Introduction: Irritations and Unforeseen Consequences of the Urban: Debating Natures, Politics and Timescapes

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Irritation/ˌɪr.ɪˈteɪ.ʃən/
Oxford Language Dict.
1. the state of feeling annoyed, impatient, or slightly angry.
2. inflammation or other discomfort in a body part caused by reaction to an irritant substance.
Origin Late Middle English from Latin: irritatio(n) from the verb irritare.

The Bishop of Freising, Otto the First, was certainly more than irritated when Henry the Lion had the bridge over the river Isar in Freising burnt down so that a new, competing bridge could be built a little further south. There, in what would later become Munich, this bridge spanned the river in his favour and served the flourishing salt trade. The episode has been handed down as a founding legend of the city. To settle the dispute, Duke Heinrich of Bavaria and Saxony was granted customs and market rights for the city of Munich by Emperor Friedrich in 1158, and, as compensation, he had to cede every third part of his income to the bishop.\(^1\) Certainly, these were unforeseen consequences for the bishop and the dispute was to continue for many years between the two cities.

The Isar is a wild mountain river that rises in the Alps and flows through the city from south to north. In the centuries of the city’s history, this river has taken on a central role and shapes Munich to this day. It has become the most important ‘natural’ element in the middle of a growing city – even though the river has been tamed over time. Its ‘wild nature’ was taken away by dams, walls and power plants. It was used as a source of fresh water and a sewer, but also for

energy production and thus, as in many metropolises that have grown up along rivers, has turned into a key part of the city’s infrastructure. As we show in the Special Feature of this dossier, since May 2000, however, an eight-kilometre-long section of the river within the city of Munich has been renaturalised. Similar kinds of transformation took place in many European cities in this time period, bringing together water engineers, hydrologists, biologists, ecologists and landscape architects to implement the projects. Munich’s renaturation of the Isar figures as an award winning, successful redesign of an urban but wild-looking river. However, it has to be noted that the assumptions on which the renaturation ecology was based were not always accurate. For instance, even though the designers made all possible provisions, some of the anticipated habitats did not emerge: some fish species failed to appear, certain plant species were unable to establish themselves. But there emerged an unexpected, exuberant affection of Munich’s citizens for the Isar, which resulted in the eutrophication of water bodies and devastation of the vegetation areas. Was this an unforeseen conflict between the human and the non-human, an unsolvable tension between the desire for urban nature as recreation area in an increasingly dense city and the flourishing of precisely this urban nature? Could the planners have foreseen these tensions and anticipated the unintended consequences? And if so, how could these have been avoided? We argue that the human use of, and interaction with, nature often evokes new alliances between human and more-than-human that seem unprecedented. Thus, nature and other more-than-human subjects can be seen as co-designers in urban planning and their agency actively contributes to the shaping of the urban. This may be irritating – and deserves much more attention to better understand the underlying dynamics of urban environments shaped by the more-than-humans and humans in tandem.


With this dossier, we contend that city dwellers are constantly confronted with irritations and unpredictable consequences of the urban, and many actions and projects take a seemingly unplanned course as a result. Rather than the exception, or proof of insufficiently thorough planning, this can be seen as a common process. Thus, the unintended, accidental and unplanned results of an intervention turn out to be equally as important as the meticulously planned project itself. However, there is a range of approaches seeking to come as close as possible to anticipating the unforeseeable, for instance by modelling what are framed as complex urban systems. In this vein, James Suckling’s work on the consequences of complex systems of the environment is remarkable: can these consequences be known and thus avoidable, or are they unknown and thus unavoidable? It has to be noted, however, that ‘urban systems’ respond differently, ranging from collapse to adaption. This is obvious when taking globalised challenges into account, such as the unexpected consequences of ongoing climate change or the COVID-19 pandemic.

Drawing on a multi-species approach, urban environments can be conceived of as an assemblage of broad sets of actors, agencies and articulations. This relational view of the urban demands a shift in social research, which is often human-centred and tends to ignore the presence and needs of non-human subjects and forms of life.


Acknowledging the presence of more-than-human actors stresses the heterogeneity of beings and temporalities in urban space, and may disrupt hegemonic ways of imagining ‘nature’ and (non)-human entanglements,\(^7\) the city, and who and what are seen as relevant in this imagination. However, it is important to note that these processes are situated in specific social-, economic- and power-laden contexts. More often than not, designing the urban and its future(s) is far from being an inclusive process, but rather highlights and perpetuates inequality and discriminatory practices. For instance, zoning and redlining in the early twentieth century maintain unjust living conditions and social structures to this day.\(^8\) Often, living in deprived areas of the city, the bodily dimension of irritation comes to the fore. Contaminated urban environments and decay may cause health problems such as inflammation or the irritation of the skin and lungs. Irritation is thus not only a mental condition but an embodied and sensory experience. Poor, disadvantaged and often racialised dwellers are frequently omitted in the imagination of sustainable urban futures and stigmatised as polluting or even dangerous, and as threatening and disrupting the social order.\(^9\) However, as Sen shows, some of the unintended consequences of discriminatory and excluding urban planning may result in the emergence of an ‘unintended city’.\(^{10}\)

In this dossier, we draw on these deliberations and argue that the


unplanned and unintended are integral dimensions of all interactions with the urban. This assumption served as a starting point for the concluding conference of the Urban Environments Initiative (UEI), a network launched by the Rachel Carson Center for Environment and Society (RCC) in October 2019 as a collaborative venture between the Ludwig-Maximilians-Universität München (LMU), the Technische Universität München (TUM), the University of Cambridge and New York University, in addition to other invited members forming an international collective of scholars from six continents. The Initiative officially ran until 2021 and was directed by Social Anthropologist Eveline Dürr (LMU) and Landscape Architect and Urban Planner Regine Keller (TUM), supported by programme associates Daniel Dumas and Carolin Maertens based at the RCC. The UEI’s primary objective was to bring together researchers working on urban environmental issues, facilitating international and interdisciplinary networking, and advancing cutting-edge approaches to urban environments, drawing on different locales from across the globe. A first workshop was held in Munich in 2019, convened by Christof Mauch and Gesa Lüdecke (both RCC), applying a historical trajectory and focusing on understanding urban environments over time while also exploring urban challenges via a comparative, transnational and global framework. This workshop included a place-based site-walk, when participants explored together a formerly abandoned railroad track which was converted into an urban park. In its design, the area has kept its rural pioneer-vegetation and its character of wilderness. Only concrete board walks have been added to prevent visitors from stepping on protected biotope areas. Another site-walk took place at the Werksviertel in Munich, which had formerly been a trading and production area, and is now being converted into a housing and business district.

It was this embodied, highly sensory spatial experience that was key for designing the UEI’s second workshop on *Spaces of Living in Transformation – In Times of Uncertainty*. However, the COVID-19 pandemic impeded our original plans of further urban site-walks. Instead, we had to adapt the format to a one-day virtual workshop hosted on Zoom. When UEI members presented their research,
three interrelated topics emerged in our discussion.\footnote{11}{E. Dürr and R. Keller. ‘Introducing urban environments as spaces of living in transformation’ (2021): https://urbanenv.org/introducing-urban-environments} Re-thinking the urban made us examine how we can conceive of, and describe, the urban texture when we include non-human actors. We highlighted that a much broader range of ‘strangers’ emerges than originally thought in conventional work on the urban; the unjust urban meant more addressing the political realm and scrutinising the ways in which imbalances and inequality become manifest in urban settings. Drawing on Anna Tsing,\footnote{12}{A.L. Tsing. The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins (Princeton: Princeton University Press, 2015).} we considered the ‘ruins of capitalism’ in our understanding of the urban environment and reflected on our own privileged positionality as scholars writing on inequality; and finally, we discussed what we called accidental nature, challenging the assumption that urban life and planning processes are projectable and foreseeable in detail, and asserting that they rather develop a dynamic on their own. As a result of this workshop, participants wrote a series of position papers relating to their individual engagements with the urban, applying different disciplinary angles from fields such as Landscape Architecture, Urban Planning, Geography, Environmental History, Environmental Humanities, Social and Cultural Anthropology, Animal Studies and Biology (amongst others).\footnote{13}{See the Position Papers prepared by UEI Members for this workshop here: https://urbanenv.org/position-papers}

Unfortunately, the pandemic did not allow us to physically conduct additional site-walks in this virtual workshop. We therefore decided to present the case studies under discussion – two sites in Munich via two filmed site-walks. This innovative format is included in this dossier as a photo essay entitled ‘Spaces of Living in Transformation: Sights, Sounds and Sensations of Munich’s River and Slaughterhouse Districts’. Daniel Dumas and Carolin Maertens discuss two case studies, both located in Munich: The Slaughterhouse District (Schlachthof) and the Area of Renaturation of the River Isar (Isarauen). As already mentioned, the Isarauen is a prime example of an urban green space that has been renaturalised in order
to return ‘nature’ to the city. The Schlachthof and Viehhof are one of the old slaughterhouses and cattle markets of Munich. While parts of the complex have been transformed today into creative political and cultural spaces that are increasingly under pressure by gentrification, the district continues to maintain its importance as a food hub in the city. In the photo essay, the authors combine three interrelated topics, nature, gentrification and planning processes. They ask if planning processes can ever be finished or if they actually need to be re-considered instead as constantly unfolding endeavours, reaching far beyond possible end-dates?

We advanced this discussion by arguing even more radically that the unplanned and unintended are integral dimensions of all interactions with the urban, and as such constitute a central feature of urban life rather than an anomaly. How can the unforeseen in the urban be theorised? How does it become manifest in time and space, and with what consequences, for whom? We took these challenging questions as points of departure for the UEI’s concluding conference, which represented the culmination of nearly two years of interdisciplinary and cross-institutional collaboration. The three-day conference entitled ‘Irritations and Unforeseen Consequences of the Urban’ was held in June 2021 in Munich and engaged with the urban at different sites. We developed an innovative format for this conference, which once again took place virtually. By focusing on the themes of ‘Whose Urban Nature’, ‘Making Urban Environments’ and ‘Openness to or Foreclosure of Futures’, each day highlighted key debates facing both theorists and practitioners of the urban. For each of the three conference themes, six UEI members gathered in working groups several months prior to the event in order to form a panel for each day of the conference, choosing a creative format to present their work. The unconventional presentation formats of these highly interdisciplinary working groups are reflected in the collaboratively written contributions, which are assembled in this Special Issue. In addition to the long-established working groups, we invited non-UEI members to participate in this conference. This too is reflected in this issue through three of their contributions, which also speak to the three main conference themes selected for this dossier.
The panel presenting the topic *Whose Urban “Nature”?* included speakers Raúl Acosta (Social Anthropology), LMU Munich; Joseph Adeniran Adedeji (Architecture), The Federal University of Technology, Akure; Maan Barua (Geography), University of Cambridge; Matthew Gandy (Geography), University of Cambridge; Sasha Gora (Environmental Humanities), Ca’ Foscari University of Venice; Kara Schlichting (History), City University of New York. This panel explored cities as spaces where organisms survive and flourish, countering the assumption that urban areas are in fact separate from ‘nature’. Moreover, the panel emphasised that there is no single ‘urban nature’ as a host of other-than-human entities teem within urban environments across varying scales. After providing a brief definition of what ‘urban nature’ is – a nature that embodies diversity and is not simply green or blue areas but constitutes the urban as ecosystem – each speaker offered an intervention using a video or a photograph, thus providing a window into their research on the topic from their disciplinary angle. This original presentation format is also reflected in the written version of this co-authored paper, called ‘Thinking with urban natures’, which is composed virtuosically as a dialogue with each author reflecting on their common agreement that there are multiple urban natures, existing in different forms and on different scales. Their individual responses to the diversity of urban nature range from the contemplation of the changing colours of waters of Venice’s canals to the nexus of landscape and spirituality in Yoruba thought, discussing urban design in relation to the presence of macaques, investigating the emergence of forensic ecologies, which ultimately may lead to alternative ecological imaginaries of the urban. Further, a sensory history shows how individuals smell, hear and sense heat in the urban environment and point to the sensory, bodily experience of irritation, while scrutinising urban micro ecologies point to the significance of microscalar interactions among life forms and the ways they are governed. Thus, by highlighting the multiplicity of ‘urban natures’, the authors irritate more conventional approaches to ‘nature’ in the city, while stressing the relationality between life forms, matter, landscapes, etc., drawing attention to highly dynamic urban processes.
The second panel took on the format of a roundtable and debated *Making Urban Environments: Infrastructures of Power, Resistance and Negotiation*. The group focused on various urban infrastructures and their political entanglements by drawing on a more-than-human perspective. This multidisciplinary group consisted of Sonja Dümpelmann (Landscape Planning and Management), University of Pennsylvania; Rob Gioielli (History), University of Cincinnati; Stephan Pauleit (Landscape Planning and Management), TU Munich; Anindya ‘Rana’ Sinha (Animal Studies), National Institute of Advanced Studies, Bangalore; Katherine Wright (Environmental Humanities), LMU Munich; Amy Zhang (Anthropology), New York University. In the conference, this roundtable developed a specific presentation format where each speaker first gave a summary of another speaker’s work followed by a few short and pertinent questions regarding their research. This was followed by a reply and then the presentation of the next speaker’s work, which ultimately made for a highly cohesive and collaborative discussion between the panel, while also stimulating an intense discussion with the audience.

In their co-written paper, the six authors keep their conversation going by drawing on diverse examples to show the political and unequal relations between human and more-than-human lifeworlds in urban environments. They debate what decentring the Anthropos actually means, in theory and in practice. How do more-than-human spaces benefit humans and vice versa, and how can one another’s rights within the city be recognised? These questions are addressed by highlighting a range of interactions between humans and more-than-humans, such as the unequal relationship between race, carbon and mobility in US-American cities in the context of transportation infrastructure, the impact of planting street trees and plants on generating public spaces and thus influencing civil rights in New York City and Berlin as well as the green infrastructure in Munich and beyond as a form of engineering with nature as a transformative concept. Other examples involve the black soldier fly as biotechnical infrastructure to deal with waste as well as the macaques, creating an urban and arboreal life of their own. In addition, the political dimension of infrastructure comes to the fore...
in practices of resistance to ongoing colonisation in the Armidale Aboriginal Community Garden in Australia. Taken together, these aspects offer an incisive and original re-reading of the concept of ‘infrastructure,’ a pervasive term within academic and policy circles. It shows how non-human actors support, maintain and sometimes disrupt ‘urban systems’ – and thus (co-)produce unforeseen consequences in a multi-species urban environment.

The third panel was entitled *Openness to or Foreclosure of Futures: The Ethics and Politics of Expectation and Modulation* and included as speakers Benedikt Boucsein (Urban Design), TU Munich; Karen Holmberg (Archeology), New York University; Simone Müller (Environmental History), LMU Munich, now Augsburg University; Talitta Reitz (Environmental Humanities), LMU Munich; Dorothee Rummel (Urban Planning and Architecture), TU Munich, now Bauhaus-University Weimar; Avi Sharma (Urban and Environmental History), TU Berlin. Once again, these speakers chose an unconventional format to forge a group debate that benefited from the various disciplinary backgrounds of the presenters, who organised each of their contributions around a single image and also in reference to their co-presenters. They based their presentation on the irritation of time as a fluid concept which cannot be pinned down but is key for many urban processes. How, then, can the nature of time be grasped at all?

In their co-written paper ‘Variations on a theme: Temporality, cities and the environment’, they conceive of time as the focal point from which debates emanated and to which they kept returning. The authors ask about the role and dimension of time in their respective studies and reflect on it from their specific disciplinary vantage points. They argue that talking about the future unavoidably means discussing the present and the past as well. They also agree that multiple timescapes may overlap in urban space, but historical processes are primarily understood in human timeframes. In addition, the authors offer brief individual reflections on the interstices of their dialogue with one another, what they frame as ‘meditations’. Given the broad span of disciplines, this contribution ranges from contemplating planetary entanglements of urban space and the di-
verse temporalities of environmental change, drawing on the example of La Brea Tar Pits (Los Angeles) to the different kinds of time – the layers and losses in nature and cultures as natural (e.g. geological) and cultural times, which cannot be separated. Further, urban future planning is discussed in what is framed as City Timeline, its representation and imaginary futures, with an example from Portland, Oregon. Drawing on examples from Nuremberg, unused space, which is actually waiting to be built on, develops its own dynamic over time because of unforeseen complications due to the perseverance of nature and thus is overwhelmed by time. Exploring the potential role of multidisciplinary scenarios, experiments in urban planning offer a methodological reflection on time; and finally, the tensions of different temporalities in ‘Trümmerzeiten’ in post-World War Berlin point to the role of time in the more-than-human city. This thought-provoking paper carves out the irritating potential of thinking with, and thinking through, different urban timescapes in their own right.

Following the three co-authored group papers from UEI members are three additional papers from participants of the final conference. In a co-authored paper, Heiko Conrad (Medieval Armenian History) and Susanne Fehlings (Social and Cultural Anthropology), both from Goethe University Frankfurt, relate to the theme Whose Urban ‘Nature’? by linking distant time periods, such as the ancient pasts with contemporary everyday life, as an intellectual experiment in order to think through the past, the present and potential futures. Drawing on the example of Yerevan, Armenia, they describe the transformation of the capital’s green zones over time and discuss their unexpected effects. In the aftermath of the Soviet Union, nature re-appropriated parks by overgrowing them, while they became a resource for firewood for the local population. And finally, gardens move into the focus of environmental protection in more recent discourses. Thus, green spaces transform, and relate to, different ideologies and gain unexpected, yet contested meanings.

In the context of the theme Making Urban Environments, Diego Molina (Geography and Botany, Royal Holloway) discusses the creation of urban nature in Bogotá and Medellín as disciplined floristi-
cal islands in the nineteenth century. He stresses the rich diversity of plant species in cities, often surpassing the biodiversity of their surroundings. As a geographer and botanist, he explores how flowers and other plants were used as a means of spreading hegemonic ideas of empire, catering to urban elites on both sides of the Atlantic. However, colonialism and unequal power relations figure prominently in this transatlantic exchange, and thus in the creation of an unforeseen urban nature.

Finally, contributing to the theme *Openness to or Foreclosure of Futures*, Eeva Berglund discusses protest and creative interventions by artists, local residents and other activists against Helsinki’s new City Plan of 2016 for Vartiosaari Island. This island was to be ‘developed’ into a high-end, ‘green’ neighbourhood at the expense of its unique natural and cultural heritage. Berglund argues that this form of resistance created novel ways of imagining natural and cultural heritage, as well as the urban. New alliances were forged by bringing together technology, science and art, and unintended consequences reconfigured what it means to respect natural and cultural heritage in a changing landscape.

Taken together, all papers assembled here focus on the urban and its relationship with(in) ‘nature’ and tackle a range of dimensions of this often unruly relationship. Stressing the more-than-human perspective while considering the political and power-laden entanglements of diverse urban actors and their different timescapes allows us not just to better grasp the intentional development of the urban, but bring to light the veiled and unintentional consequences of urban dynamics, which more than often evolve in unexpected ways. This dossier stands out because of its high level of interdisciplinarity, covering diverse methods and approaches as well as its unconventional writing formats, reflecting the result of an intense debate in the context of the Urban Environments Initiative. While the UEI officially concluded in July 2021, we anticipate that the network fostered since its creation in October 2019 will lead to further collaborations and projects, advancing pathbreaking and unconventional theory of urban environments.
**Eveline Dürr** is a professor of Social Anthropology at the LMU Munich, where she is engaged in collaborative research projects on urban issues, such as ethics and notions of the ‘good life’ in cities; ‘poverty’ tourism and inequality; and (non)human-environmental entanglements and identity politics. Previously, she was an Associate Professor at the Auckland University of Technology in New Zealand. She received her doctoral degree and venia legendi (Habilitation) from the University of Freiburg, Germany. Trained at the Universities of Heidelberg, Mexico City and Freiburg, she has lived and conducted fieldwork in Mexico, the US and New Zealand. In each case, she paid special attention to the interplay between political forces and local responses, and the ways these entanglements shape individuals’ lives. Her recent books are a co-edited volume on *Urban Ethics as Research Agenda: Outlooks and Tensions on Multidisciplinary Debates* (London, 2023), and a co-authored book on *Watchful Lives in the U.S.-Mexico Borderlands* (Berlin, 2023).

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