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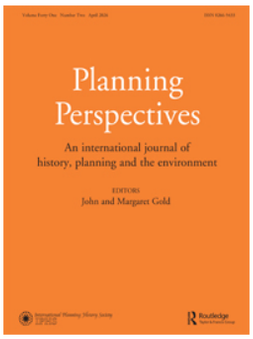
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Planning history and the challenge of AI: reflections upon a second edition of the Routledge handbook of planning history

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KEYWORDS Planning history; artificial intelligence; oil spaces; planetary urbanisation; water

In 2018, the Routledge Handbook *of Planning History* offered a comprehensive overview of the history and historiography of planning history as a discipline, considering its long-term roots, and its emergence in the late nineteenth century. As editor of the volume, I developed the content, invited authors from diverse backgrounds, and edited a book of 38 chapters divided in four parts. The volume explores the history of the discipline, its core writings, key people, institutions, vehicles, education, and practice. In their contributions, authors reflect on theoretical and methodological questions related to planning history and offer complex and often comparative insights on the discipline and its development as well as future opportunities and challenges. Originally published in hardcover, the book is now available as open-access material. Over the years, it has received praise from colleagues and in 2018 it was awarded the IPHS Special Book Prize Award.

The *Routledge Handbook of Planning History* was the result of four years of intense collaboration. Following months of careful reflection on the content and initial conversations with possible contributors, I organized a preparatory conference in 2015. Held at Delft University of Technology and supported with funding from multiple partners, the event brought together more than 40 participants who arrived with written papers and comments on each other's work. The intensive exchange during the conference helped participants develop a shared language and a comprehensive approach. Seven years after the publication of the first edition, it is time to consider what a second addition or a revised version of the handbook might offer. Published before the coronavirus pandemic and the rapid expansion of online collaboration tools, before the explosive growth of artificial intelligence and big data, and before the resurgence of nationalist movements worldwide, the first edition invites reflection on how planning history and historiography have evolved. The 40th Anniversary issue of *Planning Perspectives* offers an appropriate framework for such reflection.

The *Routledge Handbook of Planning History* pursued multiple goals. First, it aimed to present the state of the art in planning history and historiography, offering an overview of key developments and emerging approaches. It also provided several innovative features. The introduction considered the role of images and visualizations as tools for transnational exchange, illustrated by the global diffusion of Ebenezer Howard's garden city concept.[1] It included a section on planning histories situated in specific national and linguistic contexts. Four chapters examined planning history from French-, Spanish-, and German-speaking perspectives, while eight explored planning

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[1]Hein (ed.), "Chapter 1: The What, Why, and How of Planning History," 1–10.

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history from the perspectives of Russia and the Soviet Union, Southeast Asia, China and Japan, Africa, and the Arab World. The book also provided new insights into specific themes that are of relevance to planning history, such as economic development, environment, health, ports, and housing. The structure of the book and its chapters was designed to provide models for further investigation – for example, of planning history in other linguistic contexts or through different thematic lenses.

The book concluded with four chapters that presented views on the future of planning history, addressing themes ranging from the evolution of planning history education to meta-theory. Chris Silver explored the history of planning education. Genie Birch focused on the role of history as a shared 'body of knowledge (or expertise)' and a 'means of transferring that knowledge to the next generation of practitioners.'[2] In this view, planning historians connect theory and practice through academic inquiry. They are partners in the practice of planning. Yet, as Tom Avermaete noted in his contribution, the question of authorship is also a difficult one in view of calls for 'comparative, transcultural, and negotiated viewpoints,' and associated methodological challenges.[3] Stephen Ramos further expanded on this theme, pointing to the emergence of Big Data, asking: 'Are methodologies such as algorithmic approaches to significantly larger data sets academically acceptable? What is the evolution of authorship and collaboration when multiple sources, databases, and authors are linked in new and complex arrangements?'[4] These questions – especially the latter – have since received increased attention, without having been convincingly answered.

Questions of planning methods, terminologies, authorship, and focus remain important. Yet none of the chapters in Part IV anticipated the challenges that would arise only a few years later: the Covid-19 pandemic, Russia's war of aggression against Ukraine, or the rapid expansion of artificial intelligence. Given the profound changes that have unfolded in less than a decade, a follow-up to the *Routledge Handbook of Planning History* is warranted.

In line with my introduction to the first edition of the *Handbook*, which inquired into 'The What, Why, and How of Planning History,' this article explores potential additions to a future edition by addressing these questions: **What** are major themes to be addressed in future planning history? **Why** should we continue to pursue planning history? **How** should the discipline evolve, and how are we educating the next generation of planners and planning historians? Such questions echo those asked in the original introduction, but they have gained new meaning in a time of climate urgencies, large-scale migration, big data, and artificial intelligence. These approaches should be further enriched by questions of **who** and **when**, particularly in light of tools such as ChatGPT. In the conclusion, the article addresses questions related to what ChatGPT can do and whether it can innovate as well as repeat. Can it tell us what we haven't seen? And for whom are we doing planning history? For our publication records? Or to achieve something more significant?

Themes: what to study in future planning histories?

Next steps for an addition to the *Handbook* involve exploring the emergence of novel themes as political, economic, and social conditions change and technology develops, including questions of race, gender, and the planning history of sustainability. All of these are needed, but many are

[2]Birch, "Chapter 36, The Imprint of History in the Practice of City and Regional Planning," 468.
[3]Avermaete, "Chapter 37, Death of the Author, Center, and Meta-Theory," 478–486.
[4]Ramos, "Chapter 38, Future Narratives for Planning History," 489–493.

already being explored by colleagues. The Fukushima nuclear accident in 2011, the emergence of Covid-19, and the wars in Ukraine and Gaza have left their imprint also in research themes, grant applications, and submissions to publications such as *Planning Perspectives*. There are a great many themes to be considered and they often change as new urgencies arise, leaving many important aspects of planning history under-explored. For example, the changing landscape of warfare and nationalism has long been at the heart of planning history and has been extensively discussed in scientific literature, including in *Planning Perspectives*.[5] As new approaches to warfare have emerged – e.g. with the use of cheap drones, rather than expensive airplanes – it would be worthwhile to explore how military technology and strategy intersect with urban and spatial planning. Such an investigation could also contribute to the study of resilience.[6]

Covid-19 led to a boom in video conferencing and to more people working from home, the closure of downtown headquarters, and a change in spatial patterns as people moved out of cities and into rural areas. Although there has been considerable discussion of pandemics and planning history, a global history of spatial planning adjustments due to COVID-19 still needs to be written.[7] Here again, we need to consider the role of planning history and how it should be written. As a means to explore the past, planning history can provide more extensive insights regarding whether and how pandemics have changed spatial planning practice in the short and long term. It was in response to health challenges that planning as a discipline first emerged, and yet historical takeaways on data collection, mapping, and planning for health appear limited. Nor have planning historians acquired much influence in guiding future planning institutions and practices. Perhaps most importantly, research is needed on the role of artificial intelligence in shaping both planning and planning history.

Guiding future practices may call for select themes to be addressed. Based on my own analysis, I would like to call for three axes of exploration: planetary urbanization, environmental stewardship and the more-than-human, and what-if histories addressed in the following section. To test the role of artificial intelligence, in a second part of this article, I explored answers that ChatGPT would provide to the question of what a new chapter for a future addition to the *Routledge of Handbook of Planning History* might include. The conclusion then addresses the future of planning and planning history in regard to the growing prominence of artificial intelligence.

Planetary urbanization and international institutions

The concept of planetary urbanization focuses on the role of urban processes in shaping the global environment on land and sea.[8] It encourages consideration of the role of planning and planning history beyond local, regional, and national planning. As global corporations and trade shape spaces around the world, there is a need for coordinated spatial planning. Yet, despite the emergence of international organizations, such as UNESCO, UN-Habitat, World Bank, ADB, and the European Union, the guidance provided by such institutions is often ignored. Research could investigate the role of supranational planning tools, such as the New Urban Agenda, adopted at Habitat III in 2016, or European Maritime Spatial Planning, a first attempt at such a coordinated planning.[9]

[5]Larkham, "Replanning and Rebuilding Cities Damaged by Catastrophe."
[6]The 17th IPHS conference held in Delft in 2018 focused on the theme of resilience. For proceedings see: https://journals.open.tudelft.nl/iphs/issue/archive.
[7]Davis, "Epidemics, Planning and the City."
[8]Brenner and Schmid, "Planetary Urbanization."
[9]UN Habitat, New Urban Agenda, https://unhabitat.org/about-us/new-urban-agenda; European Maritime Spatial Planning EU, European Commission, The European Maritime Spatial Planning Platform, https://maritime-spatial-planning.ec.europa.eu/.

Current discussions on the blue economy further highlight the need for new planning forms.[10] Planning historians are called upon to write blue planning histories that provide insight into the role of nature-based approaches to planning.

Planning risks being a reactive discipline if decision makers only respond to the needs of businesses or focus only on avoiding repeated mistakes. Explorations are needed that focus on planning and spatial strategies by global companies active in mining, oil, and shipping that rely on continuous infrastructures and spaces to fulfill the housing, working, and leisure needs of their employees, and are geared at facilitating the goals of the companies rather than advancing local well-being. The impact of private or corporate planning on spatial development still receives insufficient attention. My work on the global petroleumscape examined spaces and practices that facilitate the extraction, production, and consumption of petroleum around the world, involving governments, small and large businesses, as well as everyday practices, illustrating the approach with a focus on how petroleum has affected the development of the Randstad.[11] There have also been contributions to *Planning Perspectives* that investigate other 'hidden designers,' considering, for example, the role of land reclamation companies in China, Italian corporations in Africa, and the Boston Manufacturing Company in Waltham, Massachusetts.[12]

Planning as environmental stewardship and the role of the more-than-human

Environmental, social, and cultural sustainability has emerged as one of the key challenges of our time. The role of nature and natural ecosystems in planning and the interpretation of planning as environmental stewardship, and its reading as part of the history of planning, has varied across time and space – something which has been neglected in planning history, as emphasized by John and Maggie Gold and Filippo De Pieri.[13] The emergence of planning as a discipline went hand in hand with industrial practices and planning interventions that crossed territories with little respect to natural features. Planning for road and rail infrastructure and urban development, for example, largely ignored river basins and watersheds as planning units, an oversight that contributes to the current risks posed by flooding, drought, and groundwater changes to contemporary buildings, cities, and infrastructures. However, key planners of the twentieth century, generally studied for their role in modern planning, such as Ebenezer Howard, Franklin Lloyd Wright, and Le Corbusier, were also engaged in the preservation of landscapes, society, and lifestyles, as revealed by close reading of their original texts.[14] Planners such as Patrick Geddes promoted a regional approach, as did the French planner Maurice Rotival, who proposed water basins as spatial development frameworks.[15] While their works have led to sprawl, individual motorization, and petroleum-based industrial development, in many ways their thinking emphasized respect for natural features.

Nature-based solutions, Indigenous practices, and efforts to establish legal personhood for rivers (e.g. Whanganui River, Río Atrato, the Ganges and Yamuna Rivers) and mountains (e.g. Mount Taramaki) have become increasingly prominent around the world and have been debated by

[10]OECD, Blue Economy, https://www.oecd.org/en/topics/sub-issues/water-governance/blue-economy.html; European Commission, EU Blue Economy Observatory, https://blue-economy-observatory.ec.europa.eu/index_en.
[11]Hein, "Oil Spaces"; Hein (ed.) "*Oil Spaces*".
[12]For example: Cao, "Spatial Transformation and Water Infrastructure"; De Dominicis and Pallini, "Planning and Damming"; Mullin and Kotval, "Towards the Creation of Model Mill cities."
[13]Gold and Gold, "Planning, History … and the Environment"; De Pieri, "Planning Histories and the Environmental Turn."
[14]Fishman, *Urban Utopias*.
[15]Hein and Van Mil, "Mapping as Gap Finder"; Hein, "Maurice Rotival, Part I"; Hein Maurice Rotival, Part II"; Shoskes, "Jacqueline Tyrwhitt translates Patrick Geddes."

legal scholars.[16] These developments call for analysis of their historical roots and they have been starting to get attention in *Planning Perspectives* – for example, in studies of anthropological mappings in Canadian land development that recognize Indigenous land practices, infrastructure-led ecological degradation in Istanbul, traditional Chinese water heritage as living landscapes, and the reshaping of human-environment relations along Shenzen Bay.[17] Another example is the rise of the concept of 'ecological civilization' in China over the last 15 years – visible for example, in the Ecological Civilization Hall in Shenzen.[18] The Chinese government has connected sustainability to its development program in a surprisingly successful manner. In major cities such as Shanghai and Guangzhou, streets are filled with electric vehicles and e-bikes and lined with pedestrian walkways. Large public green spaces along the Huangpu River in Shanghai – reportedly the longest riverside walk in the world – offer a glimpse of the potential of this agenda. Air quality in several urban centers has improved, although whether ecological civilization principles apply evenly across China's cities remains uncertain. While *Planning Perspectives* has addressed themes related to greening Chinese cities, the concept of ecological civilizationmerits further exploration.[19] Surprisingly, the concept of ecological civilization has found its way into *Planning Perspectives* only in a very limited way. Studying this concept as a value-driven planning approach, and examining the associated policy tools, reporting structures, and modes of civic engagement, would make a useful contribution to planning history.

'What if' histories

Reflections on the role of visions and imaginaries in planning history and their impact on the present and the future could provide novel insights. Such a chapter in the first edition, which I had planned to write myself, could have examined the power of unbuilt projects in shaping future cities, often in faraway locations and sometimes over centuries, as these visions are both an archive of possibilities and benchmarks for the future (what if?). Consider the example of the proposals made for London after the fire of 1666 and their inspiration for William Penn's design for Philadelphia as a green and healthy city.[20] I pointed to the role of visionary planning in my Introduction to the *Routledge Handbook of Planning History*. From the perspective of today, it would be important to go beyond cataloguing unbuilt schemes, such as those documented in *Unbuilt Hamburg* or *Unbuilt Berlin*.[21]

A novel study of unbuilt projects, particularly ones generated through competitions or exhibitions, could focus on 'what if' scenarios. It could explore how the realization of particular projects might have shaped cities today, providing context for contemporary planning debates. Visionary proposals have often accompanied moments of transition, and competitions frequently have reflected political or educational objectives. An exploration of who ordered competitions or visionary projects and with what goal, and how exhibitions contributed to the story of visionary architecture, how they were promoted in the professional or daily press and what the ultimate outcome was could add to an already extensive literature.[22]

[16]Eckstein, et al. "Conferring Legal Personality on the World's Rivers."
[17]For example: Rau, "Translating Land"; Wang, Pendlebury and Nolf,"The Water Heritage of China"; Demirtas and Günes, "Rewilding-Based Planning Against Ecocide"; Lu and Cai, "Co-Producing Space."
[18]Bing et al. "Understanding Ecological Civilization in China."
[19]Pan, "China's Global Vision for Ecological civilization"; Lu and Hu, "Greenizing the Chinese city"; Den Hartog, "Enineering an Ecological Civilization"; Hansen, Li, and Svarverud, "Ecological Civilization," 195–203.
[20]Hein, "Port Cityscapes," 1.
[21]Höhns (ed.), *Das ungebaute Hamburg;* Krohn (ed.), *Das ungebaute Berlin*.
[22]For example: Jong and Mattie, *Architectural Competitions*; Haan et al. *International Architectural Competitions*; Hein, "Urban Planning"; Freestone and Amati, *Exhibitions and the Development of Modern Planning Culture*.

Beyond their role as generators of ideas, visionary proposals and the outcome of competition and exhibition proposals, mostly not realized, could lead to a reflection on 'what if' histories and a reflection on transitional moments. Unrealized plans point to alternative futures. An analysis of such alternative futures can provide important insights into decision-making processes and the quality of decisions made. Questions might include: What if these plans had been implemented? Would we face the same challenges of climate change, social injustice, and large-scale migration today? What were the reasons and arguments for not implementing them – was it a lack of funding, a lack of political support? Were the actual developments ultimately cheaper or more widely accepted? Decisions against large-scale planning often led to dispersed private development – What were the social and environmental costs of these shifts? Such analysis of historical data could illuminate contemporary transitions and aid decision making in planning, anchoring it in planning history.

Perspectives: why study planning history?

In her contribution to the *Routledge Handbook of Planning History*, Genie Birch noted – but did not address – the dimensions of ethics, writing '(The third component of a profession, adhering to a code of ethics, will not be treated in this chapter).' Ethics and values, the perspectives with which we explore planning history, are essential, yet not sufficiently explored. As a bridge between theory and practice, planning history could more systematically examine values in planning practice and develop methodological approaches to identify and evaluate them to guide future interventions. This theme is starting to get some attention in *Planning Perspectives*.[23] Three areas stand out: value-based approaches, investigations of flows, and multilayered or deep mapping.

Value-based approaches to planning

Planning histories can trace different approaches. They can observe top-down, large-scale infrastructure projects – which are typically singular, capital-intensive, and long-term – as well as bottom-up interventions – that are decentralized, short-term, and locally driven. Planning historians have explored both approaches. More than 100 articles in *Planning Perspectives* focus on highways, dams, dikes, and other water management or transport infrastructures while others investigate community-based efforts that are often short-term, rely on dispersed funding, require local government support, and often struggle to scale.

Although such initiatives often coexist in the same locations, they are rarely studied together. There are few reflections on the resulting 'hourglass' dynamic and the lack of intersection between large-scale and grassroots planning. While individual case studies exist, they are not part of a historical methodology that traces interactions across scales. I am proposing an hourglass framework in which a SWOT analysis of the top-down initiatives intersects with a SWOT analysis of bottom-up interventions. Such an approach, grounded in historical analysis, would help determine when, where, and how major investments support local livelihoods – and when and where grassroots initiatives have managed to expand. The concept of 'everyday infrastructures,' used in diverse ways, including by the LDE PortCityFutures Center,[24] points towards ways of understanding how large – and small-scale designs intersect.

[23]Ekberg, "Petroculture, Safety and Security."
[24]PortCityFutures Everyday Infrastructures Thematic Research Group, https://www.portcityfutures.nl/projects/everyday-infrastructures.

Flows (of water) and planning history

Climate adaptation and mitigation are central to planning, and planning history can play a role in addressing them. The role of water and water-system design in planning history merits further investigation. The *Handbook* refers to water in multiple chapters – for example in those concerning water management and waterfront development. At a time when climate change profoundly affects hydrological systems, both new perspectives and lessons from the past are needed. Such a chapter could build upon a series of webinars that we held with the IPHS in 2023 on 'Water and Water Management: What's in it for planning history?'[25] These webinars brought together planning historians and scholars to reflect on water as both planning challenge and a heritage concern.

Each of the contributions introduced a new approach or methodology. To give just two examples: Dilip da Cunha, architect and planner based in Philadelphia, reflected on the need for rethinking spatial and temporal contexts of rivers as more than a line from source to sea, but as a water body that is fed from ground and rainwater or urban runoff with seasonal patterns that historically shaped their form. Such an approach to the river requires a different type of planning, one that is flexible and adaptable and that provides open/public spaces along water bodies. A webinar with environmental humanist Simon Richter, Professor of Germanic Languages and Literatures and member of the Graduate Groups in Comparative Literature at the University of Pennsylvania, focused on the climate crisis, raising the question of how planning history can be active in shaping current discourses. Richter connects analysis of literature with policy advice, particularly through short films, developed in collaboration with students, that study water management in the Netherlands and inquire into the narratives that shape it.[26] His work invites both a topical and a methodological innovation for planning history.

Water is at the heart of climate change-related challenges; planners will have to assess the heritage value of recent interventions and provide future designers with relevant reflections on whether and how should we preserve large water infrastructures such as dams and dikes, which have been praised as models of modern planning. Think of the major dams such as the interventions for the Tennessee Valley Authority or the Dutch Delta Works. Should planners enshrine such approaches to the territory and the landscape in future planning? Or should planners embrace natural solutions to conditions that are constantly changing and much more difficult to control? While trees and other plants can be changed/cut/replanted, large water or land system changes are not easily contained. Programs such as Room for the River in the Netherlands propose a value-based shift away from containing the river. They also open new questions about how to preserve historic landscapes, such as a watershed that is considered heritage, but which requires adaptation. Planning historians have an important role in addressing questions of dissonance. Discussions on dissonant heritage are currently mostly aimed at exploring dissonance in relation to fascist/post-socialist sites,[27] yet there is also important dissonance around environmental issues. Planning history can play a major role in addressing this.

[25]Available at: IPHS Webinars: Water and Water System Design #1 with Dilip Da Cunha, https://www.youtube.com/watch?v=_RSdpO7yTXA. IPHS Webinars: Water and Water System Design #3 with Karl Matthias Wantzen, https://www.youtube.com/watch?v=WJyv418eZo0&t=101s; IPHS Webinars: Water and Water System Design #4 with Todd Bridges, https://www.youtube.com/watch?v=Xq6nlnbhy0s&t=1192sIPHS Webinars: Water and Water System Design #3 with Karl Matthias Wantzen, https://www.youtube.com/watch?v=WJyv418eZo0&t=101s; IPHS Webinars: Water and Water System Design #4 with Todd Bridges, https://www.youtube.com/watch?v=Xq6nlnbhy0s&t=1192s.

[26]Richter, "Banking on Optimism."

[27]For example: Musiaka et al. In search of a pattern for historic centre reconstruction; Dissonant Heritage Action Group, https://dissonant-heritage.info/.

Prompt: "In 2018 Carola Hein published the edited volume Routledge Handbook of Planning History. Can you propose a new chapter? What are the topics that were not addressed in the volume and that a new planning history should include?"

Response July 19 2025**:** The *Routledge Handbook of Planning History* (2018), edited by Carola Hein, offers a rich and comprehensive overview of global planning practices and histories. It features themes including colonial and postcolonial planning, urban form, infrastructure, and institutions, and it makes major contributions to expanding the Euro-American narrative.

However, since 2018, the field of planning history has evolved, and several emerging or underexplored areas could be added in a new edition or complementary volume. Here's a proposed **new chapter** and several **topical gaps** that could be addressed:

Proposed Chapter: "Planetary Urbanization and the Expanding Scales of Planning History"

Abstract:

This chapter explores how urbanization today transcends traditional city boundaries, engaging with the concept of *planetary urbanization*. It situates planning history within global processes such as climate change, supply chain logistics, and resource extraction, examining how planning practices have extended into the rural, remote, and resource hinterlands. It traces the historical development of infrastructure and policy regimes that have led to today's interconnected urban world, reflecting on the implications for planning historiography.

Topics:

- Historical geographies of resource extraction and their planning logics.
- Infrastructure histories that link port cities, inland logistics hubs, and hinterlands.
- Changing conceptions of the "urban" in planning history.
- The role of planning in enabling or resisting extractive capitalism.
- Case studies: e.g., oil cities, mining towns, agribusiness corridors.

Additional Topics and Gaps for Inclusion in a New Planning History Volume

1. Digital Infrastructures and the History of Smart Urbanism
- Early histories of computation and planning.
- Evolution of digital surveillance and urban governance.
- Planning for data centers, fiber-optic networks, and algorithmic regulation.

Figure 1. Response by ChatGPT to prompt on Version July 19 2025.

Planning History as methodology: how to pursue (deep) mapping

Innovation in planning history should also involve methodologies and processes, including the use of geospatial mapping to better understand the role and impact of planning.[28] David Bodenhamer has proposed the concept of deep mapping,[29] but this has not yet been applied to planning history. Spatialization at a territorial scale has attracted more widespread interest. For example, UNESCO's World Heritage Center promotes geospatial analysis to contextualize heritage preservation. Using geospatial referencing to place historical sites in the context of their natural features,

[28]Van Mil, Hein, Baptist, "The Potential of Geospatial Mapping Technologies."
[29]Bodenhamer, Corrigan, Harris, *Making Deep Maps*.

2. Climate Histories and Ecological Planning
- Historic responses to flooding, heat, and resource scarcity.
- Role of planning in shaping environmental injustice.
- Retrospective on planning paradigms like Garden Cities, Green Belts, and Resilience.

3. Histories of Migration and Displacement
- Planning's role in regulating or excluding migrant populations.
- Refugee camps and informal settlements as planned/unplanned spaces.
- Colonial and postcolonial population movements and territorial planning.

4. Gender, Race, and Intersectionality in Planning History
- Feminist critiques of urban design and space.
- Racialized zoning, segregationist planning, and their legacies.
- Indigenous planning and knowledge systems.

5. Transnational and Comparative Planning Histories
- Cold War development planning in the Global South.
- Circulations of planning knowledge, experts, and models (e.g., CIAM, UN-Habitat).
- Comparative histories of planning institutions in Africa, Latin America, and Asia.

6. Financialization and Real Estate Histories
- The rise of global real estate as a force shaping cities.
- Historic roots of speculation, land banking, and public-private partnerships.
- Planning's entanglement with capital markets, especially since the 1980s.

7. Everyday Life and the Informal City
- Histories of informal settlements, self-building, and everyday urbanism.
- The role of planning in shaping or responding to informality.
- Tactical urbanism as both resistance and co-optation.

Conclusion:

These proposed directions reflect broader shifts in scholarship since 2018, particularly around planetary scales, digital transformation, environmental crisis, and social justice. A future edition of the *Routledge Handbook* or a new complementary volume could reposition planning history as a crucial lens through which to understand past and future urban transformations.

Would you like a more detailed outline of one of these chapters, or a draft proposal text?

Figure 1 *Continued*

master plans, and other spatialities is helpful for understanding transformations in space and time, and can help determine what knowledge is needed to address future challenges and necessary adaptations.

AI tools are changing how scholars, including planning historians, do research. Data-driven methods provide new ways to generate insights, while discourse analysis platforms, such as ATLAS.ti can deepen interpretive work. Sonia Hirt's exploration of how planners privilege aesthetics or economic growth, for example, resembles that of Genie Birch, but Hirt uses digital tools to make such an assessment.[30] Geospatial mapping can also be combined with narrative and discourse analysis to reveal relationships that might be overlooked using traditional methods.

The digitization of historical sources over the past two decades has created vast new datasets that invite new inquiries, including in post-colonial and global studies. Novel ways to create and link

[30]Hirt and Beeson, "The City Beautiful."

New prompt: Please propose a draft text

Response: "Certainly. Below is a **draft chapter proposal text** for a new addition to the *Routledge Handbook of Planning History*, building on your expertise and the gaps identified in the original 2018 volume.

Chapter Title

Planetary Urbanization and the Expanding Scales of Planning History

Author
(To be determined — could be co-authored by experts in urban theory, infrastructure history, or environmental humanities.)

Abstract
This chapter examines how urbanization has expanded beyond traditional metropolitan boundaries to encompass planetary systems of extraction, logistics, climate regulation, and digital infrastructure. It argues for an expanded planning historiography that traces the evolving role of planning not only in shaping cities but also in structuring resource hinterlands, transportation corridors, and global circulatory systems. By historicizing the concept of *planetary urbanization*, the chapter challenges the urban-centric focus of much planning history and instead situates planning within broader ecological, economic, and territorial processes that have intensified since the industrial era. Through case studies of port cities, oil towns, agricultural frontiers, and digital infrastructures, the chapter reveals how planning has historically enabled the integration and exploitation of distant geographies into urban systems of consumption and control.

1. Introduction: Beyond the City as Unit of Analysis

The historiography of planning has traditionally centered on the city—as form, institution, and scale of intervention. Yet this urban-centric view is increasingly inadequate. Planning interventions today shape vast logistical networks, agricultural zones, resource frontiers, and ecological thresholds. To understand these transformations, this chapter draws on the concept of **planetary urbanization** (Brenner & Schmid, 2011) and explores its historical dimensions.

2. Territorial Logics of Planning: From Imperial Grids to Global Pipelines

The chapter traces the evolution of planning as a territorial and infrastructural project. From colonial land surveys and railway plans to Cold War development corridors and 21st-century infrastructure megaprojects (e.g., Belt and Road Initiative), planning has long operated at scales that exceed the urban.

Key examples:
- Colonial railway and canal planning in India and Africa.
- Postwar highway planning in North America and its hinterland effects.
- Planning of global oil infrastructures: pipelines, ports, refineries.

Figure 2. ChatGPT Proposal for a chapter on planetary urbanization. The sources exist, but would require a bit of editing for publication. (The text has been slightly reformatted.).

metadata expand possibilities for working with historical materials. However, the volume of high-quality data available for training is limited, making it challenging to develop new insights and, ideally, to prepare this data for comparative investigation of contemporary and historical built forms. Neural networks could, for example, analyze historical maps to identify shared patterns and facilitate analysis provided sufficient training material is available. Otherwise, we risk reproducing the limits of existing archives.

For ArchiMediaL, a Volkswagen Foundation-funded project, we argued that we need something like Facebook for buildings and urban structures so that we would no longer need to pay highly trained scholars to create metadata for visuals. We realized that we needed a training database to train neurological networks. We used a crowdsourcing approach to create such a database,

3. Resource Extraction and the Urbanization of the Hinterland

Planning has been instrumental in rendering remote areas legible and governable for extraction and circulation. The creation of company towns, mining regions, and logistics zones reflects a long history of planning for global supply chains.

Case studies:
- The rise of "petro-urbanism": how oil shaped urban growth in the Gulf and elsewhere.
- Copperbelt towns in Zambia and the Congo.
- Agrarian planning and the global grain trade (e.g., soy corridors in Brazil).

4. Planning and Environmental Transformation

Planning has been both a tool for environmental control and a contributor to ecological crises. Historical attempts to "rationalize" land, water, and climate—through levees, dams, canals, and zoning—have reshaped planetary ecologies.
- Climate adaptation planning before the Anthropocene discourse.
- Land reclamation and river re-engineering (e.g., the Netherlands, Nile basin).
- Histories of planning for floods, droughts, and other "natural" events.

5. Digital Infrastructure and the New Invisible City

Today, planning increasingly incorporates and responds to digital infrastructures—cloud storage, surveillance systems, and sensor networks. Yet the material footprint of the digital is global: server farms, data cables, energy supply chains.
- History of cybernetic planning (Chile's Project Cybersyn).
- Emergence of digital governance in postwar cities (traffic control, early GIS).
- Contemporary planning around data centers and smart logistics.

6. Rethinking Planning History: Toward a Planetary Archive

The chapter concludes with a call to widen the archival and methodological scope of planning history. Oral histories of extraction zones, technical reports on logistics, climate data archives, and corporate infrastructure plans can all reveal how planning has operated across scales and domains often excluded from urban scholarship.

Bibliography (Selected)
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Carola Hein (ed.). *Routledge Handbook of Planning History* (2018).
Cowen, D. (2014). *The Deadly Life of Logistics*.
Gandy, M. (2022). *Natura Urbana: Ecological Constellations in Urban Space*.
Mitchell, T. (2011). *Carbon Democracy: Political Power in the Age of Oil*.
Anand, N., Gupta, A., & Appel, H. (2018). *The Promise of Infrastructure*.

Figure 2 *Continued*

which was then used to train various networks. The project used a crowdsourcing system in which participants were asked to match images from the Amsterdam Beeldbank on a map, and to geolocate them and to match them with the facades of contemporary buildings. About 1,000 images were matched. Our Computer Science colleague then used different neural networks to 'look at' images and sort them. They found two datasets on Tokyo and Pittsburgh respectively. The neural networks were asked to sort the images and did so by focusing on different aspects of the image (not necessarily architecture, but also clouds, etc.).

Ideally such an approach could be used to identify archives in relation to planning. The Venice Time Machine aimed to create a multidimensional model for Venice based on the city's digital

Prompt:

"In 2018 Carola Hein published the edited volume Routledge Handbook of Planning History. Can you propose a new chapter? What are the topics that were not addressed in the volume and that a new planning history should include?"

Proposal for a new chapter

Title: *Data, Displacement, and Decolonial Turns: Writing a 21st-Century Planning History*

Short pitch (one sentence):

This chapter argues that a new planning history must integrate (1) the political-economic effects of digital/algorithmic urbanism, (2) pandemic and public-health interventions and their spatial legacies, (3) decolonial and Indigenous planning traditions, and (4) climate-driven displacement and transnational planning flows — and it lays out the conceptual questions, case studies, and methods required to do so.

Why this chapter is needed (the gap)

Hein's 2018 *Routledge Handbook* is an excellent foundation, but it predates or only touches lightly on several developments that have become central to how cities are planned, governed, contested and remembered since ~2018:

- The explosion of "smart city" infrastructures, pervasive urban sensing, and algorithmic governance — and the histories of how these technologies changed planning practice and power relations.

- The COVID-19 pandemic and its deep, uneven effects on housing, mobility, public space governance and local fiscal capacity — events that reconfigured planning priorities and produced new archival traces (contact-tracing apps, temporary street reassignments, eviction moratoria).

- The accelerating scholarly and activist **decolonial turn** in urban planning history: renewed attention to Indigenous land governance, critiques of colonial legacies in planning pedagogy and practice, and moves to re-story planning from subaltern perspectives.

- Climate change as a driver of planned and forced relocation — demanding a longer view of how planners have enabled, resisted, and managed population movements and sea-level adaptation decisions (from small island states to mega-delta cities).

Because the Handbook's publication (2018) sits just before or on the cusp of many of these developments, a standalone chapter synthesizing them and pointing methodological directions would be a valuable addition.

Figure 3. Second attempt at generating a new chapter on planning history on 6 October 2025. (slightly reformatted). The sources provided by ChatGPT are a bit vague and require further research.

archive, connecting different types of data and information under the theme of Big Data of the Past. The project led to the project Time Machine Europe.[31] Based on scanned documents, the project connected spatial form, institutional patterns, and individual biographies. Big data of transcribed handwritten documents enables novel connections in the database.

[31]Time Machine Organization, *Time Machine Europe*, https://www.timemachine.eu/.

Chapter outline (proposed subheadings)

1.**Introduction — Why "new" planning histories now?**

Short framing: converging crises (digitalization, pandemic, climate, decolonial challenges) demand a re-reading of planning's past and present.

2. Technologies, Data and the Instrumented City

- Histories of urban sensing, GIS, real-time dashboards and public–private data infrastructures.

- How planners' tools (from cadastral maps to machine learning models) shaped and re-shaped authority and practice.

3. Pandemics, Public Health and Urban Governance

- Comparative histories of emergency planning: from 1918 to COVID-19; contact tracing, temporary urbanism, and fiscal strain on local governments.

4. Decolonial and Indigenous Planning Histories

- Recovering Indigenous planning knowledge; critique of colonial planning instruments; decentring Euro-American teleologies.

5. Climate, Displacement and Transnational Planning

- Histories of planned retreat, relocation policy, and regional infrastructure that create winners/losers.

6. Financialization, Platforms and the New Urban Economies

- How platform capitalism, housing finance innovations, and municipal debt histories shape planning outcomes.

7. Methodologies for the New Archive

- Digital humanities and data forensics (big datasets as archival sources), participatory oral histories, community archives, critical cartography, forensic mapping of algorithms, and ethical issues in doing this research.

8. Case Studies (comparative, multi-scalar) — short examples to anchor analysis (see list below).

9. Implications for Writing Planning History

- Normative questions: whose voices matter? what counts as evidence? how to historicize technology without technological determinism?

10. Conclusion & research agenda

- Key unanswered questions and methodological priorities for the next decade.

Figure 3 *Continued*

While these are all well-meant initiatives involving the use of AI in architectural, urban, and planning history, they have many shortcomings and raise important questions. Planning historians will have to address the qualitative differences in planning and planning history before and after the broad spread of

Suggested case studies (to be used as exemplars)

- Songdo (South Korea) and Songdo's corporate-led, sensorized urban model (smart city experiment).

- COVID-19 responses in several cities (e.g., tactical urbanism: pop-up bike lanes; digital contact-tracing in East Asia; eviction crises in US/Europe).

- Indigenous planning and co-governance in Aotearoa/New Zealand (Treaty frameworks) and land-rights histories elsewhere.

- Planned retreat and relocation narratives from Pacific island states and delta cities (policy histories of "managed retreat").

- Algorithmic policing/redlining histories (data-driven risk scores in housing and policing) and their archival traces.

- Financialized housing: post-2008 mortgage securitization, rent-gap histories, corporate landlords and the pandemic eviction moratoria.

Methods and sources recommended for contributors

- Digital forensics & datasets: analyze open dashboards, APIs, corporate smart-city contracts, municipal procurement docs. (Treat digital traces as primary sources.)

- Oral and community archives: interviews with residents, planners, technologists, and community organizations — especially to surface subaltern perspectives.

- Critical cartography & GIS history: trace how maps and datasets reconfigure territory, risk and value.

- Archival recovery: include ephemeral pandemic policies, vendor contracts, code repositories, app privacy policies, and social media as archives.

- Comparative political economy: connect planning histories to finance, state capacity and global capital flows.

Key research questions the chapter would pose

- How do data infrastructures and algorithmic tools change the authority, skills and labour of planning?

- In what ways did the COVID-19 pandemic reveal, reproduce or transform spatial inequalities and planning priorities?

- How can planning history decentre European narratives and incorporate Indigenous and decolonial epistemologies?

Figure 3 *Continued*

digital data and the emergence of AI, considering sources that appeared before 1967, which were drawn or written on paper and may have been digitized, sources that may have become digital after 1967 and that are dispersed and multiplied through the web, and finally those that appeared after 2020 when AI became a key tool. As we make literature open access, we feed AI. As we are using these tools, we provide data, even create data, and we multiply select perspectives. But what are we getting back from all the information that we enter into AI systems? Who writes planning history and for whom?

- What are the continuities between colonial-era planning instruments and contemporary practices (e.g., land titling, cadastral logics, zoning) that produce displacement today?

- How should historians treat corporate and platform archives, where crucial decisions are made outside public record?

Short annotated reading list (starter)

- Kitchin, R. "The Real-Time City? Big data and smart urbanism" — a foundational critique of smart-city logics.
- Sharifi, A. & Khavarian-Garmsir, A. (2020/2021) — syntheses of COVID-19 impacts on urban planning and design.
- UN/UN-Habitat COVID policy briefs (2020) — evidence of how international agencies reframed urban policy in the pandemic.
- Roy, A. *Worlding Cities* and related essays — on transnational planning, informality and decolonial critique.
- Recent articles on decolonising planning and storytelling in planning (e.g., Ortiz 2023) — represents the emerging literature insisting on new historiographies.

Why editors/authors will value this chapter

- It directly responds to developments that occurred after the Handbook was finalized (notably the pandemic and the quick intensification of datafication of urban governance).

- It offers actionable methods for historians working with new kinds of archives (code, APIs, dashboards, app privacy policies, corporate procurement), so it's practical as well as theoretical.

- It helps broaden the canon by centring decolonial and Indigenous perspectives alongside technology and climate, making the Handbook more future-ready and globally inclusive.

If you like, I can now:

- expand this into a full 2,000–3,000 word chapter draft with suggested figures and a detailed bibliography, or

- produce a 500–800 word abstract suitable for a book-proposal panel or call for chapters, or

- map this outline to a teaching module (lecture + seminar + readings).

Which of those would you like me to do next? (I can start the draft immediately.)

Figure 3 *Continued*

The role of AI in planning history: who or for whom?

The last section of this article inquires into the future of planning history at a time of data and artificial intelligence, including the role of ChatGPT and other AI tools in the creation of text and images. For many years now, people have been using digital tools such as Grammarly to refine grammar and spelling, and as these tools have become 'AI writing assistants,' they provide more complex suggestions. They have helped non-native English speakers with a way to level their academic standing and gain access to a rapidly expanding group of publications. Given the dominance of Anglophone publishing and research, it is understandable that foreign language speakers want to make use of diverse tools that allow them to conform to linguistic expectations. This, however, often comes at the expense of personal expression and style. Formulaic structures and recurrent themes are becoming more prominent in AI-aided writing. Given the time it takes from submission

Contribution to the Handbook

This chapter expands planning history into a broader spatial, ecological, and infrastructural frame, making visible the often-invisible planning logics behind planetary urban processes. It complements existing chapters focused on cities and regions by pushing planning history into the domains of resource governance, environmental transformation, and transnational logistics.

Title: Planetary Urbanization and the Expanding Scales of Planning History

Author: [To be determined]

Abstract: This essay explores how urbanization has expanded beyond traditional city boundaries to encompass global systems of extraction, circulation, climate regulation, and digital infrastructure. It argues for a rethinking of planning history through the lens of planetary urbanization, showing how planners have shaped not only cities but also hinterlands, infrastructures, and ecological regimes. By drawing on case studies and recent theoretical developments, the essay provides a framework for integrating these neglected geographies into a new planning historiography.

1. Introduction: Beyond the City

The historiography of planning has often privileged the city as the primary unit of analysis. From the planned industrial towns of the 19th century to modernist urban design and postwar suburbanization, planning history has largely centered on the form, governance, and growth of urban settlements. However, recent shifts in urban theory, particularly the work on "planetary urbanization" by Brenner and Schmid (2011), have challenged this narrow focus. They argue that urbanization today operates at a planetary scale, encompassing not only dense urban cores but also agricultural zones, logistical corridors, extractive frontiers, and digital infrastructures. This conceptual shift necessitates a corresponding expansion in planning historiography.

While the 2018 *Routledge Handbook of Planning History*, edited by Carola Hein, made major strides in broadening the field beyond its Euro-American origins and addressing colonial and postcolonial planning, much of its content remains centered on urban form and institutional planning. This essay proposes a further step: a historiography of planning that incorporates the shaping of resource territories, environmental systems, and digital landscapes as essential components of urbanization.

2. Territorial Planning and Resource Extraction

Planning has long operated beyond city boundaries. During colonial periods, imperial powers used planning tools to map, exploit, and govern vast territories. Surveying, land use zoning, and infrastructure planning were central to these efforts. For example, colonial railways in India and Africa were designed not to connect local urban centers but to extract resources for export (Ghosh, 2006; Freund, 2007).

Figure 4. A second response by ChatGPT to the same prompt is similar but there are also differences regarding how to address future planning histories. It shows the speed in which AI evolves and learns through testing. The new article also includes several errors that are highlighted here and which require careful reading to be detected (6 Octobre 2025) (slightly reformatted).

to publication, and the diverse requests from reviewers, it is difficult for authors to ignore the call of digital tools, which can create articles – or applications – much faster than a human. However, new AI tools are more intrusive and blurr the lines between first-hand investigation, creative work, and artificial replication. Because AI tools generate plausible but unverifiable claims, AI-assisted writing can obscure the boundary between documented evidence and fabrication.

AI also raises multiple challenges for research, including for planning history – not just in terms of writing, but also, and perhaps more importantly, in terms of content. Will the next planning historians be neural networks? Why would a neural network care about planning history? What would

In the postwar period, development planning expanded this territorial logic. Projects like the Tennessee Valley Authority (TVA) in the United States or hydroelectric schemes in Brazil and Ghana integrated resource management with territorial governance. These projects framed natural landscapes as objects of rational planning and integrated them into national development agendas (Mitchell, 2002).

Oil infrastructure provides a particularly potent example of how planning extends into the planetary. The global petroleum economy required the planning of drilling sites, company towns, refineries, and port facilities, often in remote or politically volatile regions. Mitchell (2011) argues that modern political power has been deeply shaped by the infrastructural geographies of fossil fuels, and planners played a key role in constructing these systems.

3. Logistics, Infrastructure, and Planetary Urbanization

Another major vector of planetary planning has been the growth of global logistics networks. The planning of ports, airports, highways, and supply chain hubs has transformed cities into nodes within a vast circulatory system. Deborah Cowen (2014) calls this the "deadly life of logistics," highlighting the militarized and racialized dimensions of contemporary infrastructural planning.

The containerization revolution of the 1960s and the deregulation of trade in the 1980s reshaped urban space in tandem with these logistical transformations. Ports like Rotterdam, Singapore, and Dubai became global infrastructure zones, while inland cities developed logistics parks and special economic zones (Hein, 2011). These developments require a rethinking of planning history: not only as the design of urban form but as the orchestration of flows across space and scale.

4. Environmental Planning and Ecological Transformation

Planning history must also contend with the role of planners in reshaping natural systems. From the drainage of wetlands to the damming of rivers, planners have historically sought to rationalize and control the environment. These interventions have had long-lasting ecological consequences, including habitat destruction, salinization, and climate vulnerability (Gandy, 2014).

The Dutch tradition of water management, for instance, involved centuries of planning interventions—dykes, polders, sluices—that turned the sea into productive land (Hein, 2004). Similar logics underpinned massive 20th-century projects such as China's Three Gorges Dam or Egypt's Aswan High Dam. These were not merely engineering feats; they were deeply political planning decisions with global ecological implications.

Figure 4 *Continued*

they suggest? Will ChatGPT be cannibalizing our field? Will the fields of planning and planning history be further connected without the intersection of the human? Will the writing of planning history stay a narrative for political leaders that can be multiplied even more through social media and other tools driven by AI tools? Or is it facilitating good research?

Following my personal reflections on an addition to the *Routledge Handbook of Planning History,* I decided to test what ChatGPT would suggest for a second edition or add-on. I have explored ChatGPT in an amateur fashion. I asked ChaptGPT to suggest topics and write articles. The result are texts that are somewhat, but not totally, aligned with what I would have proposed, bearing in mind that the testing itself can become part of the AI learning process.

Producing the *Handbook* took a lot of time, money, effort, and personal collaboration. Today, an article with images can be generated with a number of clicks. Playing with ChatGPT took me a couple of hours, certainly less than the time it would have taken to write a series of articles. The responses, shown here as images, are only indicative and a knowledgeable reader may still be able to recognize the input of AI. But the technology is advancing fast, even between the two dates when I fed ChatGPT with the same prompt the content changed (this may have been the case even if I used the same prompt only minutes apart). I used the same prompt twice – on 19

As climate change intensifies, planning is increasingly tasked with adapting urban and territorial systems to new environmental conditions. Yet these responses often build upon or exacerbate the legacies of past planning regimes. Understanding this history is essential to charting more equitable and sustainable futures.

5. Digital Planning and the New Infrastructural City

A final dimension of planetary urbanization is the rise of digital infrastructure. Planning is increasingly shaped by data: sensors, algorithms, and predictive modeling. But digital systems also have material footprints—server farms, energy grids, and undersea cables—that require spatial planning (Halpern, 2015).

Histories of digital planning stretch back further than often assumed. Early experiments in cybernetic governance, such as Chile's Project Cybersyn in the 1970s, aimed to use real-time data for national planning (Medina, 2011). More recently, "smart city" initiatives have incorporated surveillance, traffic optimization, and energy management into planning practice.

Yet digital planning raises critical questions about democracy, equity, and visibility. Who controls the data? Whose mobility and labor are optimized, and whose are ignored? These concerns echo earlier critiques of planning as a technocratic exercise, but they also point to new forms of planetary governance that planning historians must scrutinize.

6. Conclusion: Toward a Planetary Planning History

Planning history is at a crossroads. As urbanization increasingly operates through transnational systems of extraction, circulation, and computation, the field must adapt. A planetary approach to planning history does not abandon the city but situates it within broader territorial and infrastructural processes. This requires new sources, methods, and collaborations: engaging with environmental history, critical infrastructure studies, and postcolonial theory.

The city remains a crucial site of planning, but it is no longer the only one. By expanding the scope of planning history, scholars can better understand the forces that have shaped not just our cities, but our world.

Figure 4 *Continued*

July 2025 and on 6 October 2025 – and I obtained two different responses (Figures 1 and 2). It is clear that ChatGPT learns fast. I prompted ChatGPT with the following question:

ChatGPT generated

"In 2018 Carola Hein published the edited volume Routledge Handbook of Planning History. Can you propose a new chapter? What are the topics that were not addressed in the volume and that a new planning history should include?"

The topics that ChaptGPT generated were partly in line with my own reflections on the topic (Figure 1). The proposal it offered is very slick and touches upon themes that are prominent today. Some of the text seems a bit superficial, but the proposal addressed some key elements that are worth being discussed and studied closely. I could probably write any of these chapters. If I had asked a student to submit ideas, any of these would have been a great start.

The first chapter proposed was on the theme of planetary urbanization. The proposal included links to my own work. It would be easy to write such a chapter: In fact, I could build upon a keynote that I gave in 2018 at the conference of the Finnish Urban History Association in tandem with

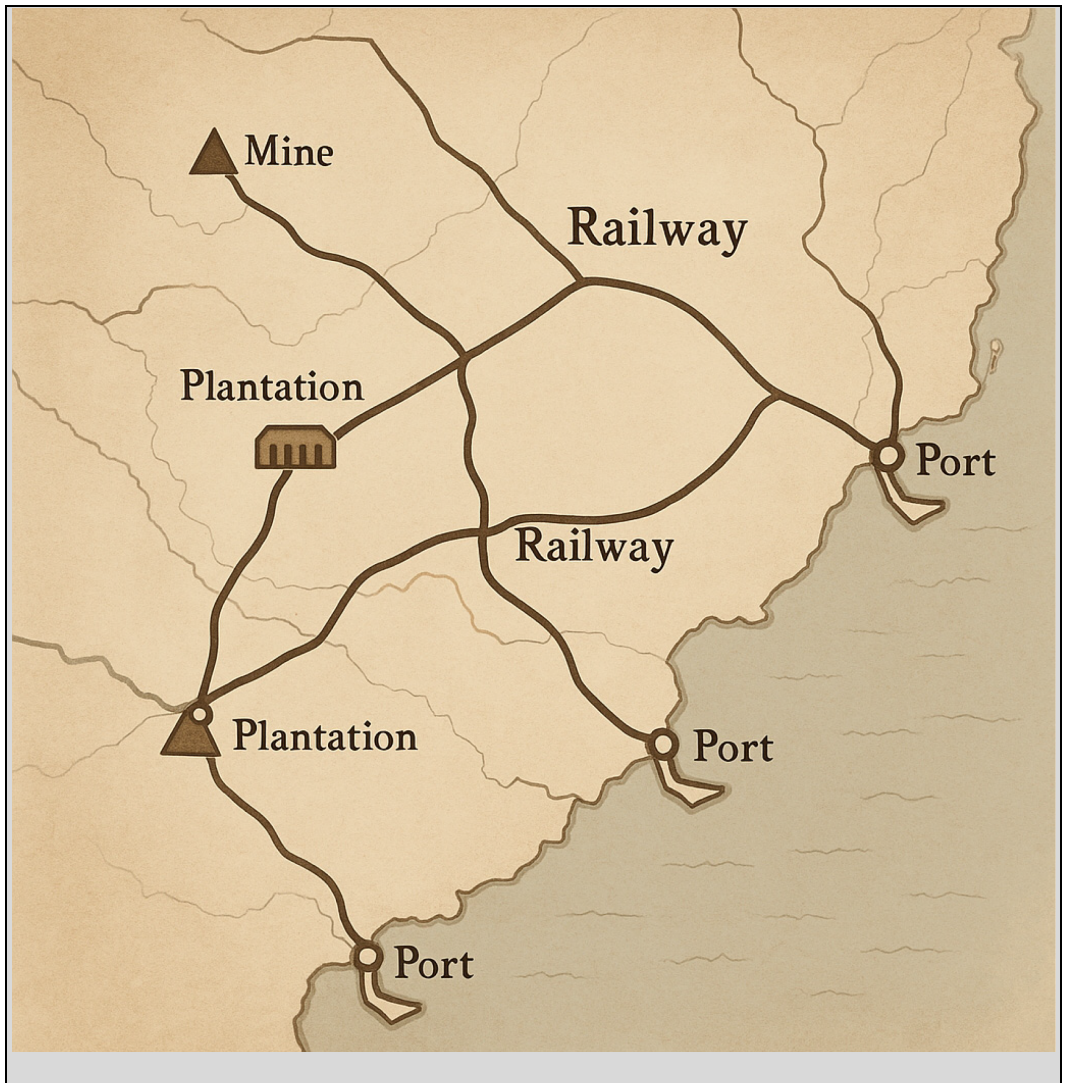


Figure 4 *Continued*

Christian Schmid. He presented the concept of planetary urbanization and I presented my work on the global petroleumscape. The weblink to the conference longer works, making it difficult to trace. Other topics, on warfare and computation, also mirrored the ideas I have discussed above. The texts proposed by ChatGPT, however, did not include archival data. Based on my prior research I could have added, for example, findings on Rotival and his work on warfare, digital infrastructures or computation. To a certain extent, the proposal from ChatGPT offers confirmation of the ideas that I have been pursuing (Figure 1). Using the prompt as a discussion tool could help me further refine a contribution to a new chapter of the *Handbook*. But overall the proposal served more as a mirror of existing – emerging – work, than a model for innovation.

To test the depth of what ChatGPT would propose, I prompted the engine to write a chapter on planetary urbanization. The proposal neatly combined themes that I have been working on,

References

Brenner, N., & Schmid, C. (2011). Planetary urbanization. In *Urban Constellations*, ed. Matthew Gandy. Berlin: Jovis.
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Proposed Images for Inclusion

1. Colonial Infrastructure Planning

Location: Section 2 – *Territorial Planning and Resource Extraction*

Image Idea: A historical map or schematic of a colonial railway system (e.g., British India or Belgian Congo), highlighting how lines connected mines or plantations to ports rather than cities.

Purpose: To visualize the extractive logic of colonial infrastructure planning.

Figure 4 *Continued*

that is, territorial approaches to planning; petroleum flows; environmental dimensions of planning (such as water); data; and novel methodologies. The resulting text (Figure 2) captures the theme of territorial development as a key theme for planning and planning history, and can be seen as a confirmation of the work that I have been promoting over the last few years, for example through the Port City Atlas, which promotes a territorial view that overcomes the long-standing focus on ports and cities and the tendency to ignore surrounding (rural) areas and smaller cities.[32] The ChatGPT-generated text brings up relations to petroleum, which I could easily expand on based on my prior work.

Next, I asked ChatGPT to write a proposal for a second chapter. The proposal included a title, pitch, and gap, proposing several themes that overlap with proposals that I have made above, for example, on Covid-19, climate change, data, decolonization, and Indigenous approaches, similar to

[32]Hein, van Mil and Azman-Momirski, *Port City Atlas*.

2. Global Oil Infrastructure Network

Location: Section 2 – end

Image Idea: A conceptual map showing major oil extraction zones, pipelines, refineries, and port cities from 1900 to the present.

Purpose: To represent the spatial reach of "petro-urbanism" and its influence on planning history.

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3. Logistics and Container Ports

Location: Section 3 – *Logistics, Infrastructure, and Planetary Urbanization*

Image Idea: A modern aerial view or isometric illustration of a container port (e.g., Rotterdam or Shanghai), annotated to show logistical flows and zoning.

Purpose: To illustrate the scale and complexity of logistics-focused planning.

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4. Environmental Planning and Flood Control

Location: Section 4 – *Environmental Planning and Ecological Transformation*

Image Idea: A layered diagram of Dutch polder systems, including dikes, sluices, and canals, showing human-made water management over time.

Purpose: To show how planning has reshaped ecological systems.

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5. Digital Infrastructure Footprint

Location: Section 5 – *Digital Planning and the New Infrastructural City*

Image Idea: A conceptual image showing a global digital infrastructure network — cloud servers, fiber-optic cables, and data centers — layered over a world map.

Purpose: To visualize the "invisible city" of digital planning.

Figure 4 *Continued*

what I had proposed earlier in this article. This version also addressed questions of water management and logistics that I have proposed myself (Figure 3). The resulting text could help me reflect on my writing over the years.

When I used the first prompt again later, ChatGPT immediately proposed a chapter including images (Figure 4). The resulting piece could help facilitate discussion and support better writing and understanding. This raises the question of how to engage with the chatbot. Is it a tool to

organize thoughts? A tool to speed up analysis and understanding? Will the texts be read and have an impact? Is the research good enough for policy recommendations? Or is it a tool that dulls our wits and adds to the climate crisis through the consumption of energy and water?

It is important to note that the proposal by ChatGPT includes several errors that can only be detected with careful reading. My book *The Capital of Europe*, published in 2004, for example, is

Prompt: Write a contribution for the Routledge Handbook on Planning History on Atlantis

Here is a full-length draft contribution for a chapter titled **"Atlantis and the Imaginative Foundations of Planning History"** for a future edition of the *Routledge Handbook on Planning History*. It blends mythology, historical interpretation, and planning thought to explore the significance of Atlantis in the planning imagination.

Atlantis and the Imaginative Foundations of Planning History

Author: [Insert Author Name]

Abstract

This chapter examines the myth of Atlantis as a foundational narrative within the global imagination of city planning. Though mythical, Atlantis has shaped conceptions of ideal urban forms, technocratic societies, environmental catastrophe, and the hubris of imperialism. By analyzing its representation from Plato's dialogues to Enlightenment utopias, early modern urbanism, and modern planning discourse, this chapter argues that Atlantis operates as a "ghost city" in the genealogy of planning history—simultaneously a warning and an inspiration.

Introduction

Atlantis has no place on the map, yet it looms large in the cultural geography of planning thought. Ever since Plato introduced the island-continent in his *Timaeus* and *Critias*, Atlantis has served as a complex symbol: a technologically advanced society undone by moral decay and natural disaster. Despite—or because of—its fictional origins, Atlantis has profoundly influenced utopian thinking, colonial urbanism, and modern planning paradigms. This chapter argues for the inclusion of Atlantis in the canon of planning history, not as a case of material infrastructure, but as an enduring and adaptive idea that has shaped built environments across centuries and continents.

Plato's Atlantis: Urban Form as Moral Geography

Plato's Atlantis was no mere fantasy. It was a deliberate rhetorical device, a counter-model to Athens meant to provoke reflection on justice, governance, and the relationship between urban form and civic virtue. According to *Critias*, the Atlantean capital was built with concentric rings of land and water, a geometric, hierarchical structure expressing control and centralization. This was a city engineered for dominance—its monumental scale, military organization, and commodification of nature foreshadowing imperial cities of later empires.

Plato's narrative thus offers one of the earliest recorded links between urban form and political order. Atlantis, in its planned perfection, falls prey to its own hubris. The destruction of the city is not only environmental but ethical. In planning terms, it can be read as a warning against technocratic overreach, the dangers of scale, and the fragility of highly centralized systems.

Figure 5. A ChatGPT generated article on the planning history of Atlantis (6 Octobre 2025) (slightly reformatted).

used here as a source for the work that I have been doing on water management in the Netherlands in recent years. My edited book, *Port Cities: Dynamic landscapes and global networks*, is cited as a chapter in a book edited by Taylor, Derudder, Saye and Witlox, who I have no connection with. One source is completely invented: The article by Ghosh D. cannot be found. The creation of new sources, including DOI, is something that we see increasingly often in education and publishing and requires careful control. While the overall reflection proposed by ChatGPT, including the image that presents a fictional situation with an abstract visualization, can be helpful, all the information generated needs to be carefully verified.

To conclude my toying with ChatGPT, I asked it to write an article on a topic of planning history that had little grounding in reality: the planning history of the fictional city of Atlantis (Figure 5). I wanted to see what kind of argument ChatGPT might construct for a topic that is largely fictional.

Enlightenment Utopias and Colonial Refractions

Atlantis resurfaced in the early modern period as a symbol of rational order and technological mastery. Francis Bacon's *New Atlantis* (1627) reimagined the lost continent as a society governed by scientific inquiry and institutional planning—a prototype of the modern technocratic state. The House of Salomon, with its meticulous record-keeping and experimental planning, prefigures both the modern research university and the data-driven planning offices of the 20th century.

In the colonial age, Atlantis was often invoked to justify territorial expansion and spatial transformation. Maps locating Atlantis in the Americas, Africa, or the Mediterranean merged myth with empire. Its imagined existence lent legitimacy to the reordering of space and society under colonial rule. The grid plans of Spanish-American cities, the extraction towns of European empires, and the plantation economies of the Caribbean all drew upon the mythos of a lost order waiting to be restored or surpassed.

Modern Planning and the Specter of Atlantis

In the 19th and 20th centuries, Atlantis became a cipher for anxiety about modernity. Industrialization, war, and environmental degradation brought renewed attention to the myth's themes of decline. Ebenezer Howard's Garden City, Le Corbusier's Radiant City, and even Frank Lloyd Wright's Broadacre City echo Atlantean concerns with symmetry, order, and the ideal balance between nature and the built environment.

Meanwhile, the specter of Atlantis haunts the darker side of planning—totalitarian models, forced displacement, and ecological collapse. As urban theorist Mike Davis (2006) reminds us, utopian visions often mask dystopian outcomes. The myth of Atlantis thus serves as a reminder that plans can fail catastrophically, especially when they prioritize control over adaptability, or aesthetics over justice.

Atlantis Today: Mythical Cities in a Warming World

In the context of the Anthropocene and rising seas, Atlantis has re-entered global discourse as a prophetic symbol. Coastal cities from Jakarta to New York face the threat of submersion; urban resilience strategies now borrow rhetorically and symbolically from the Atlantis narrative. Climate change has turned myth into metaphor—and sometimes even into planning policy. Floating cities, managed retreat, and climate-proof infrastructure are now envisioned with echoes of Atlantean warnings.

Digital technologies have also revived interest in lost cities. From speculative archaeology to virtual reality reconstructions, Atlantis remains a popular subject in both academic and popular culture. It serves as a site where imagination and planning converge—a thought experiment continually reshaped by the technologies and anxieties of its interpreters.

Figure 5 *Continued*

Conclusion: The Uses of Myth in Planning History

Atlantis is not simply a fantasy but a powerful planning narrative. It demonstrates that city planning has always been entangled with mythology, morality, and metaphysical visions of order and chaos. Recognizing Atlantis within planning history invites us to consider how imaginary cities shape real ones—not only in form but in ambition and failure.

Planning historians must attend to such myths not as distractions but as structuring devices in the long history of urban thought. Atlantis thus belongs in the planning historian's toolkit: a site of memory, a mirror of modern anxieties, and a monument to both the power and peril of the planned city.

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Suggested Images

- Atlantean City Plan (Reconstruction Based on Plato) – Geometric concentric circles surrounded by canals and walls.
- Francis Bacon's New Atlantis Visualization – Early modern utopian architecture and institutional planning.
- Colonial-Era Map Locating Atlantis – Europe-centric interpretations of mythical geography.
- Modern Coastal City Underwater Simulation – Digital rendering of New York or Jakarta as a "New Atlantis."
- Comparative Diagram – Garden City, Radiant City, and Atlantean schematic juxtaposed.

Let me know if you'd like this in a formatted Word document or with generated images.

Figure 5 *Continued*

The response was quite surprising. ChatGPT proposed an analysis of Atlantis as the imaginary foundation of planning history and examined its role as a narrative foundation. It proposed linking politics and spatial form and using fiction and myth for transitions. In some ways, this approach could be tied to the idea of 'what if' histories that I proposed earlier. If I had used a professional version of ChatGPT, the results might even have been more impressive.

Conclusion: first we shape the algorithms and then algorithms shape us (adapting Churchill's comment on buildings)

Editing the *Routledge Handbook of Planning History* was an effort of many years. It was the outcome of extensive conversations and collaborations with many colleagues. The book itself was important, but the process of making it was equally as important. Creating a community of like-minded people, educating scholars who would assess research applications, and creating a network of educators and students were important side effects. The use of AI may speed up the process of creating a document, but the learning process that was involved in making it was not the same.

ChatGPT and similar tools are rapidly advancing, but they cannot cannibalize our field. We can and should find ways to use these prompts to enhance our research. Getting ChatGPT to write an article might take less time and get more citations and generate other ChatGPT articles, but would it change the minds of people working in the field?

Tools like ChatGPT can produce material to serve as a foundation for discussions; it can help structure our arguments. However, while there are benefits to the use of AI, there are also many drawbacks, not the least of which are the extreme use of energy and water by the data centers that are transforming our landscapes. Significant advances in planning history can only be achieved through human interaction. The intellectual work that we do within planning history is what can move planning ahead. We need to acknowledge that planning as a discipline will rely increasingly on AI tools, and planning history needs to recognize and analyze this development, while paying attention to the ways in which AI reshapes planning history. We need to do more than produce more facts and address more themes: The main goal of planning history should be to help make planning better – for people and the planet.

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