large ports of Málaga and Algericas, the train line has never been materialised. The only remaining trace of the mining fever is the path of the local light mine railway built to load the ore onto ships, which still visible in the layout of the modern streetscape. Nowadays, the construction of a rail connection forms part of a larger debate around the idea of a Mediterranean railway corridor which would connect the coast of Spain, the backbone of its economic recovery, with France and the rest of Europe. In 2011, the EU declared this transport infrastructure a priority for passengers and goods in one of the most dynamic regions in Europe,[58] but till today Marbella remains the only bigger Spanish city without rail access.[59]

Instead, public transport is only a side note in the car-based transportation system of the area. The only means of transport to distant cities is the bus with a main station close to the centre of Marbella and stops in various inlets along the highway. Locally, small bus lines aim to reduce at least some of the heavy traffic during peak times. While the centre, the nearby outskirts, the bus station and the main shopping centre north of the city are well connected, the further urbanisations are only accessible by few highway bus stops. Even on the water public transport is only playing a side note, one private and short ferry line connects Marbella (Marina La Bajadilla) with neighbouring Puerto Banús during the summer months.[60]

The present transport infrastructure and pedestrian accessibilities show very distinct characteristics in the different urban fabrics. The old medina and part of the newer central developments allow a certain horizontal permeability, whereas the hotel and apartment developments at the beachfront reduce it towards the sea. Further away from the central city, the situation is dramatically different, the pedestrian has to give way to the car, the main and virtually only mode of transport.

In the vision of the horizontal metropolis, the present fabric would offer incredible possibilities of connection due to its linear and continuous urbanisation, but the reality is different. Apart from the centre of the city, today's transport infrastructure works against the notion of a pedestrian, public space orientated and Mediterranean urbanity. As the main lifeline, the coastal highway remains the only element the juxtaposed and disconnected entities are linked to.

58.   Cristina Vázquez, "El Corredor Mediterráneo de Tren Busca Presupuesto y Calendario," EL PAÍS, October 3, 2017, https://elpais.com/economia/2017/10/02/actualidad/1506965142_965246.html.

59.   "La Mayoría de Las Inversiones Públicas Prometidas Este Año En Málaga No Se Han Ejecutado."

60.   flyblueadmin, "Prices and Timetables," *Fly Blue* (blog), accessed December 31, 2017, http://fly-blue.com/en/prices-and-timetables/.

mobility
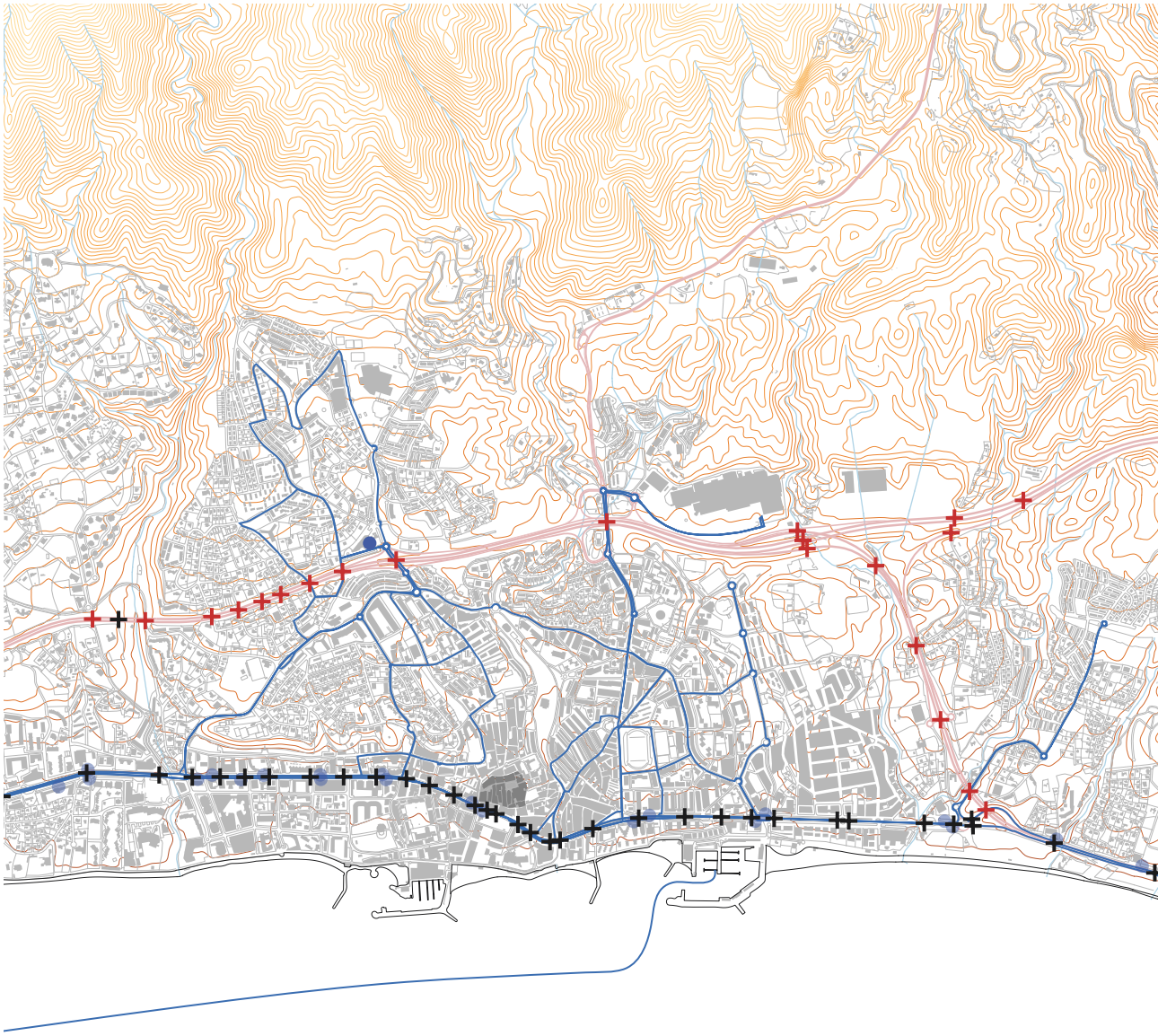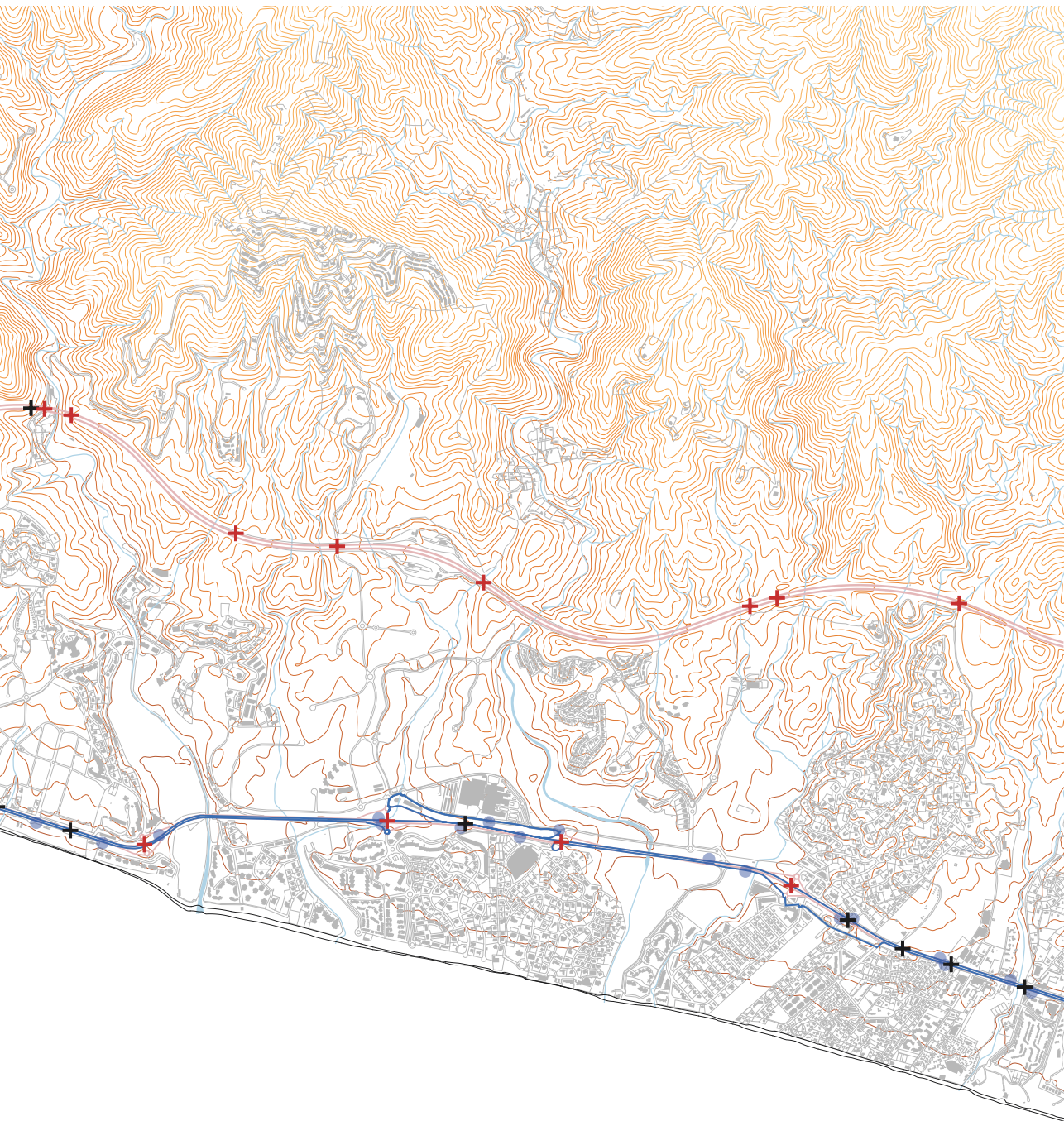
pedestrian crossing ✚
vehicle crossing ✚

medina ▪
ancient mine railway ▥

highway bus stops ●
ferry & bus lines ━
A-7 & AP-7 ━
contour lines 10m ━

🕐 1:30'000

urbanisation gate, 36°31'23.5"N 4°54'33.3"W

fragmented realities

golf club gate, 36°30'41.2"N 4°48'51.0"W

fragmented realities

One of the most striking characteristics of the present urban fabric is the vast number of privatised surfaces, from hotel complexes to shopping centres and the numerous golf courses. With few public spaces, most of the social interactions are displaced to clubs and resorts, accessible only for members and residents the facilities. As is uncannily visible on the map, the city is the only place that offers a certain amount of public spaces apart from the beach. With huge shopping centres, medical facilities and other services along the highways serving the urbanisations and their inhabitants, the beach remains the only real melting pot reuniting all different social classes. Yet even at the beach, more and more surface is being practically privatised through concession spaces, such as special resort sectors, chiringuitos and marinas. The privatised areas act like an archipelago of gated communities, cut off from the rest. Demarcation is expected, requested and largely uncontested by tourists and temporary residents, creating a confined world and providing a certain feeling of security.[61] Among the multiple types of users and inhabitants occupying and frequenting the territory, the intent of changing the situation seems to be virtually non-existent. As most of the population is financially dependent on the tourists and temporary residents this situation remains unchallenged. Only in recent years has there been some concern for the future of the current urban fabric, with more and more residents aspiring to a better quality of life. The government of Marbella seems to have acknowledged this trend in its "Marbella 2022 strategic plan"[62] of 2015, which aims at "restoring the loss of public awareness, heading towards a true concept of governance where citizens are the real protagonists" to achieve a "good quality of life for everyone"[63]. The focus on the citizens and the word "everyone" suggests an admission of the historical mistakes of only addressing the visitors of the area. Public space and amenities seem to be a mere leftover in many areas and have been given little consideration as they do not directly support the profitability of tourism. However, accommodating various types of residents and visitors with increasing demands of urban life and public spaces has become a priority for the city to secure a sustainable future of economic as well as touristic viability.[64]

All those elements contribute to the manifestation of the fragmented urban reality which is predominant along the entire Spanish Mediterranean coast and beyond. Like in many European cities with a rich past, there is a clear distinction between the historical fabric and the newer expansions. But the archipelagos of privatisation and membership culminating in numerous gated communities seem to be particularly predominant in touristic and retirement migration regions. As highlighted in the previous chapter, the continuous urban fabric along the coast could offer enormous

61. Roger Diener and Eidgenössische Technische Hochschule Zürich. Studio Basel, *The Inevitable Specificity of Cities: Napoli, Nile Valley, Belgrade, Nairobi, Hong Kong, Canary Islands, Beirut, Casablanca* (Zürich: Lars Müller, 2015), 214.

62. "MARBELLA 2022 STRATEGIC PLAN" (Marbella Local Government, September 2015), http://www.marbella.es/estrategia/docuteca/documentos-del-plan/itemlist/category/30-documento-final.html.

63. "MARBELLA 2022 STRATEGIC PLAN," 5.

64. "MARBELLA 2022 STRATEGIC PLAN," 6.

vegetal roadblock, 36°30′04.0″N 4°49′01.6″W

fragmented realities

concrete roadblock, 36°30′26.9″N 4°50′02.3″W

potential of horizontal porosity and interaction, realising the vision of the horizontal metropolis project and forming "*a dense network of elements providing direction, specificity and difference.*"[65] Notwithstanding, the reality is composed of juxtaposed and disconnected entities, highlighted by the countless gates, roadblocks and dead ends. In between the site-specific historical centres, the suburban neighbourhoods all share the same morphology and the archetypical image of the Anglo-Saxon sprawlscape, a conglomeration of repetitive standardised discontinuities.[66]

In addition to the environmental impacts combined with the scarce resources of the region, the phenomenon has given rise to other cultural and social problems due to its minimal urban complexity and diversity. It encourages a simple and often segregated social structure as seen in Marbella. For tourists and short-term residents, the shared fenced off infrastructure, private services and security measures that come in packages as well as the houses or flats become a commodity to be consumed rather than a space to be inhabited. The resulting way of life is fittingly called "lock living"[67] by urban geographer Francesc Munoz, creating islands of privacy at the scale of the house and on the scale of the neighbourhood by urbanisations with controlled entrance gates to living and leisure facilities. The concentration of gates decreases visibly towards the centre, showing an increased social diversity. This urban design is the manifestation of the urge for demarcation and consumption, creating a feeling of security and an exclusive community. For the population groups, "living protected-defended-watched-under surveillance becomes a sign of economic success, individual appurtenance and social acceptance."[68] Therefore even smaller and more modest developments show gated areas, even if everybody would benefit from a more porous urban structure. The territory becomes equalised by eliminating the "difference", one of the driving forces for a vibrant urban life, and thus decreases the urban and social morphology. The lack of human diversity leads to less urban diversity and the city becoming characterless, rather than being a complex system of relations as it once was.[69]

In this phenomenon lies the contradiction of Mediterranean cities often being appreciated for their social diversity, urban complexity and public space orientated social life, all representing added urban values. The archetypical image of the city possessing those factors is a motivation for traveling to the region for many tourists in the first place. Is the new landscape of urban habitat in regions similar to the Costa del Sol still compatible with the notion of the horizontal Mediterranean urbanity?[70] Does it reckon a rethinking or could it even go as far as to signal the end of the Mediterranean city?

65. Vigano, "The Horizontal Metropolis and Gloeden's Diagrams. Two Parallel Stories.," 100.

66. Francesc Munoz, "Lock Living: Urban Sprawl in Mediterranean Cities," *Cities* 20, no. 6 (December 2003): 382, https://doi.org/10.1016/j.cities.2003.08.003.

67. Munoz, "Lock Living."

68. Munoz, 385.

69. Munoz, 384.

70. Munoz, 384.

fragmented realities
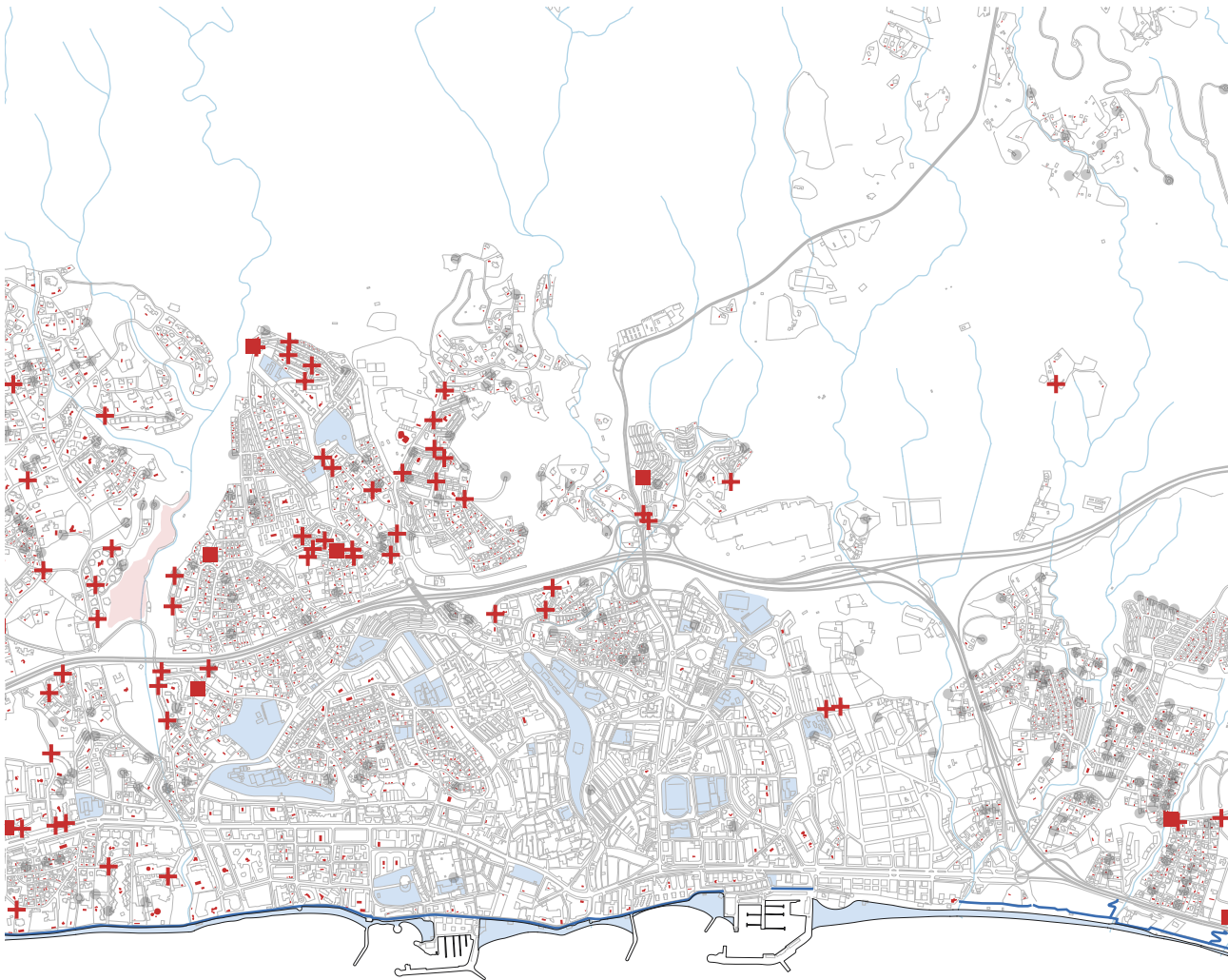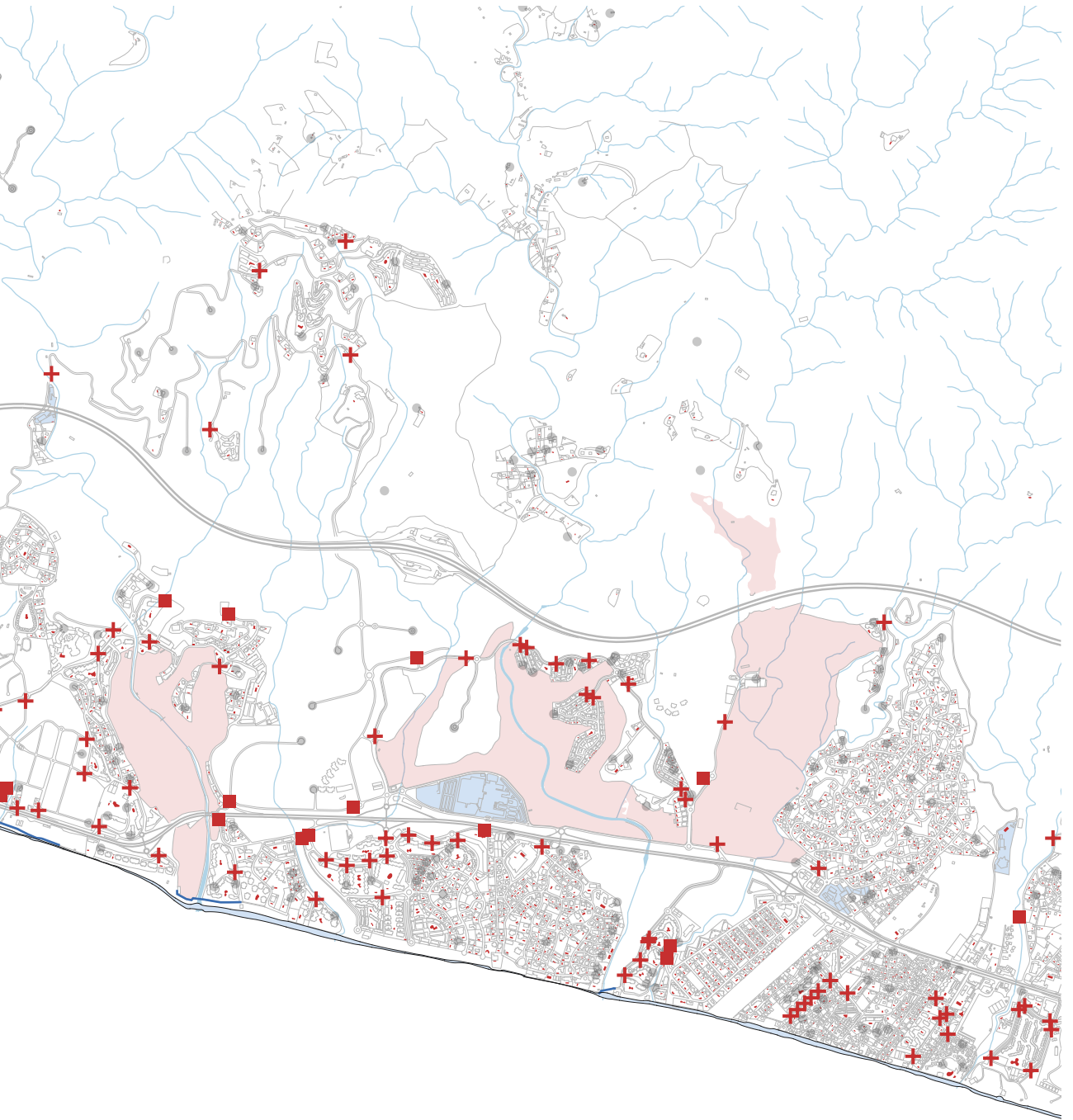
gate   ✚
road block   ■
dead end   ●

private pools   ●
privatised amenities & areas
public amenities & areas

beach promenade
A-7 & AP-7

🕐 1:250'000

towards a more Mediterranean city?

The modern Mediterranean is a spatial and cultural region "that shares common characteristics - among which the high value given to urbanity is central - and is subjected to some common global transformations that constitute real challenges to the very nature of this urbanity."[71] The Mediterranean city itself can't be reduced to a special type or category even though some social and geographical similarities exist. Historically, they have been distinguished as cities showing high density, urban complexity and social diversity. The notion of the traditional Mediterranean form of urbanity is a historical, cultural, and anthropological construct, built up on the values of its cities. Yet today, the growing propagation of urban sprawl leads to different, more global urban scenarios and the proliferation of non-vernacular architecture and urban forms.[72] The standardised low-density residential landscape, a former exclusively Anglo-Saxon type, has become a commodity around the Mediterranean, even though it contradicts the core ideals of the Mediterranean urbanity.[73] Through globalisation, many Mediterranean cities have experienced similar rapid transformations of their urban morphology and hence also of their urban life.[74]

Cities such as Marbella and the Spanish Mediterranean coast at large have been heavily impacted by those developments. Due to their eventful history, it is evident that "Mediterranean cities are the result of previous globalizations, from Neolithic times to the era of industrialization, and are not merely the product of the simple application of ancient and medieval urban ideals on space."[75] Nonetheless, the last 75 years have changed the urban landscape of the Costa del Sol in a more radical way than the preceding 2500 years. Boundaries in the fabric of the cities as well as between them and their hinterland have been redefined and transformed.

For this reason, Denis Bocquet, Professor of Urban and Architectural History and Theory, advocates the "Mediterranean as a spatial model for the understanding of contemporary global interactions" in his essay "Challenges to Urbanity in Contemporary Mediterranean Metropolises: New Urban Forms, Dynamics, Boundaries and Tensions".[76] The new relations of metropolises and smaller cities with the world raise questions about their identity in a specific geographical context, in addition to issues surrounding the increasing worldwide competition they face. The Mediterranean cities with all their history and their insight of those complications provide potential examples and lessons to guide other regional future developments.

71. Petrov, *The Mediterranean*, 5:237.

72. Petrov, 5:235.

73. Munoz, "Lock Living," 381.

74. Petrov, *The Mediterranean*, 5:235.

75. Petrov, 5:235.

76. Petrov, 5:235.

Moreover, the Mediterranean urban centres have themselves lost aspects of their very identity, which is a still an important cultural construct that could help make their future sustainable by focusing on their most valuable assets. Shouldn't Mediterranean cities be keen to revive the so-called Mediterranean urbanity, characterised by vibrant public spaces and a thriving urban life? To counteract the recent trends, many big cities have greatly invested in the revalorisation of public spaces and transport in the past 25 years, with Barcelona being the prime example ever since the 1992 Olympics. Until now, this movement has remained mainly concentrated on the economic and academic centres of metropolitan regions and has rarely reached smaller, service-orientated cities like Marbella and even less so their peripheries. Especially those smaller touristic cities could benefit from reviving public life, attracting more diverse permanent residents and solidifying their economic stability. Could Marbella therefore not become a more horizontal, public and socially diverse city? Could it even become a more Mediterranean city?

image credits

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Universidad de Zaragoza, Playa (Torremolinos), May 1, 1960,
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p.10   "Hyperwall: Black Marble 2016," accessed November 13, 2017,
https://svs.gsfc.nasa.gov/30876.

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p.22   Biblioteca de la Facultad de Empresa y Gestión Pública
Universidad de Zaragoza, Playa de Torremolinos, January 1, 1972,
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p.34   Google Earth

p.40   "IDEmap - Cartografía Histórica," accessed January 5, 2018,
http://www.idemap.es/idemap/Historico.aspx.

p.62-64   "Descargas REDIAM (Beta) - Red de Información Ambiental de
Andalucía," Descargas REDIAM (Beta), accessed November 16,
2017, http://descargasrediam.cica.es/repo/s/RUR.

p.66-71   Google Earth

p.72-80   Google Street View

GIS and map data

"Base Cartográfica de Andalucía. Instituto de Estadística y Cartografía."
Accessed January 5, 2018. http://www.juntadeandalucia.es/
institutodeestadisticaycartografia/bcadescargas/.

"Descargas REDIAM (Beta) - Red de Información Ambiental de Andalucía."
Descargas REDIAM (Beta). Accessed November 16, 2017. http://
descargasrediam.cica.es/repo/s/RUR.

Díaz Quidiello, José, Fernando Olmedo Granados, and Manuel Clavero
Salvador. Atlas de la historia del territorio de Andalucía. Sevilla: Junta de
Andalucía, Consejería de Vivienda y Ordenación del Territorio : Instituto de
Cartografía de Andalucía, 2009.

"Digital Atlas of the Roman Empire." Accessed January 4, 2018. https://
dare.ht.lu.se/.

Geográfica, Centro Nacional de Información. "Centro de Descargas Del
CNIG (IGN)." Centro de Descargas del CNIG. Accessed January 4, 2018.
http://centrodedescargas.cnig.es.

"IDEmap - Cartografía Histórica." Accessed January 5, 2018. http://www.
idemap.es/idemap/Historico.aspx.

"Instituto de Estadística y Cartografía de Andalucía. Datos Espaciales de
Referencia de Andalucía (DERA)." Accessed November 16, 2017. http://
www.juntadeandalucia.es/institutodeestadisticaycartografia/DERA/index.
htm.

"Instituto Nacional de Estadística. (National Statistics Institute)."
Accessed December 30, 2017. http://www.ine.es/dynt3/inebase/es/index.
html?padre=517&dh=1.

"MFE50 - Información Disponible - Banco de Datos de La Naturaleza (BDN)
- Servicios - Biodiversidad - Mapama.Es." Accessed January 3, 2018. http://
www.mapama.gob.es/es/biodiversidad/servicios/banco-datos-naturaleza/
informacion-disponible/mfe50_descargas_andalucia.aspx.

"Ministerio de Agricultura y Pesca, Alimentación y Medio Ambiente.
Ministra: Isabel García Tejerina Mapama.Es." Accessed November 14, 2017.
http://www.mapama.gob.es/es/.

Google Earth & Maps

bibliography

Abulafia, David. *The Great Sea: A Human History of the Mediterranean*. Penguin Books, 2014.

Beyer, Elke. *Holidays after the Fall: Seaside Architecture and Urbanism in Bulgaria and Croatia*. Berlin: Jovis, 2013.

Bradford, Ernle. *Mediterranean: Portrait of a Sea, by Ernle Bradford*. Sydney, Toronto, 1971.

Bramwell, Bill. *Coastal Mass Tourism: Diversification and Sustainable Development in Southern Europe*. Vol. 12. Aspects of Tourism. Clevedon: Channel View, 2004.

Camp, D'Laine, and Jan de Graaf. *Europe: Coast Wise : An Anthology of Reflections on Architecture and Tourism*. Rotterdam: 010 Publishers, 1997.

Colletta, Lisa. *The Legacy of the Grand Tour: New Essays on Travel, Literature, and Culture*. Rowman & Littlefield, 2015.

Corboz, André. *Le territoire comme palimpseste et autres essais*. Collection tranches de villes. Besançon: Les Éditions de l'Imprimeur, 2001.

"Descripción Del Casco Histórico de Marbella." Accessed December 31, 2017. http://www.marbella.es/cultura/patrimonio/casco-historico/descripcion-del-casco-historico.html.

Díaz Quidiello, José, Fernando Olmedo Granados, and Manuel Clavero Salvador. *Atlas de la historia del territorio de Andalucía*. Sevilla: Junta de Andalucía, Consejería de Vivienda y Ordenación del Territorio : Instituto de Cartografía de Andalucía, 2009.

Diener, Roger, and Eidgenössische Technische Hochschule Zürich. Studio Basel. *The Inevitable Specificity of Cities: Napoli, Nile Valley, Belgrade, Nairobi, Hong Kong, Canary Islands, Beirut, Casablanca*. Zürich: Lars Müller, 2015.

"Documentos - Turismo y Planificación Costa Del Sol." Accessed January 9, 2018. https://www.costadelsolmalaga.org/5304/com1_bs-Observatorio%20Tur%C3%ADstico/com1_gs-0/com1_mn-0/com1_tc-43/com1_md1_pg-5/.

"Estadísticas - Aeropuertos Españoles - Aena.Es." Accessed December 16, 2017. http://www.aena.es/csee/Satellite?pagename=Estadisticas/

Home.

flyblueadmin. "Prices and Timetables." *Fly Blue* (blog). Accessed December 31, 2017. http://fly-blue.com/en/prices-and-timetables/.

Hård, Mikael. *Urban Machinery: Inside Modern European Cities.* Inside Technology Series. Cambridge, Mass: The MIT Press, 2008.

"Historia de Marbella," July 1, 2018. http://www.malaga.es.

"Hyperwall: Black Marble 2016." Accessed November 13, 2017. https://svs.gsfc.nasa.gov/30876.

International Congress for Modern Architecture. *Logis et loisirs: 5e Congrès CIAM : (CIAM 5); Paris, (28 juin-2 juillet) 1937 : titre de départ: Urbanisme 37.* [Reprod. en facsimilé]. Documents of modern architecture. Nendeln: Kraus Reprint, 1980.

"Introduction - Málaga-Costa Del Sol Airport - Aena.Es." Accessed December 13, 2017. http://www.aena.es/en/malaga-airport/introduction.html.

"La Mayoría de Las Inversiones Públicas Prometidas Este Año En Málaga No Se Han Ejecutado." Diario Sur, December 26, 2017. http://www.diariosur.es/malaga/mayoria-inversiones-publicas-20171226194344-nt.html.

Maas, Winy, and MVRDV. *Costa Iberica.* Barcelona: Actar, 2000.
"MARBELLA 2022 STRATEGIC PLAN." Marbella Local Government, September 2015. http://www.marbella.es/estrategia/docuteca/documentos-del-plan/itemlist/category/30-documento-final.html.

Munoz, Francesc. "Lock Living: Urban Sprawl in Mediterranean Cities." *Cities* 20, no. 6 (December 2003): 381–85. https://doi.org/10.1016/j.cities.2003.08.003.

"Ocean Atlas: Understanding the Threats to Our Marine Ecosystems." Heinrich Böll Foundation. Accessed January 8, 2018. https://www.boell.de/en/2017/05/30/ocean-atlas-facts-and-figures-about-our-relationship-with-the-ocean.

P. P. Wong. *Tourism vs Environment: The Case for Coastal Areas.* Vol. 26. The GeoJournal Library. Dordrecht [etc.: Kluwer, 1993.

Petrov, Antonio. *The Mediterranean.* Vol. 5. New Geographies. Cambridge, Mass: Harvard University Graduate School of Design, 2013.

Simpson, Deane. *Young-Old: Urban Utopias of an Aging Society*. Zürich: Lars Müller Publishers, 2015.

Starr, Stephen. "The Mediterranean's Urban Sprawl: 'You Know a City's near by the Plastic in the Sea.'" *The Guardian*, January 20, 2015, sec. Cities. http://www.theguardian.com/cities/2015/jan/20/mediterranean-urban-sprawl-kayak.

"UNWTO Tourism Highlights: 2017 Edition | World Tourism Organization." Accessed December 11, 2017. https://www.e-unwto.org/doi/book/10.18111/9789284419029.

Vázquez, Cristina. "El Corredor Mediterráneo de Tren Busca Presupuesto y Calendario." EL PAÍS, October 3, 2017. https://elpais.com/economia/2017/10/02/actualidad/1506965142_965246.html.

Vigano, Paola. "The Horizontal Metropolis and Gloeden's Diagrams. Two Parallel Stories." *OASE (89)*, no. 89 (February 2013): 94–102.

Zuelow, Eric G. E. *Touring Beyond the Nation: A Transnational Approach to European Tourism History*. Ashgate Publishing, Ltd., 2011.

acknowledgments

I would first like to thank my thesis advisor, Charlotte Truwant for helpful discussions and inputs, together with professor Harry Gugger and Bárbara Maçães Costa they provided instrumental criticism in the collective laba reviews.

Thanks go as well to my friends, for their help, inspiration and motivation, notably to Marlon, Martin and the bookbinding experts Julia and Romain.

Special thanks go to Kevin, for his elaborate corrections and his interest in the work.

And last but not least, to my family, for their infinite support.

Sea, Sun and Concrete

The Costa del Sol - a linear homogeneous urbanisation or fragmented realities?

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Ecole Polytechnique Fédérale de Lausanne
January 2018

Typeface: Avenir

Format: 180 x 240mm

Print: Reprographie EPFL