# 1. Introduction to the volume

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Urban history has regularly produced what geographer Sir Peter Hall (1982) coined as 'great planning disasters'. From the Leaning Tower of Pisa, Eko Atlantic City, and Brasília to the Sidney Opera House, Berlin's BER airport, and Hamburg's Elbphilharmonie and Elbtower – the latter two examples taken from the city where we have assembled this volume – far-reaching interventions into the urban built environment sometimes take a course different from what was originally intended. Some of these interventions end in an incomplete and fragile but enduring state (Pisa, Brasília); some are stopped midway (Eko Atlantic City, Elbtower); some finally fulfil their infrastructural function (Berlin BER); some – after going through heavy turmoil (Sidney Opera House, Elbphilharmonie) – eventually turn into a 'miracle', as Hall (1982: 558) quotes the engineer Ove Arup about Sidney's architectural icon.

Such 'planning disasters' are usually framed as coincidences or accidents. That is, they are considered, first, as exceptional occurrences that, second, stand for processes that have gone wrong and need to be fixed – and that instigate learning in order to plan and manage projects in a more orderly fashion next time. The starting point of this book is to call this interpretation of failed planning and design projects as off-track ventures into question. That things develop differently from what was planned is, we maintain, nothing extraordinary but rather a chronic and normal feature of the built environment as a whole. Failures, the fixing of failures, futile attempts at avoiding failures, and the fact that failures only become evident after time and through use – all happen every day and on different scales, from the large-scale ventures referred to above to interventions into small details of single buildings. And, almost more importantly, the fact that things habitually take a course different from what plans would indicate is not necessarily a disaster that stakeholders responsible for the future urban built environment must avoid or fix. Without advocating for collective irresponsibility, we hold that deviating from the

original course can open up new and potentially promising paths for urban futures.

The concept we mobilize to capture this inherent potential of indeterminacy and uncertainty with regard to urban future-making is *contingency*. Contingency is a multifaceted concept (see Pohl, Grubbauer, and Thiel in this volume). On the one hand, contingency refers to the possibility that things could be different, or, to put it in negative terms, contingency means the impossibility of fixing things definitively. From this perspective, contingency primarily means the opposite of control. On the other hand, contingency can also mean that things are related – for instance, when we say that *A* is contingent upon *B*. Here, contingency stands for the impossibility of viewing things independently of one another, thereby emphasizing their dependency or conditionality. In both cases, however, contingency allows us to centre on the fragile nature of reality – its precarious, uncertain, and dynamic configuration. Focusing on contingency means emphasizing not so much how things are, but how they could be – it highlights that what we treat as 'normal' or even 'natural' could be otherwise, so that there is an inherent potential for change.

This volume sets out to investigate how contingency plays out in the domain of urban future-making. We understand the latter to mean the broad realm of actors and actions that shape urban conditions, including material properties, political institutions, and social dynamics. Urban future-making treats the city, or urban realities more broadly, as constantly unfolding through both temporal and spatial tensions, as well as through path dependencies and urgent demands. Cities are arenas where collective pathways to the future are designed, forecasted, and socially negotiated (see also Dobraszczyk, 2019; Zeiderman and Dawson, 2022). Various urban actors (e.g. from planning, politics, administration, business, and civil society) have the agency to actively shape the city, and yet, we argue, all actions to shape the city are somehow confronted with *contingencies in urban future-making*. With this volume we look into how professional actors with expertise in architecture, engineering, and planning, in their various roles as administrators or experts, address and seek to come to grips with these contingencies.

The contributions to this volume build on the findings of the first volume of our series on urban future-making (Grubbauer et al., 2024a). That volume explored the conflictual dynamics that arise when urban futures are imagined, negotiated, and materialized. We argued that in the light of urgent demands for transformation, the built environment disciplines have a critical role to play in these conflicts. The actions of cities seeking to tackle problems of climate

change and environmental degradation, and to adapt urban spaces to future demands, address a range of built environment domains, from energy to transport, green spaces, and housing. Professionals are thus pressured to take on key roles as agents in transformative processes, being responsible for weighing ecological and social impacts, moderating public debates, and communicating with citizens. The analyses of the first volume showed how these actions unfold within and relate to larger societal arenas of conflicts, and how professionals face the challenge of negotiating conflicts related to 'differing urban imaginaries, layered political frames of reference, and clashing temporalities' (Grubbauer et al., 2024b: 13) in their day-to-day practice. Importantly, we raised the point that many of the conflicts that professionals face seem increasingly emotionalized, arguing that urban future-making thus also represents an affective practice.

While not engaging with the notion of contingency explicitly, the first volume hinted already at contingency as a source of conflict in urban future-making, paradoxically, in a twofold way corresponding to both meanings of contingency addressed above. On the one hand, transformative action in the built environment is confronted with important path dependencies, which include not only material structures and their technical operation but also standardized procedures and institutional routines in the policy realm, as well as habitualized daily practices and cultural norms of citizens. These provide for unexpected, and in many cases much more persistent, structural barriers to transformation than initially foreseen. Thus, contingency is manifested in *conflicts about non-fulfilled promises* of planning and the failures to meet targets and implement projects as projected. On the other hand, transformative action in the built environment necessarily breaks with expectations and established norms: car-centred lifestyles are put in question, alternative sources of energy are envisioned, and the design of open and green spaces follows new paradigms in order to adapt to the new realities of climate change. Currently, much of this is explored in experimental ways, transgressing also the established formats of professional action such as plans, projects, and experiments (see Thiel and Grubbauer in this volume). Here, contingency is a source of *conflicts, as the course of action deviates from established procedures* and leads to surprising and new constellations of actors and interests, as well as to new types of interaction and uses of urban spaces. In both cases, contingency can be seen to play a role as a source of conflicts in terms of expectations that remain unfulfilled and are disappointed.

Coming back to the 'great planning disasters' that provided the entry point to this introduction: Such disasters are usually framed primarily in terms of the first notion of contingency – in terms of the unfulfilled promises and disappointed expectations of policy-makers and citizens alike with regard to time horizons and the burdens that arise from prolonged implementation, or even with regard to the general prospect of a better future (Kemmer and Simone, 2021). Such disappointment weighs even more heavily when unexpected costs are involved and questions arise about whom to hold responsible. But beyond that, the disappointed expectations of citizens, at present, relate fundamentally to the built environment as a constitutive element of everyday life, with streets, bridges, schools, public transport, sports facilities, and other public services all relying on the material and operational qualities of building and infrastructure networks. Recent studies (Heider et al., 2025) show how societal polarization and right-wing extremism are particularly strong where such expectations are left unmet, where public services are in a state of decay, and where the life-world of citizens is crumbling in the truest sense of the word. The city, and its built environment, is thus much more than the material envelope of social life: It is a genuine part of the foundations of democratic societies (Beveridge and Koch, 2022). And yet, interventions into our built fabric are not only to stabilize these foundations or to restore what has been lost; these interventions need to embrace inherent contingencies in both senses of the term. Hence, the refurbishment of infrastructures builds on the path dependencies of legacy systems; at the same time, it crucially requires securing, creating, and leveraging openings that enable the creation of new opportunities and the ability to cope with the demands of an increasingly 'turbulent world' (Amin, 2013).

Against the broader vision of urban future-making, the chapters of this volume ask how contingency can be treated not only as a disturbance to the planning of urban futures but also as a constitutive element of urban future-making; how contingency provides insights into the cracks in dominant systems in order to highlight the moments when certain paradigms and universalized norms are no longer adequate; how certain spaces provide us as urban scholars or practitioners with insights into the contingencies of cities that other spaces don't; how urban temporalities are layered, unfolding in nonlinear ways, thus emerging from entangled pasts and unstable presents; how powerful actors in shaping urban conditions must reconcile with uncertainty rather than suppress it to properly engage with the limits of planning; and how contingency can be mobilized not only as a threat but also as a resource for renegotiating and redefining the city of tomorrow. In other words, this book

aims to investigate the pitfalls, potentialities, and transformative practices that emerge when engaging with the contingencies in urban future-making.

Under the header of 'Conceptualizing Contingency in Urban Future-Making', two theoretical tracks will set the scene. In the first, Lucas Pohl, Monika Grubbauer, and Joachim Thiel probe the overarching concept of this volume: contingency. The chapter departs from the traditional concept of the city as a fixed, orderly whole and instead views it as a contingent formation shaped by uncertainty, competing visions, and the possibility of transformation. It explores how built environments simultaneously sediment existing orders and open new pathways for change, positioning contingency as a vital lens for imagining the city as an always-emergent 'possible otherwise'. Tracing the evolving role of contingency in urban planning, from defensive risk management towards an embrace of uncertainty as a driver of transformation, the chapter examines the delicate balance between control and openness in shaping urban futures. Against the backdrop of overlapping crises, it concludes that built environment professionals face a new condition of simultaneous urgency and uncertainty, in which contingency cannot be reduced to being a threat to be minimized but must be understood as a catalyst for alternative ways of designing, governing, and inhabiting the city. In the second of the conceptual framework chapters, Joachim Thiel and Monika Grubbauer venture into time and temporality as foundational concepts of the broader research on urban future-making. The authors highlight three conceptual contact zones between two timely and prominent, but hitherto largely separate, literatures: one on future and future-making, and the other on time and temporalities. These contact zones are comprised of the open but uncertain future as a feature of late modernity; the enabling but formatting effect of the modern 'socio-temporal order'; and the tricky relation between imagining futures and enacting them now, which is inherent in human agency's embeddedness in the flow of time. From two perspectives, the chapter translates these 'temporal ambiguities' into the urban: On the one hand, it focuses on built environment professionals and the temporalities of formats they use to shape urban futures (plans, projects, experiments), and on the other, it concentrates on the physical dimension of the urban, unpacking the complex temporalities of urban matter. The authors conclude that future-making research and practice essentially implies embracing multiple and ambiguous temporalities as well as complex matters.

The book's first thematic cluster, 'Leveraging History and Opening Futures', brings together four chapters that focus on path dependencies that

historical developments have generated but that impinge on future-making in the present in very different ways. The cluster starts with Thilo van der Haegen's chapter on postcolonial real estate development in Vancouver, British Columbia. The chapter examines large-scale Indigenous real estate development as part of a broader transformation in the city's political economy of land. Using a dialectical lens, it explores how such developments emerge from, yet also actively reshape, settler-colonial structures through the agency of First Nations as urban future-makers. It argues that these projects produce contingent urban futures that are neither fully predetermined nor entirely open, while positioning First Nations as powerful actors capable of redefining the terms of urban development in their traditional territories. Irina Redkina's chapter probes into a very specific phenomenon: industry towns, set up in the mid-20th century, usually adjacent to a huge industrial plant. Those foundational elements were often the emblematic examples of socialist city planning. In this context, Redkina focuses on the case of Bokaro Steel City in India. The chapter offers a thorough account of the origin of Bokaro and gives an important analysis of whether and how those urban structures are able to adapt to today's requirements, which are dominated by a neoliberal imperative. The author argues that the urban structures built during the city's founding exhibit a remarkable robustness, particularly due to the quality of non-commodified public goods that modern planning principles had brought about. In the subsequent chapter, Louis Volont challenges the common view that secular modernity fully replaced religious frameworks with a purely contingent vision of the future, arguing instead that urban future-making continues to draw on forms of sacrality. Through a Durkheimian sociological lens, the chapter examines Hamburg's 2006–2013 international building exhibition as a 'sacred' space of moral boundary-making, suspended norms, and symbolic architectural icons, where contingency was actively staged and celebrated. This reveals striking parallels between the authority of priests, prophets, and planners in shaping which urban futures are imagined, legitimized, and pursued. In the final chapter of this cluster, Carsten Gertz and Katharina Manderscheid approach the role of history in a very specific way: not with regard to the empirical phenomenon they examine – urban air mobility (UAM) – but as an analytical lens. The focus of their chapter is on how new technologies can be implemented in incumbent mobility regimes. For that purpose, Gertz and Manderscheid mobilize historical examples of both successful (the car) and failed (the Transrapid maglev train; urban cabin taxi systems) attempts at such implementation. Building on these analogies

and mapping the field of urban air mobility, the authors conclude that even though many factors seem to contraindicate the successful implementation of UAM, this is not to say that flying taxis will not have a future in the built environment.

The second thematic cluster, titled 'Negotiating Objects and Creating Matter', gathers five chapters that examine the physical aspects of the urban built environment and highlight the contingencies related to urban materialities. Kathrin Meyer investigates the complexities of rooftop extensions on multifamily houses in Hamburg built in the post–World War II period. While the enlargement of existing buildings seems like a suitable plan to alleviate housing shortages and secure resource-friendly construction, the actual implementation of such a plan involves a whole series of contingencies. For instance, the seemingly uniform building types of the 1950s and 1960s prove to be pretty diverse, particularly in regard to their load-bearing capacities. What is more, technical documentation of these buildings is insufficient, so that each expansion project requires extensive case-by-case assessments. Even newly available digital planning tools rely on standardized information and therefore cannot replace a thorough examination of each building. The chapter by Aboli Mangire enquires into the challenges that low-income mass housing strategies in India face due to climate-induced uncertainties. Using a pilot project in Pune as a case study, the chapter shows how standardized reinforced concrete construction and urban design often neglect both the thermal performance of buildings and the daily practices that their residents use to cope with rising temperatures; the result is growing energy demand for space cooling. She calls for socio-spatial methodologies that systematically integrate these lived experiences into future housing design to better address the contingencies posed by climate change. Clara da Ros explores the concept of 'interstitiality' in her chapter, examining the contingent socio-material practices that shape small-scale urban transformation by focusing on the case of a former World War II bomb shelter in Hamburg. Combining interstitial thinking with a practice-theoretical approach, the chapter examines how inherited, in-between urban spaces – often unintended, repurposed, or situated between divergent spatial logics – become active sites where past and future, as well as materialities and social meanings, intersect. Through ethnographic observations of everyday collective activities, the chapter highlights how such interstitial spaces are continually reshaped from within, contributing to urban future-making at the neighbourhood scale. Similarly, Hendrikje Alpermann's chapter examines how urban planners in the German city of Halle-Neustadt navigate the contingent fu-

tures of the vacant 'Hochhausscheiben' high-rises through the lens of 'standby' as a mode of future-making. Drawing on ethnographic research, the chapter shows how planners sustain potentiality amid uncertainty, balancing long-term visions with short-term actions while futures are repeatedly made and unmade. In doing so, the chapter reveals how maintaining buildings 'in play' embodies the tension between stasis and change in post-socialist urban contexts. The cluster on materialities closes with Lena Enne's chapter on the maintenance of gas, water, and sanitation infrastructures in Hamburg. The study centres around the contingencies caused by entanglements between different utility systems. Enne's starting points are two futile attempts at tackling these contingencies by concentrating various utility infrastructures into a commonly accessible supply tunnel; one case is from the late 19th century, and one is recent, within a newly developed neighbourhood on former port land. Building on these examples of failure, the author elaborates on three types of unavoidable contingencies that the examined infrastructures exhibit: spatial contingencies, referring to physical interferences; temporal contingencies, implying different maintenance rhythms; and institutional contingencies, concerning the fragmentation of responsibility.

The third and final cluster, 'Shaping Decision-Making and Advancing Policies', entails four chapters that deal with practices of urban future-making under conditions of contingency, particularly, how cities cope with contingency under different contexts and conditions. Oliver Ibert's conceptual chapter addresses the heart of planning theory. Starting from the classic decision-centred model of planning and the temporal sequence of decision premises and operational decisions characteristic of this model, the author first examines its strengths and limitations. Following that, Ibert discusses the potential of decision-centred planning models to cope with societal disruptions, or 'collectively perceived accelerations of change'. He proposes two options for dealing with disruptions, both concerning the relation between decision premises and operational decisions: One option is to loosen the binding nature of the former for the latter; the other is to reverse their sequence and thereby allow for 'action preceding cognition'. In his chapter, Alexander Stanley addresses strategies that the port cities Hamburg and Cape Town use in order to deal with climate risks. Stanley's work identifies three key sources of the contingencies that port cities chronically face: spatial contiguousness between water and hinterlands; fragmented institutional and regulatory landscapes; and the risk of unexpected climate change–related events. The main body of the chapter – given the author's law background – looks into the regulatory landscape

of the two case study cities. The chapter concludes with an ambivalent statement: that climate adaptation in port cities suffers from institutional fragmentation, yet local professionals have agency and can experiment with the application of new regulatory and planning approaches. Ana Paula Koury and Alessio Mazzaro explore the inherently contingent nature of informal urbanization in São Paulo's peripheries, focusing on the community of Torresmo in Itaim Paulista. Using the case of a post-disaster emergency infrastructure project, their chapter examines how local contingencies intersect with broader structural forces, revealing tensions between municipal–corporate technical cultures and more sustainable urban visions. Through the experience of Lab Itaim, a 'real-world laboratory', the authors reflect on how experimental, participatory methods can engage with uncertainty to negotiate more progressive urban futures in contexts shaped by informality and political complexity. In the final chapter, Gala Nettelbladt investigates the relationship between Berlin and its hinterland, specifically regarding water management dynamics in Lusatia, which holds the capital's supply of freshwater, on the one hand, and the economic future of old coal mining communities, on the other. Drawing from and building upon literature on city-hinterland relations and 'hydrological time', Nettelbladt focuses on understanding the hinterland as an analytical category that is at least partly independent, and whose independence, she argues, is exemplified through specific and contingent temporalities. These temporalities engender a mismatch between Berlin's expectation to be continuously supplied with freshwater, and Lusatia's expectation to have a regional economic future after the end of coal-mining.

## References

Amin, A. (2013) Surviving the turbulent future. *Environment and Planning D: Society and Space* 31.1, 140–56.

Beveridge, R. and P. Koch (2022) *How cities can transform democracy*. Polity, Cambridge.

Dobraszczyk, P. (2019) *Future cities: Architecture and the imagination*. University of Chicago Press, Chicago.

Grubbauer, M., A. Manganelli, and L. Volont, (eds.) (2024a) *Conflicts in urban future-making: Governance, institutions, and transformative change*. transcript Verlag, Bielefeld.

Grubbauer, M., A. Manganelli, and L. Volont (2024b) Introduction to the volume. In M. Grubbauer, A. Manganelli, and L. Volont (eds.), *Conflicts in urban future-making: Governance, institutions, and transformative change*, transcript Verlag, Bielefeld.

Hall, P. (1982) *Great planning disasters*. University of California Press, Berkeley.

Heider, B., T. Novack, P. Scheunert, and B. Scholz (2025) *Antidemokratische Wahlerfolge im ungleichen Deutschland: Demokratiestützende Aspekte der Daseinsvorsorge*. Friedrich-Ebert-Stiftung. https://library.fes.de/pdf-files/a-p-b/22242.pdf.

Kemmer, L. and A. Simone (2021) Standing by the promise: Acts of anticipation in Rio and Jakarta. *Environment and Planning D: Society and Space* 39.4, 573–89.

Zeiderman, A. and K. Dawson (2022) Urban futures: Idealization, capitalization, securitization. *City* 26.2/3, 261–80.