

# ATLAS OF



# SPATIAL FIGURES

Edited by Ignacio Farias, Silke Steets,  
and Nikolaus Gansterer

**Jovis**

**Atlas of  
Spatial Figures**

**Edited by  
Ignacio Farías,  
Silke Steets, and  
Nikolaus Gansterer**



ATLAS  
OF

SPA  
TIAL  
FIGURES



# TABLE OF CONTENTS

	<b>Index of Spatial Figures</b>		<b>7</b>
	<b>After the Globe</b>	<b>Ignacio Farías and Silke Steets</b>	<b>9</b>
	<b>Extimacy</b>		<b>27</b>
	<b>Blind Date</b>	<b>Daniel Grönefeld</b>	<b>32</b>
	<b>Location Scout Meets Decorator</b>	<b>Daddy Dibinga</b>	<b>34</b>
<b>C06</b>	<b>Afronovelas</b>		<b>36</b>
<b>B01</b>	<b>Peripheralised Rural Areas</b>		<b>41</b>
	<b>Immune System</b>	<b>Jae-Young Lee</b>	<b>42</b>
	<b>Security, Privacy, Status, Identity</b>	<b>Jochen Kibel</b>	<b>44</b>
	<b>Superhosts Don't Cry (About a Room They Would Rather Use Themselves)</b>	<b>Christina Hecht</b>	<b>46</b>
	<b>A Multiple Telling of Home-Making Afronovelas</b>	<b>Daddy Dibinga and Séverine Marguin</b>	<b>48</b>
	<b>We Are Everywhere, but Where Are We?</b>	<b>Sung Un Gang</b>	<b>50</b>
<b>B03</b>	<b>Smart People</b>		<b>52</b>
<b>A05</b>	<b>Being Home</b>		<b>57</b>
	<b>Soft Modernism for the Kenyan Diaspora</b>	<b>Jochen Kibel</b>	<b>58</b>
	<b>A User Manual for the Ontological Security Machine</b>	<b>Carl-Jan Dihlmann and Sophie Krone</b>	<b>60</b>
	<b>Tiny House</b>	<b>Jae-Young Lee</b>	<b>62</b>
	<b>Splintering</b>		<b>65</b>
	<b>Of Ants and Algorithms: A Feminist Internet Utopia</b>	<b>Nadine Schabét</b>	<b>70</b>
	<b>The Permanence of Networked Change</b>	<b>Daniela Stoltenberg</b>	<b>72</b>
	<b>Interface Girl</b>	<b>Ludovica Tomarchio</b>	<b>74</b>
<b>A02</b>	<b>The Spatial Knowledge of Young Adults</b>		<b>76</b>
<b>C07</b>	<b>Platform Economy</b>		<b>81</b>
	<b>Who's Hacking the Neighbourhood</b>	<b>Christina Hecht</b>	<b>82</b>
	<b>Infrastructure Stories</b>	<b>David Joshua Schröder and Sezgin Sönmez</b>	<b>84</b>
	<b>Twitter Unites Forest Preservation Activists</b>	<b>Zozan Baran</b>	<b>86</b>
<b>B05</b>	<b>Translocal Networks</b>		<b>88</b>
<b>B02</b>	<b>Control/Space</b>		<b>93</b>
	<b>The Tumultous Tale of Tube Tension</b>	<b>Mr Pressure</b>	<b>94</b>
	<b>The Unaffordable Luxury of Digital Connection</b>	<b>Daniela Stoltenberg and Zozan Baran</b>	<b>96</b>

	<b>Uninhabitability</b>		<b>99</b>
	<b>Don't Litter on My Parade</b>	<b>Sung Un Gang</b>	<b>104</b>
	<b>Where to Flee</b>	<b>Qusay Amer</b>	<b>106</b>
	<b>My Microclimate Bet</b>	<b>Indrawan Prabaharyaka</b>	<b>108</b>
	<b>EU Borders in Africa</b>	<b>Zoé Perko</b>	<b>110</b>
<b>C01</b>	<b>The Borders of the World</b>		<b>112</b>
<b>B04</b>	<b>Locative Media</b>		<b>117</b>
	<b>Leaving the Comfort Zone</b>	<b>Philip Baumbach</b>	<b>118</b>
	<b>City Girl</b>	<b>Eva Korte</b>	<b>120</b>
	<b>The Ponte Della Libertà, the Umbilical Cord of Venice, or Why a Bridge Is Responsible for the Death of Venice</b>	<b>Janin Walter</b>	<b>122</b>
<b>Ö</b>	<b>Migrating Spaces and Tourism</b>		<b>124</b>
<b>A06</b>	<b>Trajectories, Networks, and Places of Disparate Infrastructures</b>		<b>129</b>
	<b>From Different Sides</b>	<b>Maria Norkus</b>	<b>130</b>
	<b>Play Equipment Connecting for Life</b>	<b>Angela Million</b>	<b>132</b>
	<b>A Border Wall for Integration?</b>	<b>Dorothea Biaback Anong</b>	<b>134</b>
	<b>Ferality</b>		<b>137</b>
	<b>A Fox and the City</b>	<b>Carl-Jan Dihlmann</b>	<b>142</b>
<b>A01</b>	<b>Geographic Imaginations</b>		<b>144</b>
<b>A03</b>	<b>Knowledge and Goods</b>		<b>149</b>
	<b>The Life and Death of <i>Bacillus thuringiensis</i></b>	<b>Alexander Kohrs</b>	<b>150</b>
	<b>Monday Is Almost Always the Hottest Day of the Week</b>	<b>Indrawan Prabaharyaka</b>	<b>152</b>
	<b>The Magic of the Dowsing Rod</b>	<b>Hubert Knoblauch</b>	<b>154</b>
	<b>Real Sitopia</b>	<b>Linda Hering</b>	<b>156</b>
	<b>Yambition 2065</b>	<b>Francesca Ceola and Camilo Bravo Molano</b>	<b>158</b>
<b>C08</b>	<b>Architectures of Asylum</b>		<b>160</b>
<b>C05</b>	<b>The Urban Microclimate Regime</b>		<b>165</b>
	<b>You Are Kōsa</b>	<b>Margherita Tess</b>	<b>166</b>
	<b>Memoirs of an Apple Tree</b>	<b>Anna Juliane Heinrich</b>	<b>168</b>
	<b>Figuring Out Spaces</b>	<b>Ignacio Fariás, Silke Steets, and Nikolaus Gansterer</b>	<b>171</b>
	<b>Authors</b>		<b>183</b>
	<b>Colophon</b>		<b>188</b>

## INDEX OF SPATIAL FIGURES

Abode	48, 49
Archipelago	20, 108
Atlas	11, 12, 18, 181
Barricade	104
Bridge	20, 85, 122, 123
Cabin	62
Chamber	61
City	15, 23, 44, 45, 46, 48, 50, 52, 58, 59, 62, 82, 86, 87, 94, 101, 104, 107, 110, 111, 121, 122, 123, 124, 130, 143, 151, 152, 156, 157, 158
Coast	158, 166
Colony	71
Compound	107
Crack	20, 46
Ecotone	143
Flat	32, 33, 45, 46, 58, 59, 82
Flows	20, 23, 67, 93, 94, 109, 134, 139, 165
Forest	42, 73, 74, 86, 87, 88, 106, 143
Gate	44, 45, 49, 58
Ground	12, 16, 49, 51, 73, 82, 152, 155
Highway	17, 19, 43, 134
Hillside	20
Hinterland	16
Hospital	118, 119
Itinerary	130
Landmark	19
Map	11, 17, 18, 20, 21, 36, 42, 50, 51, 52, 76, 93, 97, 144, 155, 158, 174, 175, 178, 179, 180
Mesh	17, 73
Model	20, 25, 52, 76, 84, 85, 124, 176, 178, 180
Mountain	20, 162, 166
Nadir	152
Network	13, 15, 17, 18, 19, 20, 25, 41, 67, 70, 71, 73, 81, 85, 88, 93, 94, 95, 97, 129, 132, 160, 180
Node	17, 70, 132
Outpost	111
Patch	22
Place	13, 17, 18, 19, 20, 23, 24, 29, 32, 34, 41, 43, 48, 52, 61, 62, 74, 75, 81, 82, 87, 88, 96, 101, 104, 105, 106, 111, 118, 121, 124, 129, 130, 132, 143, 151, 155, 157, 160, 169, 177, 178

<b>Plantation</b>	<b>57, 156</b>
<b>Platform</b>	<b>29, 34, 41, 71, 81, 82, 88, 96</b>
<b>Position</b>	<b>11, 18, 25, 35, 44, 51, 57, 81, 82, 95, 111, 121, 144</b>
<b>Railroad</b>	<b>19, 84</b>
<b>Resort</b>	<b>29, 42, 43</b>
<b>Retreat</b>	<b>23, 29, 48, 96</b>
<b>Route</b>	<b>17, 19, 20, 41, 51, 97, 111, 130</b>
<b>Salon</b>	<b>33</b>
<b>Shade</b>	<b>169</b>
<b>Sphere</b>	<b>23, 67, 88, 97, 152</b>
<b>Square</b>	<b>19, 152</b>
<b>Stack</b>	<b>22</b>
<b>Stage</b>	<b>23, 34, 82, 104, 175, 176</b>
<b>Surrounding</b>	<b>16, 42, 49, 52, 59, 94, 156</b>
<b>Terrain</b>	<b>22</b>
<b>Territory</b>	<b>16, 17, 19, 41, 49, 71, 110</b>
<b>Threshold</b>	<b>52, 74</b>
<b>Trajectory</b>	<b>17, 18, 20, 129, 130, 152</b>
<b>Travel</b>	<b>62, 74, 75, 96, 97, 107, 111, 118, 122, 124, 130, 151, 166, 178</b>
<b>Tube</b>	<b>94, 95</b>
<b>Valley</b>	<b>20, 49, 123, 152</b>
<b>Vortex</b>	<b>167</b>
<b>Wall</b>	<b>23, 32, 43, 44, 48, 49, 58, 59, 62, 67, 84, 86, 101, 104, 109, 134</b>
<b>Waterway</b>	<b>19</b>
<b>Wave</b>	<b>109, 117, 119, 155</b>
<b>Zone</b>	<b>22, 119, 143, 160</b>

# AFTER THE GLOBE



# AFTER THE GLOBE: EXPLORING SPATIAL FIGURES OF THE CONTEMPORARY

Ignacio Farías and Silke Steets

## 1 THE ATLAS AS A SPATIAL FIGURE

Atlas was a Titan, a deity renowned for his immense strength, and the son of Uranus and Gaia. He fought against the Olympians, who, led by Zeus and supported by the Cyclopes, ultimately defeated the Titans. As a punishment for his rebellion, Zeus condemned Atlas to bear the weight of the heavens for eternity. Almost 2,000 years later, in 1595, the cartographer Gerardus Mercator's unfinished work was published posthumously as *Atlas, or Cosmographic Meditations on the Fabric of the World and the Figure of the Fabrick'd*. It was the first time the word 'atlas' was used to name a bound collection of maps.

We want to open the pages of our *Atlas of Spatial Figures* by reflecting critically on this historical moment, when a mythical figure, Atlas, was transformed into a spatial figure, or, as Mercator's title suggests, a 'figure of the fabricated'. This concept is a good starting point, for during this period, the word 'figure' signified 'ways of knowing that connected signs to material and historical life' and 'fabricated' meant 'the world as created by God'.<sup>1</sup>

Accordingly, the atlas represented a new way of knowing what had been created – it was a new figure of the world. There is no doubt that it was a problematic one, however, especially in terms of its historical entanglement with the European project of colonial expansion. Indeed, one feature of the atlas is precisely its cartographic figuration of the earth as a globe: a geometric abstraction of space as *res extensa*, visible only from an external or godlike position. Philosopher Bruno Latour argues that the globe as a figure is at the centre of a historical project imposed on the majority of the world by a few global powers and that has led to levels of resource extraction and consumption that cannot be sustained by our planet.

But Mercator's atlas was also a very situated experiment on how to represent the world. Early in his career, Mercator was imprisoned for employing cartographic conventions deemed Lutheran, illustrating that 'in the latter half of the sixteenth century, it was impossible to separate science from history, history from geography, geography from cosmography, and cosmography from theology'.<sup>2</sup> According to historian Jerry Brotton, the maps and projection techniques Mercator developed later in his life involved attempts to transcend religious divisions and evade censorship and persecution. The atlas was, thus, also an attempt at drawing a possible common world.

Mercator's atlas gained popularity after it was bought and reprinted by the editor Jodocus Hondius in 1606. This transformed the atlas in two important ways. Firstly, new updated editions were published every year. By the 1637 edition, the number of maps had quadrupled to four hundred and seventy. In addition, *Atlas Minor*, a more affordable version, was introduced with a smaller selection of maps.<sup>3</sup> In practice, the atlas was not a final representation of the world but a provisional and, therefore, incomplete one, as it was overtaken by new knowledge and historical developments. It also became much more than a collection of maps. Hondius worked closely with the writer Petrus Montanus, whose texts and essays made up about half of the atlas. These texts, which blended multiple sources, especially classical Greek and Roman authors and contemporary writers, were essential to the integration of time and history into the atlas.<sup>4</sup>

1 Celia Lury, William Viney, and Scott Wark, 'Introduction: Figure, Figuring and Configuration', in *Figure: Concept and Method*, eds. Celia Lury, William Viney, and Scott Wark (Singapore: Springer Nature Singapore, 2022), 1–20.

2 Jerry Brotton, 'A "Devious Course": Projecting Toleration on Mercator's "Map of the World", 1569', *Cartographic Journal* 49, no. 2 (2012): 105, <https://doi.org/10.1179/174327712X13312850640021>.

3 Eila M. J. Campbell, 'The Early Development of the Atlas', *Geography* (1949): 187–95.

4 Janne Tunturi, 'Cartographer's Experience of Time in the Mercator-Hondius Atlas (1606, 1613)', *Approaching Religion* 6, no. 1 (2016): 46–56, <https://www.doria.fi/handle/10024/136515>.

Our *Atlas of Spatial Figures* is also concerned with the exploration of figures of the worlds and spaces we inhabit by means of visual representations and stories – although our stories explore multiple genres, varying from literary to factual, ethnographic and allegoric. Yet, they all share a sense of actuality, an orientation towards the present and an attempt at charting it. In that regard, even though our *Atlas of Spatial Figures* is not written to be republished on a yearly basis, it shares the gesture of being a possible collection or, better, assemblage of stories and figures, which, to the extent that they could be exchanged by others, have no aspiration to produce a definitive representation. Thus, while we share the multimodal character of Mercator's atlas, we set out to search for alternative figures of the spaces we inhabit, the worlds that we share, and the grounds that we figure. We do so on the shoulders of many colleagues, especially Martina Löw and Hubert Knoblauch, who in 2018 founded the Collaborative Research Centre 1265 'Re-Figuration of Spaces' (CRC), based at Technische Universität Berlin, and have worked since then towards a theory of spatial refiguration. The concept of 'refiguration' is based on the premise that the rapid changes in our contemporary world can only be understood by looking at them from a spatial perspective. And it proposes that space is not only constituted by arrangements of objects and actors but also articulated by specific figures. How do the spatial figurations of both micro and macro phenomena change over time? This is the central question of the interdisciplinary research centre on whose work this *Atlas of Spatial Figures* is based and whose questions, working methods, and forms of research we wish to document in this book.

The CRC brings together more than eighty researchers, from student assistants to professors, working in sociology, architecture, geography, communication studies, anthropology, planning studies, and visual art, whose common goal is to develop a theory of social change as a process of spatial refiguration. The CRC covers a total of sixteen research projects ('subprojects') that are clustered in three areas: area A focuses on 'spatial knowledge' and contemporary imaginations of space; area B analyses changing modes of communication in the digital age and the resulting 'digitally mediated spaces'; and area C revolves around the tension between 'circulation and order', focusing on spatial regimes and multiple forms of overflow that irritate or even disrupt them.

Our *Atlas of Spatial Figures* contributes to this larger project by exploring the following propositions. First, it shows that spatial figures as transcalar analytical tools offer a powerful alternative to theories based on the question of the global. Second, it proposes to expand the understanding of spatial figures by paying attention to not only topological but also topographic figures of space. Third, it proposes that the contemporary refiguration process is articulated around four reference problems, each involving a specific problematisation of modern spatial arrangements.

- 5 See, for instance, Martina Löw, Volkan Sayman, Jona Schwerer, and Hannah Wolf, eds., *Am Ende der Globalisierung: Über die Refiguration von Räumen* (Bielefeld: transcript, 2021).

For some years now, we have been confronted with fundamental spatial transformations, leading many observers to speak of the 'end of globalisation'.<sup>5</sup> While we certainly continue to live in a globalised world in which markets, technologies, and cultures remain closely intertwined, we are also confronted with numerous crises, such as climate change, right-wing populism, trade wars, wars of aggression, new nationalisms, technological decoupling, and environmental degradation, which render implausible the long-standing diagnosis, whether progressive or critical, of a continuing and ever-increasing economic and (hence) socio-cultural integration of the world. In spatial terms, we are, indeed, witnessing massive forms of re-territorialisation, fuelled by nationalist populist rhetoric – as expressed, for example, in Brexit and other EU exit dreams of the autonomous control of immigration and markets, in the geopolitics of Russia and China, in the 'America First' policies of the old and new US president, Donald Trump, or in the ever-increasing militarisation of the EU's external borders.

But what we see is not just a return to territorial forms of spatial organisation. Rather, we are confronted with phenomena in which different forms of space overlap in complex ways. For example, the now ubiquitous use of smartphones in urban areas worldwide and geolocation apps such as Uber, Tinder, and Foursquare create complex imbrications of cyber-physical spaces that specifically intertwine global and local elements. Or take migration. On the one hand, it creates places where people with very different biographies, everyday habits, moral convictions, and spatial knowledge come together and invent new forms of sociality; on the other hand, it results in borders being reinforced and micro- and macro-encapsulations that are performed, creating highly segregated spaces. Another example is climate change, which not only undermines long-held distinctions between the local and the global but also makes it possible to cut across world regions, as when a group of Peruvian farmers filed a lawsuit against several European energy companies, claiming that their greenhouse gas emissions contribute significantly to climate change, which in turn damages the farmers' agricultural practices and livelihoods. Since globalisation theory is insufficient to describe these often opposing and overlapping spatialities, we need to revise our spatial imaginary to reflect better the increasingly complex and evolving realities of our world.

There is no doubt that we have long outgrown one-sided notions of the world as a 'single place', a 'world society', or a globally interconnected 'network society' resulting from the globalisation process.<sup>6</sup> As sociologist Helmut Berking has pointed out, the emergence of globalisation theory must be read, first, as a continuation of classical modernisation theories and, second, as a Western narrative.<sup>7</sup> As different as the approaches may be in detail, they are united by the idea that 'society' – originally conceived in terms of the nation-state – can be historically scaled up to form a global or world society. In this process, driven primarily by technology and economics, the 'liberal script' of Western state organisations was also believed to be spreading globally.<sup>8</sup> Sociologist Martin Albrow even spoke of a new era, the 'global age', created by the fact that 'the global has displaced the modern as the defining experience of our time', and sociologist Ulrich Beck nurtured the idea of 'globality'.<sup>9</sup> All these theories share, as Knoblauch and Löw point out, 'a progressive reading of globalisation as leading either to an extended modern society or to its transformation into an emergent globalised society'.<sup>10</sup>

There have been numerous efforts – especially in anthropology – to fix and refine globalisation theory to account for the fact that the global circulation of technological and cultural forms does not lead to one homogeneous world. In the 1990s, anthropologist Néstor García Canclini introduced the concept of 'glocalisation' to emphasise the intricate relationship between global and local dynamics in cultural production and social practices.<sup>11</sup> He argued that globalisation does not produce a uniform culture but, rather,

- 6 Ronald Robertson, *Globalization: Social Theory and Global Culture* (London: Sage, 1992); Niklas Luhmann, 'The World Society as a Social System', *International Journal of General Systems* 8, no. 3 (1982); Manuel Castells, *The Rise of the Network Society* (Malden, MA: Blackwell Publishers, 1996).
- 7 Helmut Berking, 'Globalisierung', in *Handbuch Soziologie*, eds. Nina Baur, Hermann Korte, Martina Löw, and Markus Schroer (Wiesbaden: VS Verlag, 2008), 117–37; Immanuel M. Wallerstein, *World-Systems Analysis: An Introduction* (Durham, NC: Duke University Press, 2004); and Shmuel N. Eisenstadt, 'Multiple Modernities', *Daedalus* 129, no. 1 (2000): 1–29.
- 8 Frank Lechner and John Boli, *World Culture: Origins and Consequences* (Malden, MA: Blackwell, 2005).
- 9 Martin Albrow, *The Global Age: State and Society Beyond Modernity* (Cambridge: Polity Press, 1996): 41; Ulrich Beck, *What Is Globalization?* (Cambridge, MA: Cambridge University Press, 2000).
- 10 Hubert Knoblauch and Martina Löw, 'The Refiguration of the Global: Globalization and the Spatial Logics of Digitalization', *Critical Sociology*, online first (2024), <https://doi.org/10.1177/08969205241262304>.
- 11 Néstor García Canclini, *Hybrid Cultures: Strategies for Entering and Leaving Modernity* (Minneapolis: University of Minnesota Press, 1995).

a complex process in which global influences are adapted, transformed and reinterpreted in local contexts. In *Modernity at Large*, anthropologist Arjun Appadurai argues that global cultural forms should be understood in fractal and polythetic terms, taking into account the crucial role that social imagination plays in integrating global influences into local practices.<sup>12</sup> More recently, anthropologists Aihwa Ong and Stephen J. Collier have introduced the notion of 'global assemblages', suggesting that the global entails abstract forms, such as market calculations, that do not produce uniform effects everywhere, as their functioning and meaning can vary significantly depending on the specific characteristics of the concrete assemblages in which they are realised.<sup>13</sup>

While these approaches move beyond traditional linear understandings of globalisation, they place scalar differences and scaling processes at the core of their analysis. From this perspective, the key socio-economic and socio-political transformations of the past fifty years can be understood primarily as resulting from changes in how scales are 'established, differentiated, hierarchised, and, under certain conditions, rejigged, reorganised, and recalibrated in relation to one another'.<sup>14</sup> This is not a universal process; the meanings and effects of scalar units – such as the local, national, regional, and global – can vary significantly depending on the socio-spatial processes involved. However, a crucial argument in this framework is that 'scalar structuration may crystallise into scalar fixes',<sup>15</sup> that is, relatively stabilised geographical hierarchies that 'bound political, economic, and cultural activity in specific ways'.<sup>16</sup> Thus, whether globalisation is seen as homogenising or as a fractal socio-cultural process, the focus is on the politics of re-scaling: how economic dynamics, political norms and institutions, and cultural practices and symbols are transformed as they shift across different scales.

The concept of spatial refiguration aims at providing an innovative alternative analytical framework to traditional theories of globalisation and scalar structuration by examining socio-historical transformations through the lens of spatial figures. Unlike spatial scales, which are typically understood as entangled within hierarchical and stratified relationships, spatial figures emphasise diverse modes of spatialisation and inhabitation that coexist and interact, creating a multiplicity of spatial forms. As we will explore in subsequent sections, this shift from a scalar perspective to one that prioritises figural thinking is at the core of refiguration theory as it enables a richer understanding of how spaces are shaped and negotiated in practice. This framework, thus, challenges us to develop new concepts and methods for tracing and analysing the intersections, collisions, and transformations of spatial figures that structure and sustain the spaces we inhabit.

12 Arjun Appadurai, *Modernity at Large: Cultural Dimensions of Globalization* (Minneapolis: University of Minnesota Press, 1996).

13 Aihwa Ong and Stephen J. Collier, eds., *Global Assemblages: Technology, Politics, and Ethics as Anthropological Problems* (Oxford: Blackwell Publishing, 2005).

14 Neil Brenner, 'The Limits to Scale? Methodological Reflections on Scalar Structuration', *Progress in Human Geography* 25, no. 4 (2001): 600.

15 Brenner, 'The Limits to Scale?', 607.

16 Neil Smith, 'Remaking Scale: Competition and Cooperation in Prenational and Post-national Europe', in *Competitive European Peripheries*, ed. Heikki Eskelinen and Folke Snickars (Berlin: Springer, 1995), 59–74.

- 17 Georg Simmel, *The Metropolis and Mental Life*, in *The Sociology of Georg Simmel*, ed. Kurt Wolff (New York: Free Press, 1950), 409–24.
- 18 Rolf Lindner, *Berlin, absolute Stadt. Eine kleine Anthropologie der großen Stadt* (Berlin: Kulturverlag Kadmos, 2016).

Our emphasis on spatial figures represents a significant conceptual departure from figurative approaches in the social sciences and cultural theory. Figures have primarily served as heuristic tools for describing specific individuals or ‘social types’, as tokens for analysing how worlds are made and inhabited.

It was probably sociologist Georg Simmel who, in keeping with the social discourses of the early twentieth century, identified and theorised social figures and social forms in order to grasp the specificity of the modern metropolis.<sup>17</sup> Indeed, in the urban literature, newspapers and even police and educational pamphlets of the time, the identification and typification of urban figures was a major concern, as city dwellers had to learn to read the human masses and to distinguish a ‘trickster’ or a ‘swindler’ from a trustworthy individual.<sup>18</sup> These urban discourses were in the tradition of novelist Honoré de Balzac’s physiognomy of city dwellers – that pseudoscience closely entangled with racism that would study people’s physical appearances, such as bodily habits, tone of voice, and forms of interaction, in order to draw conclusions about a person’s social background and ‘true’ identity. But Simmel, along with other scholars of urban culture at the time, such as Robert Park from the Chicago School of Urban Sociology, were not interested in physiognomy. Instead, they studied figures that they saw as products of the rapidly growing metropolises of the late nineteenth and early twentieth centuries, such as the ‘stranger’, the ‘hobo’, the ‘flâneur’, the ‘commuter’, the ‘ghetto dweller’, the ‘gang member’, the ‘white-collar worker’, and others.

In the mid-twentieth century, sociologist Norbert Elias introduced a theory of figuration as an alternative to the action/structure dichotomy in the social sciences. Figurations are dynamic networks of relationships between individuals that shape both individual subjectivities (psychogenesis) and the social structures (sociogenesis) in which they are embedded. Although Elias didn’t explicitly theorise social figures, it is clear from his work that social figures are constantly evolving as a result of historical and social processes.<sup>19</sup> Looking at how early Christians analysed and interpreted the Old Testament from the perspective of the New Testament, cultural scientist Erich Auerbach proposed that events or persons become figures as they are seen as prefiguring a later event or person. Thus, the former event or person signifies not only itself but also the second, which is seen as a continuation and expression of the first.<sup>20</sup> Figures appear here as performative forces that shape history.

More recent approaches emphasise the need to also understand how figures are shaped by specific ‘historical, political, racial and technological presumptions and prejudices of those that speak for them’.<sup>21</sup> In this vein, geographer Leila Dawney argues that Michel Foucault’s analysis of four figures of biopower – the ‘hysterical woman’, the ‘Malthusian couple’, the ‘perverse adult’ and the ‘masturbating child’ – as well as feminist scholar Michelle Murphy’s discussion of ‘the girl’ – show how figures function as ‘technologies of power that work through the affective capacities of specifically historical bodies’.<sup>22</sup>

Figures are rarely the product of scientific conceptualisation but play an important role in social science and cultural theory analysis. They often first appear in cultural, public, and governmental discourses from the social need to articulate and govern collective experiences. Accordingly, anthropologists Moritz Ege and Jens Wietschorke suggest studying the ‘practices of figuring’, i.e., the emergence, appropriation, and reinterpretation of social figures and the associated forms of self and external attribution, the creation of belonging, and demarcation.<sup>23</sup> Sociologists Sebastian Moser and Tobias Schlechtriemen note that social figures are often used with a diagnostic intention to visualise the central elements of collective experiences, especially in moments of social crisis or upheaval. In some cases, figures would resemble sociologist Max Weber’s concept of ideal types, i.e., purely

- 19 Norbert Elias, *What Is Sociology?* (London: Hutchinson, 1978).
- 20 Erich Auerbach, ‘Figura: Neuedition des Textes von 1938’, in *Mimesis und Figura*, eds. Friedrich Balke and Hanna Engelmeier (Paderborn: Brill Fink, 2018), 53.
- 21 Lury, Viney, and Wark, ‘Introduction: Figure, Figuring and Configuration’, 4.
- 22 Leila Dawney, ‘The Work That Figures Do’, in *Figure: Concept and Method*, eds. Celia Lury, William Viney, and Scott Wark (Singapore: Springer Nature Singapore, 2022), 23.
- 23 Moritz Ege and Jens Wietschorke, ‘Figuren und Figurierungen in der empirischen Kulturanalyse: Methodologische Überlegungen am Beispiel der ‘Wiener Typen’ vom 18. bis zum 20. und des Berliner ‘Prolls’ im 21. Jahrhundert’, Zurich Open Repository and Archive (2023), <https://doi.org/10.5167/uzh-231205>.

conceptual constructs formed by the one-sided accentuation of socio-historical phenomena. But whereas an ideal type is a 'utopia' that cannot be found empirically and has a purely analytical function, the currency of a social figure 'depends on the relevance of the social experiences captured in the figure, as well as on criteria of narrative and figurative coherence'.<sup>24</sup>

But figures can also be sites of resistance and subversion. Feminist scholar Donna J. Haraway's work with figures as 'performative images that can be inhabited' aims to prefigure subjectivities and worlds in which the binaries that shape gender, technology and culture are playfully and experimentally dismantled.<sup>25</sup> Figures such as the 'cyborg', the 'oncomouse', or the 'companion species' are not diagnostic. They mobilise their performative power to generate alternative modes of inhabitation and cohabitation. As media scholar Scott Wark has argued, Haraway's idea of inhabitation suggests that figures are not containers but 'pivots' that aim to articulate and envision alternative worlds. 'Inhabitation', he observes, 'needs to be understood as being-with (...) Figures (...) embroil us – conceived, broadly, against distinctions like those between humans and their others – in their worlds'.<sup>26</sup> Haraway's figures are, thus, also linked to philosophers Gilles Deleuze and Félix Guattari's notion of 'conceptual personas (as) the becoming or the subject of a philosophy'.<sup>27</sup> Conceptual personas are, thus, fundamentally different from the social types developed in the tradition of Simmel. Rather, they are philosophical inventions that mediate between the plane of concepts and the plane of immanence. Their role is 'to show thought's territories'.<sup>28</sup>

At this point in our brief genealogy of figurative social science and cultural theory, the question of spatial figures becomes urgent. As we have seen, figures carry worlds and spaces with them. So far, however, these spaces have remained the unmarked side of social figures. Spaces seem to form the ground, the background, the conditions of possibility, the surroundings of social figures, the territories of conceptual personas. Wouldn't it be necessary to systematically study the figures that constitute such spaces? It is not enough to observe that social figures are always spatial because, in their gestalt or figure/ground logic, they always invoke a surrounding, a 'hinterland'.<sup>29</sup> What we need is to perform a figure/ground inversion and explore the figures of the ground, the figures of the spaces that make up the worlds we inhabit, for, indeed, the figure of the 'hinterland' prefigures inhabitation in a different way from the figures of the 'territory', the 'surroundings', or the 'ground'. A systematic exploration of spatial figures, thus, has an urgent diagnostic and performative function.

- 24 Max Weber, 'The "Objectivity" of Knowledge in Social Science and Social Policy', in *The Essential Weber*, ed. Sam Whimster (London: Routledge, 2004), 359–404; Sebastian J. Moser and Tobias Schlechtriemen, 'Sozialfiguren – zwischen gesellschaftlicher Erfahrung und soziologischer Diagnose', *Zeitschrift für Soziologie* 47, no. 3 (2018): 167 (our translation).
- 25 Donna J. Haraway, *Modest\_Witness@Second\_Millennium.FemaleMan\_Meets\_OncoMouse™: Feminism and Technoscience* (New York: Routledge, 1997), 11 (our emphasis).
- 26 Scott Wark, "'In the Cloud": Figuring and Inhabiting Media Milieus', in *Figure: Concept and Method*, eds. Celia Lury, William Viney, and Scott Wark (Singapore: Springer Nature Singapore, 2022), 50.
- 27 Gilles Deleuze and Félix Guattari, *What Is Philosophy?* (New York: Columbia University Press, 1994), 64.
- 28 Deleuze and Guattari, *What Is Philosophy?*, 69.
- 29 Lury, Viney, and Wark, 'Introduction: Figure, Figuring and Configuration'.

- 30 Henri Lefebvre, *The Production of Space* (Oxford/Cambridge, MA: Blackwell, 1991).
- 31 Lefebvre, *The Production of Space*; see also Penny Harvey and Hannah Knox, *Roads: An Anthropology of Infrastructure and Expertise* (Ithaca, NY: Cornell University Press, 2015).
- 32 Martina Löw, *The Sociology of Space: Materiality, Social Structures, and Action* (New York: Palgrave Macmillan, 2016), viii.

The so-called spatial turn in the social sciences and cultural theory has, to a large extent, been a topical one. Space has become the topic, or the object, of analysis, leaving the frameworks, concepts, and modes of social or cultural analysis untouched. Take philosopher Henri Lefebvre's analysis of the production of space. Although both his theoretical considerations and his empirical analyses have had a major influence on spatial thinking across disciplines, the mechanisms to which Lefebvre traces the production of space remain surprisingly non-spatial.<sup>30</sup> Two examples: first, space, Lefebvre argues, is produced in a trialectic process involving how space is perceived in everyday practices, how it is conceived in abstract and theoretical terms, and how it is lived through symbolic meanings and personal experiences. Accordingly, spatial practice, representations of space, and representational space are the products of social formations (everyday life, expert knowledge, symbolic structures). Second, for Lefebvre, changing class relations throughout human history has led to changing spatial forms. Accordingly, the primacy and power of 'abstract space' is the result of a capitalist mode of production.<sup>31</sup> Thus, as Löw has argued, for many authors of the spatial turn, their focus is precisely on the *social* production of space, in the sense that the mechanisms through which it is produced are not spatial.<sup>32</sup>

Löw's own theory is that spaces are constituted by means of two interconnected processes: spacing and synthesising. Spacing entails a relational arrangement of human and nonhuman entities in which these entities are put in relation to one another. Synthesising, on the other hand, is the interpretative process of grasping these relational arrangements as a coherent whole, thus forming a specific space. Interestingly, Löw's theory of space bears significant resemblance to Elias's concept of figuration, as both focus on how heterogeneous elements relate and interact dynamically. Building on these shared insights, it is logical that Löw, in collaboration with Knoblauch, has developed her relational theory of space into the theory of spatial refiguration, which seeks to capture the evolving, multi-scalar, and interconnected nature of spatial relations in contemporary societies.<sup>33</sup>

- 33 Hubert Knoblauch and Martina Löw, 'The Re-Figuration of Spaces and Refigured Modernity', *Historical Social Research* 45, no. 2 (2020): 263–92.
- 34 Martina Löw, 'In welchen Räumen leben wir? Eine raumsoziologisch und kommunikativ konstruktivistische Bestimmung der Raumfiguren Territorialraum, Bahnraum, Netzerraum und Ort', in *Grenzen der Kommunikation. Kommunikation an den Grenzen*, ed. Jo Reichertz (Weilerwist: Velbrück, 2020), 149–64.
- 35 Tim Ingold, 'On Human Correspondence', *Journal of the Royal Anthropological Institute* 23, no. 1 (2017): 9–27.

Löw and Knoblauch's theory proposes that contemporary social change can be explained in terms of the contradictory entanglement of spatial figures. Löw distinguishes four spatial figures that emerge from specific spatial practices: territorial space, network space, trajectory space, and place.<sup>34</sup> Territorial space is created through practices of demarcation, i.e., through the drawing of boundaries that separate an inside from an outside. It often corresponds to a homogenisation of elements within a territory and a planar conception of space (e.g., a nation-state). A political world map would be a perfect example of a world consisting only of territorial spaces. In contrast, network space emerges through practices of connection. In a network, heterogeneous elements (e.g., places) are related to each other in such a way that they are mutually functional and, thus, form an open but definable whole (e.g., the network of global cities). According to Löw, spatial distances are irrelevant for the figure of the network; what counts is the network-specific relationship of an element to other elements. A world made up entirely of networks would consist of nodes and links. Trajectory space is produced through practices of moving and traversing, thus creating routes. Routes are lines. They have start and end points, but these points only give direction to the route. Movement along a line is its characteristic practice, so that specific points along a line are only of interest for orientation. Empirically, routes turn their backs on places and cross territorial boundaries (e.g., highways or commodity chains). A world formed only by routes would consist of a 'mesh-work' of straight and curved lines, to use anthropologist Tim Ingold's concept.<sup>35</sup> Places, finally, emerge through practices of marking and identifying and, thus, follow the logic of a simultaneity of heterogeneous references. When being formed, they develop a specific way of referring to history and the

world in which the most diverse ‘thens and theres’ combine and manifest themselves in the ‘here and now’.<sup>36</sup> This is what makes points on the earth’s surface distinguishable places with meaningful names. A naive look at the stars on a dark night gives a good idea of what a space made up only of individually distinguishable points might look like.

With Löw and Knoblauch, we share the conviction that spatial figures are powerful concepts for the analysis of spatial refiguration. In this atlas, however, we want to emphasise the empirical reality rather than the analytical function of spatial figures and show how they are entangled in the spatial transformation of the present. To do so, we propose distinguishing between two different types of spatial figures. While those introduced by Löw are basically topological figures used in refiguration theory as heuristic tools, we understand them as empirically entangled with specific modern ways of producing space.<sup>37</sup> Furthermore, we propose to go beyond them, exploring what we call topographic spatial figures and, thus, begin to chart spatial refiguration by focusing on emerging problematisations of modern logics.

## —TOPOLOGICAL FIGURES

Topological figures are spatial diagrams that represent abstract types of spatial arrangements or relationships between objects or entities. As cultural theorist Rob Shields describes, topology was first articulated in the work of mathematician Leonhard Euler, who, in 1741, proposed a ‘geometry of positions’ that was not concerned with geometric distance measurements, topographic calculations, or scale maps but with the relationships between spatial positions. What characterises or rather fundamentally defines an object or a space is not its precise contours or its exact shape but ‘the way in which objects are put together – how parts relate to wholes, or how a shape divides a plane by containing an interior separated from an exterior’.<sup>38</sup> When mathematician Felix Hausdorff defined topology as a mathematical discipline in 1922, the focus was on the non-Euclidean spatiality or identity of objects. As Shields goes on to explain: ‘Topology focuses on spatial properties of these object-spaces that do not change under such “homeomorphic” continuous deformations. For example, any object with a hole is “homeomorphic” to any other object with a hole.’<sup>39</sup>

So, topological spatial figures are based on the assumption that space, in principle, is constituted by the way entities and objects (such as two points in the simplest case) are related to each other. Löw’s concepts of territorial space, network space, trajectorial space, and place are all homeomorphic diagrams. This means they can be deformed and take on different forms but retain a fundamental, that is, topological identity. As such, these four figures are also traced back to ideal types of spatial practices (demarcating, connecting, traversing, and identifying), each of which relates objects or entities by acting upon them in a particular way. The advantage of such topological spatial thinking is that these idea-typical spatial figures can be used as heuristic tools for (rather than endpoints of) empirical analyses.<sup>40</sup> Theorising with the help of ideal types must not follow the aim to subsume empirical findings under spatial figures but to use them as pointed concepts to sharpen the perception of the spatiality of the social. Ideal types can be used as *tertium comparationis* to give direction to the comparison of empirical cases or to inspire research questions such as these: In what sense is a spatial phenomenon territorial? Why do spatial conflicts arise in a particular place? How does a digital network unfold? Or, what makes an empirically observable commodity chain a trajectory space (and what does not)?

The disadvantage of conceiving these topological figures as ideal types is overlooking that their empirical manifestations play a crucial role in modernist processes and projects of space production. Territories, places, trajectories, and networks are empirically and historically entangled in very specific projects of world-making, in particular, state formation and urban development, as well as the colonisation and modernisation projects of the

36 Doreen Massey, *For Space* (London/Thousand Oaks, CA: Sage, 2005), 140.  
37 Löw, ‘In welchen Räumen leben wir?’.

38 Rob Shields, ‘Cultural Topology: The Seven Bridges of Königsburg, 1736’, *Theory, Culture & Society* 29, nos. 4–5 (2012): 45.

39 Shields, ‘Cultural Topology’, 46.

40 Cf. Thomas Schmidt-Lux, Monika Wohlrab-Sahr, and Alexander Leistner, *Kultursoziologie – eine problemorientierte Einführung* (Weinheim/Basel: Beltz Juventa, 2016); Richard Swedberg, ‘How to Use Max Weber’s Ideal Type in Sociological Analysis’, *Journal of Classical Sociology* 18, no. 3 (2018): 181–96.

West and the Global North. Let us give a quick overview of their implication.

First, there is no doubt that the concept of territory has played a foundational role in the emergence of the modern nation-state. As an empirical spatial construct, territory functions by delineating a homogeneous space through the establishment of borders, distinguishing the 'inside' from the 'outside'. This act of demarcation is fundamental to the concept of modern sovereignty, which rests on the monopoly of the legitimate use of physical force within these defined territorial boundaries. However, the forms of state control over territory have evolved over time. Foucault examines this evolution by tracing the transformation of state sovereignty from a notion rooted in the rigid demarcation of territorial space to one that conceptualises territory as a medium for governance. In this framework, territory is no longer merely a container with fixed boundaries within which individuals are classified as legal subjects – or excluded from such recognition. Instead, it comes to represent a dynamic field where the aggregated behavior of the population, conceived as a collective body, becomes the primary object of governance. This shift reflects a broader reconfiguration of power, emphasising the circulation and interrelation of people, goods, and ideas within the governed space.

Second, 'place' emerges as a powerful tool in the construction of collective identity, serving as a spatial figure that fosters the symbolic integration of increasingly complex societies. Within the framework of modern urban planning, 'place' assumes a critical role in establishing a symbolic order for cities, a process that goes beyond mere functional design to include the crafting of spaces imbued with cultural and historical significance. These spaces often become arenas for collective identification and remembrance, where shared values, narratives, and memories are anchored. Monuments, public squares, and memorials, for instance, are intentionally designed to evoke a sense of unity and continuity, linking individuals to a broader social and historical narrative. In a parallel vein, the emergence of tourism as a cultural phenomenon underscores the instrumentalisation of 'place' in reinforcing national identities. Tourism operates by spotlighting locations that serve as emblematic representations of a nation-state's heritage, achievements, and distinctiveness. These places – be they historic landmarks, natural wonders, or culturally significant cities – are imbued with symbolic meaning, constructed both physically and rhetorically as sites that embody the essence of the nation.

Third, trajectories and networks are profoundly shaped by power, knowledge, and technology, making them integral to the development of modern states. The infrastructure of transportation – highways, railroads, and waterways – represents one of the earliest mechanisms deployed to assert control over and within a given territory.<sup>41</sup> These infrastructural networks not only facilitate the movement of goods, people, and information but also serve as instruments of governance, enabling states to exert influence across vast spaces. Modern networks and railroad systems, in particular, demonstrate significant 'territorial effects', as they reshape spatial relationships and consolidate state power.<sup>42</sup> These systems are inseparable from the history of settler colonialism, where infrastructure development was often a tool of dispossession, enabling the exploitation of land and resources while asserting dominance over Indigenous populations. The interplay of power, knowledge, and technology in the construction of these networks highlights their dual role as both instruments of progress and mechanisms of control, underscoring their centrality to the formation and expansion of modern states.

Finally, trajectories and networks are deeply intertwined with the formation of the global economic order – a project that remains inextricably linked to the history of colonialism. The destruction and devastation wrought along colonial routes and trade networks were often rendered invisible, dismissed as localised issues or distant legacies far removed from the centres of colonial power. This erasure enabled the postcolonial world economy to be envisioned as a seamless, interconnected trade network spanning the globe. This is well captured by socio-technical networks designed for the

41 Marian Burchardt and Dirk van Laak, eds., *Making Spaces through Infrastructure: Visions, Technologies, and Tensions* (Berlin/Boston: De Gruyter, 2023).

42 Harvey and Knox, *Roads: An Anthropology of Infrastructure and Expertise*.

processing, circulation, and management of information. According to sociologist Manuel Castells, these networks have given rise to a new 'space of flows', a spatial configuration characterised by continuous movement and interconnection.<sup>43</sup> This emergent space is emblematic of contemporary globalisation, where the flow of information, goods, and capital is both enabled and structured by the underlying inequalities and power dynamics inherited from the colonial past.

The empirical manifestations of the four topological spatial figures at the core of refiguration theory – territorial space, network space, trajectory space, and place – perfectly capture the highly controlled and regulated spaces of modernity. However, these figures are intrinsically tied to the uncontrollable overflows and disruptions that challenge their stability in contemporary contexts. To fully grasp these overflows and their implications, it is essential to turn our attention to topographic spatial figures, which offer a lens to understand the material and relational dynamics that escape the confines of controlled spatial frameworks.

## —TOPOGRAPHIC FIGURES

We propose to speak of topographic figures to refer to spatial concepts that aim to capture the identity of empirically observable spatial arrangements. Unlike abstract diagrams that chart spatial structures independent of their specific materiality, topographic figures manifest as concrete socio-material assemblages of human and nonhuman entities. Examples such as a 'bridge', a 'crack', or an 'archipelago' vividly illustrate how these figures might emerge from tangible configurations of objects and entities. It is important to note, however, that the figures themselves can move between topographic and topological functions. A 'network', for example, can be both an abstract spatial diagram that produces and organises space in a particular way and a spatial image of a specific spatial arrangement.

Turning to topography as a discipline concerned with the measurement and classification of landforms is of great interest, especially considering the tension it has always dealt with between measurement and classification of landforms.<sup>44</sup> Modern topography emerged historically based on two central techniques: first, triangulation has been, since the seventeenth century, the key method for measuring the three-dimensional shape of the earth's surface;<sup>45</sup> second, contour or elevation lines have become, since the nineteenth century, a fundamental cartographic convention for representing the shape of the land.<sup>46</sup> Both techniques appraise the earth's surface as a continuum, without indicating the boundaries of different landforms. At the same time, topography has been fundamentally concerned with the classification of landforms, dividing and naming the earth's surface as composed of smaller distinct units, such as a mountain, a valley, a hillside, etc.

This is how geomorphologists describe this problem today: 'Mathematically, landform is a continuous surface covering the earth. All major approaches representing landform, however, treat this surface as composed of smaller units.'<sup>47</sup> This requires what geographer Martin Dehn and colleagues call 'filter functions', which, conventionally, are based on geometrical criteria. But, as they argue, geometry alone is insufficient to distinguish between land units, as it leads to an untenable situation of 'semantic heterogeneity', i.e., 'different terms for the same object or identical terms for different objects'.<sup>48</sup> Similarly, geographer Barry Smith and philosopher David Mark observe that cartographers solve the tension between a continuous field-based and discontinuous object-based ontology by putting, for example, 'the *names* of mountains on their maps (...) But then they leave it up to the user of the map to infer the extent of the object to which the name refers'.<sup>49</sup> Geomorphologists increasingly agree that the classification of landforms is, thus, not only a matter of geometry but essentially one of mental and semantic models. This is very interesting, even considering the caveat that instead of following a linguistic or a cognitivist approach, we would propose a figurational approach.

44 Barry Smith and David M. Mark, 'Do Mountains Exist? Towards an Ontology of Landforms', *Environment and Planning B: Planning and Design* 30, no. 3 (2003).

45 Engelhard Weigl, 'Die Vermessung Einer Nation Oder Die Triangulation Des Terrestrischen Raumes', in *Instrumente Der Neuzeit: Die Entdeckung Der Modernen Wirklichkeit*, ed. Engelhard Weigl (Stuttgart: J. B. Metzler, 1990), 155–73.

46 J. C. Maxwell, 'On Hills and Dales: To the Editors of the *Philosophical Magazine and Journal*', *The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science* 40, no. 269 (1870): 421–27, <https://doi.org/10.1080/14786447008640422>.

47 Martin Dehn, Holger Gärtner, and Richard Dikau, 'Principles of Semantic Modeling of Landform Structures', *Computers & Geosciences* 27, no. 8 (2001): 1005.

48 Dehn, Gärtner, and Dikau, 'Principles of Semantic Modeling of Landform Structures', 1005.

49 Smith and Mark, 'Do Mountains Exist?', 421.

50 Löw, *The Sociology of Space*.

51 George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: University of Chicago Press, 1980), 1.

52 Dawney, 'The Work That Figures Do'.

Topography is, thus, fundamentally different from topology, as it deals with concrete articulations of landforms and semantics or, to put it more broadly, matter and meaning. Topography demonstrates how topographic figures are central to the constitution of spaces by actively articulating – or, as Löw suggests, 'synthesising' – the spatial orders of distributed objects and beings.<sup>50</sup> Much like metaphors in language, topographic figures often operate implicitly, shaping everyday spatial practices and perceptions in ways that may go unnoticed. They influence 'what we perceive, how we navigate the world, and how we relate to others', forming the hidden scaffolding of our spatial and social environments.<sup>51</sup> As such, they are essential for understanding the stability and reproduction of concrete spaces, as well as their transformation and production. They act as 'pivots', anchoring and reinforcing the spatial arrangements that underpin governmental and biopolitical regimes while simultaneously laying the groundwork for the constitution of alternative spaces.<sup>52</sup>

Accordingly, topographic figures serve as particularly powerful diagnostic tools for understanding the contemporary transformation of the spaces we inhabit. Because topographic figures can be sites of imagination and resistance dedicated to cultivating alternative ways of living/modes of inhabitation, they not only help to structure these spaces but also challenge and reimagine them.

## FROM FIGURES TO REFIGURATION: PROBLEMATISING MODERN SPATIAL ARRANGEMENTS

Our *Atlas of Spatial Figures* investigates topographic spatial figures through multimodal assemblages of stories, etymologies, and drawings. Across the book's pages, each assemblage provides a unique case demonstrating how spatial figures link empirical situations within broader processes of spatial refiguration. The refiguration of contemporary society can, thus, be conceived, first and foremost, as a process characterised by the massive and persistent proliferation of topographic figures, marked not by fixed varieties but by pure variation, leading to an overflowing pool of possibilities. The primary aim of the *Atlas of Spatial Figures* is to account for this proliferation by establishing an exploratory multimodal practice. This approach enables a deeper appreciation of topographic figures, helps us identify their various forms, and encourages us to recognise their empirical and analytical significance. However, this first step must be followed by a more comprehensive analysis of refiguration that focuses on the historical transformation of spatial figures. This entails not only interrogating modern topological figures but also exploring the articulation of new modes of constituting space.

Such an analysis of refiguration could proceed in two ways. The first one involves investigating the processes through which emergent topographic figures evolve into shared articulations of space. By tracing how these figures gain prominence, one could chart their eventual transformation into abstract spatial diagrams capable of challenging the primacy of modern topological figures. This requires a genealogical approach – rooted in historical inquiry – aimed at retrospectively understanding the emergence of what in the present are evidently new spatial figures. Contemporary diagnostic analyses often adopt this method, beginning with specific emerging figures such as the 'critical zone', 'terrain', 'stack', or 'patch',<sup>53</sup> and tracing their development. However, given the current historical phase of accelerated change and polycrisis, it may still be premature to identify such figures.

The second way focuses on identifying the problematisations articulated by these topographic figures. Problematisations, according to Foucault, are specific to historical conjunctures and involve a 'transformation of a set of difficulties and troubles into problems to which diverse solutions are proposed as responses'.<sup>54</sup> Problematisations are, thus, what constitutes historical modes of thinking or epistemes. This approach aligns with sociologist Niklas Luhmann's concept of 'problems of reference',<sup>55</sup> though the latter emphasises societal differentiation over historical change. Problems of reference are contingent historical problems that arise from the concrete situations of everyday life, and, in Luhmann's theory, they help to explain the emergence of distinct forms of communication, such as economic, political, or artistic communication. Notably, Luhmann argues that reference problems do not exist prior to the form of communication for which they offer an orientation point and that, accordingly, these modes of communication do not ultimately aim at solving these problems but, rather, constantly defer and, thus, reproduce them. Similarly, we propose that 'reference problems' are specific historical situations that prompt new spatial figures. For instance, the four topological spatial figures identified by Löw are intrinsically linked to the problem of constituting the modern nation-state and are deeply interwoven with colonialism and globalisation.<sup>56</sup>

The central proposition of the *Atlas of Spatial Figures* is identifying the 'reference problems' that are performatively articulated in the plethora of topographic figures that emerge in the contemporary moment of rapid transformation and crisis. We have structured the book in four sections corresponding with the four 'reference problems' we have identified in the stories, etymologies, and drawings of topographic figures, which, we propose, are central to understanding the direction of the current process of societal refiguration.

- 53 Bruno Latour and Peter Weibel, *Critical Zones: The Science and Politics of Landing on Earth* (Karlsruhe, Germany; Cambridge, MA: MIT Press, 2020); Stuart Elden, 'Terrain, Politics, History', *Dialogues in Human Geography* 11, no. 2 (2021): 170–89, <https://doi.org/10.1177/2043820620951353>; Benjamin H. Bratton, *The Stack: On Software and Sovereignty*, 1st ed. (Cambridge, MA: MIT Press, 2016); Anna Lowenhaupt Tsing, Jennifer Deger, Alder Keleman Saxena, and Feifei Zhou, *Field Guide to the Patchy Anthropocene: The New Nature* (Stanford, CA: Stanford University Press, 2024).
- 54 Paul Rabinow, *Anthropos Today: Reflections on Modern Equipment* (Princeton, NJ: Princeton University Press, 2003), 47.
- 55 Niklas Luhmann, *Die Gesellschaft der Gesellschaft* (Frankfurt am Main: Suhrkamp, 1997).
- 56 Löw, 'In welchen Räumen leben wir?'.

## —EXTIMACY

The term 'extimacy' captures the current challenging of Western notions of home as a place of intimacy. In Euro-American modernity, the home has been understood as an intimate space where individuals retreat from the public world to be 'authentic' – to embody who they would truly be. Today, however, we increasingly encounter socio-spatial situations that refigure homes as spaces of extimacy. Originally coined by psychoanalyst Jacques Lacan,<sup>57</sup> the term refers to how our deepest and most intimate desires are shaped by external forces – the strange, the alien, the other. Similarly, contemporary experiences of home are marked by exposures and intersections with external logics that disrupt traditional notions of intimacy. These dynamics turn the home inside out, deterritorialising it and transforming it into something else entirely: a precarious and vulnerable space, as well as a site of political empowerment and economic struggle. Homes, in this sense, often lose their intimacy, becoming akin to public spaces. This transformation resonates with feminist perspectives, which assert that 'the personal is political', emphasising how the home becomes a stage for public issues and conflicts to be contested and negotiated. Under such conditions, the home is no longer a retreat from the world but a space where the boundaries between the personal and the political, the intimate and the public, are actively blurred and redefined.

57 Jacques Lacan, *The Seminar. Book VII: The Ethics of Psychoanalysis, 1959–60* (New York: Norton & Company, 1997).

## —SPLINTERING

The second reference problem is splintering, a concept introduced by geographers Steve Graham and Simon Marvin to illustrate how new physical and digital infrastructures contribute to the fragmentation of cities along economic, social, and technological lines.<sup>58</sup> This phenomenon is increasingly evident today in the global digital public sphere, where not only are digital infrastructures increasingly fragmented, but the once-utopian vision of a world united by digital communication is shattered. In its early days, the internet was celebrated as a limitless, borderless realm fostering the creation of virtual communities, the open exchange of knowledge and information, and the advancement of democratic processes. Today, however, we are witnessing the reconfiguration of its infrastructures and virtual spaces. Large technology corporations such as Google, Meta, and Microsoft are constructing proprietary digital infrastructures, bypassing traditional forms of routing on the open internet to consolidate control over data and its flows. Meanwhile, authoritarian regimes like China and Russia impose firewalls to restrict online communication, while countries such as India resort to internet shutdowns to suppress dissent and protests. This splintering reflects a profound transformation of the digital landscape, where once-celebrated ideals of openness and connectivity are overshadowed by fragmentation, control, and exclusion.

58 Steven Graham and Simon Marvin, *Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition* (London/New York: Routledge, 2001).

## —UNINHABITABILITY

Uninhabitability is the third reference problem we propose to explore. Its salience becomes particularly evident in urban environments, as the city has conventionally been envisioned as a space of dwelling and belonging, actively appropriated by individuals, groups, and communities in ways that often challenge or subvert planning visions and governmental arrangements. Through such processes, the city becomes a site of identification, affective attachment, and cultural representation, where struggles for recognition and participation unfold. However, this understanding of the city is increasingly being contested by developments that point to the impossibility – or fragility – of appropriating urban space. Urban theorist AbdouMaliq Simone's concept of 'uninhabitability' compels us to rethink how people relate, or rather, fail to relate, to the city and the world.<sup>59</sup> Notably, Simone frames uninhabitability as a potential source of liberation, describing it as a state that allows 'residents

59 AbdouMaliq Simone, *Improvvised Lives: Rhythms of Endurance in an Urban South* (Cambridge, UK: Polity Press, 2019).

to spiral in and out, propel themselves into the larger urban surrounds and then bear back down again into the familiar places now rendered unfamiliar. It is the creation of a rhythm of itineraries that are themselves uninhabitable'.<sup>60</sup> Yet, uninhabitability does not always carry such liberating connotations. It is deeply intertwined with experiences of violence, alienation, fear, and misrecognition. It encompasses various forms of spatial displacement and urban conditions that lead to the outright exclusion of certain groups. Moreover, it reflects the challenges of inhabiting infrastructural spaces at the margins of both habitability and appropriation, existing in precarious states that defy stable or meaningful urban belonging.

60 Simone, *Improvvised Lives*, 5.

## —FERALITY

The fourth reference problem concerns the unpredictable and ungovernable agency of nonhuman entities and ecological processes, particularly in the face of climate change and planetary transformation. A defining characteristic of the modern spatialisation of nature has been its strict separation from the social realm, which has facilitated its ornamental use, commoditisation as a resource, and even its combating. However, since the onset of the multifaceted socio-natural crises linked to climate change, this modern understanding of nature has become untenable. Today, what we once considered 'nature' – encompassing geophysical, biochemical, and atmospheric processes – seems to have gone 'wild'. These processes are no longer distinct from the human world; rather, they have become intertwined with it, often acting in ways that destabilise our environment and challenge our societal structures. The concept of ferality, traditionally used to describe domesticated animals that revert to a wild state – such as feral cats or pigs – captures this new nature. Anthropologist Anna Tsing offers a compelling definition of ferality, describing it as 'the state of nonhuman beings engaged with human projects, but not in the way the makers of those projects designed'.<sup>61</sup> This perspective thus highlights the complex interactions between human intentions and the unpredictable responses of nonhuman entities.

61 Tsing, Deger, Saxena, and Zhou, *Field Guide to the Patchy Anthropocene*, 10.

## A RESEARCH AGENDA FOR SPATIAL REFIGURATION

These four reference problems of extimacy, splintering, uninhabitability, and ferality and their associated spatial figures are deeply interwoven, forming complex and dynamic spatial arrangements. An essential empirical task is to systematically explore and analyse how these reference problems are articulated in practice, revealing how they may reinforce, subsume, supplement, contradict, or ignore one another. These articulations and their cascading effects could be a key focus of the diagnostic analysis of the spatial refiguration of the contemporary.

Uninhabitability, for example, could amplify splintering by creating socio-spatial conditions that marginalise specific populations, leaving them disconnected from both physical and digital infrastructures. Similarly, extimacy might interact with ferality, as the breakdown of intimate boundaries within the home could contribute to the unregulated or 'wild' re-emergence of more-than-human ecologies. Conversely, ferality might also challenge splintering, introducing unpredictable elements that resist the technocratic control of infrastructures and digital networks.

Equally critical is the task of understanding how individuals and communities navigate these overlapping spatial arrangements in their daily lives. People must adapt to the precariousness of uninhabitability while engaging with deterritorialised homes under extimacy, often developing strategies to counteract or leverage the effects of splintering in digital and urban realms. Additionally, more-than-human actors – wildlife, climate forces, or technological systems – play an integral role in mediating and reshaping these interactions.

A second critical issue concerns how exactly these reference problems point to transformation processes currently underway – whether they explain a refiguration of actual spatial arrangements, what Löw defines as spacing, or whether they represent a shift in the ways we conceptualise and understand space, aligning more closely with her concept of synthesising. This distinction is crucial because it raises questions about the positionality of refiguration theory, particularly the cultural, political, and affective positions from which spatial figures are identified and the theory itself is developed.

Uninhabitability, for instance, gains particular relevance as an emergent reference problem when contrasted with urban imaginaries characteristic of modern European cities. Yet, in many other regions, uninhabitable spaces have long been a reality. Similarly, ferality can be reconsidered through Latour's argument that we have never been modern,<sup>62</sup> as nonhuman actors have always been entangled, mediating and also disrupting human arrangements and, thus, played an integral role in the production of space. Intimacy, too, is a distinctly Western construct tied to modern ideals of the home. To frame extimacy as an emerging reference problem presumes that this model of intimacy was ever universally applicable. Finally, splintering is best understood in contrast to the modern ideal of universal infrastructures – digital or otherwise – which, apart from a few exceptions, was never fully realised.

These observations suggest that the reference problems and their associated spatial figures primarily highlight a refiguration of how we conceptualise and constitute spaces. This is not to deny the fundamental nature of spatial refiguration itself but, rather, to clarify the mode through which reference problems and spatial figures contribute to this process. They may not primarily indicate changes in the actual distributions of humans and non-humans but, instead, designate shifts in the conceptual and affective ways spaces are constituted.

62 Bruno Latour, *We Have Never Been Modern* (Cambridge, MA: Harvard University Press, 1993).

## ACKNOWLEDGEMENTS

Many people have contributed to the *Atlas of Spatial Figures*. First of all, the book is a testament to the generous spirit of collaboration we have in the CRC 'Re-Figuration of Spaces' in Berlin. To have a group of extremely busy scholars willing to invest so much time and energy – first, in participating in our strange multimodal workshops that formed the starting point for this book project; then, in writing literary, speculative, and even science-fiction stories about their research findings; and finally, in going through a very long process of revision and rewriting – is a real luxury that we know how to appreciate. This book is, first and foremost, a testimony to that.

In addition, a number of people have helped us bring this book to life. Without their curiosity, ideas and willingness to collaborate in thinking and conceptualising, the atlas would not exist. Tiziana Ratcheva not only documented the multimodal workshops but also shaped them with her insightful questions. Daniel Jarczyk researched etymologies, had AI systems speculate on the meaning of terms, and on this basis, wrote many of the stories about the etymologies of spatial figures. We are deeply grateful to Katja Gretzinger, first of all, for the great book design but, also, for the inspiring conversations about translating ideas into book form. Last but not least, the book is the result of the excellent work of Mark Soo. As an editor, Mark has achieved the feat of guiding scholars in creative writing. Without his kind, competent, and professional guidance throughout the book production process, we would have been completely lost. It is thanks to him that this scientific book is – as we think – also an exciting read.

# EXTI MACY



## EXTIMACY: TURNING HOMES INSIDE OUT

The stories in this section revolve around the concept of 'home', with many of them challenging Western notions of home as a place of intimacy. Traditionally, the home has been seen as a private and intimate space where individuals can retreat from the public world and be 'authentic', that is, to be who they really are. However, many of the following stories speak of homes under conditions of 'extimacy'. This term, originally coined by psychoanalyst and psychiatrist Jacques Lacan, refers to how our most intimate desires are shaped by the external, strange, and alien. Similarly, we are interested in the ways in which the space of the home is exposed and intersected by logics that undo or challenge experiences of the private and the intimate; that speak of how homes are turned inside out, deterritorialised, and how they become something else: a dangerous and defenceless place or a space of political and economic struggle. In the process, and for myriad reasons, homes often become spaces of temporary exposure.

Thematically, the stories range from feelings of fear and lust during a blind date arranged on the gay dating platform Grindr; a team of set designers searching for the ideal apartment for a movie shoot; the transformation of a Chilean village due to the construction of a nearby luxury resort; the significance of gates, doors, and grills for spatial and symbolic forms of demarcation in Nairobi; the dilemma of an Airbnb superhost caught between privacy and business interests; the intimate (in)visibility of gay bars in Seoul; the staging of homes in Afronovelas; a user manual for a machine that promises to evoke individual forms of ontological security; the housing dreams of Kenya's upper-middle class; and the seriality of rural tourist accommodation.





# BLIND

Although hours had passed since sunset, Leo was not surrounded by complete darkness. The intrusive light of a streetlamp had only reluctantly allowed itself to be dimmed by a picnic blanket that barely covered the large window of his living room.

Leo's iPhone buzzed, and the screen lit up. 'I'm a bit late, sorry!'

He opened Grindr and replied, 'No problem. See you on the dark side 😊'. The screen switched off, his eyes narrowing in the obscurity until the black-and-white poster on the wall with the words 'But we are not animals\*' became legible again.

Thoughts flickered through Leo's mind. What image would the guy have of Leo, given that the few furnishings, thrown together by inheritance and leftovers from the previous tenant, would likely be the most private insight he would ever have – aside from the sex, of course. In fact, he really had no reason to worry about it. In his personal darkroom, their eyes would be busy making out more than mere silhouettes of their bodies, and the furniture would quickly recede from attention.

During the time Leo had lived with his ex-partner Ali, he wasn't allowed to use their flat as a place for his occasional Grindr encounters. For Ali, home was a safe space meant exclusively for himself, his partner, and close friends. On their very first date, Leo had received Ali in the small room of Leo's shared flat, although Ali lived alone in a spacious apartment. Only after they had been a couple for a year or so did Leo move in with Ali. Whenever Leo met other men at their places, he never stayed the night. He did this in an attempt to separate the physical side from the emotions he reserved for his partner. Now that he was single and living alone again, Leo offered his flat as a meeting place in case the other didn't (or couldn't) do so or was outside the twenty-minute radius that quite consistently delineated Leo's dating activities. He usually felt fairly secure inviting strangers, and so it was today.

At the same time, the man who was keeping him waiting in the gloom of his living room had seemed somewhat uneasy about Leo's less-than-common suggestion of meeting in the dark. He

# DATE

S → A → L



səˈlɒn

The English noun 'SALON' traces back to the proto-Indo-European *sel-*, which originally referred to a large room or hall. In the English language, the term first appeared during the 1690s, where it referred to a spacious 'room or apartment in a palace or great house'. Over the course of the nineteenth century, the meaning shifted from focusing on the size of the room to its function. By the 1810s, it was used to describe the 'reception room of a Parisian lady'. Later, particularly in the last quarter of the nineteenth century, it came to denote a gathering of fashionable people or events such as fairs and exhibitions. This evolution of meaning was also influenced by the Latin term *salire*, meaning to jump or to leap, which highlighted the festive and lively nature of the conversations and gatherings that took place in that space. The modern sense of 'salon' as an 'establishment for hairdressing or beauty care' was first recorded in 1913.

hesitated at first but then agreed on the condition that Leo would receive him naked and seated on the floor. 'A safety measure 😊', he explained. Having been worried about his safety in his early days of Grindr, Leo was able to empathise. He had always shared his location with a friend and placed his belongings just in front of the door so that he could hear his keys scratching over the floor in case someone entered the flat while they were in action. He had stopped doing so, though, because the effort didn't seem to him to justify the lack of danger he felt.

By now, Leo was starting to feel a little cold and – even more worryingly – nowhere near as horny as he had been at the time he had invited the guy over. He flicked through the photographs that had triggered his desire for an immediate meeting less than two hours ago. As the anticipation was returning, a message popped up. 'I'm at the door, let me in. 🙏' With a hint of a smile on his lips, Leo's mouth quietly formed the word 'please', voicing the meaning of the emoji that marked the end of the sentence.



# LOCATION

Title: Scouting Session for Season 2 of the Series

'C'est la vie' in Dakar

Genre: Television Series - Drama

Episode: 01

Written by: Daddy Dibinga

---

INT. LIVING ROOM - DAY

The director, assistant director, location scout, and set design team gather in the living room of a potential house for the main characters.

ASSISTANT DIRECTOR  
(to location scout)

Which character would this house belong to?

LOCATION SCOUT

I was thinking of Dr Diop's parents. Living room and bedroom. Come in, come in.

DIRECTOR

How many episodes are we going to shoot here?

ASSISTANT DIRECTOR

Four episodes with costume changes, living room, and bedroom. One day off.

DIRECTOR

Mr Diop is a doctor. Normally, he'd be from a wealthy family... I'm not sure this house feels right.

ASSISTANT DIRECTOR

Yes, Father Diop worked in a bank.

The DIRECTOR shows artistic photos on his phone.

DIRECTOR

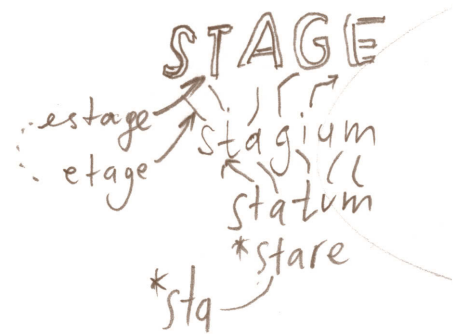
I plan to dress his parents like this: the father as an old Ivorian pensioner and the mother with a simpler yet stylish look, maybe with some African-inspired patterns. It's like a touch of Cape Verdean style. The other problem I have with this house is the two windows behind the sofas. It bothers me.

The DECORATOR chimes in.

DECORATOR

We can use the two small sofas in grey.

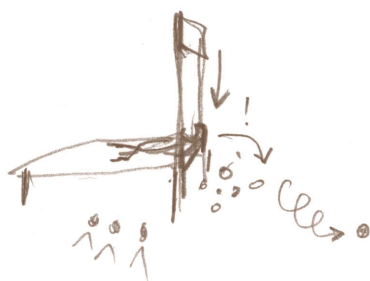
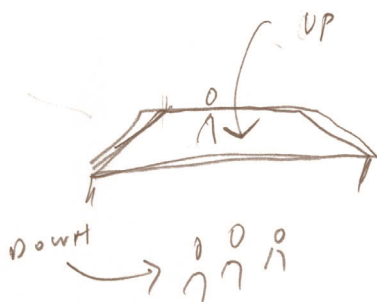
# SCOUT



sted3

The English noun 'STAGE' originates from the Latin root *stadium*, which refers to an elevated area or platform serving various purposes, including performances, exhibitions, and public speaking. Its etymological notion is, therefore, linked inextricably to a 'standing place (...)' where anything is publicly exhibited', which is also reflected in its usage record ever since its adoption by the English language. Its first appearance can be traced back to the thirteenth century, when it denoted a 'horizontal division of a structure or a story of a building'. The meaning of a 'raised platform used for public display' (including executions) was first recorded in the fourteenth century before being increasingly restricted to the realm of theatre in the sixteenth century. The notion of the term as a single step in a sequence or gradual process, as in the expression a 'stage of a journey' or in the process of cancer staging, also developed during the fourteenth century.

# MEETS



DIRECTOR

Let's keep the sofas. They're a complementary colour scheme.

The DIRECTOR addresses the assistant director and the decorating team.

DIRECTOR

We can arrange the sofas differently to obtain depth of field, but it will be a very limited depth.

ASSISTANT DIRECTOR

We shouldn't bother with this house. It could easily be used as a set for other characters.

DECORATOR

Who are you thinking of?

ASSISTANT DIRECTOR

It could be the house of Rose, Ange's girlfriend. In this scene, Ange comes knocking on his door and tells his girlfriend that it's late... You remember, in the story, Rose is living her life as she wants. On the side, she works hard to send money to her mum. She is really from a working-class background. In the web episodes and in the following sessions, we already have her bedroom and her kitchen confirmed. It could be a good option if we considered this house as Rose's. We would then have the missing rooms.

DECORATOR

We can also consider this house for Meissa or her parents. But until we visit other houses, let's keep the 'Rose house' option for now.

DIRECTOR

For me, it's important every time I come to a house that it fits the character, but I also always need to consider three important things: depth of field, the position of the light, and different colours within the set. In this case, we don't have any depth of field.

The LOCATION SCOUT interrupts.

LOCATION SCOUT

Let's have a look at the next house.

DIRECTOR

Wait until I take a picture before you leave.

The director takes a picture of the living room, capturing the essence of the space.

FADE OUT.

# DECORATOR

## AFRONOVELAS: SPATIAL STORIES AND PRODUCTION REGIMES IN WEST AFRICAN SOAPS

Subproject C06 is dedicated to the production of spatial histories in pop culture using the example of streamed television series in the French-speaking West African context, particularly in Senegal and Côte d'Ivoire. The subproject is built around two entangled interrogations: first, we are investigating the fictionalisation of spatial refiguration by analysing the ways everyday spaces and their transformations are meaningfully interpreted within the soap-opera genre; second, we are reconstructing the translocal production regime of Afronovelas by working out the constellation of actors involved in the creation of these spatial stories.

As a result, our socio-spatial filmic analysis shows how the main *tension* in the Afronovelas' narrative is between tradition and modernity. This is performed on a material level through the staging of everyday spaces and the ongoing conflicts around the construction of African modernities. Furthermore, the institutional mapping of the production regime shows the coexistence of three different translocal production repertoires (civilisational, identitarian, standardising), each of which represents a group of players operating at different scales and constructing (more or less) powerful circuits for the circulation of the series.

The analysis aims to bring these two levels together and to work out to what extent the staging of modernities is orchestrated and interpreted differently depending on each production repertoire. The investigation provides striking evidence for the differences in this staging and, thus, contributes to the understanding of how mainstream pop culture participates in the ongoing controversial and conflictual refiguration of Africanness.

Principal investigator:  
Séverine Marguin

Team:  
Daddy Dibinga  
Marie Inès Gartlinger  
Mara Oppermann



M

POLY GAM Y

TEC SPACE

LIGHT

CAMERA

POV

SOUND

ACTOR

SALON

HALL

SOFA

KITCHEN

BATH ROOM

SERVANTS ROOM

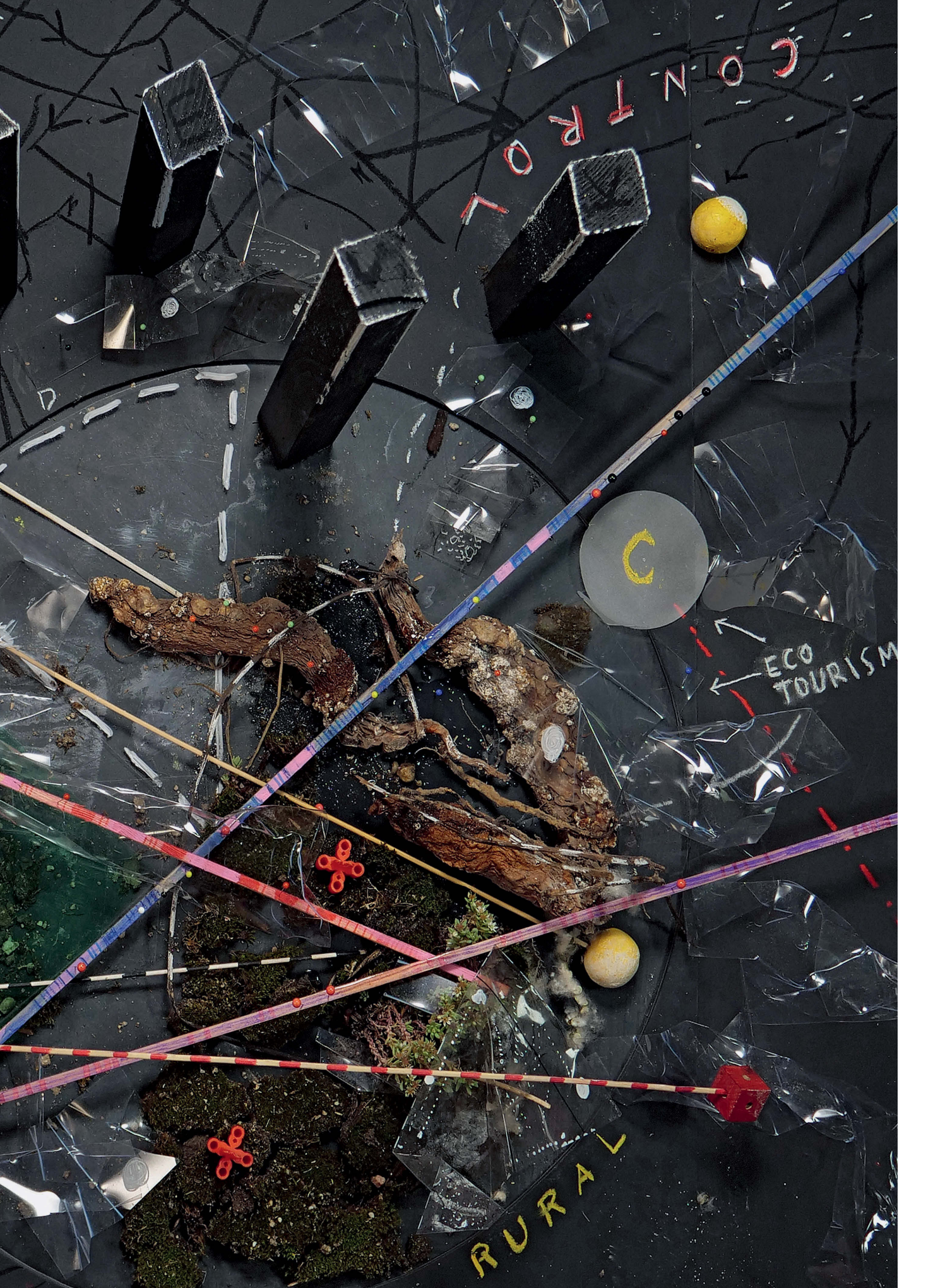
LIVING ROOM

REGIONAL









CONTROL

ECO  
TOURISM

C

RURAL

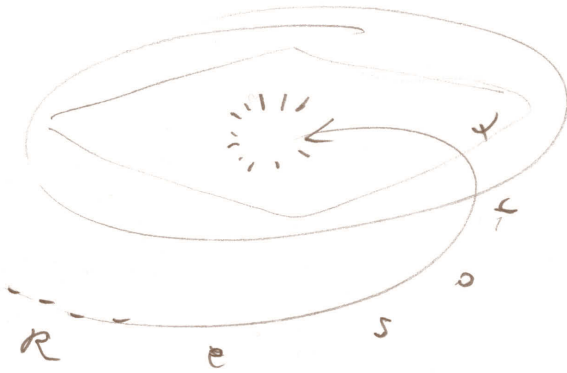
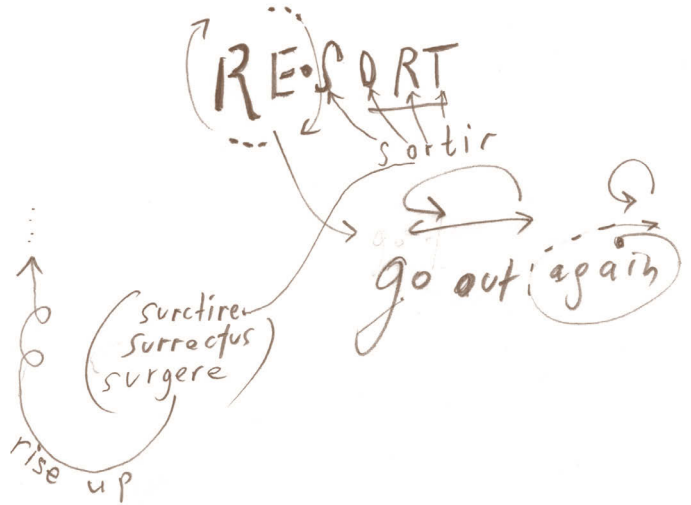
# PERIPHERALISED RURAL AREAS: DIGITALISATION AND THE CONSTRUCTIONS OF SPACES

B01

Subproject B01 focuses on the role of digitalisation strategies and processes in cities and peripheralised rural areas. In the first funding period, our research team analysed changes in urban spaces due to digitalised planning practices since the 1970s. In the second period, we examine peripheral rural areas. Using the examples of South Korea and Chile, we ask what rural concepts, practises, and spatial arrangements were in place prior to the advent of digitalisation in the countryside and how these may have transformed due to digitality. The research follows planning actors at the national and regional level, as well as rural residents who have become active in e-commerce or platform tourism. Of particular interest are the forms and relationships of rural spatial figures (territory, network, place, and routes) that result from (new) perceptions and practices and the extent to which they coincide or conflict with each other. One of the results is that network spaces bring new experiences and opportunities for action, including more autonomy, that did not exist before. With their national or even global connectivity, they seem to evoke new forms of peripheralisation and deperipheralisation that, on the one hand, are appreciated locally but, on the other, also bring new disruptions and uncertainties.

**Principal investigator:**  
**Gabriela Christmann**

**Team:**  
**Jae-Young Lee**  
**Nicole Zerrer**



# IMMUNE

It seemed that they had seen into the future. ‘This was us in 2003, when we decided to change something’, the woman said, holding a group picture of late teens and twenty-somethings. ‘We wanted to work with tourism, and we wanted to survive here.’

In this little village in Chile, the woman, now thirty-eight, stood in front of the hotel she owned today. Since the 2010s, the hotel had sustained itself by piggybacking off the growing number of tourists following the promise of the luxury resort down the road. This very resort had previously bought all of the surrounding forests and had it declared a nature reserve and planned to establish the area as a new destination on the global tourist map.

## RESORT

The etymological origin of the English word 'RESORT' is the Latin *resortus*, the past participle of the verb *resurgere*. The term denoted either a place or an act of returning or resurgence. In the fourteenth century, the term first appeared in English as a variation of the French verb *resortir*, meaning 'to go out again', and was used to describe 'that to which one has recourse for help, aid or assistance, a source of comfort and solace'. Its expansion to mean a place dedicated to being visited, especially for relaxation, recreation, or other purposes, can be traced back to the mid-eighteenth century.

# SYSTEM

Inadvertently, it ended the village's main form of employment, woodworking.

With the arrival of more tourists also came new infrastructure: a smooth highway, comfortably connecting cities to the resort, now touches the village's edge, while local fast food joints, food trucks, cafés, and 'Open' signs line streets guarded by friendly dogs. At first, many stopped by the village only to ask for directions to the resort, But today, people want to explore its old rubble roads.

After talking with the woman, I decided to check out the rest of the village and headed down its main street. Passing a quaint house, a gastronomer called out, showing me his backyard with wildflowers and vegetables. 'In the near future, the village will be a tourist paradise', he said. 'For us, it's already perfect. But for them, we will make a garden to sit in, eat, drink, and listen to music.' His place was part of a business he owned together with a friend, a cook. They had started humbly, initially handing flyers for info and publicity to friends employed at the resort. After, I met a neighbour who services the tourist info point along the highway. Every morning, she checks in with local businesses to gather information for visitors who ask about what they can do here.

Not everybody saw opportunities in this indirect cooperation with the resort, however. 'We're losing our lands and identity to them. They give us phones and cars to work for them, but they are bait. They own everything, and we own nothing', a resident on the street tells me. 'Their story about this place is not our story. Educational organisations come here to see our village history, you know – it's valuable. Take the abandoned wood factory in the village centre. The historical structures are still intact, but as villagers and schoolchildren stroll through, only graffiti lines the walls', they continued. 'In the future, the building will be restored as a place for the village, a place that carries our story for the world to see.'

'It already seems like it', I thought to myself, astonished about this wish for an alternate vision of the village centre – I am startled by the many dimensions of how this village has survived. Regardless of cooperation or resistance to the resort and ever-growing tourism, the inhabitants somehow managed to continue.

I began imagining an invisible magnet at the core of this village acting as a collective binding to this place, a shared memory colouring the background. Not only did these people survive, but they seemed to have kept this place alive by embedding change, like an immune system negotiating a new element to protect and go on, each cell processing in its own time and space.

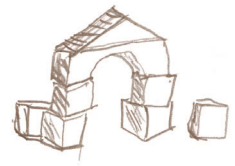
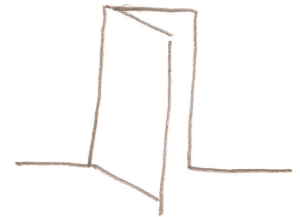
# SECURITY, PRIVACY,

‘Security’, ‘privacy’, ‘status’, and ‘identity’ are the words the locksmith uses to explain to me what the central needs of his clients are. The gates, grills, and doors he sells on the roadside of one of the big main streets in the west of Nairobi, Kenya, are self-made and, therefore, all unique. And business in Nairobi is running well. The grills and gates, especially, follow not only functional aspects of security but also represent status and, thus, increase the residents’ reputations. His customers, who belong to the upper-middle class, appreciate this.

The locksmith makes the long journey from his workshop fifty kilometres outside of Nairobi to the west of the city several times a week, often leaving as early as half past four in the morning. The individual pieces he brings are neither used in traditional upcountry housing homesteads nor in the gated communities that larger real estate developers are building across the city. Instead, they are used on plots that the residents freely design according to their wishes, free from the cultural norms of ancestral homes or the standardising projects of private and state real estate. As the locksmith explained, ‘Those who can afford the extra expense of a beautiful and individually crafted door want to make a prestige statement’.

Since the doors are in demand not only by those who can afford a magnificent house but also by those who want to use them to make their aspirations for advancement visible, this leads to the curious fact that the doors are sometimes stronger than the perimeter walls around the houses. A related paradox is that the prosperity of the residents, displayed with the doors, often seems to increase the desires of thieves and burglars, which, in turn, leads to a further ‘upgrading’ of the houses. This acute irony is summed up by the locksmith: ‘They will find themselves in a fortress, locked behind grills and massive iron structures, which they themselves have paid for.’

Late one afternoon, I witnessed a sales talk that seemed to put the locksmith into a mixture of slight tension and suppressed excitement, which I could sense but not quite understand. The customer, who, like many others, drove into the sales yard in a spacious German SUV, seemed to be the reason. I learned later he was a high state official who ordered two magnificent gates and window grilles for his house in Kisumu, in the west of Kenya. This thirst for recognition by the political and economic elite, as well as the aspirations of the upper-middle class, will ensure that business continues to run well.



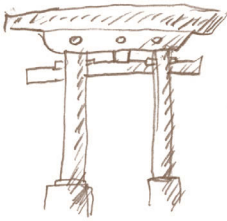
ger

The English noun ‘GATE’ is derived from the proto-Germanic root *gata*, which describes an opening or entrance. Its adaptation to English expanded this meaning both to the physical and metaphorical realm. In the former sense, the word refers to entrances or passages but also, more broadly, to a movable barrier controlling access. This is also why many cities feature districts whose names end with -gate, like Aldgate or Westgate in London, indicating their position at what had historically been the city’s borders. With a similar connotation of managing access, the word ‘watergates’ means a technology used to control water flow. Today, the term also appears in figurative expressions such as ‘to gatecrash a party’ and ‘to gatekeep’.

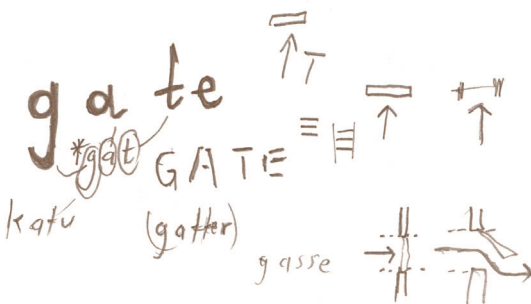
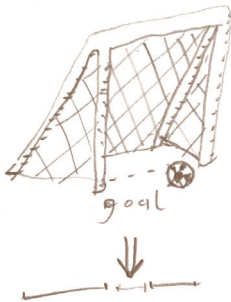
Besides the will to individualise their homes in the wealthier west of the city, however, the less affluent middle class from the east is also eager to purchase doors and massive gates. As friends from Kasarani told me, they have financed gates at both ends of their street, together with their neighbours, to secure the street. In this way, they are constructing a semi-public space that is also structured in terms of time because the two entrance gates are locked in the evening, with three keys distributed among the neighbours. There are also self-made gates made of corrugated iron and used wooden poles, which are locked at night, thus distinguishing what happens during the day from what happens at night. Consequently, movements in the neighbourhood and beyond are temporally coded, spatially structured and socially organised.

Admittedly, the need for security dominates here, which, for all the locksmith's customers, is the lowest common denominator. Although these doors will separate the rich and the poor, they also link them closer to each other because the dreams of the upper-middle class require the proximity of the working class and their cheap labour force. The social inequality between the 'haves' who hire the 'have-nots' as nannies, construction workers, security guards, and eventually, doorkeepers, is huge. At the same time, the proximity of those who have little to nothing and those who hire them to enforce their security infrastructure is close.

The magnificent doors of the luxurious houses of the upper-middle class, therefore, become a metaphor for the space that equally separates and relates both groups. The state servant who caused the locksmith's excitement that afternoon will give him a profit worth the price of a flat in Nairobi's lower-income neighbourhoods in the dusty east. The employees of the civil servant, who will open the gate day and night for the rest of their lives, will probably only be able to dream of this kind of sum. For now, however, the constant stream of customers who purchase security and status carries on. The steady traffic inflow indicates that the search for prestige will continue as the upper class steadily heads towards the lavishing green of Nairobi's west.



# STATUS,



# IDENTITY

# SUPERHOSTS

When I moved to Berlin in 2019, this Prenzlauer Berg apartment seemed cheap compared to the tiny London flat I rented. What I soon realised, though, is that for Berlin living standards, it's waaay too expensive. We're always on the lookout for that mythical cheaper apartment, but nothing has come up yet. It's why my boyfriend and I started Airbnb hosting. We're both artists, and that's our focus, but working as hosts has been convenient – we earn a stable extra income in a flexible way that lets us focus on our art-work. Our flat's smaller room is almost constantly booked, so we're doing something right. We're Superhosts, but it definitely doesn't come naturally to us.

Our flat is rather ideal for hosting. It could even pass as two separate flats, as guests aren't allowed to enter our side. The Airbnb side needs to remain minimal – that's what guests like – and it's also convenient for cleaning. Our side of the flat is where we work on our art.

To keep us standing out from other rentals, we have to go the extra mile. For example, my boyfriend helps guests with heavy luggage, and I recommend galleries and exhibitions. Our communication is top, too, and we reply fast to booking requests and rarely cancel, so our reviews are all five stars. But the hosting isn't about chatting with strangers. It's about preparing the space for guests and helping them to get around Berlin. Other than that, they do what they want. I'm not in their faces, and they're not in mine.

Last week, my hosting was challenged. I rented the room to a social scientist from Berlin researching us for some university project. She tried to immerse herself in our lives, questioning our motivations and analysing every aspect of our hosting work. As a Superhost, I was happy to give her an interview, which excited her. But she tried to start conversations at every opportunity, as if she was hoping to find some deeper meaning behind what we do. One time, after a conversation, we said goodbye at the door, but she knocked again after it had closed. I opened it a crack – I wanted to be strict about this bordering. She said I'd forgotten to sign the interview consent document. But I don't really care about it! I get that the scientist finds all of this fascinating, but let's get it straight. We hustle as Superhosts, but it's not an ambition, just a way to make ends meet while keeping your sanity in a city that used to offer space but now chews up dreamers and spits them out.



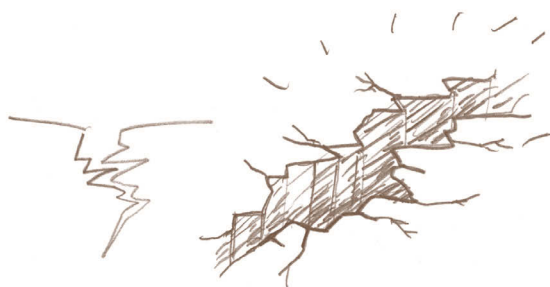
## kræk

The word 'CRACK' is derived from the Middle English *craken* and the Old English *craeian*, which means to break or to burst. The word also describes the sharp noise that results from something breaking. Its contemporary usage refers either to a small fissure or a break in a surface or to a sharp sound, like the crack of thunder or a whip. This is interesting because it points to the close relationship between the spatial and tonal figure of the crack. Why the word has been included in the name for 'crack cocaine' since the early 1980s, however, remains unclear. It is speculated that this choice may be linked to the effect of the drug, making users feel mentally broken, burst, or 'cracked up'.

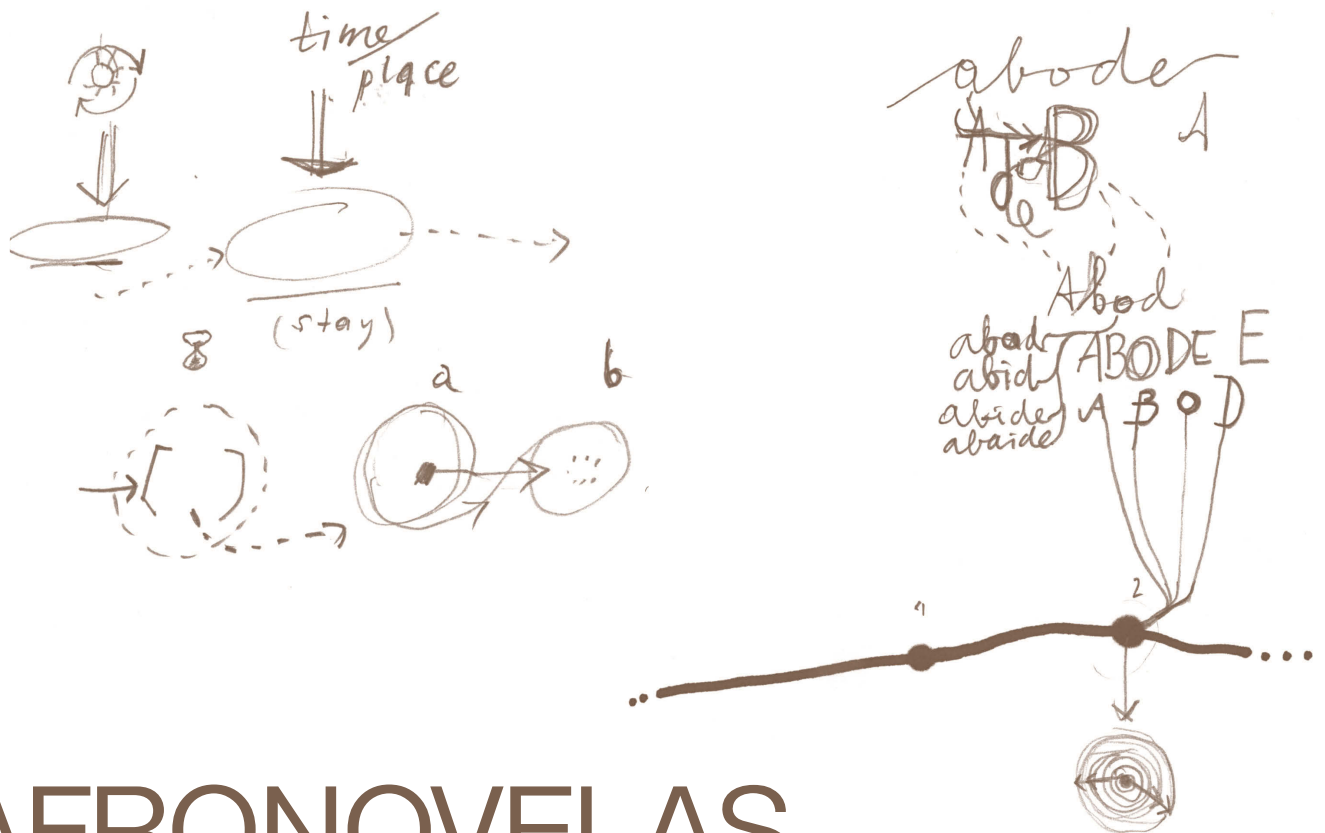
DON'T CRY



(ABOUT  
A  
ROOM THEY  
WOULD  
RATHER USE  
THEMSELVES)



# A MULTIPLE TELLING OF HOME-MAKING



## AFRONOVELAS

In the bustling city of Dakar, a popular television series called *Pod et Marichou* captivates viewers with its compelling storylines. Produced by the most successful local production company, the show skillfully uses the houses of its main characters to enhance the contrasts and connections between them.

Pod, a talented director and devoted single father, resides in a warm and inviting home with his young daughter, Mia. Their house boasts light-coloured walls, airy furnishings, and lush green plants that breathe life into the space. The heart of their home is the open kitchen, drenched in natural light and serving as a central hub. It radiates a sense of interconnectedness, with its circular

ə'boʊd

The English word 'ABODE' was first recorded in the thirteenth century and is derived from the Old English verb *abidan*, which means to stay, remain, wait, or dwell. In contrast to the word 'home', the noun 'abode', therefore, usually refers to a place of temporary rather than long-term residence. These places were also associated with a sense of security, which in part lends them the characteristics of a place of retreat. The meaning of the word today, which can describe not only a current place of residence but also an apartment as such, thus differs, to some extent, from its original meaning.

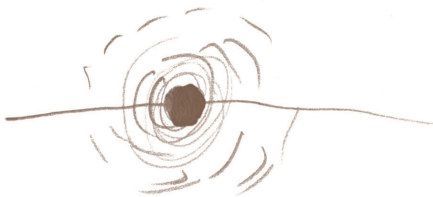
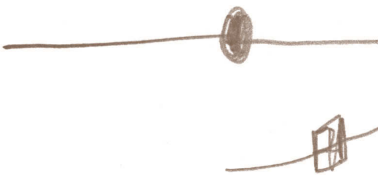
layout effortlessly linking the other rooms and the outside world. In one scene, Mia descends from her cosy pink bedroom, decorated with her own flair, and exchanges waves through the open hallway door with her friend, who lives in the same building. Together, they step out into the sandy street, embarking on their daily adventures.

Marichou, on the other hand, shares her luxurious dwelling with her husband, El-Hadj, a pious and respected middle-aged man. Their house exudes an air of dignity, adorned with warmly coloured walls and lavish embellishments. The furniture is dark and imposing, and the heavy curtains adorning the windows add a sense of grandeur. In one intriguing moment, Marichou clandestinely makes a call to Pod, her former lover, in the secluded refuge of her kitchen. This space, off-limits to El-Hadj, offers her solace and privacy. Their maid shares this territory but is forbidden from entering the living areas when El-Hadj is present. Here, the arrangement of the house becomes territorial, with the entrance hall acting as a gateway separating the 'master's' realm from the hidden spaces beyond.

Another captivating series, *Cacao*, is a collaboration between a translocal production company based in Côte d'Ivoire and France. Financed by the renowned global media company Canal+, it graces the screens of their African channel, A+, as a premium offering.

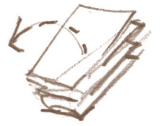
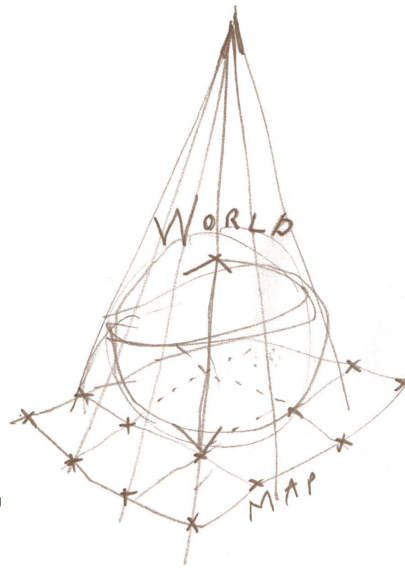
At the centre of the plot, amidst the power struggle over cocoa production and trade, stands the Desva family home. This bourgeois abode, exhibiting colonial architecture, is majestically enveloped by vine leaves in the midst of a vast park overlooking a scenic valley. Its grandeur is accentuated by the gallery encircling both the ground and first floors, casting shadows over large wooden windows. Within the expansive living room, the aristocratic Ivorian family gathers for drinks and meals, while the eldest son engages in video calls with people in Canada. In a captivating scene, the youngest daughter dances on the terrace, her performance intended to be seen by a social network audience. Symbolically potent, the house represents a reclamation of power by the Ivorian aristocracy over colonial influences and their associated mansions. The tasteful decor added to its allure, while its excellent connectivity makes it a truly international space, seamlessly integrating with the garden, the valley, and the wider world.

In stark contrast, the house of the rival Ahitey family, a self-made working-class unit, remains largely unseen. One scene features a family meal, with the father seated at the head of a long table, warmly welcoming his four sons and two daughters. Filmed up close, the shot intentionally obscures the immediate surroundings, shrouding everything in darkness for the viewers. Though never explicitly shown, the Ahitey house still makes its presence felt.





# WE ARE EVERYWHERE,

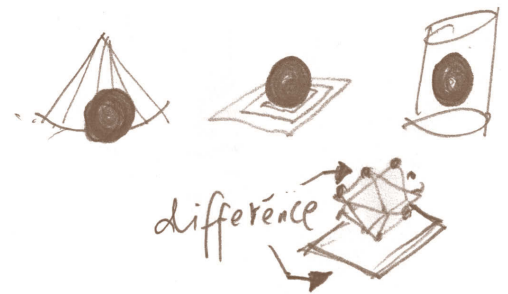


I felt lost as I typed 'gay Jongno' into the search engine. I was trying to figure out, by myself, everything I needed to know about Seoul's gay scene. Depending on how I would define 'queer' and 'space', the two main keywords for my research, I could really go anywhere in the city. Let's start with the obvious, though, I thought. For this reason, I chose to stay in Jongno, the district known for being the oldest gay area of the capital.

Sitting on the edge of the hotel bed with sneakers on, I got stuck searching for about an hour. Strange – there was hardly any information on the Korean-speaking internet about gay bars in Jongno. There was a list from 2015, but it seemed many weren't operating anymore. On blogs, forums, and Twitter, people were talking about pubs, karaoke bars, and even saunas without giving any specifics. Seemingly, everyone knew where to go but me. I was dependent on the internet because I hadn't seen a single pride flag since I had landed on Korean soil that would tell me where to go. In Cologne, where I live, I had a similar yet slightly different problem in identifying queer spaces downtown due to the abundance of rainbow flags. Yes, we are everywhere, but is this supermarket with higher-priced organic oatmeal really where queer people of Cologne gather?

It was a newspaper article about the gentrification of the Ikseon-dong area that gave me the first clear clue to a gay bar named Friends. The bar owner was quoted as saying he saw the potential for the area to become like Queer Street in San Francisco. However, he was cautious because many gay people who haven't come out felt uncomfortable with info being so openly public. They might run into colleagues or friends who hadn't any idea about their identity or sexual orientation.

I walked into the sticky summer air of July. On Insa-dong Street, I typed 'Bar Friends' on the Naver Map. The bar was



# BUT WHERE ARE WE?

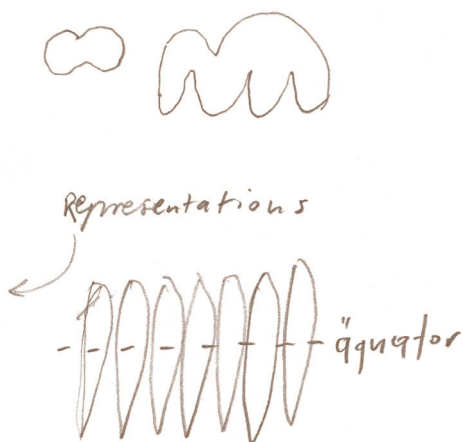
apparently only a ten-minute walk away from my hotel. As I followed the route the app showed me, I couldn't believe it was just around the corner from where I used to meet my heterosexual friends for lunch. But instead of going straight to Bar Friends, I started roaming the neighbourhood, expecting to discover what I had thus far been missing. But all I could see were wage workers wearing employee cards on their necks at BBQ grills and elders drinking soju at seafood eateries. One moment, I passed two groups of young men who, I believed, made quick and curious glances at me. But it was so fleeting that it could have been anything.

Next, I typed 'gay bar' into the app. The results showed me that there might be five gay bars in the whole country, and all of them were in Seoul – Bar Friends being the only one in Jongno – while the other four were in Itaewon. I remembered an anecdote about a gay guy who believed that there might be only two gay men in South Korea – him and Hong Seok-cheon, a TV star who came out in 2000. I had to admit, my search that week was fruitless. I couldn't find gay Jongno, although I knew that I was standing right in the middle of it.

A few months later, I had dinner with a friend of mine near Jongno. He was active in Seoul's gay community. 'There are over a hundred gay bars in Jongno, but they are hardly recognisable. Many of them aren't on the ground floor, and they often have no sign. Some cover their windows, too', he said, answering my many questions about the neighbourhood.

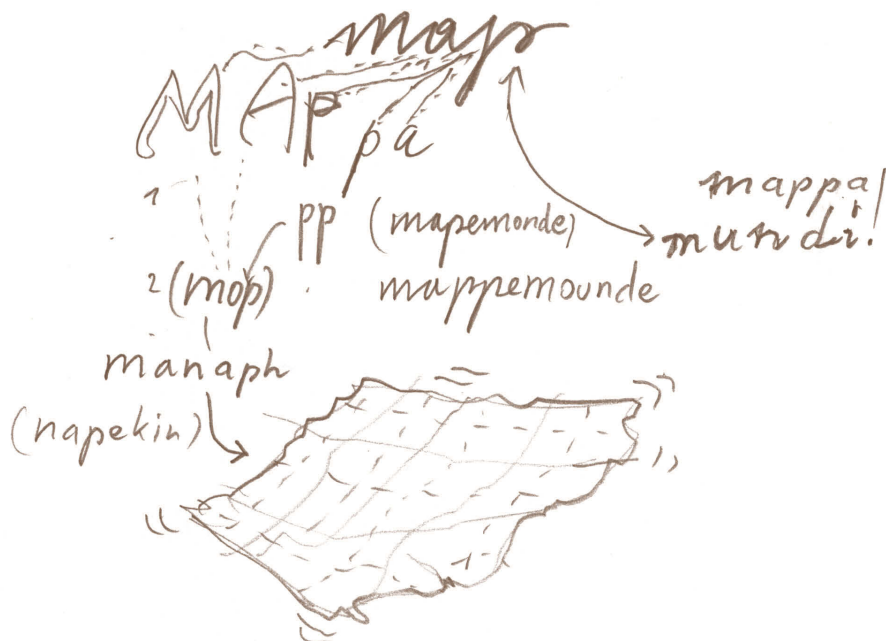
'How can I ever figure it out?' I asked him, puzzled.

He shrugged his shoulders and leaned in. 'Although there used to be a map with all the gay businesses in Jongno, you would usually just meet people who know where to go'. We were sipping from our cocktail glasses, sitting next to several groups of loud office workers on a weekday evening. He lowered his voice and whispered, 'By the way, the owner here is gay, too, but no one really knows about it'.



### map

The English word 'MAP' has its roots in the Latin noun *mappa*, meaning a napkin or piece of cloth, which was most commonly used as a surface on which to draw visual geographical information. In the ninth century, the term *mappa mundi* circulated to describe the representation of the known world, either pictorial or verbal. In the fourteenth century, 'map' in English originated from the shortened form of the term *mapemounde*, which was the Middle English equivalent of the Latin *mappa mundi*. It referred to a representation of the earth on a flat surface, showing the relative proportions and positions of its individual features. The opening of the term to denote 'detailed representation[s] of anything' traces back to the seventeenth century.



## SMART PEOPLE: QUEER EVERYDAY LIFE IN DIGITALISED SPACES

Subproject B03 focuses on socio-spatial changes, digital communication, and their implications for everyday life in South Korea. During the first period, we examined Smart City Songdo in South Korea to better understand the impact of 'smartification' on everyday lives and spatial refiguration. We noticed that the city catered to the middle-class nuclear family, continuing the socio-spatial organisation rooted in heterosexual life trajectories. But how do queer inhabitants of the Seoul Metropolitan Area (SMA) create, appropriate, and claim spaces? What conflicts emerge, and how do they deal with them? What role does digital communication play in this dynamic process?

Starting from these questions, we conducted ethnographic fieldwork both on- and offline, including in queer neighbourhoods in Mapo-gu; queer nightlife districts in Jongno, Itaewon, and Hongdae; Seoul Plaza during the Seoul Queer Cultural Festival 2022; and on dating apps. Additionally, we interviewed queer inhabitants, experts, and activists. We have observed three tendencies: firstly, the housing market often challenges queer inhabitants due to heteronormative familialism embedded in housing politics, financing, and everyday life, including digital communication among neighbours. The housing problem in Korea, identified as the main culprit of the country's falling birth rate, is discussed solely based on heterosexual marriage, which excludes and discriminates against queer individuals. Secondly, while spatial conflict surrounding Seoul Plaza during the Seoul Queer Culture Festival makes a typical case of this discrimination, most queer inhabitants also experience placelessness in their everyday lives. The commercialisation of spaces, gentrification, and various forms of gender-based discrimination contribute to experiences of placelessness among queer individuals. Thirdly, adopting and playing with in/visibility is a common pattern in the creation, appropriation, and claiming of queer spaces. Not only bars but also chatrooms and community maps are safeguarded through filtering and thresholding practices. This can be an empowering and subversive spatial practice for queer inhabitants of the SMA. Furthermore, it allows them to navigate heteronormative society without 'coming out of the closet', a concept increasingly questioned as an idealised Western model of being queer. Yet, pursuing safety through reduced visibility creates tension with queer activism, which advocates for greater queer visibility in public life.

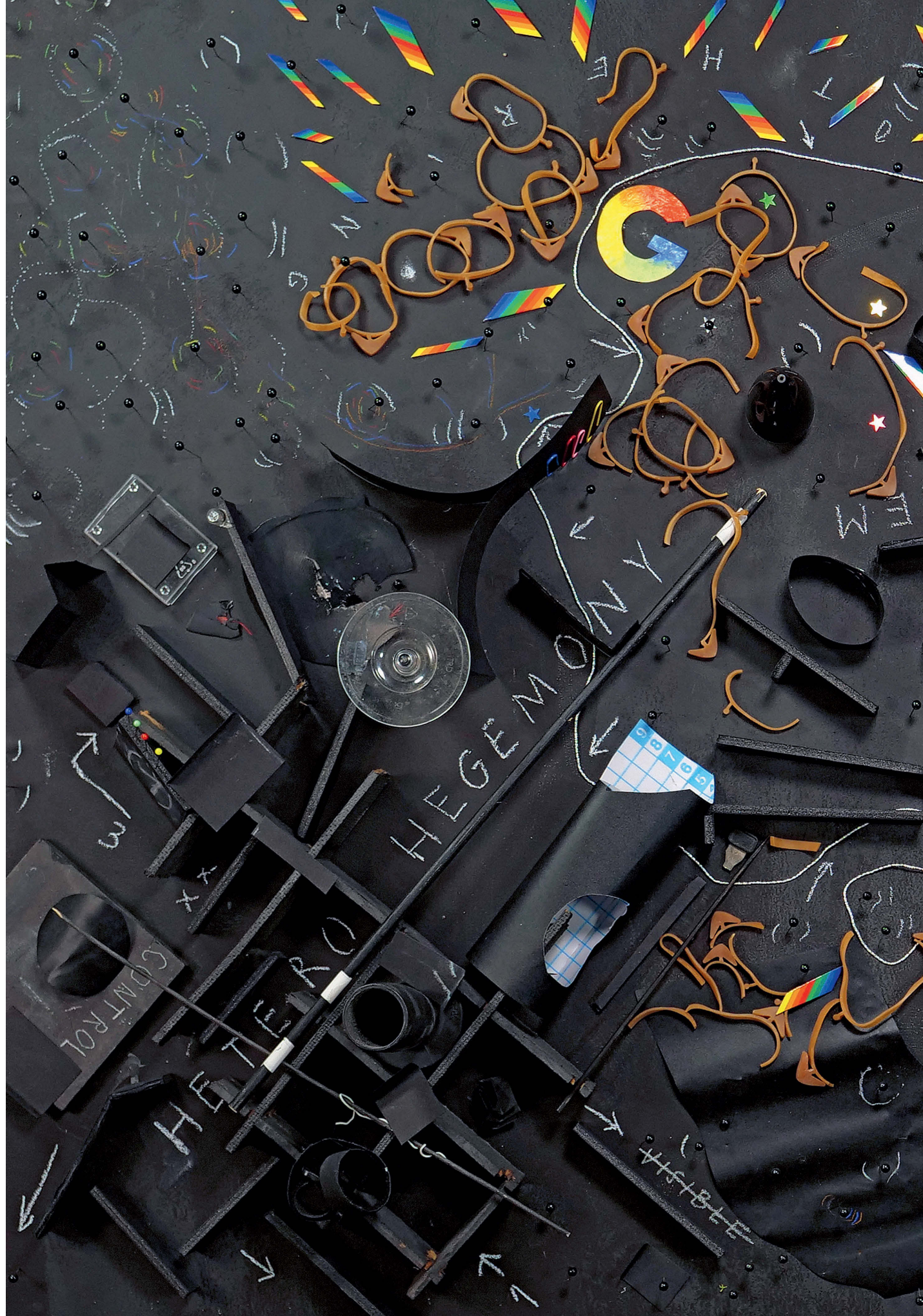
By centring the lived experiences of queer inhabitants in the SMA, our subproject can make meaningful contributions to queer geographies (which are often centred on Europe and North America), diversify urban sociological discussions on the Korean megacity, and make a strong case for queering Asian studies.

### Principal investigators:

Martina Löw  
Jörg Stollmann

### Team:

Sung Un Gang  
Adi Cohen  
Yong-Ha Kim  
and Ara Song





HIVES

KATIONAL

MIDDLE CLASS

SELF JUSTICE

4

6

8

9

10

11





UPPER C.

MIDDLE CLASS

CLASS

LOWER

CLASS

LOWER

SPLIT

X

↗

↖

↙

↘

↙

↘

↘

↘



DISSIPORA

GERMANY

NAIROBI

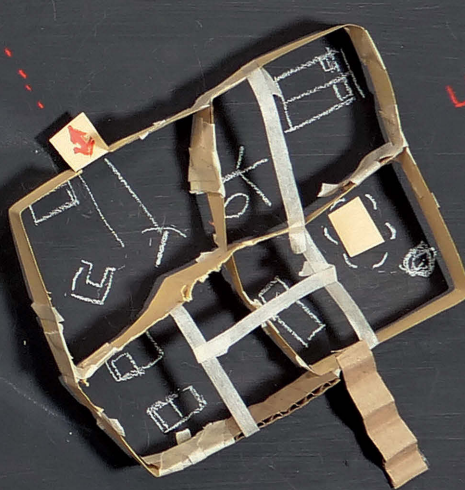
X

WORDS

LETTERS

AGILE  
TATUS  
R  
S

GA



## BEING HOME: LIVING SPACES AND SELF-IMAGES OF THE KENYAN MIDDLE CLASS

Subproject A05 analyses the self-perception of the Kenyan middle class in relation to notions of home and spatial home-making practices. For many members of the Kenyan middle class, there are several spatial points of reference relevant to their conduct of life in general and home-making in particular, which, in the latter, our research group understands as a space-constituting practice. These include rural regions and urban spaces but also transnational spaces, for example, in Europe or the United States. Therefore, we are particularly interested in the translocal interdependencies created in home-making practices within and between these spaces. We examine the spatial dimensions and relationships in our interviewees' everyday lives to explore various self-images of middle-class individuals at the level of personal identity. Doing this, we aim to shed light on different possible subject positions as well as the diversity of the Kenyan middle class, which stands as one example of the often-homogenised new African middle classes.

Our findings show that the colonial spatial refiguration of large areas of land, the large-scale expropriation of the fertile land of central Kenya in particular, and the establishment of an export-orientated plantation economy continue to influence the self-perceptions of Kenyans and their living conditions. As parts of the middle class are highly mobile not only within but also across nation-state borders, a differentiation and the emergence of a variety of new forms of home-making can be observed, which go hand-in-hand with new social figures or possible subject positions that are brought about by discourses. Like historical spatial refiguration, new spatial relations (for example, in the diaspora) lead to specific modes of subjectivation. The new social figures, thus, emerge from new constellations of spatial figures.

**Principal investigator:**  
Jochen Kibel

**Team:**  
Eva Korte  
Makau Kitata  
Kate Owino  
Itziar Gastaminza Vacas  
Tobias Pilz

# SOFT MODERNISM

Through contact with a real estate agent, we have gained access to Tatu City, probably the most dazzling real estate project in Kiambu County, in the northeastern periphery of Nairobi. Various project developers are building a planned city here, which includes an airport and an industrial area. The project developers, who come from the United Kingdom and Australia, deliberately advertise to the wealthy Kenyan diaspora in Europe, North America, and Australia.

Each two-to-four-room flat is priced from around €80,000, but surprisingly large discounts are made in the event of a cash payment. The potential upper-middle-class clients that invest here are not only financially strong but also ethnically diverse. Indeed, the construction site in the formerly rural province of Kiambu is now surrounded by a strange international flair.

We meet an estate agent who immediately assumes that we're interested in buying a flat, and without being asked and wasting no time, praises their advantages. We are among the first groups to see the showrooms that have just been completed and furnished this week. The many pairs of dirty shoes at the door clearly indicate demand here in the Nairobi outskirts. With a certain haughty air, we are politely asked to take ours off, too, lest the dirt we bring contaminates the distinguished upper-middle-class dreams still under construction.


On my socks, I finally enter the luxuriously furnished four-room flat. My gaze is caught by the massive sofa set with its heavy cushions. The furniture, with its robust fabric covers, dominates the seating area. A carpet with golden flokati fringes lies on the wood-look flooring. From here, the eye climbs up the wall opposite the entrance, where a large flat-screen TV is enthroned. The gaze finally wanders to the ceiling lamp, whose seven bare light bulbs nevertheless look noble.

The dining room area, enclosed by modern-looking octagonal black tiles, is visually separated from the rest of the living area. The dining table is set for a standard family of four with gilded cutlery and opulent napkins. From there, the tiles once again flow smoothly toward the kitchen, whose floor is made from the same imitation wood as the one in the living room.

The flat's unobstructed windows, free from the usual security bars, are explicitly touted by the estate agent, as is the drinkable tap water. It is true that there are classic security devices here, such as fences, gates, and gatekeepers, but the fact that doors and windows do not have to be barred is due to Tatu City's special security concept in controlling the gated community. However, it is not only entrances and exits that are controlled but also the movements of all the residents.

vs. 

platus





# FOR THE KENYAN DIASPORA

As a colleague explained to me during my second visit, Tatu City is deliberately demarcated from the surrounding area. The planners managed to ensure the city would not be reachable by cheap local buses or *matatus*, whose last station now ends a few kilometres before the new planned domiciles of the solvent middle class. This self-exclusion means that residents, upon their decision to move here, consciously demand this exclusivity and spatial distinction.

Once in the kitchen, we look down the entire length of the room's axis. Our gaze lingers for a moment on the large clock with a Roman dial hanging on the wall. Once back in the living area, the gaze turns to the bedrooms, which join on the left from here. Past the bathroom, your gaze sweeps the master bedroom, which is brightly flooded with daylight from its floor-to-ceiling windows. Numerous pillows lie on the beds in the bedroom; more pillows are arranged exuberantly on the beds in the two adjoining children's rooms.

Next is the children's room, decorated in dark blue tones. A football and guitar, as well as a basketball, are draped at the head of the bed. Two pictures on the wall show hockey players in blue.

In another children's room, the colour pink dominates, which can be found in the fluff of the decorative cushions on the bed, as well as in the window curtains. On the wall hangs a picture drawn in light lines showing the exposed shoulders of a young woman. The painting, with its tight, simple, and curved lines, has a playful lightness that is also continued in the drapes of the curtains. The view ultimately follows the curved lines of the curtains through the lattice-less window into the outdoor area.

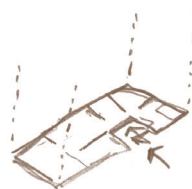
The showrooms, staged by photographers while we are present, will presumably soon advertise the new flats in a glossy brochure and online. The interior design of these flats follows a soft modernist aesthetic: the open floor plan, modern furnishings with clean lines, and nostalgic-looking accessories are characteristic of this. The ideal of living advertised here, with its stereotypical boys' and girls' rooms, refers to a nuclear family with one or two children. Rooms for domestic servants, an integral part of middle-class households in Nairobi, are just as absent as rooms for grandparents or other family members.

In the view through the window of this perfectly arranged flat, we see the reinforced concrete skeleton of the neighbouring house. It is still under construction, and the paths have not yet been laid, but its transformation is imminent. Clumpy and lingering, the dirt and soil outside cling to the feet of all who visit, however – the same as on the shoes we left outside the door when entering.



## flat

The English noun 'FLAT' can be traced back to the proto-Germanic terms *flata* or *flataz*, which referred to a 'dwelling' or a 'flat surface'. In Old English, the word *flet* evolved to mean a smooth, level area without bumps or irregularities. The modern form 'flat' first appeared in the early fourteenth century, initially describing various level surfaces, such as a flat landscape, road, or tabletop. Its current meaning as a housing unit originated in Scotland, where the term was used in the early nineteenth century to refer to 'a story of a house'.



# A USER MANUAL



# FOR THE ONTOLOGICAL SECURITY MACHINE

## Introduction:

The Ontological Security Machine (OSM) is a highly advanced machine designed to create a sense of safety, identity and secure spaces for individuals. It uses a combination of psychological, sociological, and geographical analysis to create customised plans for achieving ontological security.



#### Operations:

- The OSM begins by analysing the individual's current sense of identity and place in the world. This includes analysing their beliefs, values, and social connections, as well as their relationship to their physical environment and the nature around them.
- Using this information, the OSM creates a customised plan for achieving ontological security. This plan may include activities such as community building, formation of a pleasant atmosphere, as well as home-making and the creation of a sense of belonging to a physical place and the nature that surrounds it.
- The OSM then implements the plan, providing support and guidance to the individual as they work to achieve ontological security.
- The OSM continually monitors the individual's progress and makes adjustments to the plan as necessary.
- Once ontological security is achieved, the OSM provides ongoing support to maintain it.

#### Maintenance:

- The OSM requires regular maintenance to ensure optimal performance. This includes software updates that adapt the machine to current events and spatial developments.
- The OSM's algorithms should be monitored and updated as necessary to ensure they are effective in achieving ontological security.
- It is important to keep the OSM's database of psychological, sociological, and geographical information up to date, including information about ongoing and historical events, expectations for the future, collective behaviour, as well as the human relationship with nature.

#### Safety Precautions:

- It is important to only use the OSM in a controlled environment with appropriate safety measures in place.
- Please keep in mind that it is a complex and nuanced process to create ontological security. It requires a multifaceted approach and understanding of human psychology, sociology, and the environment that surrounds it.
- Warning: Ontological security can be lost at all times and may never be fully achieved!

What would be more obvious than to ask that an actual machine? The above user manual of the Ontological Security Machine was created in a conversation with ChatGPT. After ChatGPT warned us that Ontological Security is a concept referring to human psychology and social behaviour that cannot be created by a machine, we insisted it be creative and write a fictional manual. The text has subsequently been modified and supplemented by us for the purposes of this publication.

<sup>l</sup>tʃeɪm.bər

The English noun 'CHAMBER' originates from the Latin word *camera*, which refers to a vaulted room or arched chamber. The term also implied that the room was relatively small in size. In the twelfth century, both Old French and Old English adopted 'camera' to describe rooms designated for specific purposes, often as part of a larger space or with restricted access – examples include private rooms or legislative assembly rooms. This sense of 'chamber' also extended into anatomical terminology by the late fourteenth century, as in the 'chambers' of the heart, and later, to musical terminology, with chamber music in the eighteenth century.

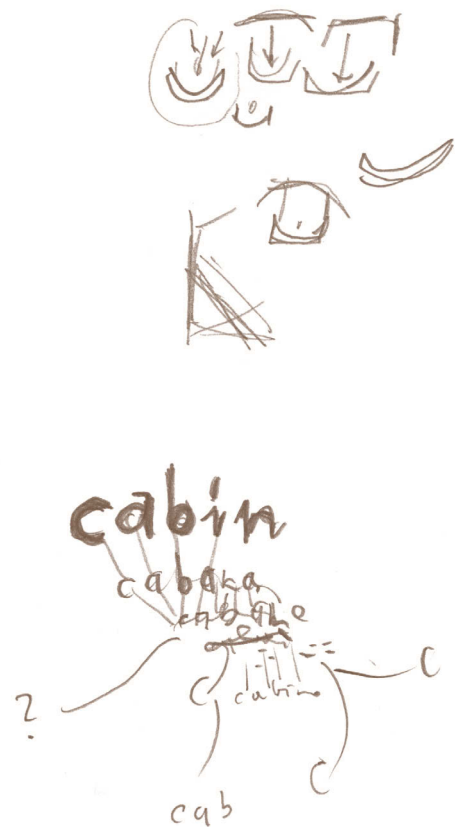
We moved here for the work', she said, an infant son in her arms, half asleep. We were sitting in the couple's front garden on a blanket, protected by high wooden fences. Her husband was cutting wood with dogs and chickens running around in the fifteen-square-metre enclosure.

When they were laid off from their city jobs four years ago, they decided to move here, back to her hometown, to jump into tourism. They had never considered a life like this until they no longer had a choice. But, the timing was right since the plot of land they bought was big enough to build a house and a series of rental cabins nearby. It gave them the opportunity to live and work in the same place, as they had seen on vlogs by other couples on the internet. And even though this place was isolated in the past, new roads and internet speed had finally caught up.

This very day marked a special one in their business. Two new cabins, little wooden domes with bulls-eyes for windows, would arrive in two trucks. The woman slipped her smartphone out of her pocket and opened her Pinterest wall, a colourful collage of domes in different landscapes: mountainous, snowy, dry, lush. 'I saw the domes for the first time on Airbnb. I thought their round shapes looked so unique, like an adventure', she said, scrolling through the images. 'It'll be special here. Nobody else has one.' Closing the browser, she said, 'We're so happy to have found a factory online making them with direct delivery to our door. The design process was a bit more difficult with the other cabins and our house.'

I looked at their place, a quaint and small two-story rectangle, easily blending into the built fabric of this village with its local signature bay window and wooden cladding. She led me through the kitchen to the upper floor. 'You know, we wanted a mezzanine here, like in a Tiny House, so that we could see downstairs from upstairs', she said while miming a big space. 'But the Maestro, one of the traditional architects here, didn't understand. I think he didn't even know what a mezzanine was! People in this village all know how to build houses – it's their traditional craft – yet, it was so hard to explain to him what the Tiny House style was. We showed him so many pictures on the internet, but in the end, he still built us a two-floor traditional house. It's a pity. But now, with the domes, we have another chance at creating something unique. But you – you know what Tiny Houses are, right?' she continued, looking for my empathy.

I knew exactly what she meant, and she knew that I knew. She immediately recognised that, unlike the local Maestro, our references were the same, derived from the global flow of digital



'kæbɪn

The English word 'CABIN' can be traced back to the Late Latin *capanna*, meaning 'hut' or 'cabin'. It entered the English language via the Old French *cabane* in the fourteenth century to describe rudely constructed, small, and simple dwellings mostly located in rural areas. These cabins were not meant to accommodate people on a long-term basis. Instead, they were commonly used as temporary shelters or as places of residence for shepherds, hunters, and travelers. This context also inspired the shipping industry to use the term to designate the individual compartments on board a ship. As a result, the expression 'cabin fever' emerged to describe the urge to get out and about.





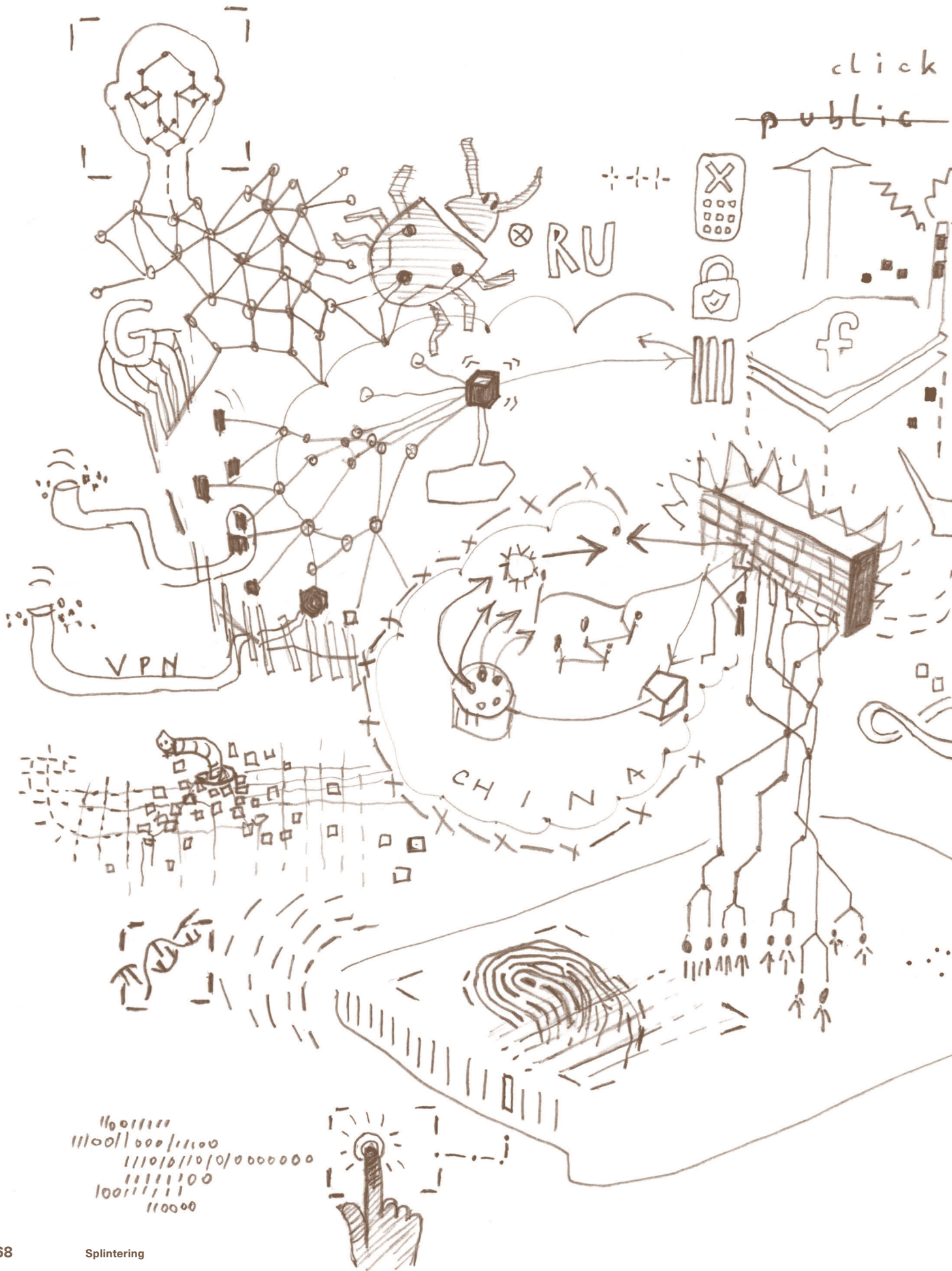
# SPLIN TERING



## SPLINTERING: WHAT HAPPENED TO THE DIGITAL PUBLIC SPHERE?

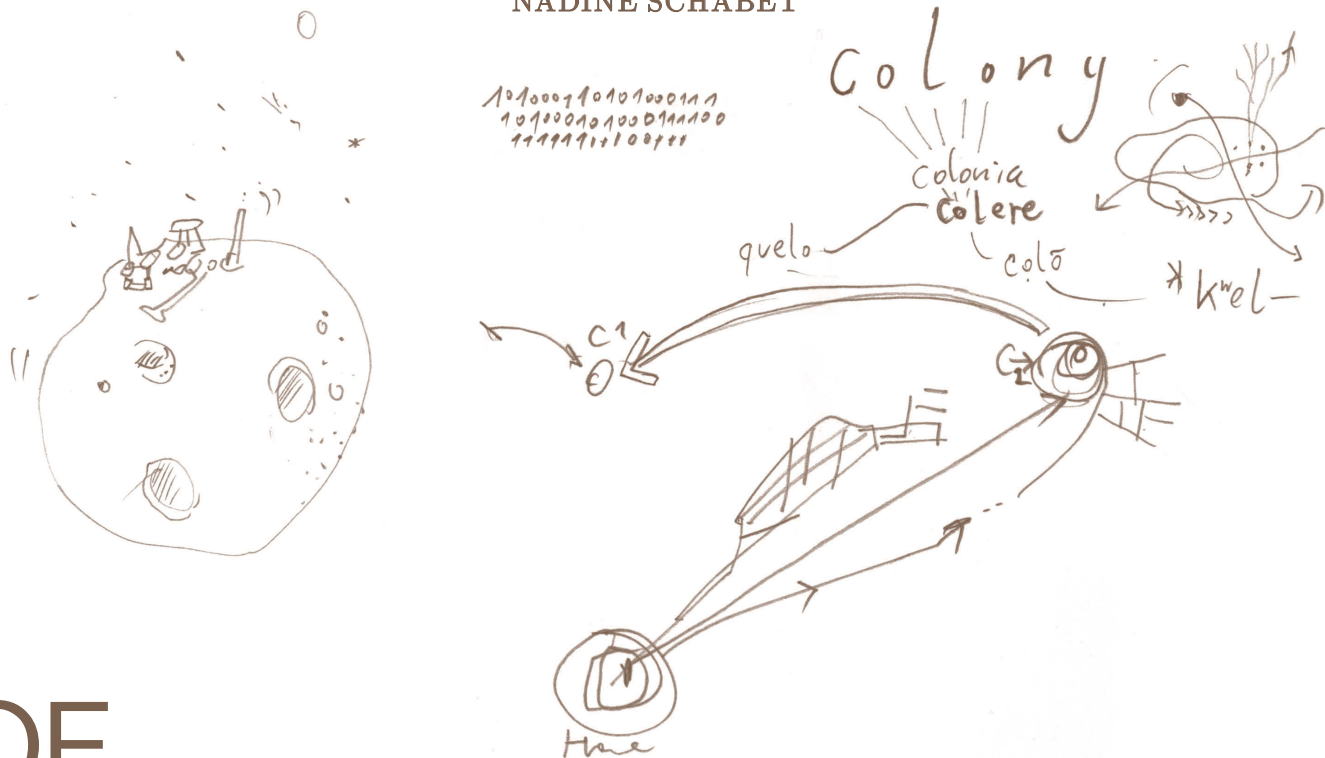
In its early days, the internet was envisioned as an infinite, borderless space that would inspire the formation of virtual communities, facilitate the open exchange of knowledge and information, and promote democratic processes. Today, however, we are witnessing a refiguration of its infrastructure and its virtual spaces. Large technology companies such as Google, Meta, and Microsoft are constructing their own digital infrastructures to bypass traditional forms of routing on the open internet and to seize control of data and its flows. Authoritarian regimes, like China and Russia, use firewalls to restrict online communications, while others, like India, resort to internet shutdowns to suppress protests. In their well-known examination of how physical and digital infrastructures can promote the fragmentation of urban spaces along economic, social and technological lines, geographers Steve Graham and Simon Marvin introduced the concept of 'splintering'. Applied to the digital space, it is not only infrastructure that is being fragmented but also the once-utopian imaginary of a world united by digital communication.

The stories in this section tell of a teenager caught between the experiences of the three-dimensional physical world and the two-dimensional computer-screen world; a digital network reassembling after the retreat of a disillusioned climate activist; a city-dweller trying to save a neighbourhood by hacking Airbnb; a journalist's spooky investigation into the transformation of digital control infrastructures; and the Twitter-fueled battle for the Hambach Forest in Germany. There is also a steam-punk tale about the impacts of internet sanctions against a belligerent state; a dystopia depicting our future as a world disintegrating into rural communities where the use of digital media has become a luxury due to lack of energy; and a utopia that sees the solution to all these problems in the formation of a feminist-organic internet.





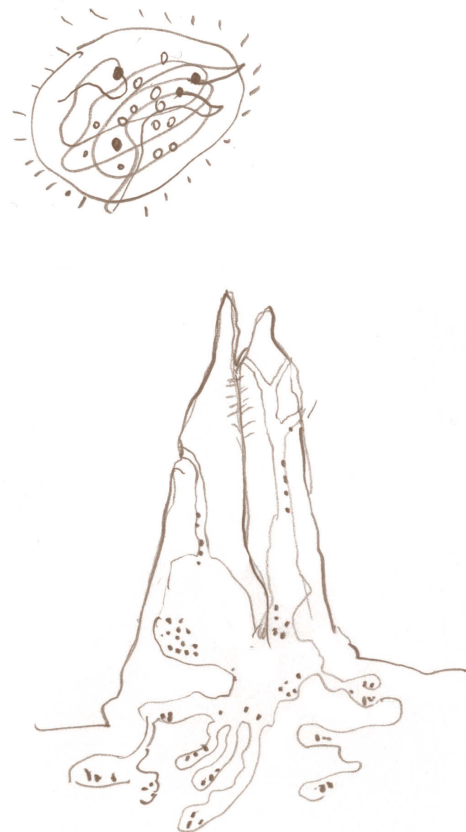
SPLINTERING



# OF ANTS AND ALGORITHMS:

The year is 2065, and the world is no longer as we know it. Twenty years earlier, the former mighty Big Tech players completely centralised the internet at the expense of social integration and the climate. It was a space formed in their image, full of inequality, discrimination, and misogyny. The crisis of commercial digital infrastructure had reached an apex, too, destroying large swathes of the earth. The need for action to save the planet and individual freedom became urgent, giving rise to resistance movements from a parallel underground internet, the Feminist Internet, which grew rapidly to combat the old patriarchal giants and demolish their monopolies. Battles spanning both physical and cyber spaces raged between the Big Tech powers and the feminist challengers. The confluence of digital data and physical infrastructure worldwide, especially at concentrated network nodes such as highly guarded server locations, became targets for both sides. Eventually emerging triumphantly, the resistance movements took over. Former power balances were shifted completely, establishing free and equitable feminist forms of social organisation and internet governance by dismantling monopolies ranging from nation-states to mega-firms. To further counteract the failures of the past, the process of recovering the planet through a more sustainable use of resources began.

A key leader of the resistance movements emerged in the figure of philosopher and feminist legend Donna J. Haraway, already a seminal thinker over half a century earlier during the period of

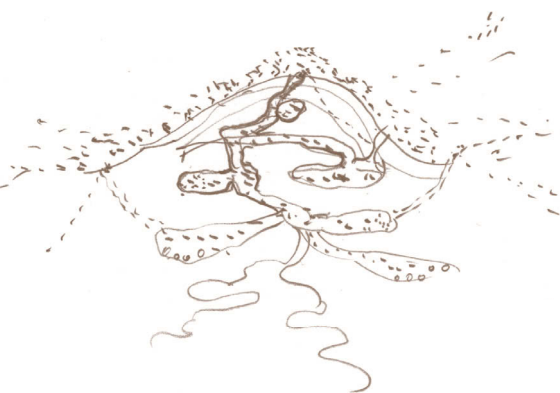


ˈkɑ.lə.ni

The Latin word *colonia* is derived from the verb *colere*, meaning 'to cultivate' or 'to inhabit'. In ancient Rome, colonies marked a settlement of Roman citizens that arose outside the former territory of Italy in newly conquered areas and were named *coloniae*. The inhabitants of these colonies, which usually served agricultural purposes, were called *colonus*. The fact that this Latin term was used to translate the Greek word *apoikia* (people from home) provides a further indication of the potential meanings of this term.

Today, the noun 'COLONY' is closely associated with European settlement colonialism, which is why it has strong connotations with exploitative practices. With the 'discovery' of the so-called New World, Europeans established colonies in distant territories, which were held under their political rule and which benefited trade and resource extraction through the use of violence and forced labour. Beyond that, the word 'colony' has also been used to describe a group of organisms, such as animals or bacteria, that live together in a cooperative or organised manner. For example, an ant or bee colony refers to a community of individual insects working together for the benefit of the group.

# A FEMINIST INTERNET UTOPIA



the old internet, beginning with her influential essay from 1985, *A Cyborg Manifesto*. Haraway had envisioned a world in which technological developments fundamentally changed society to overcome gender boundaries and eliminate inequalities, and her writings and thinking became a cornerstone for the groups that formed the Feminist Internet.

During the early years of the rise of Big Tech, Haraway and researchers from the Global South were keenly involved in the invention of feminist cyborg ants, a new, advanced technology and perfect symbiosis of tech and nature. This invention became a turning point in winning the fight against Big Tech, not only as fighting and healing machines but also as a vehicle for prolonging the life and mind of Haraway long past the biological constraints of her physical body, which dated from the last century. Using then-nascent scientific developments in artificial intelligence, her mind was virtually frozen and transferred to the ant queen before Haraway's bodily death. Fully becoming a cyborg ant in 2055, this transformation allowed her thought process to live on and communicate within the network. The invention of these hybrid machine-creatures became one materialisation of Haraway's vision of new, world-inhabiting, cross-species alliances holding the potential for undermining identarian binaries and collectively healing the planet.

Led bravely by a cyborg Haraway, the ants fought and protected the resistance movements of the Feminist Internet during the uprising against Big Tech. Their biological characteristics, evolved over millions of years, proved advantageous for the struggle: ants had developed communication and cooperation abilities ideal for reacting quickly. Ants also live in a matriarchy without a central authority and interact democratically, for example, in sharing information. Newly developed into a trillion-sized hybrid cyber colony, they could react effectively to cyberattacks through their new encryption technology. Furthermore, they learned to work synergistically with the planetary ecosystem to quickly counteract possible destruction, contributing significantly to the earth's climatic recovery in the coming era.

After the taxing overthrow of Big Tech, the new, emergent Feminist Internet was built on top of the old internet. Ossified infrastructure was refigured to create new data networks, flexible linkages, and worldwide network coverage that finally offered true access to everyone. This led to a new level of global harmony and a space of possibilities with open and transparent networks, equal and free communication regardless of hierarchies or capitalistic imbalances, and the implementation of new, anti-discriminatory, non-binary social codes and technologies. Diverse ways of living on the planet became possible, too: the inspiring cyborg ant technology was made accessible to more people in established body-hacking labs, enabling all cyborgs and humans to live in unison within the new feminist society.

A robust platform was thus constructed, and for now, the Feminist Internet imaginaries have prevailed, turning hopes for a utopia of the re-imagination of internet space into reality.

# THE PERMANENCE



# OF NETWORKED CHANGE

The activist network does not care if you leave. That is a truth, which may sound harsh or comforting, but it does not care about that either. When the IPCC confirms that the goal of limiting global warming to 1.5 degrees Celcius has become unreachable, I will throw my smartphone into the ocean, I will delete my Twitter account, and I will quit my job doing social media outreach for a transnational climate-justice movement organisation. For years, I have connected climate activists from different parts of the globe. I have held training sessions to help others become more effective activists. I have grown the grassroots of people who care. Now, I will go live in the forest, while there still is a forest to live in.

Some in the network will follow me, but others will stay. They will keep fighting the fight, walking the walk. In the old days, advocacy was not like this. Had Greenpeace ceased to exist, people would have noticed. There would have been empty seats at the lobbying table and empty space where campaign posters would have hung. Digital activism is not like that, and there is a cruelty and comfort in its ability to replace you. Like a swarm of birds in the sky, activists around the world – diverse in their identities and strategies but united in their goal – will effortlessly reorganise the network to keep functioning. We are legion. They will not even notice they are doing it. And that is why the network does not care if I leave. For if we cannot limit global warming to 1.5 degrees, the next fight of 2 degrees may still be won. Enough people care about that.

Certainly, my absence may be felt in the short term. I brokered decisions between different parts of the network, connecting geographically far-flung communities and passing information back and forth. There will be a glitch here, in my digital neighbourhood, a temporary slowing down or loss of efficiency. But, the network is self-organised and not hierarchical. Someone else will take my place. They may take my desk at the organisation entirely. I am free to walk the forest grounds forevermore, for I am not needed.

Constantly in flux, the network reworks itself around the hole I leave, changed but unbroken. This, I understand. It is not a rebirth nor a repair, only a constant state of emergence.

meʃ

The English word 'mesh' first appeared in the late fourteenth century and probably originates from the late Old English word *max*, which means 'net', or the proto-Germanic root *mask-*, meaning 'open space in a net or netting'. 'MESH' began to take on its current meaning in the late eighteenth century when the term 'mesh-work' was used to denote the practice of netting. This is also where the connotation with fabrics, which persists today, comes from, although the term now encompasses many mesh structures made from other materials. In the context of engine design, 'meshing' describes the interlocking of the teeth of connected gears. In addition to its literal meaning, the word is also used metaphorically, for example, to describe a particularly successful combination of different elements or good chemistry between people.

mesh  
 \*meizg → knit, twist, plait  
 (mask) \*maskrō, maskwē

## INTER

‘So, how long has she been like that?’ It was a Monday morning, and I just entered a white sanitised room,

‘It all started with her sixteenth birthday, so now, almost three and a half months’, the doctor growled between sips of his acrid coffee.

‘I checked the reports, and they all seem in order. Is she eating regularly?’ I added, while checking the material he previously sent to me.

‘Only when she’s in the right “places”’, the doctor answered.

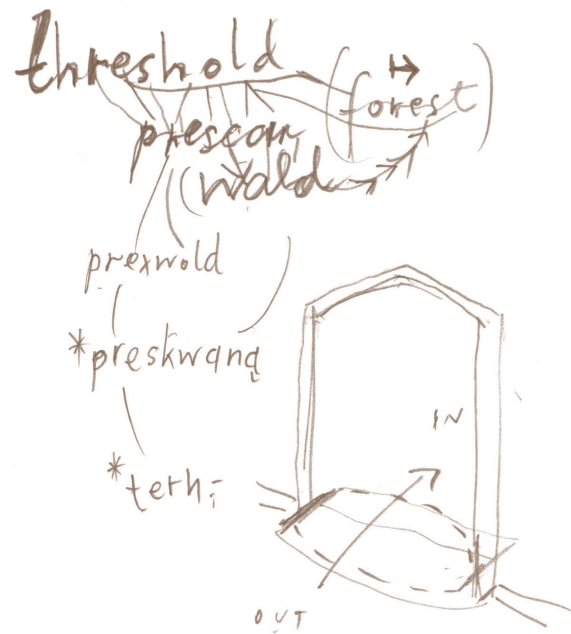
‘What do you mean? I thought she didn’t leave this room the whole time.’

‘Yes, she didn’t. But somehow, she did...’

I studied architecture and was used to long working hours in offices. I always thought that the emergencies I faced were made of bricks and mortar, but the situation I faced that day in May was completely different. The doctor who contacted me was a psychiatrist who was also confused about the peculiarity of the situation. After exploiting all his resources, he thought that an architect who devoted his life to researching how space is constructed in our minds could help. The girl, ‘Patient 16’, was sitting still in a meditating position in front of a huge piece of white paper. They tried to remove and relocate her, but she would instantly fall into a state of sleep unless placed in front of the white paper. The documents I was given were the results of hours of interviews with the patient. In her words, she felt at ease in front of the white paper. She could eat, sleep, make friends, laugh, watch movies, and live, there, and only there. It was the only space – that white paper – that her mind recognised as being easy. She felt as if she was in the right place but also the wrong place. She felt at home and like a stranger. She felt like she was travelling, exploring, but also belonging.

‘The hippocampus, a curved seahorse-shaped organ on the underside of each temporal lobe, is part of a larger structure called the hippocampal formation. It is one of the oldest parts of our brain. It supports memory, learning, navigation and the perception of space. For some weird reason, though, her hippocampus switched from a tri-dimensional experience of space to a bi-dimensional one’, the doctor carefully informed me. ‘But memory can fill in the gaps, projecting into the white paper the lacking

## FACE



θɹɛʃ.hoʊld

The term ‘**THRESHOLD**’ is a compound word derived from the Old English *prescan*, meaning ‘to thresh’, and *wald*, meaning forest. The practice of threshing, which involves separating grain from husks, embodies the central concept of separation. This notion is also reflected in the Old English term *prescwald*, which referred to the beam at the entrance of a house or barn that marked the division between the interior and the exterior. This idea is clearly mirrored in the modern noun ‘threshold’, and it permeates all its contemporary meanings, which broadly refer to any point of entry or transition.

# GIRL

information. While she's in front of the white paper, she is in her brain, inside many different spaces composed of fragments of her memory. She is home, in a movie theatre, in a garden. Her brain fills the sensorial gaps, and the bi-dimensional projection is the only spatial experience her mind now recognises', he added.

'And how does she travel from one place to the other?' I was genuinely curious at this point.

'Well, you should ask her. She told us she blinks her eyes to respond', the doctor answered.

'Is she aware of her condition?' I asked nervously while looking at her staring face in front of the white paper.

'We're not sure...'

I approached her. 'Hello, can you hear me? Where are we?'

'We're in my gym. I'm practising yoga', she answered.

'Is there light?' I was trying to establish a connection.

'Yes. Two big windows are facing a garden', she said, without blinking her eyes.

'Can you bring me to a place you don't like?' I asked.

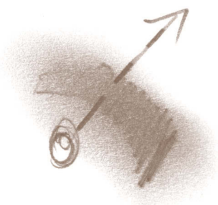
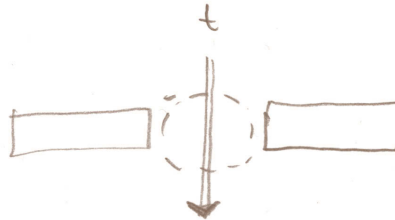
She looked at me, surprised. 'Yes, I can'. She blinked her eyes, and soon enough, I knew. It was dark and wet. I had spent endless afternoons in this space writing my PhD. I hated that house, that smell of mould, the deep vegetation-filtering light.

'I recognise this place', I said.

'For sure you do'. Her voice had a low, calm tone.

'You can travel with your mind everywhere. Where would you like to go?'

She suddenly detached her gaze from the white paper and looked into my eyes. 'Have you ever been outside of your brain?' she asked. 'I imagine there is not a "there" anymore', she continued. And in that moment my whole world collapsed into a white paper sheet.



## THE SPATIAL KNOWLEDGE OF YOUNG ADULTS: THE CONSTITUTION OF ONLINE, OFFLINE, AND HYBRID SPACES

Subproject A02 explores how young people imagine, perceive, experience, talk about, use, produce, and design spaces. We summarise all this under the term 'spatial knowledge'.

In the first funding period, we identified overarching trends in the refiguration of young people's spatial knowledge and the geographies of childhood and youth in many different contexts worldwide starting from the late 1960s. It became clear that, amid ongoing processes of refiguration, widely used models of young people's activity spaces no longer adequately describe their lifeworlds. Simultaneity and overlap between different spatial logics increasingly shape young people's spatial knowledge.

In the second funding period, our aim is to capture the increasing heterogeneity of adolescent lifeworlds. Together with adolescents in Berlin, Germany and Lima, Peru, we have co-developed an app that young people have called MAP REPUBLIC. This app is an innovative tool that allows young people to map their daily lives by collaging hand drawings, icons, photos, screenshots and so on. As part of our data collection process, we integrate their material with follow-up interviews during which the participating fourteen- to sixteen-year-old students explain their collages in detail.

A particular focus of our research is on hybrid spaces. These spaces evolve through the imbrication of physical and virtual environments and are, thus, conditioned by mobile technological devices and ubiquitous internet access. Researching hybrid spaces with digital natives seems particularly fruitful, as these spaces are enormously important to them and their everyday lives. By analysing and interpreting our data, we will develop a typology of young people's spatialities that illustrates how they synthesise online and offline spaces. This highlights the diverse hybrid spatial constitutions that emerge and the distinct roles these spatialities play in their daily lives. We expect our research to make an important contribution to the understanding of young people's spatialities and, in particular, the role of digital media in current and future spatial planning and urban design.

### Principal investigators:

Anna Juliane Heinrich  
Angela Million

### Team:

Ignacio Castillo Ulloa  
Sarah Friedel  
Ludovica Tomarchio  
Luis Miguel Calvo Conseur



GROUP  
DYNAMICS

HOME

I D E N T I T Y

SERVER



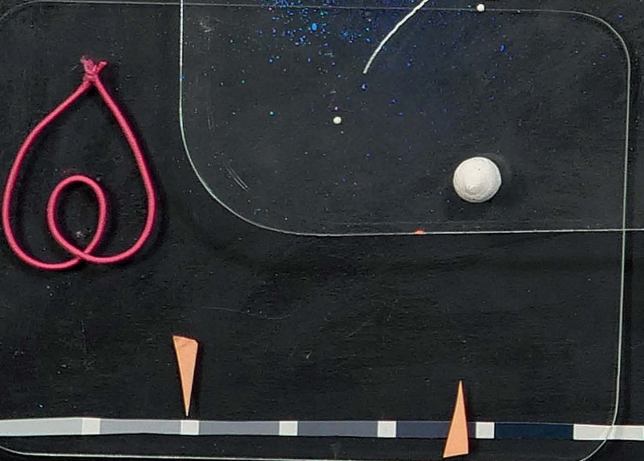
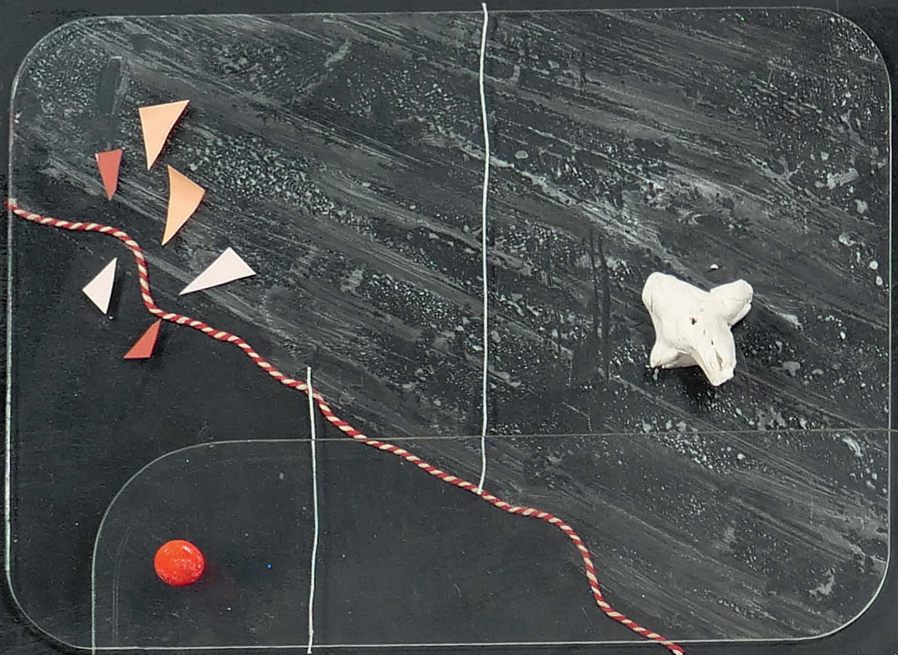
PLACES

MARKET

PLATFORM

ECONOMY

RATINGS





E

RISING RENTS

SHARING ECONOMY

GENTRIFICATION

SUPER BOUT

ASH  
C(R)



# PLATFORM ECONOMY: SPATIAL CONFLICTS OVER AIRBNB BETWEEN GLOBAL MARKETISATION AND TERRITORIAL CONTAINMENT

C07

Subproject C07 explores spatial conflicts related to Airbnb. As a key example of the platform economy, Airbnb enables its users to offer and book accommodation worldwide, thereby connecting places in a digital network space. Initially, many hoped Airbnb would promote sustainable business practices and the formation of a global community. However, criticism has grown over time. Critics perceive Airbnb as a prime example of radicalised economisation that turns private accommodation and neighbourhoods into a global commodity.

Airbnb is associated with problems in many cities, such as declining housing quality, rising real estate prices, and unregulated tourism. Thus, spatial conflicts around Airbnb's global network arise locally, as civil initiatives and regulatory or administrative bodies predominantly act within specific territories. We aim to shed light on these spatial conflicts using a mixed-method approach. Using web-scraped data from Airbnb listings and their locations and attributes, we analyse the constitution of Airbnb's marketplace in different cities, including Berlin, Amsterdam, London, Cape Town, New York, and San Francisco. Additionally, we conduct qualitative interviews to understand how hosts navigate the marketplace and how different stakeholders position themselves in conflicts around Airbnb. By combining these methods, we can identify nuanced differences and similarities in how spatial conflicts unfold in different locations. We thus contribute to the debate on the platform economy by combining different methods and investigating new cases, like Cape Town. As Airbnb creates new orders of place, network and territorial space, our research highlights it as a key case of spatial refiguration in the wake of the digitalisation of society and the conflictual processes inherent to it.

**Principal investigator:**  
Stefan Kirchner

**Team:**  
Simon Pohl  
Christina Hecht  
Kubi Meyer

# WHO'S HACKING

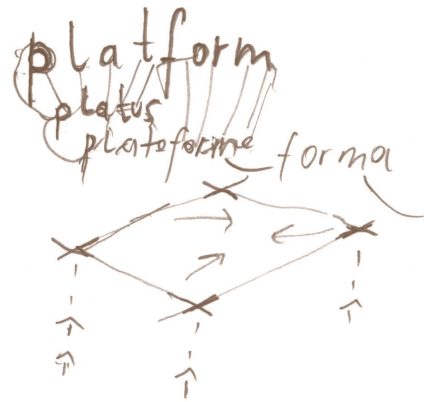
My neighbourhood is nothing but a shape, designed for tourists hunting authentic local experiences. With their tourist money, they come here and, in the process, destroy what they are looking for. My favourite bookshop had to leave because an iced, shaken matcha latte looks better in holiday photos than a stack of novels. With the rise of short-term rental platforms, things got even worse. Walking through the streets that once felt like home, my friends and I have become shapes as well – shapes imprinted with local knowledge that can be accessed, shapes that will share their intimate neighbourhood stories upon request, shapes that can guide you to the most authentic local bakery.

What used to be my neighbourhood is now promoted, compared, and rated on the internet. The platforms' platform is our neighbourhood, and its code is a law that follows the law of profit. But the law can be changed, and thus, so can the code. Luckily, platform capitalism also provides us with the tools to disrupt it.

To start, let's scrape the web to collect all the desperate requests looking for affordable housing in my neighbourhood. Let's match them to all the short-term rentals in the area based on geolocation codes and display them on the website, right next to the pictures people glance at while eagerly awaiting pleasant holidays.

Next, let's be more honest about how tourism affects my neighbourhood. I mean, honesty and transparency are said to be the guiding principles of this global short-term rental platform community. There, the private conversations between hosts and guests I read seem way more nuanced than their public ratings. People are friendly on this platform, intimate almost. But everything beyond perfectly authentic stays secret – until now. Let's make this open – it's easy enough to display these private messages alongside public ratings on the website.

But why stop here? My neighbourhood is now nothing but a shape, rated on this platform. My data analysis shows that with almost every booking, people rely on that five-star authenticity insurance. Let's crash this entire rating system, and then they won't be able to decide where to go anymore. Please, no neighbourhood promotion, as if authenticity is something to sell. No comparing a street's community uniqueness, as if it's something one can access easily. And please, no ratings for places, as if you could express homeliness on a scale of one to five.

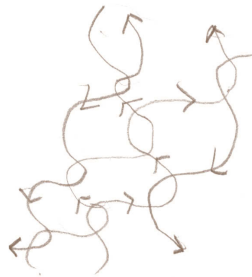


## 'plæt.fɔ:rm

The etymology of the word 'PLATFORM' goes back both to the Latin adjective *platus*, which meant flat or level, and to the Old French noun *plateforme*, which denoted a 'ground-plan' or a 'plan of action'. However, the meaning of the French root no longer occurs in modern usage. Instead, since around 1550, the attribution of a raised and flat surface has taken centre stage, particularly in the field of geography. The close connection with forms of performance and communication probably stems from this characteristic. This is particularly impressive for the American political context, where a platform can also mean the statement of a political position. This usage probably emerged around 1803, following the convention that politicians would announce their programmes and demands from a platform.

Today, the broader and more fundamental concept of an elevated surface has regained significance, as the term's application across diverse fields – such as transportation (train platforms), technology (computer platforms), and politics (political platforms) – emphasises this defining characteristic.

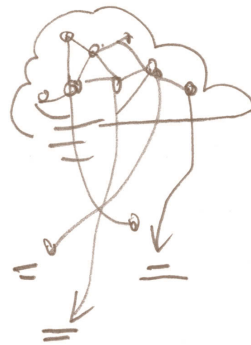
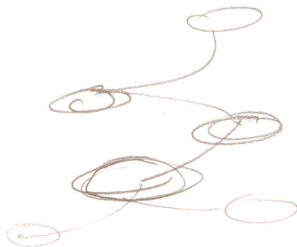
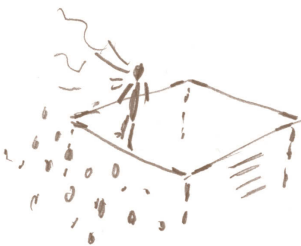
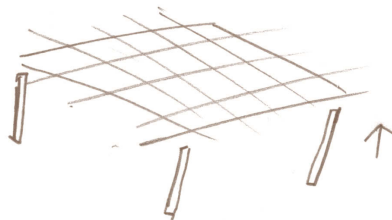
# THE



# NEIGHBOURHOOD?



*morphé*



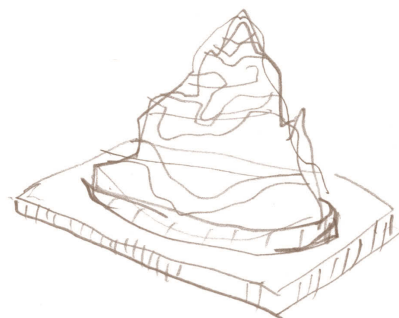
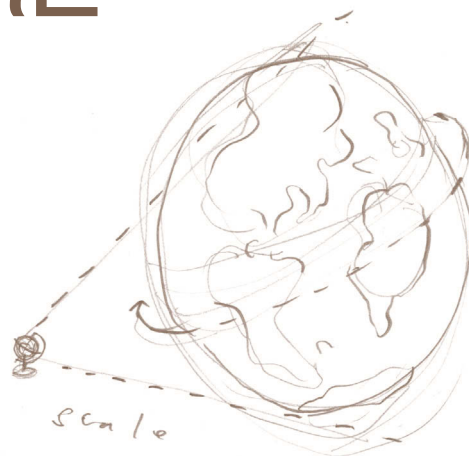
# INFRASTRUCTURE STORIES

Sarah Moreno sat at a worn wooden desk in the corner of the library. She exhaled heavily and opened her laptop, delving into her research on the unique history of infrastructure control rooms. These are the dark, often cramped command centres hidden beneath the texture of modern life, featuring walls of varying monitoring equipment to surveil electricity, water, transport, and communication. She still had about a month to send the text to the publisher. Fear briefly rose in her.

From an early age, Sarah had cultivated a very peculiar gift of the mind: the ability to ‘hear’ texts while reading them. Trained over the years, she now possessed the unique skill of reconstructing the embodied voices of the authors using a technique of personified imagination.

At her desk, flipping through the pages of *Wired: The Rise of the Electrified World* by Jonathan Wygoda, the author began to speak to Sarah, ‘Good morning! Let me transport you back to the days of my meticulous research and relentless dedication to unravelling the workings of electricity control.’ Sarah felt immediately repulsed by Wygoda’s cocky voice. She closed the book abruptly, cutting off his voice immediately.

As Sarah opened the next book on her table, *Rails of Progress* by Edward Guldjord, her imagination took flight once more. Guldjord’s passion for trains and their role in shaping the modern world resonated with Sarah. ‘In the past, railroad systems planners built miniature railroad models in the centre of the control room. From this, they could immediately tell which part of the infrastructure they were making changes to.’ She took a liking to him. He reminded her of her grandfather – patient and caring – who always took his time to tell her stories. ‘Goodbye, Mr. Guldjord’, she said. ‘Goodbye, my dear, take care’, Guldjord answered.



ˈmɒd.əl

The term 'MODEL' comes from the Latin word *modulus*, which means 'measure' or 'standard'. In ancient Rome, a *modulus* referred to a small unit of measurement used as a guide for construction or as a standard for creating objects of a predetermined size or shape. In English, 'model' emerged in the late sixteenth century, initially referring to a physical representation or miniature version of an object, often used as a template for constructing larger entities or for artistic purposes. By the seventeenth century, the meaning of 'model' had expanded to include not only physical replicas but also conceptual frameworks or ideal examples used as standards for imitation or emulation. The verb 'to model' refers to the act of bringing something to a desired state.



Turning to the theme of telecommunications, Sarah opened *Waves of Connection* by Miranda Stieger. The author's voice immediately popped into Sarah's head, conveying the impression of a tech-savvy individual with a keen eye for detail. 'Telecommunications', Stieger began lecturing, 'bridges the gap between distant shores and connects people across continents, and their control rooms became the nerve centres of global communication. Today, these rooms often feature a giant screen in the centre, which seems less relevant for the employees than for public representational purposes. The contextures of the displays at the individual workstations and the spaces they create are presented digitally in a customisable way. The focus is on how complex data sets can be synthesised into user-friendly graphics.'

As Sarah acquired the needed information, she attempted to close the book. 'Wait!' Stieger shouted. 'Please, could you stay and listen a little longer? I'm lonely', she pleaded in a sad voice. Sarah had trained herself to be firm, though. 'I'm sorry, this is purely research.'

Sarah finally turned to her last book, *Net Nexus*, by Jonathan Icke. Icke's voice conjured a person who considered himself a visionary, a mind constantly buzzing with ideas. His voice led her through a vast network of information and people. At last, he got to the important part: 'In comparison to traditional control rooms', Icke spoke while chewing gum, 'the process of controlling the internet follows the form of networked spaces and refigures the control room into a public control network of distributed human actors and non-human agents. There is no objective perspective on the internet itself, as it consists of thousands of autonomous systems, only held together by shared protocols and standards and supported by community-built software tools and infrastructure sensors, which enable distributed infrastructure surveillance.' Icke used a rhetorical pause of a whole five seconds to lend weight to his argument. All you could hear was the smacking of his chewing gum. 'The former asymmetrical relation of sensors and interfaces in modern control centres shifted towards a pluralisation of interfaces', he continued. 'Controlling the internet is not a task people do out of a specific centralised room but rather within public multi-stakeholder communities embedded in internet governance organisations, which enable them to track internet traffic, data flow, outages, and network blocking in real-time. Data banks and sensory networks can technically be accessed from any internet device and interpreted by multiple actors around the world.'

As Sarah took a minute to think about what he said, Icke became rather annoyed, 'Did you even listen to what I said?' She felt an unease again, closed her laptop, and headed outside for a cigarette break, her mind still buzzing with the voices she heard and the personalities she was inevitably confronted with. She inhaled deeply, filling the space of her lungs with sweet nicotine. 'Howdy', the cigarette started to say. 'Time to relax, huh?'

This time, Sarah didn't answer.

# TWITTER

You absolutely need to know my name because I am at the centre of a huge problem plaguing our civilisation. Our so-called harmony with nature is a farce – we have conquered and exploited it to no end. But I’m not content with just complaining about it. I’m taking matters into my own hands, creating a new home and an entirely different life for myself. And where better to make my stand than by occupying Hambach Forest, a breathtaking and ancient woodland nestled in the western reaches of Germany?

This forest, this sacred piece of land, is the epitome of everything that’s wrong with our society. We tear through it without a second thought, endangering countless species, all for the sake of a little more coal.

However, this forest happens to be in the middle of nowhere. Nobody will know about my actions, and that’s a problem. I can’t do this alone, people! The mining company that owns the land will surely unleash their law enforcement crew on me. By myself, I don’t stand a chance. I need a crew of supporters, and I need to make some noise, right?

Good news, I have Twitter. With a few taps on my smartphone, people all around the world can see my messages. They can reverberate across the globe. But I’ve got to distil my message to its essence, making it captivating and impossible to ignore. So, I’ve settled on the hashtag #hambibleibt. Short and snappy, a reminder that this tiny forest is in grave danger.

\*\*\*

Listen, my name is Hans. I’m a hardworking miner in the renowned Hambach mines, just like my father and his father before him. Generations of us have toiled underground while living in the bustling city nearby. This tradition runs deep, and the whole city takes pride in it. We’ve even got museums showcasing the legacy of our forefathers – the ones who provided the entire nation with electricity. Thanks to them, we live in prosperity.

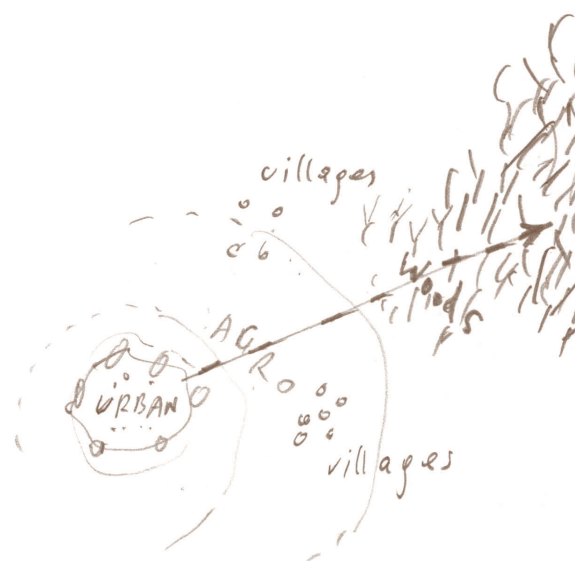
But these spoiled city kids just don’t get it. They walk into our town, seizing empty houses, occupying our forests, and defiling our walls with their atrocious slogans. About coal, can you believe it? Do they not realise they’d be shivering in winter without it? All they do is spout words, like they do on their beloved Twitter, resulting in strangers hanging from our trees like monkeys. At least we have jobs, earning enough to live a life of comfort. They’re simply ungrateful, seething with anger. And climate change? Who knows what to make of it. I can’t afford to wait for it. I need to feed my family, plain and simple.

\*\*\*

My name is Renata. I hail from Morschenich, a village nestled beside the illustrious Hambach Forest. Yet, Morschenich exists no more – it’s nothing but a desolate ghost town now. We’ve lost it all – our houses, our families, our cherished memories. I was born in Morschenich, never venturing far. When I married, we settled just a stone’s throw away from my childhood house.



# UNITES



<sup>1</sup>fɒr.ɪst

The English word 'FOREST' comes from the Latin *forestis*, which refers to an area outside the city. During the thirteenth century, when the word first spread and expanded to the English language, it was used to denote an 'extensive tree-covered district', which was mainly reserved for hunting and other aristocratic leisure activities. Hence, very specific regulations were applied to these forests to protect them from (human) development and preserve game. To this day, the term is closely associated with an image of wilderness in the sense of something 'beyond the park', although, as a place of recreation, this 'wilderness' is now open to a far wider range of people.

We were a small community, invisible to the world's gaze, all employed by RWE, a behemoth of a company. But they wanted to fell the forests and mine everything, for their profit alone, then tell us to leave. It was all-or-nothing, and sustainability was not an option. They even dangled money in front of our eyes to soften the impact. Almost everyone I knew took the money and ran. As they left, the town transformed into a hollow echo of its former self.

But let me tell you. We had support, you see. Kind-hearted souls from Germany and beyond stood in solidarity with us. They didn't want to see a village and its forest disappear. They lent support through social media. My own son introduced me to the wonders of Twitter, and let us not forget our Facebook group, where thousands of messages cried out to revitalise our village. This, my friends, marks the first time in my existence that I've joined the ranks of protesters, and I must confess, it feels good.

But amidst our struggle, there are those who have taken it a step further – they've headed into the forest and even occupied the vacant houses. How they endure perching on trees, I cannot fathom. I support their dedication, although I must admit, there are times when they take it too far. Take, for instance, their refusal to eat meat. Picture this – a Christmas dinner devoid of roasts, replaced instead by tofu. The thought of it leaves me puzzled, my dear friends.



# FOREST PRESERVATION ACTIVISTS

## TRANSLOCAL NETWORKS: CONTESTED SPACES AND CLIMATE JUSTICE ON SOCIAL MEDIA

Subproject B05 investigates discourses, actors, and networks around spaces of climate justice conflict as negotiated in social media communication. During the first funding period, our subproject investigated the spatial arrangements of public spheres, focusing on Twitter communication in Berlin and Jerusalem. In the second period, we aim to map out communication in contested spaces by conducting four case studies, each representing a spatial conflict: the contestation of pipeline construction in the United States; the mobilisation against deforestation in the Brazilian Amazon rainforest; and protests against forest destruction for coal mining in Germany. In Israel, we take a different lens as climate conflicts are less or differently spatialised.

Taking up concepts from the first period and further developing them in the context of movement communication, we take three tasks in the second period. First, on the level of interaction networks, we ask how different communities are involved in climate justice discourses and how they are rooted in space and locality. Second, with regard to issue spaces, we ask how actors connect local conflicts to similar issues in other places: Which places are named and made relevant in the discourse? How are they connected to translocal metanarratives of climate justice and environmentalism? Third, we investigate the spatial imaginations that social media users share in their textual and visual communication. For each case, we are collecting data from three social media platforms: Facebook, Instagram, and Twitter. The subproject combines network analyses, automated content analyses, image analyses, mapping, and qualitative, interpretative methods.

**Principle investigator:**  
Barbara Pfetsch

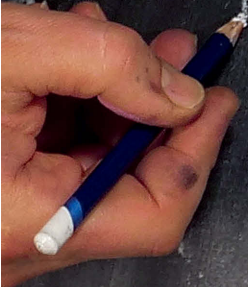
**Team:**  
Daniela Stoltenberg  
Zozan Baran  
Katharina Genz  
Kristian Hristov

**In collaboration with:**  
Annie Waldherr (University of Vienna)  
Neta Kligler-Vilenchik (Hebrew University of Jerusalem)  
Brooke Foucault Welles (Northeastern University)  
Diógenes Lycarião (Universidade Federal do Ceará)

#HAMBIBLEIBT

HAMBACH

ISRAEL



DAKOTA

BRAZIL

INDIGENOUS

- FAMILY
- FRIENDS
- PUBLIC (undefined)





GLOBAL  
PLAYERS

OR  
N

P  
C  
A  
F  
L

E  
C  
H  
I

Ta

K

Li

As

Cu

Al

W

Sn



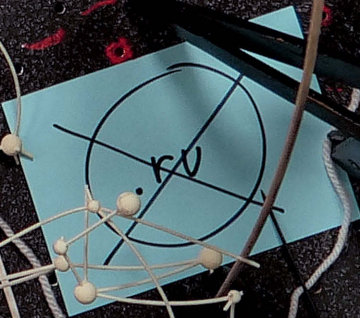
FEMINIST  
? INTERNET

VALUES  
MORAL

INTERNET  
GOVERNANCE

INVASION

CONTROL  
SPACE



# CONTROL/SPACE: THE SPATIALITY OF DIGITAL INFRASTRUCTURES IN CONTEXTURES, MAPS, AND DISCOURSES

B02

Subproject B02 examines forms of spatial control through digital infrastructures. In the first funding period, we investigated the digitalisation of control room spaces, such as the police or municipal water and power utilities. Using focused ethnography and videography as methods, we analysed various control rooms and their centralisation around digital infrastructure. In the second funding period, we focus on the control and spatial structuring of the internet's digital infrastructures. We look at three areas in particular: first, the physical and technological design of digital infrastructures, i.e., the question of how different content and network providers control data flows through the internet via hardware, standards, and protocols; second, the negotiation of these standards, and protocols in the arenas of multi-stakeholder internet governance; and third, the imaginaries expressed in discourses and maps that guide and legitimise the design of the internet.

As a result, at the infrastructural level, we observe various forms of centralisation and fragmentation of the network figure of the internet. At the governance level, we see a territorial differentiation that becomes more conflictual as the internet also becomes a pawn in geopolitical discourses. Our research makes it particularly clear how spaces are created and how economic and political power is exercised through the design of digital infrastructures.

**Principal investigators:**  
Hubert Knoblauch  
Silke Steets

**Team:**  
Sezgin Sönmez  
René Tuma  
Nadine Schabét  
Florin Keuneke  
Marie Inès Gartlinger  
David Joshua Schröder  
Joanna K. Kiefer  
Sophia Speckter

# THE TUMULTUOUS TALE OF TUBE TENSION

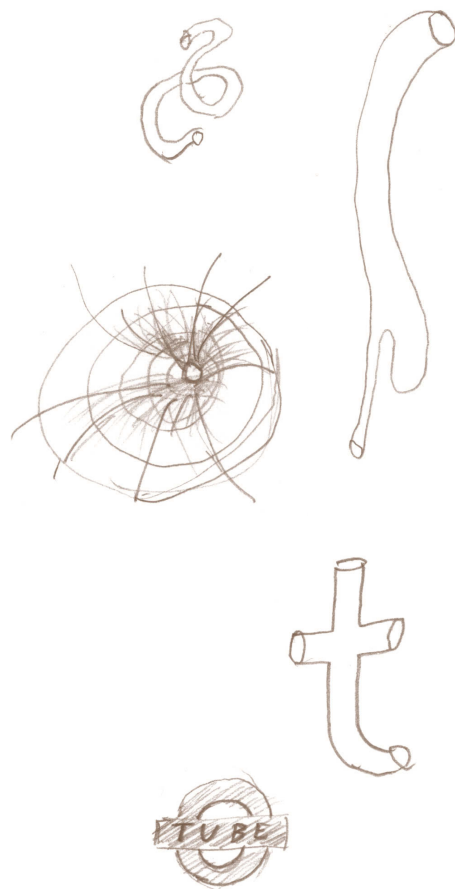
In bustling Gearford, a sprawling city and communications hub in the country of Pneumonia, steam-powered dirigibles soar above cobbled streets while clockwork automatons mingle with Victorian-esque citizens. Like many others throughout the country, the city's heart is driven by the pulse of information that flows through the Tube Mail System, a vast global network of pneumatic tubes that propel information canisters through the air using steam power.

Many consider it a wonder that this delicate system works, but a network of mysterious organisations press tirelessly to maintain this system. For outsiders, it is hard to understand who is doing what and what all their names and acronyms mean. For insiders, however, there is a hidden order in all the different groups that know the secrets behind all the tubes, gases, and regulations surrounding the complex but delicate system. In the end, they are still run by real people called Keepers. One of its chief engineers, Frederick, an enigmatic figure with a penchant for intricate gears and steam-powered contraptions, recently found himself entangled in a series of events that could alter the fate of the global tube network.

One day, a terrible war emerged when the large country of the Clockwork Empire invaded its smaller neighbour, Pneumonia. Amongst the terrible loss of life, some in Gearford were afraid that this war might not only affect the world but also disrupt the delicate set-up of pressure on which the worldwide system of tubes operated. Four days after the invasion, Alexander Mertil, Pneumonia's Minister of Information Transformation, sent a request delivered through a special brass capsule to one of the organisations, the prestigious Steam Message Authority for Assigned Names and Numbers (SMICANN). He called for sanctions against the Clockwork Empire that would clamp their tubes to punish them for their invasion.

The first step called for removing the Clockwork Empire's tube address system, which relies on vapours and colours that tell the steam generators which direction to push the capsules. The second demanded that the hidden mechanisms securing the tubes' exit points be disabled. The third step called for the destruction of the codes that guide the capsules through their complex tube networks.

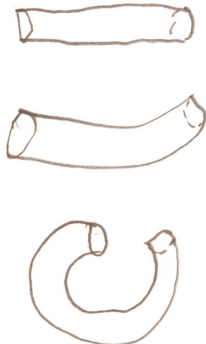
The response to the sanctions was not unilateral. Some voices – academics and key critical thinkers from the streets, the 'brass folk' – supported the demands and argued that the network should be active in world politics. They saw the steam-clamping as a



tju:b

The Latin word *tubus*, which refers to a pipe or tube, forms the basis for the current English noun 'TUBE'. This seems logical, as we still consider a round and hollow structure to be the core characteristic of tubes, which is also reflected in the word's broad deployment. London's underground railway system, the first in the world, which opened in 1863, was christened the Tube. The term 'tube' was also used as an old slang word for the telephone and, from 1959, as a colloquial term for televisions, whose pictures were produced using a cathode ray tube. In fashion, the term 'tube top' was used to describe a tight-fitting strapless top often worn by women and popularised in the early 1970s.

tube  
tubus  
tup



necessary gesture to oppose and punish the aggressors. Others, such as the many organisations that maintained the tubes, feared for the working of the global network and wished for a more neutral position. They saw the network as a kind of natural system or garden not to be interfered with, for if they enacted sanctions, the Clockwork Empire's severance from the vast network would create a 'broken splinter tube' that would shatter the idea of a unified Tube Mail System. SMICANN, for example, saw its sole purpose as maintainers of the global steam pressure that keeps information freely running; this freedom, in their eyes, is a guarantee of a better future and shouldn't be disrupted by the world's struggles. Another key organisation, ROPE, responsible for the proper delivery and naming of tubes, said that if SMICANN would recall the network names, the Clockwork Empire might just break apart and develop its own language and naming system. The IPTF, yet another organisation, argued that, while supporting the sanction in principle, they did not see themselves as 'steam police' because all their decisions were made through a complicated process of whistling melodies in unison.

The fallout from Mertil's proposed sanctions quickly spread, and debates broke out within the Steam Conclave's governing body questioning the neutrality of the Tube Mail System's dizzying group of organisations and governing bodies. The fate of this steam-punk realm now hung precariously, suspended like a pendulum awaiting the decisive tick of a clockwork mechanism. Frederick, a master engineer, grasped the network's delicate ballet of elements and the political equilibrium behind its operations. But he could feel the tensions starting to explode, not only throughout all the organisations they were in contact with but also among his fellow Keepers.

A sudden ring shattered the silence as Frederick pondered these weighty matters in his modest chamber. Turning to his corner table, he beheld a brass capsule within the glass tube, a blue letter visible amidst the billowing steam. The elegant writing belied the directness of the request: sanctions or neutrality? As a Keeper, what future would he choose for the network, who would he align with, and who was it that was asking him?

In hindsight, the signs that digital media would be unsustainable were all there. Back in the early 2020s, crypto-mining had exceeded the annual energy consumption of Australia, think pieces had started to advocate for a return to in-person meetings over video-conferencing for climate protection, and one could have already guessed that social media, too, would eventually become too climate-costly.

Platform capitalism had a few more good decades ahead then, but by today, in the year 2065, a breaking point has been reached. The climate and energy crises have become rampant, and public regulation has transformed digital life as we know it. In a rural Germany ravaged by climate change, conservation activists run the show now, and their agricultural collectives, few and far-flung, barely manage to feed the community.

Artemis, a wiry local conservation activist, hunts for plots of farmland within a day's walking distance on the outdated phone she usually keeps in her carbon-fibre and mushroom-skin hip pack. Using her meagre government-allotted thirty minutes of daily social media use, she had scoured listings for the least deteriorated plots. With little time to assess the reliability of information, and having to rely on the accuracy of textual description by advertisers with every reason to embellish their products, the results were not always pleasant.

On this occasion, the farmland she arrives at after a gruelling hike, advertised as 'luscious', turned out to be a barren plot posted by a grifter. 'This would not have happened on Facebook Marketplace', she sighs, a forbidden nostalgia for the media legends of the old days creeping into her mind. Social media is now publicly owned, and digital tools have become a curse as well as a blessing for what remains of humanity. The sole remaining platform has resorted to being exclusively text-based, and digital transfers of video or even photo data are luxuries people can no longer afford. 'The rest of the team are not going to love this', Artemis grumbles to no one in particular. Casting one last look at the sandy no-man's land, she begins the day-long trudge back to her commune.

A day later, she is back with her people. Themis, who administers the community's judicial server, excitedly speaks to the rest of the group at the weekly authority meeting. 'We need to look into this!' she exclaims. Asclepius and Hades, her colleagues in medicine and sanitation, nod sagely.

'Look into what?' Artemis asks tersely. She is somewhat confused and annoyed that her tale of the unsuccessful hunt for farmland has been brushed aside with little fanfare, considering the effort she made for the team. She doesn't mind the walks, but the least people could do would be to show some interest. In these times, travel is largely severely limited, and political life is organised in village communities. People rely more on face-to-face

#### retreat

The English noun 'RETREAT' draws from the Latin prefix *re-*, indicating a retrograde or backwards movement, and the Latin verbs *cedere*, meaning 'to go' or 'to yield', and *trahere*, meaning 'to draw' or 'to pull'. The term was adopted in the English language for military purposes in the fourteenth century, originally to signal a command to cease action/fire and withdraw from the battlefield to seek refuge. Consequently, retreats encompass not only a movement back but also a strong association with recovery and introspection. This dual connotation is evident in its recorded use to mean a 'place of seclusion' as early as the fifteenth century.

As is documented from the mid-eighteenth century onwards, it is, therefore, no wonder that the concept of the retreat also served religious purposes. The term's application to a physical location explicitly dedicated to the accommodation and treatment of the mentally ill dates back to the end of the eighteenth century. Notably, this fixed notion of place stands in contrast to the former military use of the term, where virtually any location could be adapted to serve as a retreat.

The term in today's common usage has transitioned and often refers to a withdrawal from the challenges of daily life for the purpose of regaining strength and achieving inner peace.

relationships in their local community, and long-distance connections have become rare and risky. This, too, is mirrored in the digital sphere. Social media servers are locally bound, issue-specific, and only sparsely networked, making information often sketchy and difficult to verify or share reliably.

'Here.' Themis quickly flicks on her device and opens the translocal message group of judicial organisers across Europe. Artemis begins to read. It's mostly whispers and vague rumours, but a picture emerges. In southern Spain, there remains a remote community where, seemingly, fields are green, energy is abundant, and people remain connected as they were decades earlier.

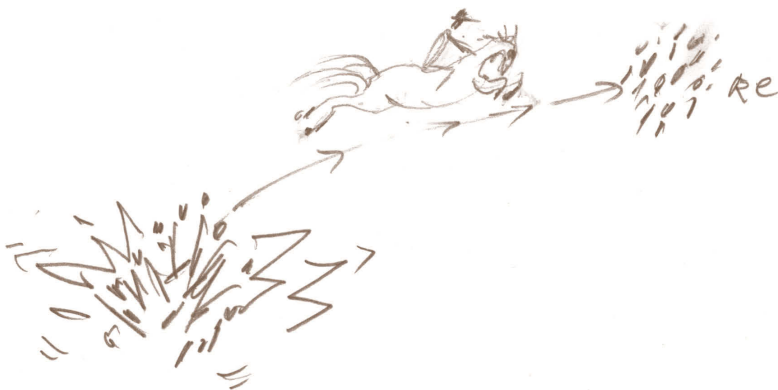
'Do you think they could have really done it?' Themis says, looking at Artemis expectantly. 'Environmental renewal?'

Artemis shakes her head. 'We're about to find out, I guess.' She flicks to the network's agricultural channel, already typing a request for fellow travellers. 'Either they have, or they are draining everyone else's resources.' She pulls out an old printed map – no such thing as Google Maps these days – and traces the route with her finger. A glint appears in her eye as she feels her heels smarting from the long trek the day before.

'Well, Spain is about 2,600 kilometres from here', she replies dryly. 'Who's up for a nice walk?'



# THE UNAFFORDABLE LUXURY OF



# DIGITAL CONNECTION



UNIN  
HABI  
TABIL  
ITY



# UNINHABITABILITY: URBANITY IS NOT WHAT IT USED TO BE

In urban research, the city has long been imagined as an important space of dwelling and belonging that can be meaningfully shaped by individuals, groups, and communities. In this way, it becomes a place of identification, affective attachments, and individual emancipation where the struggles for recognition and the right to the city, understood as the right to inhabit a city and to be represented there, take place. However, the stories in this section challenge this reading of the city because they all revolve around the impossibility of appropriating urban space.

Urbanist AbdouMaliq Simone coined the concept of 'uninhabitability', which invites us to rethink how people relate, or rather, un-relate, to the city. Interestingly, Simone imagines uninhabitability as something that can be liberating, describing it as a state that allows 'residents to spiral in and out, propel themselves into the larger urban surrounds and then bear back down again into the familiar places now rendered unfamiliar. It is the creation of a rhythm of itineraries that are, themselves, uninhabitable'.<sup>1</sup>

The following stories of urban uninhabitability, however, do not necessarily share such a liberating perspective. Instead, they are stories of violence, discrimination, alienation, and fear. They talk about the ambivalence of queer protest spaces, everyday life in an illegal internally displaced persons (IDP) camp, the creation of EU external borders in West Africa, our future lives in urban cooling centres, the oppressive experience of a hospital visit, a young woman's dream of becoming a Nairobi city girl, the effects of overtourism in Venice, the parallel itineraries of two people whose spaces touch but do not interpenetrate, and the absurdity of a border wall built to integrate a region.

<sup>1</sup> AbdouMaliq Simone, *Improvised Lives: Rhythms of Endurance in an Urban South* (Cambridge, UK: Polity Press, 2019), 5.





# DON'T LITTER



My office colleagues and I were about to take a shortcut on our way to Friday lunch, crossing Seoul Plaza. The lawn, however, was surrounded by the translucent panels of a police wall.

‘Oh, come on. Not another demo!’ Tae-hwan, our office team lead, grumbled at us.

‘Tomorrow is Pride’, countered Heena, our student intern. ‘Maybe I’ll go there with my boyfriend’, she continued.

‘Aren’t you afraid of these gays hitting on him?’ Yejin joked.

‘Well, it’ll be flattering because, obviously, I picked the right “one”, and so did he’, said Heena, confidently laughing.

Trying to conceal how nervous I was about this and to change the topic, I shot back at Heena. ‘Look how this Gen-Z talks!’ I mocked. Thankfully, the conversation took another turn.

The local lesbian chat room had been all about the opening of the first on-site Pride festival since the COVID-19 pandemic, and many people were making plans to go to the festival together. Known officially as the Seoul Queer Culture Festival, the Pride festival takes place in the Korean capital at Seoul Plaza along with a parade that travels through the heart of the city. The location is a historically significant site and has, among many things, been the central stage for democracy protests in 1987, a place for the public viewing and celebration of the FIFA World Cup Games in

ˌbær.ɪˈkeɪd

The etymological origins of the noun ‘BARRICADE’ are inextricably linked to the history of protest, riot, and resistance in France and Spain. The term derives from the Spanish word *barril*, meaning wooden barrel. The Huguenot riots of 1588 in Paris, ‘when large barrels filled with earth and stones were set up in the streets’ as a blockade, created strong associations of the word ‘barricade’ to revolution and street fights. While the general sense of a physical defence or hindrance persists today, the materialities of barricades are no longer restricted to wooden barrels. Instead, any material or object employed to quickly create an effective barrier for obstructing passage during conflicts, protests, or sieges meets the definition of a barricade. Unlike walls, barricades are typically temporary and site-bound – they do not need to enclose areas completely.



# ON MY PARADE

2002, and a place for the public mourning of former president Roh Moo-hyun in 2009. For queer and human-rights activists and their allies, the festival at Seoul Plaza is celebrated as a crucial moment of visibility.

On Saturday, my team was back at the office preparing for next week's important pitch. The noise from Pride, as well as the demos against it, echoed throughout the area. It was a wild mixture – K-Pop songs from the Pride celebrations, on the one hand, and protests, infuriated yelling, sermons, and the Korean national anthem, on the other. I put on noise-cancelling headphones to drown it all out for a moment.

It started pouring at 4 p.m. 'Look, she was there!' Yejin said, showing us Heena's Instagram feed. Heena and her boyfriend were beaming at the camera, proudly showing a rainbow-coloured Ikea bag. No one in the background was blurred, and some were clearly recognisable. My heart dropped. Was Heena knowingly ignoring warnings that taking pictures and uploading them online can put queer people in danger? Back at my desk, I asked if everyone in the chatroom was doing okay.

'We're all wet, but we're marching anyway!' replied Cheetah.

'People are showing us a rainbow on their tablets through the window!' added another user.

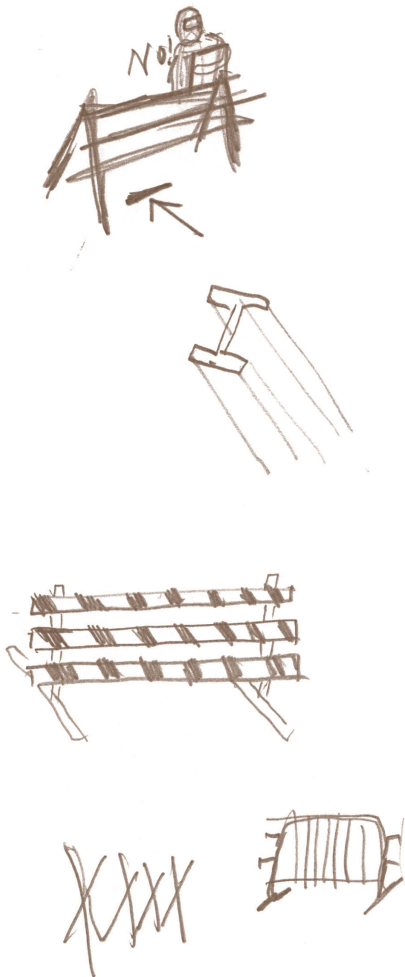
'Happy Pride', I typed as I closed the chatroom.

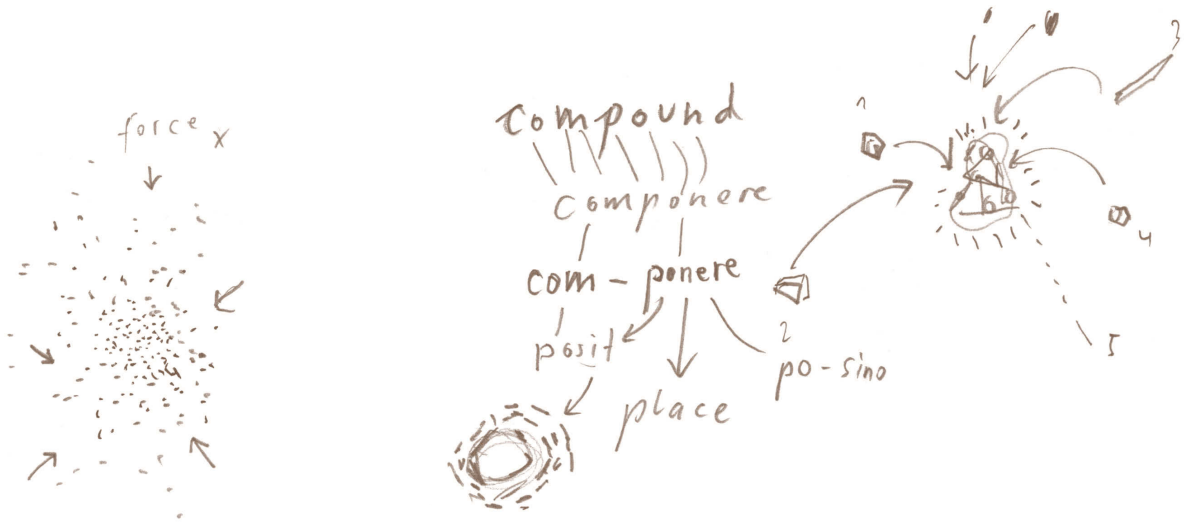
On Monday, I walked with the team to Seoul Plaza for lunch. Strangely, there was not a hint of what took place on Saturday – not a rainbow flag or a fragment of a flyer. It was as if nothing had happened. Everything was perfectly cleaned up. In comparison, I remembered my last business trip to Cologne before the pandemic: puzzled by the glitter all over downtown, I asked Basti, our interpreter, if there was a celebration – he casually answered that the Queer Pride festival was held two weeks before.

While there is less trash on the streets of Seoul than in Cologne in general, mass events in Seoul can only gain wide societal acceptance when they conform to public order. This became clear during the 2002 World Cup Games as audiences made big public impressions by voluntarily clearing sites where they had celebrated wildly. Although the Pride festival had won the right to celebrate in historic Seoul Plaza, it still stands on thin ice: the performance of participants and organisers must be flawless; they can't afford to be perceived as unruly or excessive nor can they be relaxed about their presence in the plaza, for even mere leftover sprinkles of glitter or confetti can be held against them.

Walking back to the office, drinking iced coffee like everybody else on the street, I finally spotted a rainbow near the Korea Telecom building. It was a placard showing a picture of the American Embassy's pride flag but with a big red X on it. Scrawled below was the phrase, 'We oppose the appointment of the homosexual U.S. ambassador, Philip Seth Goldberg, to Korea. Withdraw his appointment immediately!'

People were passing by. 'What an insane decision', Tae-hwan blurted out. For a while, in the scorching July sun, I couldn't move my feet.



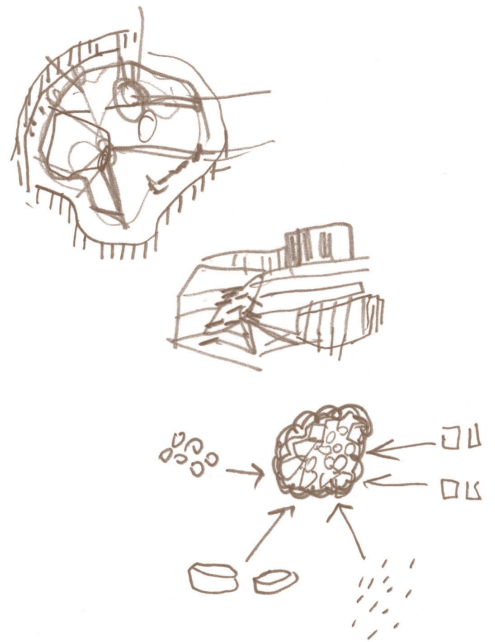


WHERE



TO FLEE

Rashid tried to take a deep breath, but the fresh breeze of the morning dawn got stuck between his ribs, tightening his chest. The pickup truck was ready to head to the south. He climbed up and squeezed between a sleepy woman and a young man with white paint on his sleeves. There were about ten people on the truck, and Rashid didn't know any of them. He was thinking about his family, not sure if he wanted to go back to the village to see if they were still there. If they weren't, where would he search for them? Since the last attack by Boko Haram three weeks ago, he'd been on his own. His mother was able to convince his father to leave the village, but it was too late. The family had decided to leave after the year's first harvest, but a week later, Boko Haram took over their village. They killed many and kidnapped the young girls. During the melee, he hid in the forest, the only one who could run away. About a week ago, he started walking south, avoiding the military checkpoint he had heard about. While on foot, he met some people on a truck heading to Lagos. Rashid was determined to find his Uncle Mohammed there and hitched a ride.



Arriving at the vastness of Lagos, he headed for the market his uncle had once told him about. It was the biggest in West Africa, he had said, and was where he met up with clients who needed to exchange dollars or euros for naira. At its rowdy entrance, Rashid could not imagine how big it was, but already, it seemed vast enough

to swallow him. Not knowing where to start his search, Rashid relied on the fact that, on the streets of Lagos, friends are very easily made – you can always find a willing one of its twenty-four million people to chat with.

He described Uncle Mohammed to many – middle height, a white moustache, and a golden corner tooth – and to his surprise, the vendors immediately knew whom he was talking about. But they sent him from one market corner to the next, forcing him to remember details from each location as he tracked his way back: a fish, a yam lady, and so on. It seemed impossible – simply too many stores. After searching and waiting for hours, it was his uncle who found him. The day was long, and Rashid was now relieved. They hugged, and he suddenly felt how hungry he was. They got two jollof rice dishes and sat together on the warm sidewalk, and he told his uncle what had happened.

In the evening, they arrived at the compound where his uncle had lived for ten years, only returning twice to visit his old northern village during this time. The camp he shared with twenty-five others is illegal, Uncle Mohammed explained, because the city officially has no place for those from the north. ‘The government doesn’t want to have us’, he said. Their camp was built on rented land, but there are no contracts, he continued. ‘We pay for each square metre, but still, nothing here belongs to us.’

A couple of weeks pass at the camp, and Rashid, now a resident, has learned to ride a motorcycle. Through one of his uncle’s compound friends, he agrees to work afternoon shifts driving people from the bus stop to their home in the camp. But the young men working for the landowners bully Rashid, charging him more than the others for using the parking place while waiting for customers.

Today is Sunday, a day that looks much like the day Rashid arrived. Together with his new friend Ahmad, a kid born in the camp, he now plays football in the unofficial IDP – or internally displaced persons – Sunday league, where IDP teams travel from one camp to the next to enjoy a football match. On this particular day, Rashid had walked a lot earlier, and his left foot hurt after the last football game, where he had crashed into a boy twice his size. It was later in the day that Uncle Mohammed pulled Rashid aside, telling him that he must now manage his life on his own. Continuing, he said if Rashid didn’t find a shift on the motorcycle, he would have to get out onto the streets to find something else to do.

Here, at the camp, no one takes care of you, and there is no government support. You are invisible. Rashid sees young kids selling stuff to people in cars. At fifteen years of age, back in his hometown, he would have been at school. He was interested in becoming a police officer, but his uncle had laughed at the idea and told him he needed a lot of money for that. Rashid tells Ahmad that he used to go to school and that he can read and write. The answer comes swiftly: ‘Boy, you are riding a motorcycle now. It doesn’t matter anymore.’



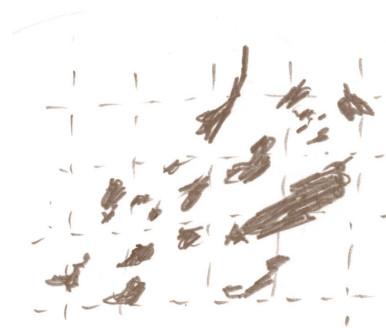
kampaeng  
kampong

ˈkɒm.paʊnd

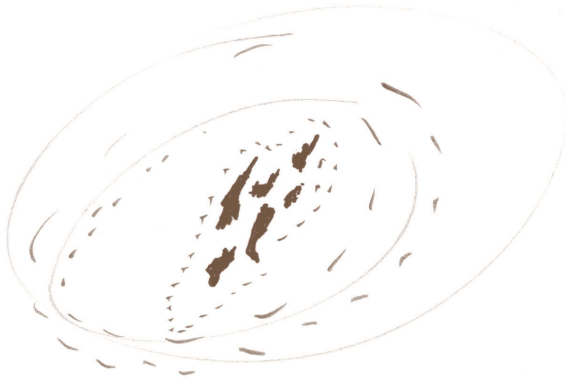
The term ‘COMPOUND’ originates from the Latin verb *componere*, meaning ‘to put together’, ‘to arrange’, or ‘to compose’. It is also thought to share a connection with the Arabic word *qamad*, which similarly conveys the idea of building and forming. In its earliest usage, the term appeared in English during the early Middle Ages, referring to a combination or craft composed of two or more elements – an idea that reflects the essence of the word’s meaning.

The sense of ‘compound’ as an enclosed residence emerged later, around the 1670s. With the expansion of colonial enterprises, this meaning evolved further, extending to describe factories or settlements of Europeans in the East. This development was influenced by the Dutch *kampoeng* and the Malay *kampong*, both of which denote a ‘village’ or a ‘group of buildings’. In South Africa, the term underwent two significant adaptations. First, in 1893, it was used to describe diamond miners’ camps, and later, in 1946, it came to refer to large, fenced-in residences.

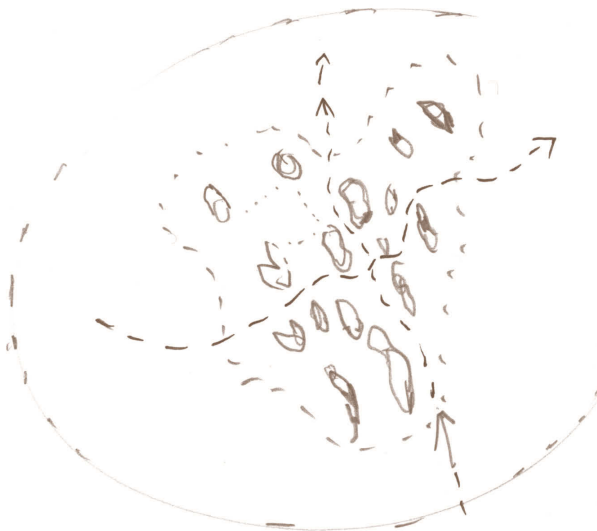
Over time, the term ‘compound’ retained its meaning of ‘a combination of two or more things’, though the way the combination was created changed. While the Latin root emphasises the act of assembling single elements together, from the 1670s onward, the focus shifted to the creation of composite units through enclosure or containment.



# MY MICROCLIMATE



# BET



archipelago  
 archi pelagos

ˌɑːr.kəˈpel.ə.goʊ

The noun 'ARCHIPELAGO' traces back to the Italian name for the Aegean Sea, Archipelago, which originally had been a derivative of the Greek term *Aigaion pelagos*. It is a compound word of the two Latin roots *archi*, meaning 'principal' or 'chief', and *pelagus*, meaning 'open sea'. For the ancient Greeks, this area, which is dotted with numerous islands, was crucial for maritime exploration, trade and cultural exchange. Hence, it is assumed that the term was coined to refer to the geographical and navigational characteristics of regions with interconnected groups of islands. Since 1600, it has been used in the English language to refer to 'any sea studded with islands'. Furthermore, various adaptations of the term have since spread across the globe.

Berlin, 2023

Dear Margherita, my geo-ethnologist!

I'm glad that you have managed to find the time capsule I've buried in the courtyard of the Institute of European Ethnology, where I've kept this letter for you. I write it as a memory that we worked together once on a research project about urban heat-waves and the sociology of space. It was such a memorable moment, right? You did your fieldwork in Fukuoka while I was in Stuttgart. We went there before, after, and when the cities were boiling hot during the dog days of summer. Back then, in the 2020s, various cities tested different strategies for dealing with heatwaves: wind corridors in Stuttgart and micro-gadgets in Fukuoka. But somehow, we have not yet encountered cooling centres, which exist with different names and shapes: a friend in Barcelona told me about a 'climate shelter' (*refugee climàtic*) there that has been in place for the last couple of years; when I went to Daejeon, in Korea, I noticed that the municipality had built mechanical umbrellas (the locals call them *garimmak*, meaning 'to shield' or 'to hide') at street intersections that automatically open when it's too hot to protect pedestrians waiting for the green light.

You can consider this letter as my bet. I bet that cooling centres in the future will be a common thing. Why? I suppose their construction will be good for economic growth, compared to wind corridors that require little or no construction at all. Not only that, but I bet that cooling centres will be diverse in the future, ranging from Type A to Type Z.

At one end of the spectrum (Type A), there will be isolated, air-conditioned rooms in which interior heat and humidity are sucked out by electric devices powered by renewable and non-renewable energy, depending on the location; in petro-cities, such as Dubai or Houston, oil remains the most favourable fuel. Ecology should be good for the economy, say the politicians. Well, of course, this is at the expense of the heat walls around the facility. At the other end of the spectrum (Type Z), there will be carefully planned open spaces surrounded by trees and ponds through which volumetric flows of cool air from multiple directions are meticulously measured, channelled, and concentrated.

Some entrepreneurs use an old trick for the cooling centres: pay-per-access. The sentence 'Please Insert Coins. We Accept Digital and Analog Payment' is written on Type A booths. Type Z contraptions are a bit more sneaky: the green area is surrounded by extremely thin and transparent wires, so fine that they are barely visible from half a metre. Other technoscientific entrepreneurs remove the material wires and surround the area with electromagnetic sensors, effectively creating a non-visual enclosure. Still, they are met with the protest of people who live with Electromagnetic Hypersensitivity and can hear 'the buzz'. Besides these controlled micro-climatic spaces, there is a super-pricey option: the air-conditioned suit, specifically designed for the elders, bundled with an air purifier.

That is my bet, Margherita. After you read this letter, you might want to check what types of cooling centres exist in Berlin. If I'm right, or at least partially right, then you might find one that I might have co-designed. There, below a linden tree, you might find another time capsule with a gift for you. If I am totally wrong, and there are no cooling centres at all in 2065, maybe you could reinvent one.

Your good friend,  
Indrawan

# EU BORDERS IN

‘Thank you very much for taking part in this interview’, said the red-haired journalist to the migration researcher opposite her.

‘Thank you, too’, the researcher replied. The two sat in a heavily climatized café vested in white tiles and harsh lighting, while Afrobeat music blasted from the stereo. Even though the café’s cool air gave them goosebumps, they were only too happy to escape the scorching heat and dusty streets so common this time of year in West Africa.

‘As you know, I am a European journalist interested in understanding more about the activities of the European Union in West Africa’, the journalist continued. ‘Not long ago, I didn’t even know that European actors were present here. We all heard the news about the Mediterranean. It’s tragic. But what are European borders doing here, so far away from actual Europe?’ she asked loudly, her voice breaking shrill towards the end of her sentence. She paused and then continued more calmly. ‘Please start by presenting yourself and by giving us some context about West African migration.’

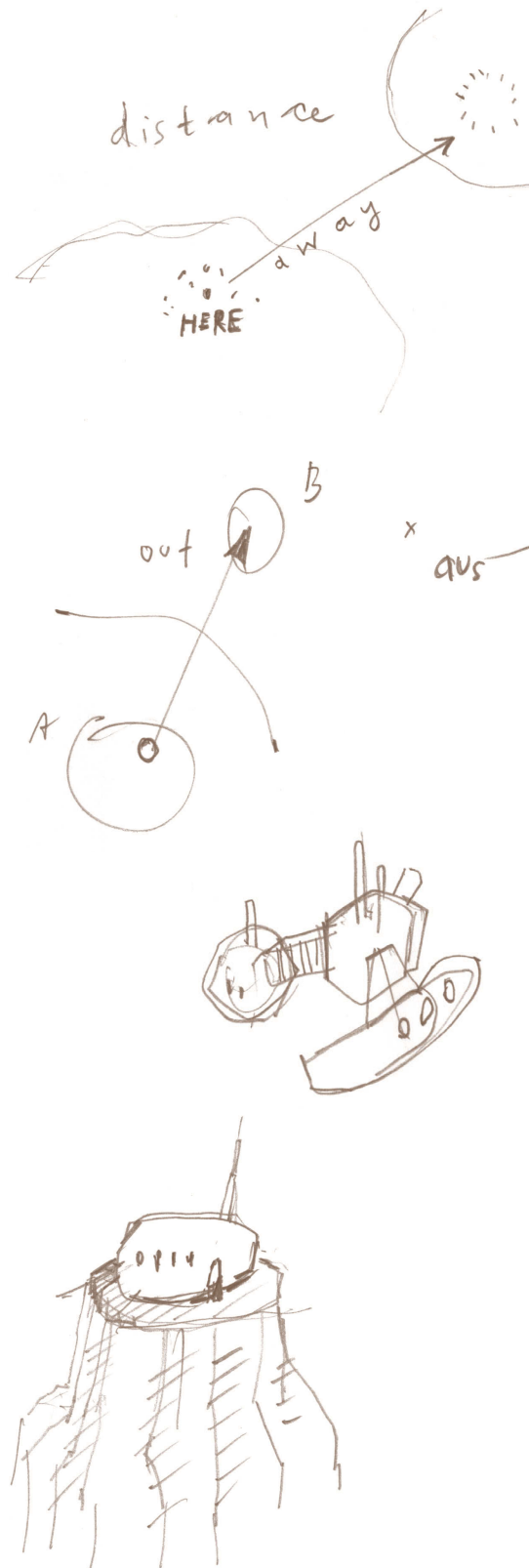
Slightly annoyed at the journalist’s demanding tone, the researcher took a deep breath and calmly spoke, ‘I am a migration researcher who has been interested in the exterritorialisation of European borders. It means that, nowadays, EU borders don’t only operate where the territory ends or begins. They can be present far away from this demarcation line, and even here, in West Africa.’

The journalist nodded, now understanding that she needed to give the researcher more space to speak about the complexities of the very country she had flown into not more than twenty-four hours ago.

‘For example, right here, in this West African city, you can obviously see the European influences. Migration was once a daily occurrence, transcending arbitrary colonial borders. The region’s tradition of freedom of movement within West Africa truly propelled the local economy forward’, the researcher went on to say.

‘Interesting’, the journalist replied. Her big frown gave away a concern that was stirring in her. ‘There seems to have been a shift. What is the European Union doing here?’

‘Despite its geographical distance from sub-Saharan Africa, the EU began exerting border control functions within the continent’, the researcher responded. ‘Their aim was to prevent migrants from reaching Europe, but inadvertently, they ended up affecting internal regional migration. The city we are currently sitting in, along with many other places, has essentially become a part of the European bordering system. You see, borders aren’t confined to physical spaces; they manifest wherever the movement of people is managed, controlled, or interfered with.’



# AFRICA

The journalist seemed confused. Clearly, she couldn't make sense of this absurd reality.

Reacting to the journalist's expression, the researcher went on to explain, 'Now, how could this be possible?' She took a sip of bottled Nestle water while her interview partner impatiently slid back and forth on her seat. 'The EU pursued various strategies, including offering financial incentives to African governments to restrict internal movement. A form of bribery. This led to the implementation of militarised border checkpoints, all funded by the EU. This shift also resulted in legal changes that criminalise movement, hosting and transporting people.' Pausing, she pointed her finger towards the window, drawing attention to an empty building across from their café. 'The city, once thriving on income generated from human mobility, experienced an economic collapse.'

The journalist took a quick look at her scrupulous notes and said, 'One thing I don't seem to understand – you said many migrants travel within West Africa. Are they not even trying to reach Europe?'

Annoyed by the Eurocentric question, the researcher took a deep breath but held herself back from impulsively reacting to the journalist. Of course, she couldn't blame her. This is exactly the picture painted in Europe – everyone thinks that Africans want to go there, even though more than eighty per cent of the migration takes place within the West African subcontinent. The researcher replied, her voice trembling, 'It's actually a common misconception that migrants are headed north. Not everyone's goal is to reach Europe. The EU's actions overlook this reality. While the EU champions its own free-movement ideals, its actions in West Africa don't seem to be concerned with these very same principles.'

Surprised by this important piece of information, the journalist shot back, 'This sounds like an absurd contradiction. Besides the economic implications', she asked, 'have there been other consequences?'

'Unfortunately, the restrictions have pushed migrants to take more dangerous routes to bypass border controls, resulting in tragic deaths in the desert', said the researcher while lowering her voice. She worried about triggering other café guests who might have lost someone to this injustice.

The journalist nodded her head, her mind reeling from this information. She knew the rest of her trip would not be the same. 'Thank you for shedding light on this complex situation... I really had no idea.'

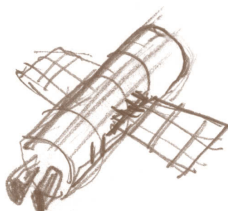
'You're welcome. It's crucial that we understand these dynamics to foster informed discussions and policy decisions', said the researcher, hoping that this interview would raise awareness about the topic beyond West Africa. Standing up from her white plastic chair, she continued firmly, 'This would be so important to me.'

THERE  
position



## ˈaot.poʊst

The English noun 'post' is derived from the Latin *positus*, which, as the past participle of the verb *ponere*, meant that something had been placed or positioned. Combined with the prefix 'out-', the 'OUTPOST' historically described places that were established as small military or trading stations positioned 'from the main body of troops' or outside the limits of a settlement. Over time, the term 'outpost' expanded beyond its strictly military connotations to refer more generally to any remote or isolated settlement, station, or facility established in a distant or frontier location. This broader usage reflects the concept of an outpost as a place situated away from the main centres of population or activity.



## THE BORDERS OF THE WORLD: CONFLICTS AND TENSIONS IN THE FORMATION OF MACRO-TERRITORIAL BORDERS

The subproject C01 approaches the question of spatial refiguration from the perspective of border conflicts. We focus on processes of macro-territorial border formation in the course of regional integration projects and their impact on mobility. Thus, the assumption is that forms of regional integration represent an important intermediate level between the global level and the nation-state 'container'. Processes of regional integration often support the opening of internal borders and strengthen freedom of movement. While the Schengen Agreement, which designates a complete dismantling of border controls, is a famous form of macro-territorialization, in other cases, typical elements may include visa exemption, extended rights of residence and settlement, and access to the labour market. At the same time, inequalities, as well as economic and security conflicts, have been observed to block ambitious integration projects permanently. Using three exemplary cases from different regions of the world (the European Union, the Mercosur trade block in Latin America, and the ECOWAS trade union in West Africa), the subproject examines how circulation changes within and across macro-territorial borders and asks which types of spatial conflicts arise in the process.

**Principal investigator:**  
Steffen Mau

**Team:**  
Dorothea Biaback Anong  
Zoé Perko  
Solva Bergmann



BIOMETRIC

FORTIFIED

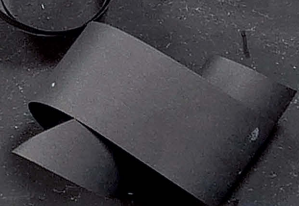
EU POWER

BIOMETRIC

ROUTE

CHECK POINT

RIVER







PRISON

CELL

SAFE

SPACE

MICROPOLITICS

AREA  
CRUISING

MEDICAL CARE

NOLLENDORF

GAYBERHOOD



# LOCATIVE MEDIA: NEW SPATIAL REALITIES BETWEEN CONFLICT AND COEXISTENCE

B04

Subproject B04 investigates the effects of the routinisation of locative media on spatial realities constituted by spatial knowledge and its impact on everyday actions. Locative media are mobile apps that access the geo-location features of smartphones to locate their users in physical space and display web content tailored to their current location. In the user's perception, the digital space on the smartphone screen and the physical space merge into a cyber-physical reality context.

Focusing on three cases – online dating (Grindr and Tinder), mobile gaming (Pokémon Go) and recommendation apps (Foursquare) – B04 contributes to the refiguration thesis by using locative media to focus on the recent wave of digitalisation of urban spaces. In all three cases, locative media can become the cause of conflicts, for example, when the cyber-physical spatial reality deviates from established perceptions of reality, and this is interpreted as a distortion, or when it is accompanied by practices of spatial appropriation that contradict established socio-spatial norms of behaviour. However, in all these cases, locative media can also enable new forms of coexistence of different spatial realities, for instance, when the respective cyber-physical spatial realities remain mutually invisible. Thus, the subproject empirically explores the specific conditions in which conflicting or coexisting spatial realities emerge by combining methods including problem-centred interviews, focused ethnographic observations, and computer-assisted text analyses.

**Principal investigator:**  
Ingo Schulz-Schaeffer

**Team:**  
Eric Lettkemann  
Nicolas Zehner  
Daniel Grönefeld  
Philip Baumbach  
Iryna Kuptsova

# LEAVING

Henry hated hospitals! He was standing in a hallway flooded with bright neon lights, waiting for his turn. The line in front of him consisted of ten others, all of them with different ailments. At least he had a little time to contemplate. How did he manage to get himself into this mess?

Last night, he had met with a Dutch exchange student named Finn, who was visiting Berlin for the first time. They had found each other via Grindr, the dating app, and decided they would meet in Nollendorfkiez, a gay-friendly neighbourhood with a global reputation, for their first date. As the local, Henry was happy to take the lead in showing Finn all the places he had come to love since moving here several years ago. They stopped at some of his regular pubs, had drinks, sometimes accompanied by talk with the bartender or other visitors, and then went on their way again. They spent most of their time walking and talking outside in the mild summer evening. Henry told personal anecdotes about the places they passed, for instance, the bakery, where he'd have his Sunday hangover breakfast. The owner was the husband of Mr Biesel, who owned the leather-wear store just a few blocks down the street, and both were well known and liked in the neighbourhood. They seemed to have been here forever, as integral to this place as the pavement itself.

They passed Doc Derrick's office next. Henry could still remember the first time he was there, in his early twenties, when his then-boyfriend had just found out he was HIV positive. After working through their initial panic, they went to see Doc, following the recommendation of a close friend. He was a small, kind-hearted man who not only managed to calm them down but also taught Henry a lot about how to protect himself from these kinds of situations.

As Henry and Finn moved on and the night got cooler, Henry decided to invite his date back to his place. He hadn't planned on it, but since they got along well and he didn't want the evening to end, it seemed natural. Only when he woke up the next morning did Henry suddenly realise he had neglected some of his most basic safety measures. With the alcohol-induced daredevilry subsiding from his system, he remembered the fear from that first close call with HIV. But it was Sunday, and Doc Derrick's office was closed. Henry could wait until Monday, but at this moment, the additional risk just didn't seem worth it. He needed to do something – today.

So here he was, in a hospital. Ten people later, and now it's Henry's turn. Standing in front of a nurse who had nothing of Doc's kindness from back in the day, his head was spinning. He felt afraid, and something else... shame? It was hard to admit, especially to himself. Having to walk up to a stranger – even though professional – and being forced to share his sex life with them felt so degrading.

'Präpp?' the nurse asked warily.

'Yes, PrEP', Henry replied.

'Oh, I'll have to check with the doctor about that. He'll be free

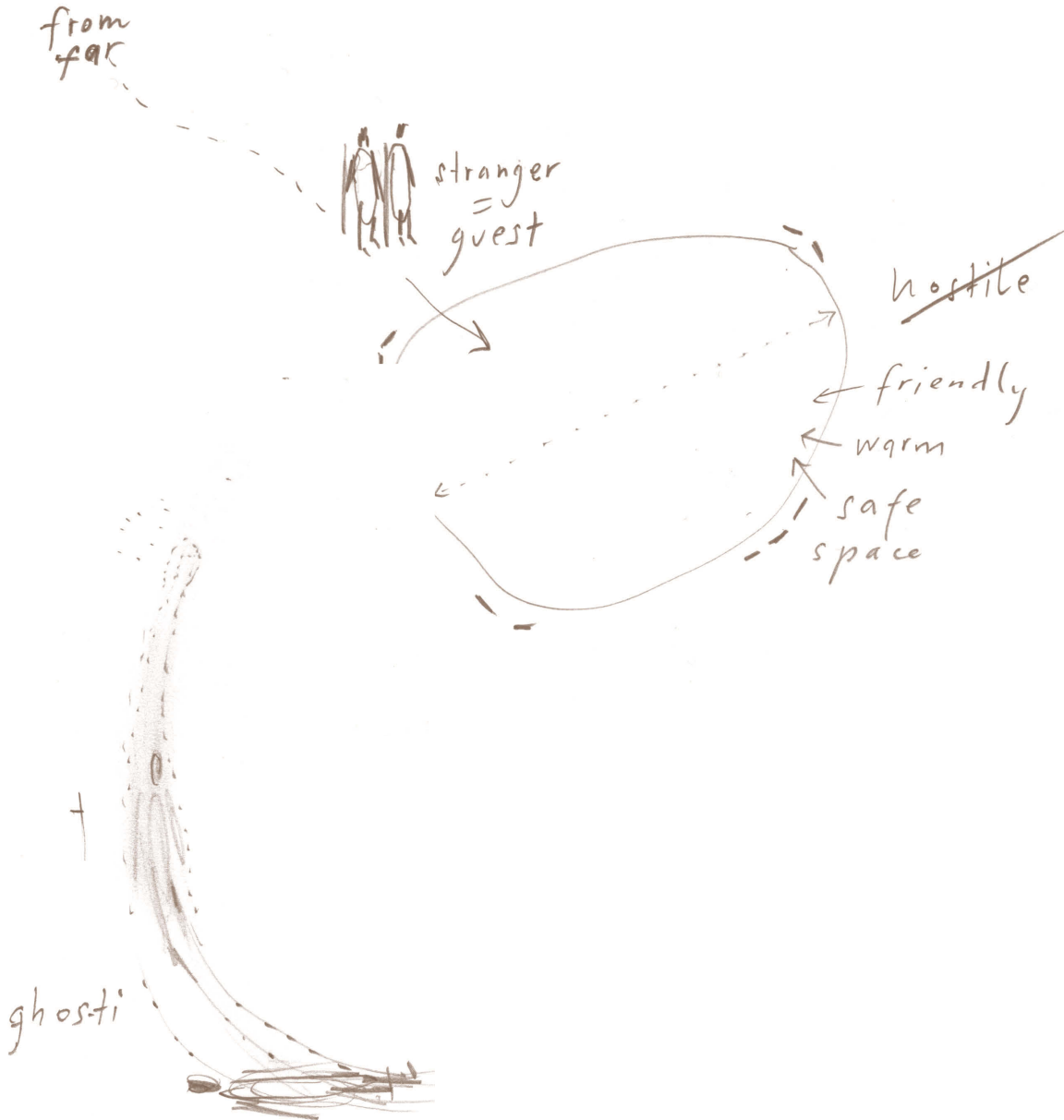


<sup>1</sup>hds.pr.tl

The word 'HOSPITAL' is a compound noun formed from the Latin word *hospes* and the Greek word *spitia*. *Hospes* translates to 'guest' or 'stranger', while *spitia* means a shelter or a place to stay. In ancient Rome, facilities known as *hospitia* or *hospitium* were designated for the accommodation of travellers, strangers, and the sick. The proto-Indo-European word *ghos-ti* is also suggested as a possible origin for the word 'hospital'.

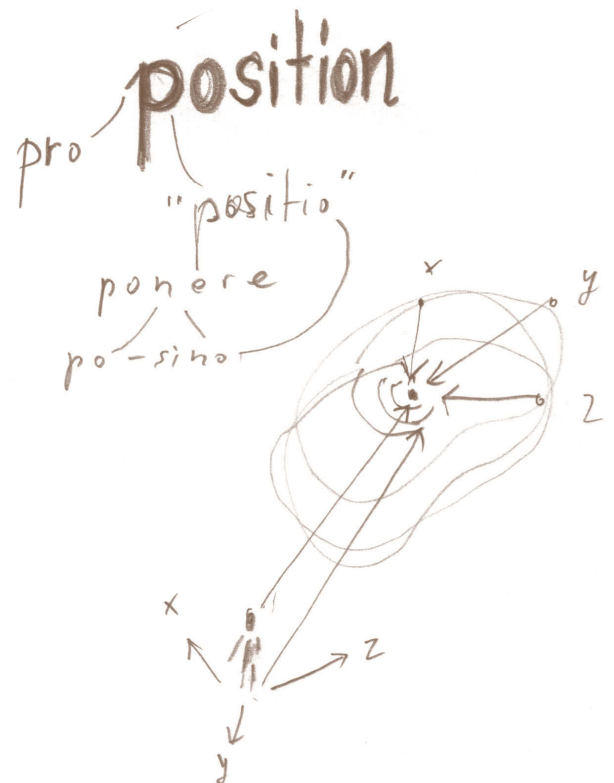
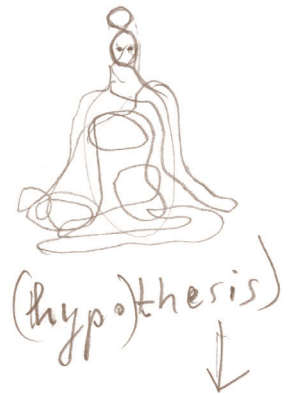
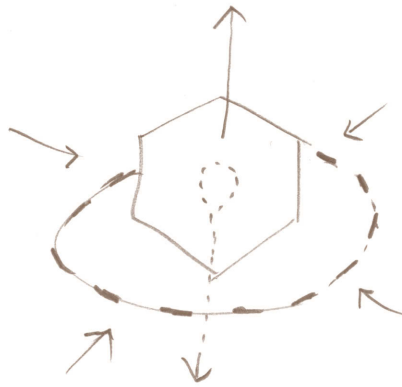
In both English and French, the word first appeared in the thirteenth century and originally referred to a place where travellers could stay, reflecting the broader meaning of its Latin origin, which could also mean 'the duties of hospitality'. The modern sense of the term, referring to an institution providing care for the sick or wounded, did not emerge until the 1540s.

in just an hour or so', she said. 'Would you mind waiting right here?' Henry did mind, especially since he knew from Doc that waiting was not a necessity but often a nurse's ill-judged bias to an overwhelming health situation – something that many gay men are more than familiar with, especially at institutions like hospitals. But telling her would not have changed a thing. Instead, he nodded along, wishing for the understanding comfort of Doc Derrick and his comfy waiting room armchair.



# THE COMFORT ZONE

# CITY



# GIRL



pə'zɪʃ.ən.ɪŋ

The word 'POSITION' has its roots in the Latin *positio*, which translates to 'a putting, position'. In English, its first recorded use dates back to the late fourteenth century, when philosophers and mathematicians made use of it to refer to the act of asserting a proposition or thesis. From the mid-sixteenth century onwards, its meaning expanded to refer more generally to a place occupied by a person or thing, always with a sense of proper placement in relation to other persons or things. This could include social contexts, for example, social ranks and class; physical contexts, such as in dance or sexual intercourse; or political stances, such as support for specific movements. Additionally, the word has a long history of use in marketing, where it refers to the process of establishing a product or brand in the minds of consumers or acquiring/solidifying a specific market position.

People can tell I'm from the village. My clothes aren't very city-like, and I still move too slowly. When I first came to Nairobi, I got in the way of people constantly. Some would even snap at me. It's getting better, though. I'm adjusting to their pace, and I'm saving up so I can afford one of those handbags and a pair of nice shoes they sell at that market my cousin Atis took me to. It's also difficult to know your way around with public transport. But everybody else seems to know where to wait for the Matatus and when they come and where they take you. How am I supposed to know it's even a bus stop? I feel like I'd need years to figure all this out.

My biggest problem right now, though, is that I need to find a place of my own. I've been staying with my cousin Jenny for over a month. She doesn't say, but I know she'd like to get rid of me sooner than later. The place she rents is already tiny for one person. I try to contribute by buying food, but I haven't found a job yet, and my savings are diminishing. At least I brought some food when I came – the ugali we eat almost every night is still made from maize flour from back home. Sometimes, Jenny acts as if she's above me. The day I arrived, she scolded me when I walked into her bedroom without knocking. Her bedroom is a private space, she said. How superior does she think she is?

My auntie Sarah reached out the other day, telling me on WhatsApp about this young couple who came to the village looking for a nanny. She gave them my contact. Now, I'm waiting for them to get in touch. Being a nanny would be a good job since it often comes with a place to stay. Usually, you sleep in the family's living room on the couch. My friend Vicky told me that she knows someone who works as a nanny in Westlands who has her own room! As much as I hope this job works out, I'm also scared. I've never lived with anyone who isn't family.

I want to make it in Nairobi. I want to live an exciting city life. Maybe when I'm old, I'll move back home to the village. But even when it's hard, and I get homesick, I can't possibly go back to the village now, with my tail between my legs, proving right those who said I wouldn't make it. I'll be back one day, with gifts from the city. Stuff they could never afford. I'll be the city girl that made it in Nairobi, and they'll respect me for that.

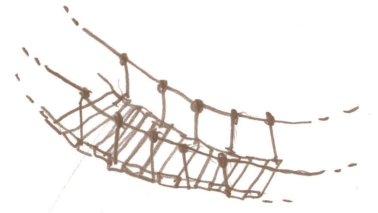
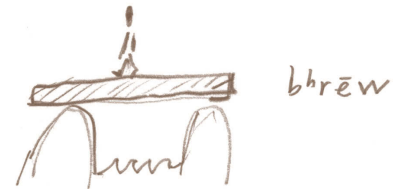
# THE PONTE DELLA LIBERTÀ, THE UMBILICAL CORD OF VENICE,

When the Habsburgs began their second reign, lasting from 1815 to 1886, they took over a Venice that was in a pitiful state. Many inhabitants had died during various epidemics or had left their city. Houses and palaces stood empty and were left to decay. The ‘golden’ years were long gone. Nevertheless, they defined a goal of developing a mediaeval and rotten Venice into a modern city with a revived economy.

Apart from the realisation of a free port on the island of San Giorgio Maggiore in 1830, the most effective intervention for this economic revival was the investment in infrastructure. Thus, the Habsburgs established a railway connection between Milan and Venice. This required a 3.6-kilometre-long railway bridge across the lagoon: the Ponte Vecchio. After five years of construction, it was opened in 1846 and connected the two Venetian main stations, Mestre, on the mainland, and Santa Lucia, on the island. The economic boom brought about by the bridge was not long in coming. For with it came the first really large groups of tourists, of up to 50,000 travellers a year. Venice became more and more popular for those willing to travel, and a visit to the city was soon part of the classic educational programme of many travellers to Italy.

In 1933, the railway bridge received an extension, the Ponte Littorio, an access road for motor vehicles commissioned by Mussolini for war purposes. This was renamed Ponte della Libertá, or the Freedom Bridge, after the end of the Second World War. Most Venetians, however, may question whether this name still does justice to its significance today. For a century now, the city’s economic structure has been one-sidedly oriented towards tourism. Strengthened by the dissemination of images – and even built copies of Venice – the number of tourists has quadrupled in the last twenty-five years. Among the many motives for visiting Venice, one is the desire to see the original that inspired a replica built in Macau.

Parallel to the increase in the number of tourists, the population of Venice has continued to shrink. While in 1951, there were still 170,000 people living in Venice, by 2000, there were only 64,000. In 2022, only 50,000 Venetians lived in the city. And these inhabitants meet 100,000 day tourists every day and 30 million visitors every year. Day tourists usually stay overnight in Mestre or other



## bridg

The etymological origins of the English term 'BRIDGE' trace back to the proto-Germanic root *brugjo*, which was adopted in Old English as *brycge* and referred to any structure that could span a gap or provide a way across an obstacle. Central to the concept of the bridge is the idea of connecting two things that would otherwise be spatially separated. Bridges can span different geographical structures such as valleys, rivers, or gorges and are constructed from a wide variety of materials, with the original concept stemming from 'a beam or a log laid down for crossing'. However, the semantic field of the bridge is not confined to physical space; it also extends to the connection of people, living environments, cultures, and concepts. Additionally, bridges can be found built in the structure of musical compositions.

# OR WHY A BRIDGE IS RESPONSIBLE FOR THE DEATH OF VENICE

nearby towns on the mainland. They cross the Ponte della Libertà in the morning, take photos at Piazza San Marco, the Rialto Bridge, or the Bridge of Sighs and return to their hotels on the mainland in the evening. In Venice, shops for everyday needs, doctors, and post offices are transformed into tourist shops, luxury malls, and hotels. Prices in Venice are thirty per cent higher than on the mainland. For the Venetians, their city has become a museum and too expensive to live in.

This is the case for the second-hand seller Guilia and her family, native Venetians who don't know how much longer they can afford to live in Venice. For Guilia, the diminishing desire for her uniquely sourced wares compared to indistinguishable tourist trinkets in every store casts her livelihood on the edge of an uncertain future. Her husband shares her burdens, and he, too, sells tourist goods in a leased shop on Piazza San Marco. Guilia's son complained about the lack of leisure activities for young people in Venice and left the island straight after graduating, moving to Florence. And now, her daughter longs to follow suit once she finishes her studies

Venice, once a jewel in the crown of grandeur, has been transformed into a playground for the masses. In an ironic reversal of the Habsburgs' original intentions, nearby Mestre promises an affordable and 'normal' life – the Ponte della Libertà makes it possible to live on the mainland and work in Venice. The intended economic upturn brought about by the bridge has become Venice's undoing. Once a city worth living in with select guests, it now has the character of a theme park where people only work but no longer live. For Giulia, what is now left is to free herself from the untenable constraints of tourism, like so many other Venetians, and turn her back on a city that now tempts too many others.



## MIGRATING SPACES AND TOURISM: IMAGINATION, PICTORIAL SPACE AND CONTEXTURES OF VENICE

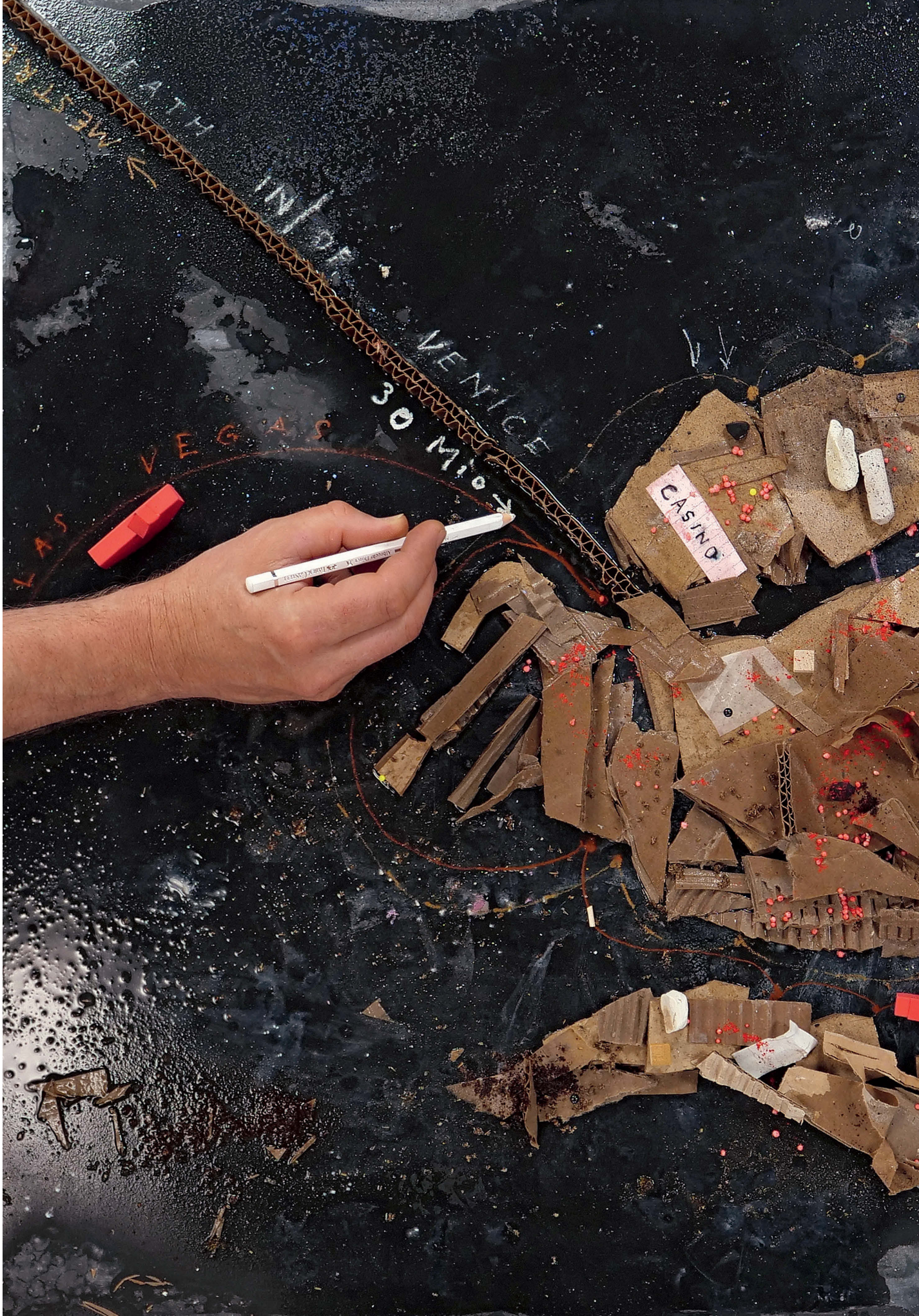
Subproject Ö conducts a case study on Venice to artistically explore how circulating images and Venice replicas refigure the northern Italian city. As the public relations project of the CRC, it also aims at communicating the work and key results of the CRC to a broader public through artistic engagement.

In the first funding period, the subproject used empirical case studies in South Korea and Berlin to reveal spatial changes linked to overlapping spatial processes of migration and tourism across different scales. For the second funding period, the subproject turns its research to Venice and asks how, where, and in what media is Venice copied and reproduced. Replicas are located in places ranging from casinos in Las Vegas and Venice Beach, Los Angeles, to a theme park in China and the many Venetian ice cream parlours born from Italian migration located in small and medium-sized German towns. Venice offers a projection surface for various spatial imaginaries, and to understand these processes, the subproject links the artistic discourse on image, model, afterimage (i.e., the copy) and picture with the social science discourse on refiguration.

The circulation of goods (trade), images, and people has been a defining element of Venice since its foundation. However, after the 2019 floods, followed by the COVID-19 pandemic – both a boom and an existential crisis for the city – the conflicts caused by over-tourism and gentrification have intensified. Based on an archive of images that principal investigator Stefanie Bürkle has compiled on her travels to Venice over more than twenty-five years that explores these conflicts, the subproject Ö will result in an art exhibition, *Venice BeReal*, that will be shown in Berlin in March 2025 at the project space Meinblau and in a collaboration with the city of Venice in September 2025 at Palazzo Tito. The installation of images attempts to draw relations between Venice and its copies in Las Vegas, Macao, and Shenzhen. Across time (through historical travelogues) and various media (from the *veduta* to the postcard and the travel guide to the Instagram selfie), the images play with tourist expectations, creating an image loop in which the city seems trapped.

**Principal investigator:**  
Stefanie Bürkle

**Team:**  
Kristina Loovas  
Janin Walter  
Charlotte Arens  
Wilhelm Will  
Marina Pohl  
Pietro Mellano



NEW YORK  
MEXICO  
L.A.

INFLUENCE

VENICE  
30 Miles

VEGAS

CASINO

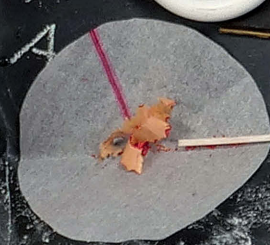


MACHO

M  
A  
G  
T  
O  
N

↑  
D  
E  
C  
A  
Y  
↓

RESIDENCE



B

WATER





# TRAJECTORIES, NETWORKS, AND PLACES OF DISPARATE INFRASTRUCTURES: SPATIAL FIGURES, ATTITUDES, AND SOCIAL INEQUALITIES

A06

The subproject A06 examines the influence of the spatial environment experienced in everyday life on attitudes to justice and the assessment and redistribution of current inequality. We conceptualise the spatial environment as an interweaving of individual-specific networks and trajectory spaces across different locations, such as residence and work. To avoid these spaces being conceived only as fixed containers, our research team used the geolocation of quantitative survey data and combined this with various geocoded data to characterise specific locations. The exact spatial coordinates of respondents are combined with further data on the material infrastructure around these local areas. We next organised this information into spatial typologies based around places of residence and work. These typologies are reconstructed for the respondents and brought into relation with socio-demographic data on social inequality. Further, we established a connection between attitudes on justice and its redistribution. From our research, it can be assumed that specific spatial experiences of inequality are relevant for attitudes towards its distribution and for justice. This subproject offers an innovative contribution to the connection between space and social inequality.

**Principal investigators:**

**Jan Göbel  
Maria Norkus**

**Team:**

**Nicole Oetke  
Malte Uecker**

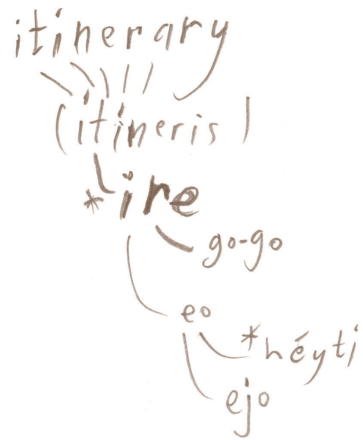
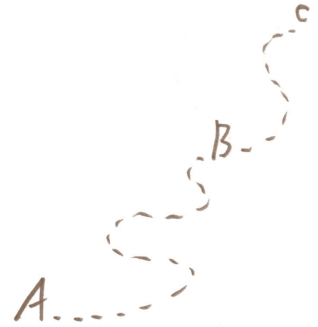
Mehmed woke up at 9:00 a.m. He usually works from his home office, but today, he has an appointment at the company office. Deliberating – should he drive? – he takes the train instead. The city centre is almost always crowded, but he finds commuting by rail relaxing. It’s often empty on his line, and the trip gets tiring only when he has to change trains.

Today, there seems to be hardly any staff in the cars; he decides he’ll have to write a complaint. Arriving at his destination, he notices some new homeless people: instinctively, he touches his trouser pocket, resolving to donate something more to the food bank. At the office, he unlocks the door himself – the doorman almost always ignores him, a point that has irked Mehmed for some time now. And again, the cleaning team hasn’t properly vacuumed, he notes mentally. At the end of his day’s workshop, pleased with the pace of the project, he decides to have an early dinner at a new restaurant near the office, having checked the reviews a few weeks ago. He calls to reserve a table, but irritatingly, no one answers.

Sigrid has been awake since 4:00 a.m. After preparing the day’s lunches for her two children, she moves quickly in order to catch the bus. Her car – something with the clutch – has been in the workshop for months. Her shift starts at 7:30, and the bus, full to bursting, is already a little late. She spots a free seat at the back, on the right. Approaching, she swiftly smells why – a beer bottle must have spilt. With a plastic bag from yesterday’s shopping in her backpack, she covers the damp patch – it’ll do. Hanging her head for the trip, there might just be some time for a light snooze before the main station. At Goethestrasse, Sigrid gets off, hastening past the boutiques and complexes towards her office entrance. On her floor, the coffee machine stands in the boiler room, and if the line isn’t full, she’ll grab a cup. The pace of her shift picks up at 8:00 am as the public starts arriving. After lunch, the day’s exhaustion already starts to set in. During the late afternoon’s wind-down in customers, she resolves to make sure the kids have healthier dinners than the ones their father prepares.

On his way to the restaurant, Mehmed’s thoughts are already on another option if, annoyingly, this one is full. He walks briskly, weaving through the streets of the city centre. As he approaches the restaurant on the corner of Goethestrasse, he briefly notices a weary but sprightly woman rushing towards him. Though seemingly lost in her own thoughts, Mehmed catches the glimmer of something intriguing through the fatigue around her eyes. Sigrid, though preoccupied with the responsibilities of work and her kids, notices the man approaching.

For the two, their intuitively shared impression lifts the spirits of each other for a brief moment. But with every step past one another, for each, their comforts and anxieties return to fill their thoughts.



ar.tin.ə.rer.i

In ancient Rome, the Latin word *itinerarium* referred to a written document that functioned either as a record of or guide for a journey that usually entailed detailed information about the route, stops, and distances travelled. Another possible root could be the Arabic noun *itnara*, meaning ‘journey’. The English language first adopted the word in the mid-fifteenth century, retaining the sense of a planned journey or route. The word ‘ITINERARY’ therefore clearly differs from other terms used to describe movement, such as ‘trajectory’, which is characterised by its unilinear/streamlined direction; ‘trip’, which preserves the element of spontaneity; or ‘tour’, which implies a roundtrip or holistic coverage of an area. Accordingly, itineraries today appear in a variety of contexts, including the plan for a vacation, the schedule for a business trip, the list of places to visit in a city, and the route between two points in general.

# FROM DIFFERENT SIDES



# PLAY EQUIPMENT CONNECTING

‘Tell us about your adventures’, my father encouraged.

The cosy living room we sat in brimmed with the aroma of fresh coffee and the soft hum of conversation. I was visiting my elderly parents for our customary Sunday coffee, a moment that allowed me to escape the hustle and bustle of my daily life and return to my village. My father, a countryside man, was always eager to hear about my study trips as a professor and researcher to different parts of the world.

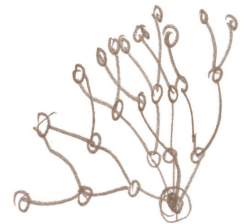
Our conversation drifted to the hours I used to spend at playgrounds and childcare centres with my kids. I recalled those large, unique, colourful geometric playground structures formed of rope and ball connectors, so memorable to not only my children but to me, too. As a professor of urban planning, these playgrounds were a topic that captured my academic attention but that, for years, was also such a vivid part of my small family’s daily lives.

‘Little did I know this equipment is now found throughout the world in so many kinds of places, even shopping malls and amusement parks’, I recounted. ‘And when I was in Lima last month, I recognised the same structures I’ve seen in Berlin’. My parents leaned in, captivated by my tale of seemingly ordinary playground equipment, though still somewhat puzzled by the point I was trying to make. ‘I even recognised them in old photos from a family trip to Chicago’, I said.

I shared with them the small facts and bits of history that fascinated me, not least of all that, though these structures had originated in Germany, they had now become a global phenomenon. I noticed my parents’ expressions shift, a mixture of curiosity and recollection. ‘These ropes look like the ones used for elevators and hanging bridges’, my father declared as I swiped through photos on my phone. Indeed, the steel ropes were initially produced for the growing elevator market of the nineteenth century.

The room was filled with the soft clinking of cups as my parents sipped their coffee, fully engaged in our banter and reminiscence. ‘However’, I continued, attempting not to sound increasingly like an engineer, ‘the true hidden champions of the play equipment are the aluminium ball connectors that secure the ropes in place. They conceal the tensioning mechanism, which is easy to maintain but inaccessible to children and other users with curious hands. The Berlin-based company even offers a fifteen-year guarantee!’

My mother perked up, humour in her voice, ‘I wouldn’t mind having such a long guarantee on my washing machine – it seems to break down every three years!’ Meanwhile, my father, peering



NODE  
 (knot) node nodus  
 \*ned



nood

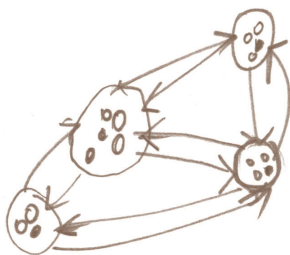
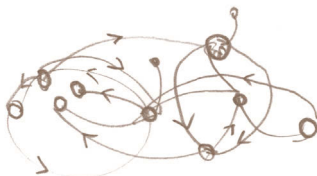
The English word ‘NODE’ comes from the Latin noun *nodus*, which refers to a knot or lump and is closely associated with the activity of tying and binding. It first entered the English language in the early fifteenth century and was initially used to describe an ulcer or hardening in tissue. However, by the seventeenth century, another meaning of the term emerged: the node’s characteristic as a point of intersection gained prominence, which led to its adoption in astronomy to describe planetary orbits. Based on this metaphorical understanding, the term spread to various fields. For example, it is now widely used in the context of networks, particularly in computer science and network technology, to describe the interface between networks in a system.

through his reading glasses perched on the tip of his nose, examined a photo closely before settling back in his chair, 'Very smart, very smart...'

'It's simply astounding to think that children worldwide are growing up playing on the exact same equipment', I softly added. 'It makes me wonder whether my kids noticed they were playing on the same equipment they had seen and played on in other countries – does it give them a sense of familiarity?' Amid our weekend camaraderie, I thought about how these playgrounds, with their unique structures, might shape children's spatial perceptions and memories. I couldn't escape the idea that their unmistakable geometric forms and vivid colours represented not only literal connections with ropes and balls but also connections among children from different continents. These are connections that might only come to light when they travel or reunite in adulthood, sharing their cherished childhood memories.

My mother, her humour rekindled, chimed in with a smile, 'Well, I may not know much about all this, but I like the design of different rope colours. I could change my clothes to match the next time we visit a playground with the grandchildren!' Our laughter filled the room as we set out to enjoy another cup of coffee and finally turned to the village gossip.

# FOR LIFE

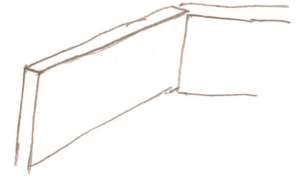


# A BORDER WALL

At the crossroads of the three-border region between Argentina, Paraguay, and Brazil, described as ‘the heart of Mercosur’, Argentina started building a wall in 2014 between the twin border towns of Posadas, Argentina, and Encarnación, Paraguay. The wall was planned and built under the pro-immigration administration of President Cristina Fernández de Kirchner, who passed an immigration law in 2004 that established migration as a human right. Completed in 2015, the border wall is five metres high and 1.3 kilometres long. It was built with the aim to facilitate the high volume of everyday border crossings and alleviate traffic through the border towns, as well as reorientate border flows and trade towards national highways. Initiated by an agency funded to foster cross-border initiatives within the Mercosur regional trading bloc, the initiative aimed explicitly at enhancing regional and binational integration.

Notwithstanding the political and practical motivations of the wall, its completion immediately caused protests from local residents and the wider Argentine and Paraguayan population. Locals criticised the impediment the wall caused for pedestrians crossing the border day-by-day. For many people beyond the local environment and who were mostly detached from the initial convivial motivations of its construction, the wall caused irritation and protest because of its symbolic separation of neighbouring populations; its meaning was directly associated with other border walls across the globe – along with their associations of exclusionary politics and violent realities. For example, a 2015 petition by a civil-society organisation read: ‘It seems that the idea of the North American, far-right Donald Trump, to build a wall between Mexico and the US, has been adopted here’. Elsewhere, a Twitter user lamented: ‘The Berlin Wall is [again] underway’.

In an attempt to reverse the unintended negative effects of the Posadas-Encarnación wall, fifty-five muralists from all over Latin America were hired in 2019 to transform it into a symbol of unity instead. In parallel, the group set out to break the Guinness World Record for the biggest surface covered with pencil drawings. However, building a border wall is perhaps inseparable from the meaning attached to its physicality. To envision one that does not separate and exclude, even if it is not meant to do so, might seem impossible. Thus, it remains to be seen if this mural will succeed at overriding the border wall as a negative symbol for all citizens.



wall

vallum

\*walso

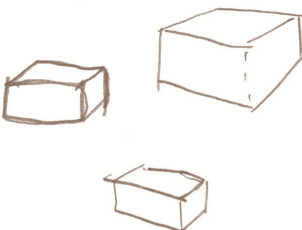
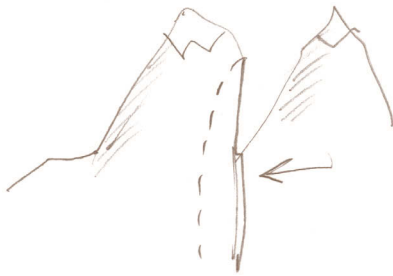
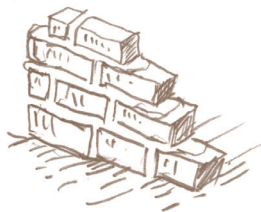
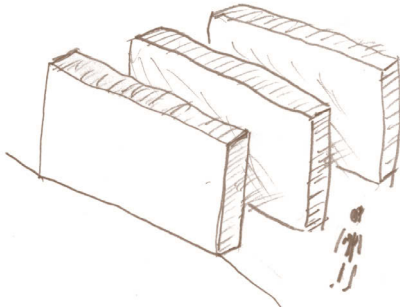
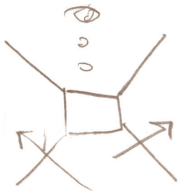
\*welH



wɔ:l

The English noun ‘WALL’ is most likely derived from the proto-Indo-European *wel*, which means ‘to turn’ or ‘to revolve’, with ‘derivatives referring to curved, enclosing objects’. The word ‘wall’ is also believed to reflect the ancient construction technique of building walls by placing bricks or stones to create a sturdy and defensive structure. However, in addition to artificially created structures, naturally occurring dividing elements, such as rocky shores or cliffs, were included under the term. Therefore, in all its meanings and forms, it attests to the human need for protection. In the English language, it was first recorded in the eighth century and has been in use ever since.

# FOR INTEGRATION?





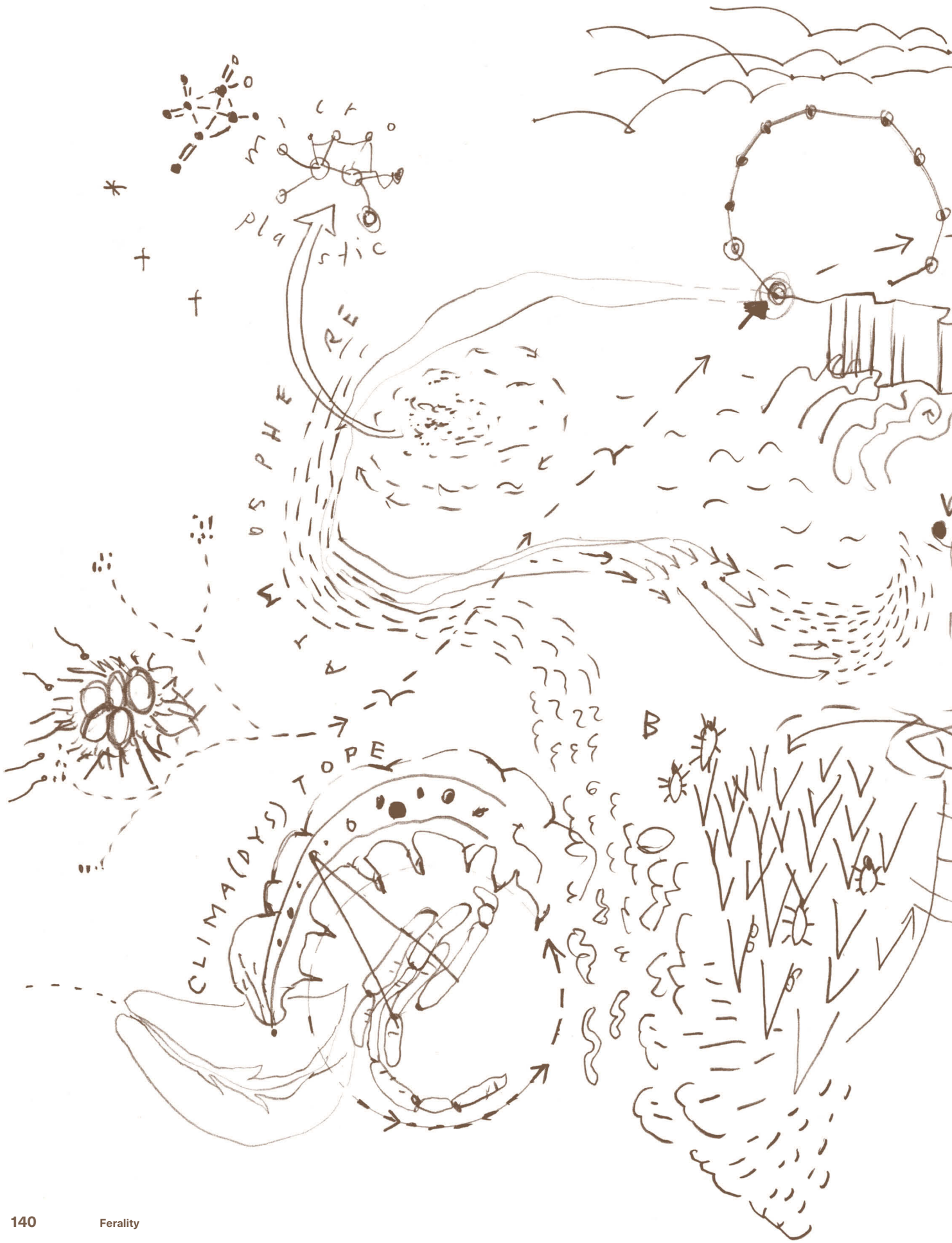
# FERAL ITY

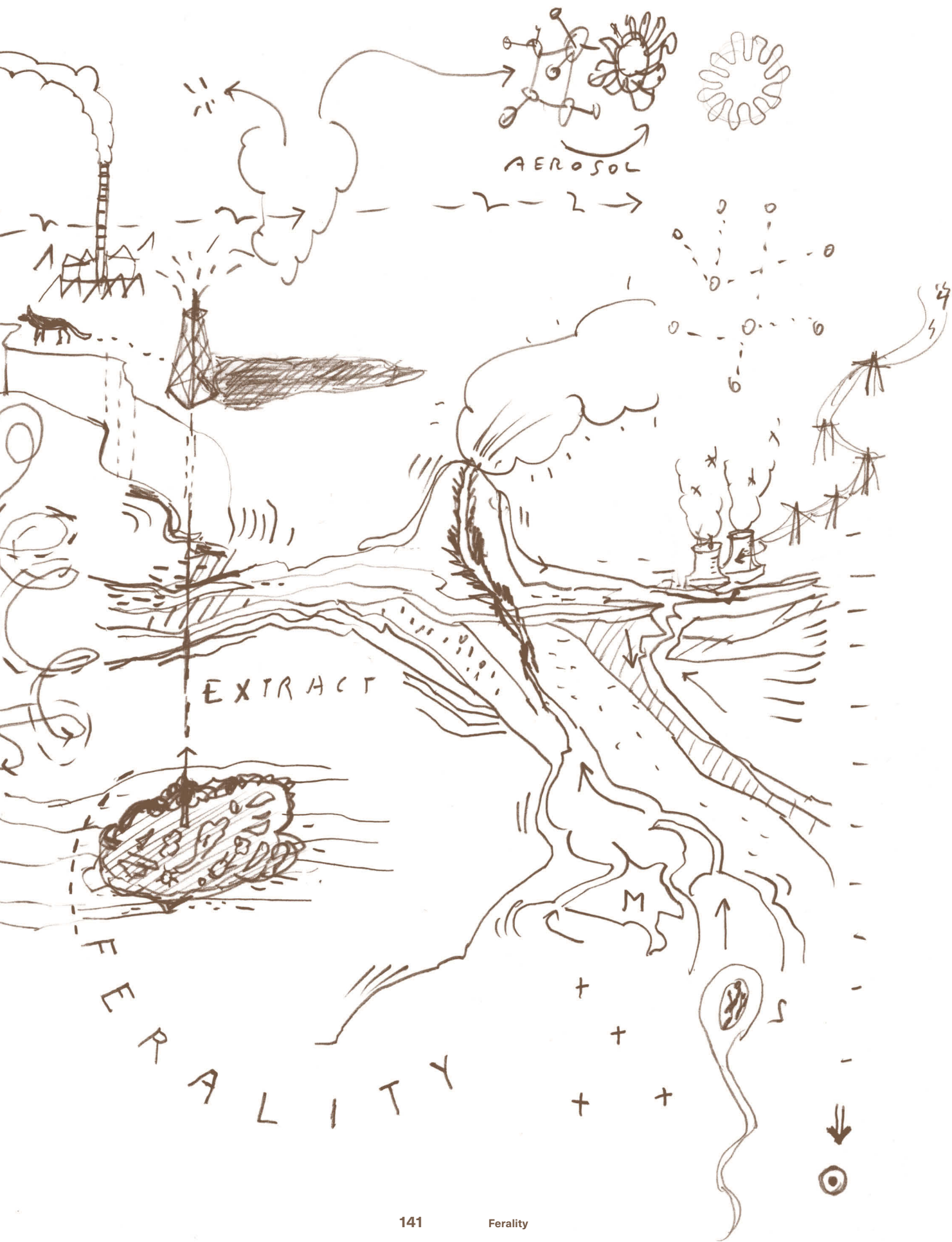


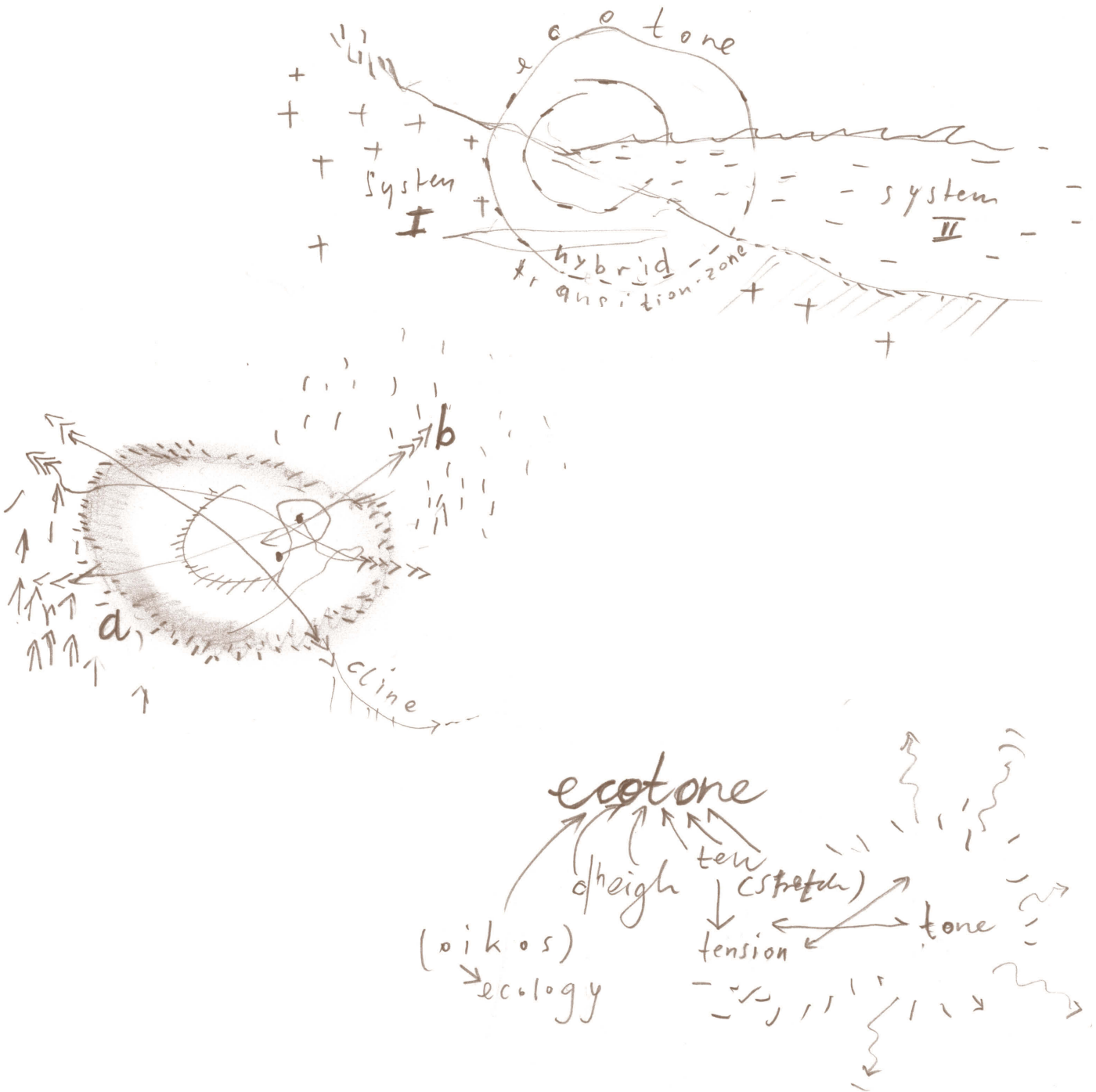
1 Anna Lowenhaupt Tsing, Jennifer Deger, Alder Keleman Saxena, and Feifei Zhou, eds., *Field Guide to the Patchy Anthropocene: The New Nature* (Stanford, CA: Stanford University Press, 2024), 10.

Ferality has become one of the key terms to describe the unpredictable and ungovernable agency of nonhuman entities and ecological processes in the current context of climate change and planetary transformation. The term has long been used to describe animals that have reverted to a wild state after being domesticated, such as feral cats and pigs. Today, everything we once envisioned as nature – ranging from the geophysical and biochemical to the oceanic and atmospheric – appears to have gone wild, not only becoming inseparable from our human world but also turning against it and destabilising it. Anthropologist Anna Tsing has provided an influential definition by describing ferality as ‘the state of non-human beings engaged with human projects, but not in the way the makers of those projects designed’.<sup>1</sup> We are particularly inspired by her observation that ferality is one of the most fundamental processes shaping the landscapes of the Anthropocene.

As the stories in this section reveal, feral entanglements and trajectories offer uncommon but powerful insights into spatial refiguration. They trace the journey of a bacterium through a global commodity chain, follow a solid sand particle suspended in the air as it crosses continents to a niche in the bronchus of a city dweller, and interrogate an indifferent fox wandering the outskirts of a city while questioning humans and their arbitrary locations. They also explore how nonhuman bodies are affected by their material environment; how trees are sensible to the ebbs and flows of both human and planetary activity, of technological and climate change; and how tree branches help dowsers to feel the electromagnetic attraction of minerals and metals, forces from the underground. Finally, they also envision future techno-ecologies, featuring dried lagoons, greenhouse towers, the pharmaceutical industry, and techno-feminist rebellions.







A fox, it seems, does not really care about the political, social, or spatial distinction between urbanity and rurality. Probably, and this would stand to reason, it simply and utterly doesn't care about it. At least that's what I think a fox thinks.

The fox is considered a so-called hemerophile. That is, it draws advantages from the human change of the cultural landscape or, at least, manages to adapt to it. There has been a lot of change to the cultural landscape recently: urbanisation, surface consumption, deforestation, industrialisation of agriculture, and whatnot.

# A FOX AND THE CITY

i:koo.toon

The etymology of 'ECOTONE' begins with the proto-Indo-European roots *d<sup>h</sup>eigh-*, meaning 'to build' or 'to form', and *ten-*, meaning 'to stretch' or 'to extend', which together convey the foundational concepts of creating a space and the dynamic interactions within it. These roots evolved into the Greek word *oikos*, meaning 'house' or 'environment', emphasising the idea of a dwelling that sustains life, and *tonos*, meaning 'tension' or 'tone', which reflects the balance and interactions between forces. The merging of *oikos* and *tonos* in the Greek term *ecotone* encapsulates the notion of a transitional zone where different ecological communities meet, highlighting the unique relationships and tensions that arise at these boundaries.

Therefore, I understand the motivation for foxes to move to cities. Indeed, the number of foxes in areas of human settlement has consequently risen in the last decades, and I now see them constantly. But if I think about it now more deeply, perhaps it is the distinction between urbanity and rurality that bothers the fox. To be honest, it would bother me as a fox, too, if I had to watch out all the time that some tin can with wheels didn't run me over. On the other hand, in the forest, a mama fox has to be alert, too, to protect baby foxes from eagle-owls. So where would it feel more comfortable? In the forest? There, there is danger from eagle-owls, beautiful old badgers burrow sleeping places, and the tedious search for food. In the city, food is easy because it is everywhere, and sleeping places are omnipresent, but the tin cans with wheels are constantly annoying. I have no idea what is better. Perhaps a concrete story of a fox helps to answer the question.

A colleague recently told me about one. It lived in the city of Berlin. Well, not really, but in Müggelheim. That's the last corner of Berlin, down on the right, by the water. That's where the fox lived, in an allotment garden area. In addition to typical small huts, there are some brown fields and ruins. It seemed the fox found them quite comfortable and has set up there. It also has enough to eat, with some of that partly being cat food. My colleague said that I shouldn't write about who provided the cat food. Anyways, the fox was observed very often and also along the same paths: ruins, cat food, ruins, water, ruins, cat food, ruins, hammock. Hammock? Apparently, the fox felt so comfortable and accepted by the person who fed it cat food that it joined her frequently, resting next to her hammock at night. At a safe distance, it watched over the person, so I was told. I think that's crazy: a fox watching over a person in a hammock at night! Maybe a fox, my colleague speculated, likes the attention. It is a very beautiful animal and arouses admiration – in contrast to a rat or similar.

Well, unfortunately, at some point, the fox died. I don't know if it cared about whether Müggelheim was an urban location (it's in the administrative city limits of Berlin) or a rural place (it admittedly looks like Brandenburg). Anyhow, as long as it lived, it seemed to have felt very comfortable there. Would it have felt more comfortable in the forest? We don't really know, but we do know that foxes actually live longer in urban areas than in rural ones – even though this fox presumably died very young. There, too, we don't know anything more precise about the actual circumstances. And, moreover, we are there again with the question, to which category does Müggelheim now actually count – urbanity or rurality? I am quite sure that the fox didn't care about that question.

Subproject A01 focuses on the personal experience of security and insecurity in relation to spatial processes such as globalisation, climate change, and deindustrialisation – what we call ‘ontological security’ (in reference to Ronald D. Laing and Anthony Giddens). In the first phase of the subproject, we studied the cities of Berlin, Singapore, and Vancouver as examples of large metropolitan areas. Our research revealed, for example, how the concept of ‘home’ is central to people’s sense of (in)security in volatile housing markets or that access to nature is crucial for many living in large cities. Our study suggests that an individually perceived confidence in one’s positioning in the world is strongly influenced by spatial imaginations, which we call ‘geographical imaginations’, in reference to the geographer David Harvey.

In the subproject’s current phase, we are shifting our focus away from large cities to rural areas to see if the spatial perceptions and experiences of (in)security differ from those in urban contexts. In Germany and Canada, we are concerned with prosperous and peripheralised rural regions. By prosperous, we mean economically stable regions with good infrastructure, often in spectacular landscapes. In contrast, peripheralised rural areas usually have poor infrastructure and are characterised by negative developments in their key economic indicators, such as demographic decline or unemployment. For our subproject, it is important that there is no definitive rural or urban space but, rather, very different regions, cities, and villages with different development paths and structural conditions. Since we are interested in subjective experiences in our subproject, we are, again, working with qualitative interviews, mappings, and observations on-site. Our results indicate that looking at the subjective experience of (in)security can ultimately contribute to our understanding of the increasing divisions in society.

**Principal investigator:**  
Ilse Helbrecht

**Team:**  
Carl-Jan Dihlmann  
Joanna Jurkiewicz (from 2024)  
Sophie Krone (2022–24)  
Franz Nguyen  
Lucas Pohl

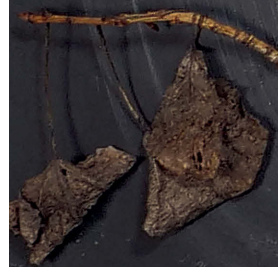
idyll  
(constructed)

IDENTITY  
(as movement)

CONTINENTAL

HEIM  
AT

AFRICA





H2



(IN)

SECURITY



HERITAGE 1

RBAN

3

°F	64	66	68	70	72	74	76	78	80	82	84
°C	18	19	20	21	22	23	24	25	26	27	28



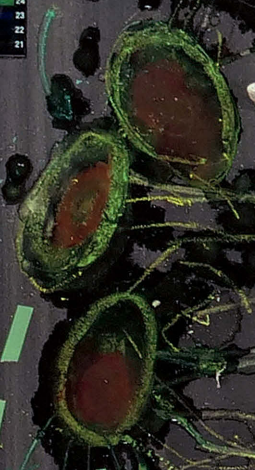
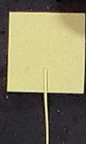
CONTAINER

FLOW

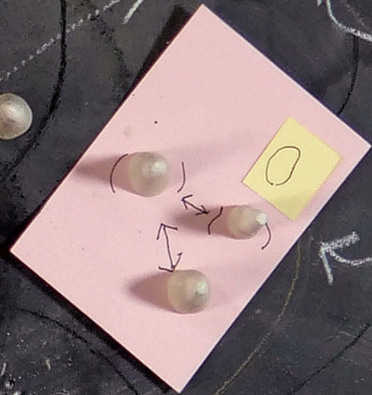
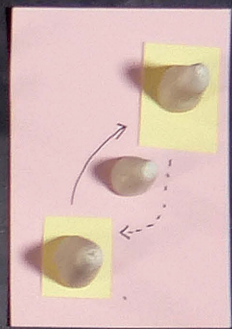
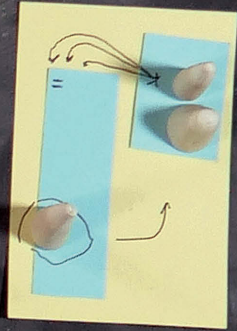
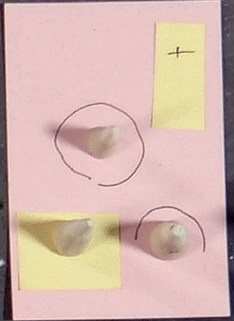
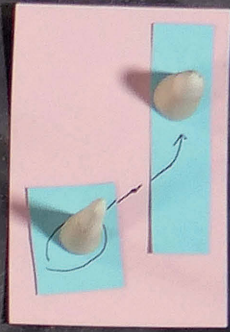
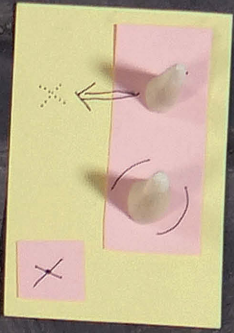
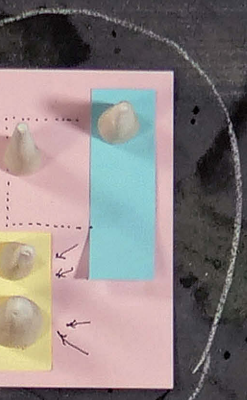
MOUNTAIN

HERE

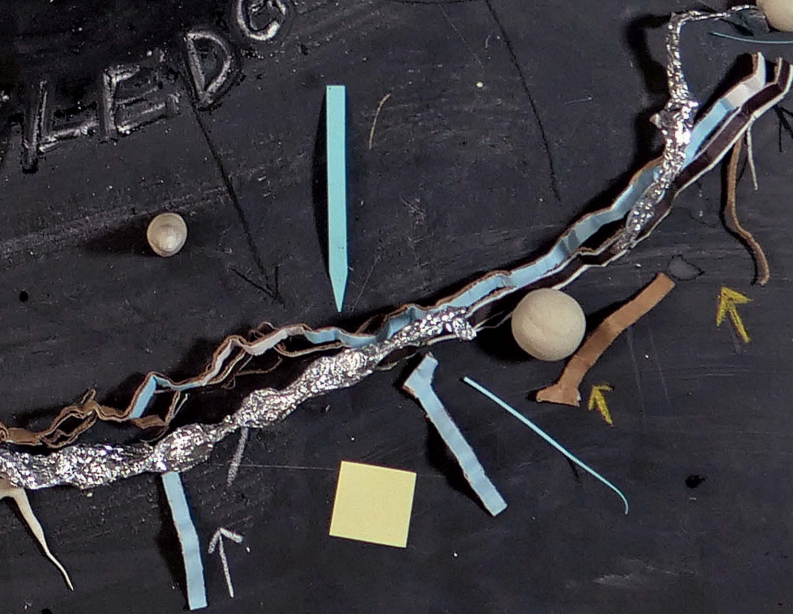
TIME



POLY CONTEXT



LED GEL



TECHNIQUES OF



SPATIAL KNOWLEDGE LOCAL PRESERVATION

WHY



In subproject A03, we investigate how spatial knowledge influences circulation and the order of goods from both an economic-sociological and economic-geographical perspective, for example, in commodity chains for fresh produce such as avocados, apples, bananas, eggplants, and tomatoes. Commodity chains are translocally organised in vertical and horizontal chains of interdependence that can be subdivided into three subcontexts: production, sales, and consumption. Due to their complexity, commodity chains are difficult to analyse as a whole. Therefore, we have focused on the largest research gap: the role of spatial knowledge in retailer-consumer interactions in urban space. We first explored this in Berlin between 2018 and 2020. From 2020, we contrasted Berlin with Nairobi and Singapore, two cities of the Global South. We showed that most market actors know very little about the commodity chain. Due to this lack of knowledge, social institutions and objectified infrastructures play a key role in maintaining the circulation of goods along the chains. These institutions and infrastructure systems are also important for linking the translocal chain to urban space. As the cities differ very much from each other, the resulting spatial arrangement of urban food markets also differs.

**Principal investigators:**

**Nina Baur  
Elmar Kulke**

**Team:**

**Linda Hering  
Lara Espeter  
Elettra Griesi  
Alexander Kohrs**

# THE LIFE AND DEATH OF

# BACILLUS THURINGIENSIS



I am *Bacillus thuringiensis*, an unremarkable bacterium normally found in the soil. My existence had never had a defined scientific purpose until recently, when researchers discovered my metabolites could be used as biological crop protection against predators such as mosquito larvae. They then created varieties of genetically modified corn that carried parts of my organism in their genome, creating a form of natural protection. Since then, I have multiplied and been carried in thousands of ears of corn throughout the fields of Kenya.

Recently, I lived on a corn ear on a farm on Mount Kenya. There, a farmer and his family worked hard to cultivate their fields. In Kenya, life is rather exhausting because, with climate change,



temperatures have become hotter during the dry seasons, and the precipitation is sometimes unbearable during the rainy seasons. However, after eighty days in the sun, we were harvested and placed with other ears in a special polypropylene bag that protected us from dirt and moisture. This is very important since I don't like light, humidity, and high temperatures at all.

We then travelled on a pickup truck driven by the farmer's son to the corn factory, which took about an hour. Once there, every ear was peeled, cleaned, dried, milled, and ground, and I then found myself on a soft particle of flour. Finally, we were sieved and packed in a two-kilogram paper bag. I noticed that some bags were torn open by people in white coats and taken to a lab. One of them was talking – something about quality control. After, I was loaded onto a pallet in my soft packaging with five hundred other cornmeal bags and stacked in rows of twenty-five each. We stood around, stacked like this in the warehouse, for two to three days until a forklift came and loaded us onto a truck. From there, we went to Nairobi, the capital of Kenya. In the city, the traffic increased in congestion, increasingly stressing the truck driver. We stopped at every supermarket, from countless Naivas stores to a few shabby Tuskys and also to the upper-class Carrefour stores.

My corn flour pallet was finally unloaded at a Naivas branch in the Buru Buru neighbourhood. I spent the first night in the warehouse. Early in the morning, an employee put me on a supermarket shelf. To my surprise, the bag of cornmeal in which I had made myself comfortable was not bought on its own but, instead, with fifteen other bags by a middle-aged woman, who immediately placed us all into a large canvas bag along with flour, black tea, and washing powder. Together, we weighed enough to make it hard for her to carry. Fortunately, she had a friend with a motorcycle to help, and we drove to Kasarani, a district east of Nairobi.

When I got there, I found my way on to the shelf in another store, this time kiosk-like, among a colourful mix of products, ranging from white eggs and fresh glowing red tomatoes to instant coffee and spice cubes, as well as a range of non-perishable goods. Most were in small packages stocked in small quantities.

After some time spent in the corner of the store shelf, over-seeing the daily hustle and bustle, a mother came in with her children. She bought my package of cornmeal and took me home. There, the package was immediately opened and processed in boiling water. As I dissolved, the journey I have just now recounted swept by me as a sort of prayer no different for myself than for the countless other bacteria also travelling in parallel at this and every moment.



### træv.əl

The word 'TRAVEL' developed as a variant of the Middle English *travail*, which had a broad semantic range involving labour, toil, burden, suffering, trouble, distress, and the labour of childbirth. *Travail* derives from the Old French *travailler*, meaning 'to toil, labour', and originally, 'to trouble, torture, torment'. This, in turn, traces back to vulgar Latin *tripaliare*, which means 'to torture with a tripalium'. The late Latin term *tripalium* refers to a torture device, likely derived from the Latin *tripalis*, literally 'three stakes', with *tri-* meaning 'three' and *palus* meaning 'stake'. In essence, travel is torture – a sentiment some still feel today. The word began to take on the sense of 'to journey' around the late fourteenth century. In the fifteenth century, 'travell' meant 'make a journey, go from place to place'. This shift in meaning likely arose from the idea of embarking on a difficult journey, which makes sense considering the challenging travel conditions in early modern Europe.

Imagine yourself standing high over a park, crawling the blue sky with your green hairs, like Erich Kästner's tree, in the extreme heat of July, the month of no rainfall. Your leaves, touching others nearby, spread out over the intersection of Stuttgart's Schlossplatz and Königstraße in one of the lowest points and hottest parts of the city's valley basin, an area known as der Kessel.

Tuesday, 12 July 2022. You learned that this month, the sun had shone for around two-thirds of a day. You have also known, for a while now, that you live at der Kessel's bottom, where strong winds rarely blow.

Wednesday, 13 July 2022. At 4:37 a.m., the sun appeared. A gradation of dark blue to Princeton orange painted the canvas of clouds. You felt a dense air choke you in the morning. A German meteorologist cautioned people from jogging between 6 and 9 a.m. because the air's nitrogen dioxide crossed the 'limit of a function'.

Thursday, 14 July 2022. Today was hot. The dense air in the morning choked you more than yesterday, maybe the most this month. A German meteorologist cautioned residents that, from 8 to 10 a.m., the concentration of nitrogen dioxide would be one-and-a-half-times higher than the maximum limit. 8:14 p.m. As the sun slowly receded from the horizon, you could hear music in the park, and people lounged on the green grass of the square, enjoying the generous wind from the western valley. In the twilight, a man read a local newspaper. In it, a weather forecaster reminded everyone that, today, for almost ten hours, the temperature was predicted to be higher than thirty degrees Celsius.

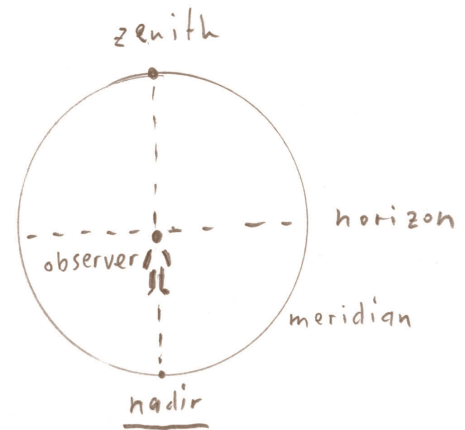
Friday, 15 July 2022. Children played in a fountain around you. It was another hot day, but not as hot as yesterday.

Saturday, 16 July 2022. You swore you could feel a slight breeze at 3:02 p.m. blowing against your trunk and through the other trees. Humans walked under the shadows of buildings, hiding from the scorching sun.

Sunday, 17 July 2022. Today was only slightly cooler. As the Saturday nightlife ebbed, rolling into Sunday, you could feel the temperature drop slightly past midnight. The sun rose at 5:38 a.m. and began to warm the air. A smattering of people passed by on the street. You enjoyed the quietness that normally marks the beginning of the day. You felt the sun's energy increasing until midday. At 1:29 p.m., the brightest and hottest point of the day, you noticed the least amount of people passing by, and those who did always stopped to take a breath under your shadow. The day remained warm until sunset at 9:20 p.m.

Monday, 18 July 2022. At around 6:00 p.m., a crowd gathered on the square's concrete ground around you, carrying Stuttgart 21 banners and posters. Among them was a dog lying on the ground, swooning and panting heavily. And Monday is almost always the hottest day of the week.

# MONDAY IS



## neɪ.dɪər

The word 'NADIR' entered the English language in the fourteenth century, first used in celestial navigation and astronomy to designate the lowest point in the celestial sphere, directly below an observer. It stems from the Arabic term *nazir as-samt*, which is composed of *nazir* (counterpart, corresponding to) and *as-samt* (road, path). It means the opposite of 'zenith', that is, the highest point in the celestial sphere directly above the observer. Whereas the zenith is associated with the sky and symbolises glory, power, hope and renewal, the nadir came to designate the earth as a place of darkness and despair. It was in the late eighteenth century that nadir began to be used generally as a term for the lowest point in a trajectory or situation and figuratively as the point of greatest adversity in a person's fortune or circumstances.

# ALMOST ALWAYS

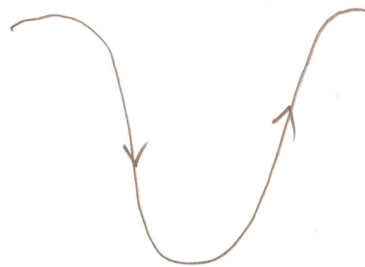
# THE HOTTEST DAY OF THE WEEK



# THE MAGIC OF THE DOWSING



*wellege  
wellege*



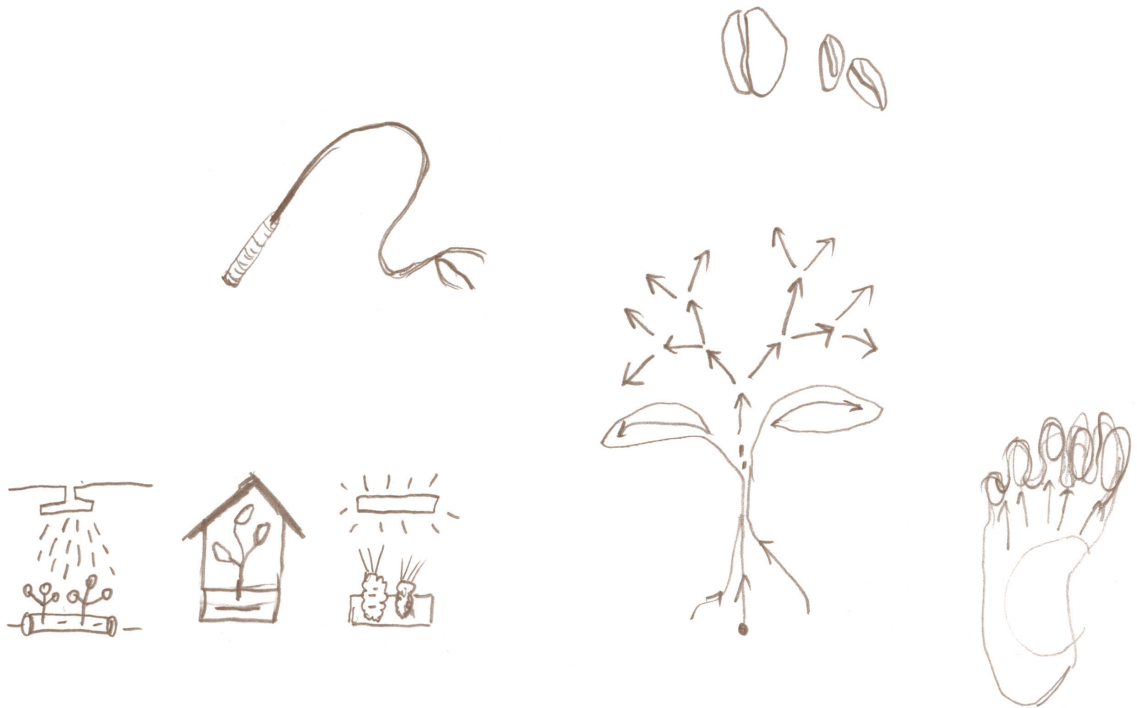
*wave*

*wave  
wave*





## REAL



## SITOPIA

A drop of water brushes my cheek and pulls me back from my day-dream to reality. It's humid, and despite the fans that create gusts of wind with a steady hum, beads of sweat run down my arms and neck. I've been working here for eleven weeks on the roof of a twenty-story climate-positive high-rise tower planted vertically and horizontally with greenery. This is meant to cool down the city's heat and contribute to the food supply. One of my tasks is to roam through the rows of mini trees bearing apples, oranges, and avocados, picking up the damaged drones that fight pests. When I'm done with that, the water supply to the hydroponic towers needs to be checked. Various types of cabbage, herbs, and berry plants grow here, and the metre-long plants across five floors are all connected to the pump of the housing trestle, which helps to power the ventilation of the surrounding apartments. Without this, the daily heat would kill us.

Every day, I slave away up here, completely covered in a plastic suit. I was chosen for one of these coveted jobs by lottery, which made my friends jealous. Lucky me, they said. Truthfully, I'm no longer sure whether this is a blessing or a curse. It's all a tight

plantation  
plantare  
\*pel  
plaq

plæn'teɪʃən

The Latin verb *plantare*, with its two meanings 'to plant' and 'to settle', already hints at the settler colonial history of plantations. *Plantare* is derived from the proto-Indo-European root *pel-*, which means 'to strike' or 'to push'. The Latin word *plantatio* was then formed from the verb *plantare* with the suffix *-tio*, which indicates an action or process. The word *plantation* was adopted by Old French in the twelfth century as *plantacion*, and by the fourteenth century, it had entered Middle English as *plantation*. It referred to any area of land that was cleared solely for the purpose of cultivating crops. The term 'PLANTATION' took on a more specific meaning with European colonial expansion, especially towards tropical regions. Plantations became large-scale agricultural enterprises focused on producing single cash crops, such as sugar, tobacco, cotton, or coffee. This shift towards monoculture was driven by the demand for these crops in European markets and often relied on enslaved labour. Plantations were thus the backbone of the transatlantic slave trade.

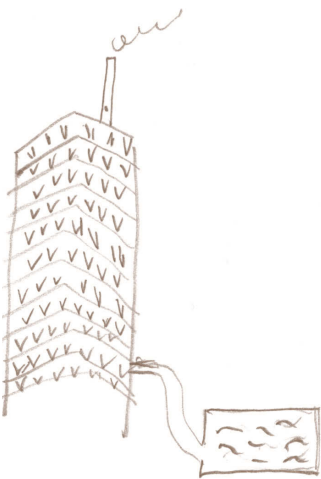
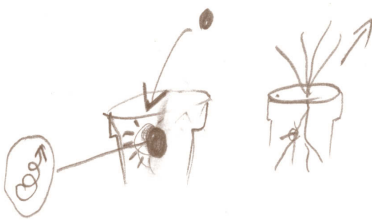
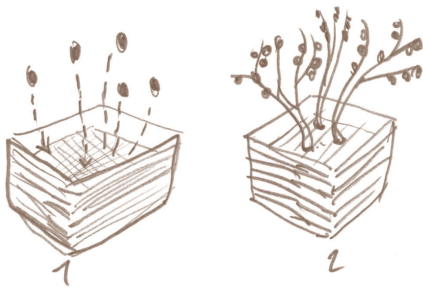
operation, but despite the miracle of hydroponic towers, the fruits and vegetables produced here still taste bland.

Tonight, though, I am at a special event at a hidden restaurant, where only those with the right finances are served. More precisely, I've been selected to host a delegation of greenhouse engineers from the Northlands touring the city to discuss the potential for new indoor farming projects. Here, in our city, locally produced food is prized, a luxury product, and because imported food symbolises the city's dependence on other countries – a no-go – greenhouse engineers occupy a position akin to the celebrities of the past.

Arriving at the frosted glass door, the delegation turns in all their electronics at the coat-check machine, passing through a full body scanner and into the chic and minimal glass hall. Greeting them, my guide duties take me through exhibits showcasing our remarkable technological achievements. I explain how gender equality and individual freedoms are celebrated. However, not everything is great here – for example, only those with high status get to choose their jobs, and the rest have to test their luck in the state lottery system.

One of the engineers is funny, and we chat about how many different kinds of fruit we can possibly fit into our mouths and how much that would be worth. Our banter begins to take a serious turn, and they ask about where and *how* I live. I'm unsure why they want to know, but the connection feels sincere. During a brief break in the tour, I see a chance to speak privately with the delegation's leader, Mr Van Di Meer, cautiously sharing my reservations about certain aspects of the state and testing his reaction. To my surprise, he shows genuine interest in my ideas – rather than suspicious, he seems impressed. My initial fear – that they are totally blinded by the technological achievements and do not see the hidden problems – begins to wane as I realise these engineers might be potential allies for my secret cause.

As I continue guiding the delegation through our utopian city, my focus shifts further: an alliance with the Northlands engineers might be a small but significant step towards a shared goal of challenging the existing order, I think to myself. However, it is only as the evening draws to a close, bidding farewell to the Northlands engineers, that I quickly decide to reveal the secret organisation I am part of. Together with a cabal of similar minds, we are fighting for the right to grow food in reinvented community gardens, I whisper, highly illegal in this city, using old-fashioned seeds that may not be as productive but that bring back a multiverse of flavours from days gone by. Hydroponic technology is an important part of growing food in times of diminishing freshwater supplies and rising temperatures, and my job in the massive modern towers gives me a perfect position to learn and act on our goals. Under the cover of the cloakroom, I detect subtle nods of understanding in return. By the end of our evening, my initial apprehensions have given way to hope, and it seems I have found perfect allies in an unexpected place. The seeds of change are being sown, and together, we can work towards a brighter, better-tasting future for all.



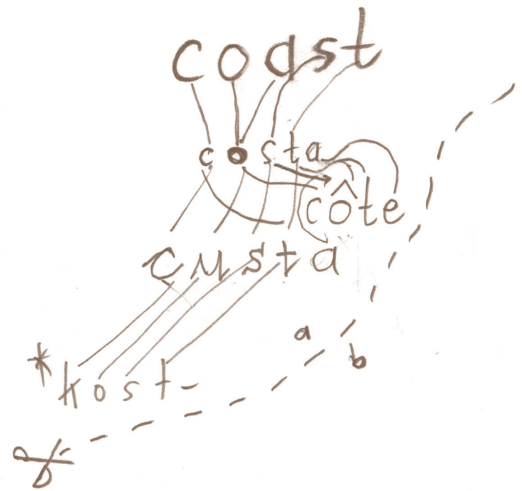
# YAMBITION

For the first decades of this century, Lagos had been a favourite spot on the map of foreign investment, which was poured into the oil economy in unmeasurable amounts. That is, until the reserves were exhausted. By 2040, the Lagos Lagoon, along with much as the entire Nigerian coast, was so completely pumped out of oil that it looked as if the earth's round surface had deflated. During the bonanza, skyscrapers had drawn sharp lines across the Lagos skyline, built over increasing land extensions reclaimed from the ocean by filling it with the ocean's bottom.

Around the time the oil fields were depleted, tremendous amounts of capital were also evacuated, which showed how the only value to Nigeria that foreigners recognised was the value of its extractable underground resources. Investors who had financed these operations in Lagos left, and it became a moment for Nigerians to finally reclaim their values and determine them on their own terms.

In the city, vacant skyscrapers were turned into huge squats in response to the affordable housing shortage that had been, for far too long, exacerbated by foreign presence and influence. And yet again, ocean water began to encroach upon the reclaimed land. Rather than set up monumental concrete barriers that ridiculously try to counteract the force of the Atlantic, this time, Lagotians embraced the cycle of nature. They did not divert the water streams creeping through neighbourhoods, fragmenting the decades-long urban efforts in constructing a city that was, for a while, the pearl of commerce on the Atlantic coast and of the transatlantic slave trade before that. Rather, they started navigating them. As oil-derived fuel was not available anymore – they had sold it all, and anyway, water was now everywhere – the people went back to using small boats for their daily commute to school, to the store, and to the workshops where many of them worked.

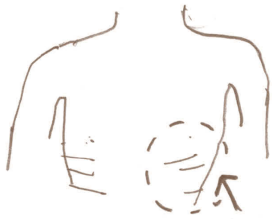
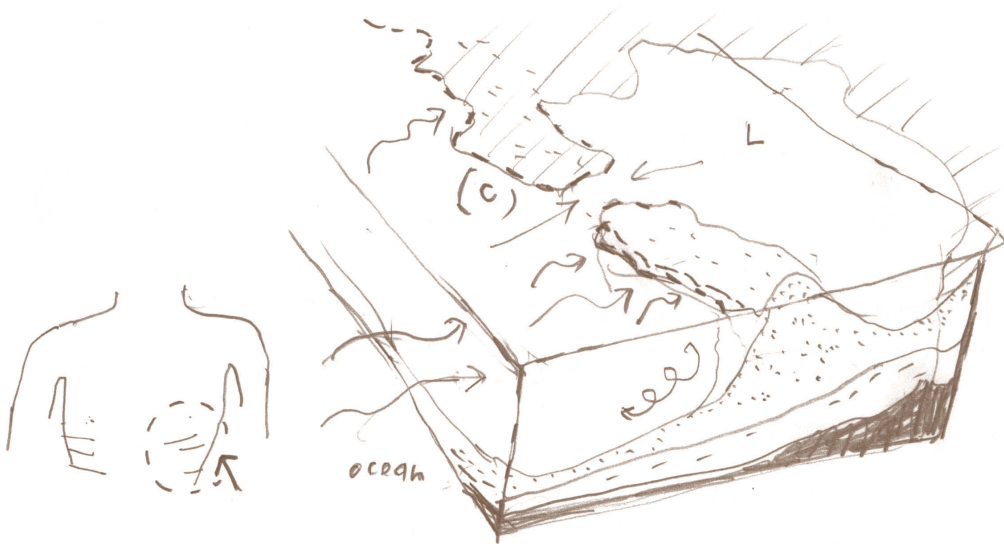
It was this Lagos that the biologist from Europe, sent by a cosmetics and pharmaceutical company, beheld before him and that he was attempting to describe in his logbook – in 2065. He had been sent there to scout for a yam specimen whose suitability for superfood products and eco-cosmesis had only just been tested. If assessed as viable, he was to set up the entire production and distribution chain with the Lagotians – that is, if they would agree to take part in the supply chain. But he had already come to understand that compromise would be hard to reach, if it were even ever to be considered, as for what he knew of the Lagotians today is that they would never again let the Europeans dictate what was valuable on their land.



## koost

The term 'COAST' comes from the Old French *coste*, which means 'side' or 'flank', and was derived from the Latin word *costa*, which referred to the sides or ribs of the human body. It was also used metaphorically to describe the sides or edges of objects. This sense of edges or sides evolved to describe the geographical feature where land meets the sea (the French *côte* appeared in the twelfth century) but also the side of a hill (the Spanish *cuesta*, meaning slope, appeared in the late Middle Ages, also from Latin *cūsta*). Both *costa* and *cūsta* can be traced back to the proto-Indo-European root *kost-*, which means 'to cut' or 'to divide'.

2065



## ARCHITECTURES OF ASYLUM: CIRCULATION OF GOVERNANCE APPROACHES, PLANNING KNOWLEDGE, DESIGN PRACTICES, AND MATERIALITIES

Subproject C08 investigates the concrete material-spatial manifestations that emerge as architectural or infrastructural products from spatial conflicts and that physically shape places of refuge as critical zones. During the first phase, this subproject investigated the spaces of refugee camps and how their inhabitants appropriate them through spatial practices. The research revealed that these processes were conflictual negotiations in which different bodies of knowledge were hybridised. Our findings from the first phase pointed to the need to broaden the scope and understand refugees as contributing to the production of urban places, particularly since the paths of refugees vary greatly and camps are not a part of the displacement journey of many refugees, who choose to settle in other settings, especially urban areas.

In the second phase, we examine the planning and materialisation of physical interventions that produce places of refuge in different urban spaces. Further, we trace the global, national, and local actors involved in producing regulatory frameworks, maintaining spatial orders, and consolidating existing technopolitical regimes. Our study focuses on three case studies: 1) Berlin: This case study explores various forms of state-provided accommodations, expanding the analysis beyond traditional refugee camps and emergency shelters. It aims to conceptualise a more comprehensive typology of these spaces. 2) Amman: This case study investigates how translocal networks influence local planning policies and governance strategies for managing migration. It places particular emphasis on the planning and execution of physical interventions in diverse urban spaces and the involvement of all stakeholders in these processes. 3) Lagos: This case study examines the processes through which internally displaced persons (IDPs) from the northeast of the country establish spaces in urban areas that are both difficult to access and fraught with socio-ethnic tensions. This involves mapping their trajectories and strategies for adapting to and appropriating these environments.

**Principal investigator:**  
Philipp Misselwitz

**Team:**  
Francesca Ceola  
Qusay Amer  
Rebecca Enobong Roberts  
Maureen Abi-Ghanem

UNHCR



DP 5

NGO's

HOME

MARKING



B

GOVERNANCE





RELIGION

CONFLICT

ETHNICITY

ASK

2018



WIND

milieu

SUB  
TERRESTRIAL

RESILIENCE



A

B

H

FORM

TRANS

SUB CUTANEOUS

# THE URBAN MICROCLIMATE REGIME: THE CONSTITUTION OF SPACES AND INFRASTRUCTURES OF HEAT

C05

Subproject C05 examines how climate adaptation strategies refigure urban spaces. Starting from Stuttgart, Germany, the project reconstructs the historical invention of the 'fresh air corridor' and the 'climatope' as two climatological spatial figures at the core of urban conflicts, notably in protests, litigations, and scientific controversies. Next, by focusing on the city of Fukuoka, Japan, the project follows the equivocal translocalisation of such spatial figures and the prevalence of bodily techniques of urban ventilation. The Japanese case study further contributes to the understanding of urban refiguration, focusing on the infrastructuring and management of shading techniques through greenery and their implications for the habitability of urban spaces. The project thus examines emerging regimes of atmospheric urbanism primarily concerned with the circulation of airflows and heat radiation.

**Principal investigator:**  
**Ignacio Fariás**

**Team:**  
**Indrawan Prabaharyaka**  
**Margherita Tess**

You are part of something bigger called Kōsa (黄砂), which means yellow sand, an aggregate of aerosols made of liquid and solid particles suspended in air, visible and invisible at the same time. Your life journey started millions of years ago, probably somewhere in the Gobi Desert. You emerged as sand in this splendid and tranquil desert ecosystem, born and ever-travelling, thanks to the winds.

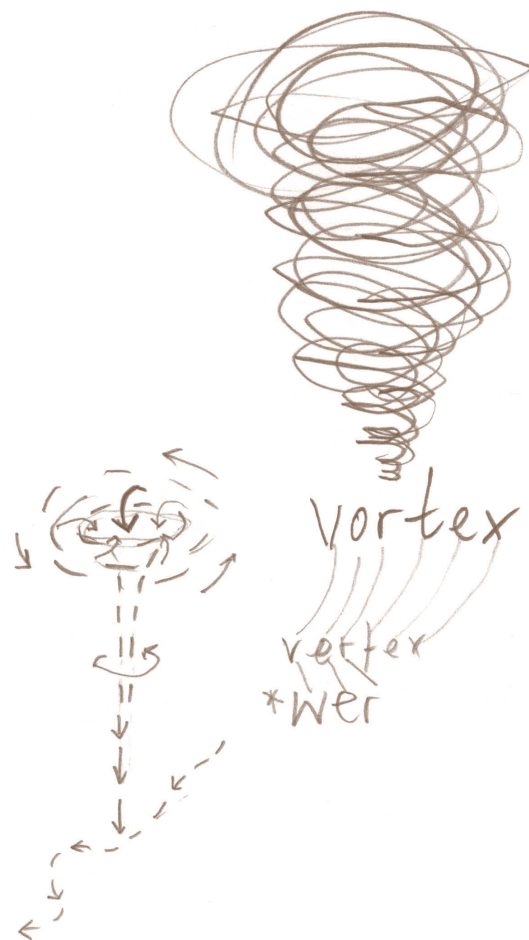
It is 2019, and the journey you embark on now starts in the desert. Heavy deforestation due to extensive logging in northern China allows you first to travel further south than expected. Over Shaanxi province, because of soil erosion due to overgrazing, you move speedily. Across China, your character, materiality, and properties change, but you are still very light, and you stay suspended in the air.

Throughout your journey, you mix with, reassemble, and disassemble everything you encounter. Across burning coal, you aggregate with mercury, cadmium, and other heavy metals. You pass countryside, fields, stock farms, and cities, becoming one with pesticides, antibiotics, plastic, and hormone-mimicking phthalates. You meet and ferry bacteria and viruses, too. You are constantly transforming.

When you reach Korea, it is spring. You cross a series of weather radars, which alarm many meteorologists. The Korean government sends a warning to the whole population. Everybody is prohibited from outdoor activities. Parts of you get caught in air purifiers at the entrance of Korean homes. At the country's border, you begin your journey over the ocean.

Arriving at the Japanese coast, you encounter Fukuoka, in northern Kyushu. There, a fisherman looks at the sea and says, 'It's China's fault that I can't see the horizon today'. Some of your components are infinitely small. Scientists call them fine particulate matter (PM). Your concentration of ultra-fine dust now exceeds  $800 \mu\text{m}/\text{m}^3$ . Some of your components reach the lungs of a Japanese woman living in the area, and you travel deep into her alveoli. She starts coughing. She blinks many times because some of your sandy parts get stuck in her eyes. Your ultrafine components are so thin they travel through her blood and reach other organs in her body.

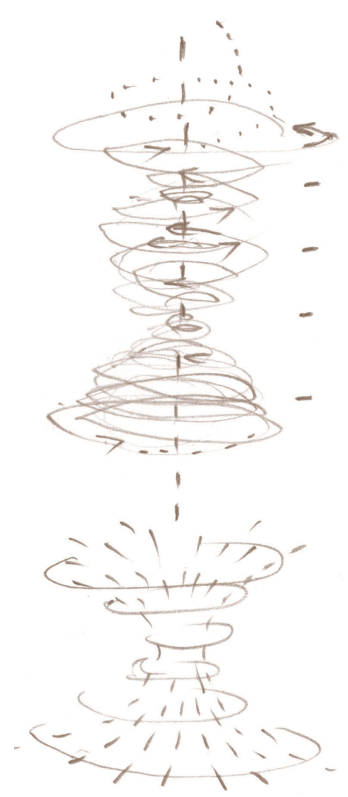
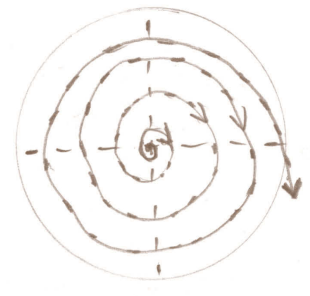
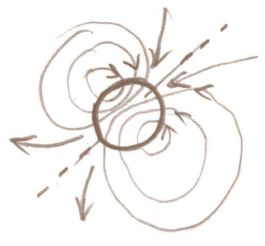
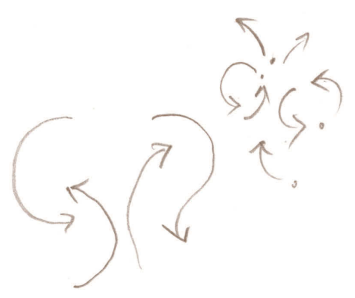
You have become one with something else again, this time, in an undesirable intimacy with a human body living in Fukuoka. You exist and resonate in the time of a breath and in the deep time of sand formations. You exist and move in the microscopic space of a bronchus and across thousands of kilometres.

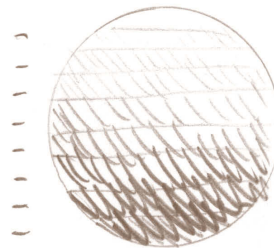
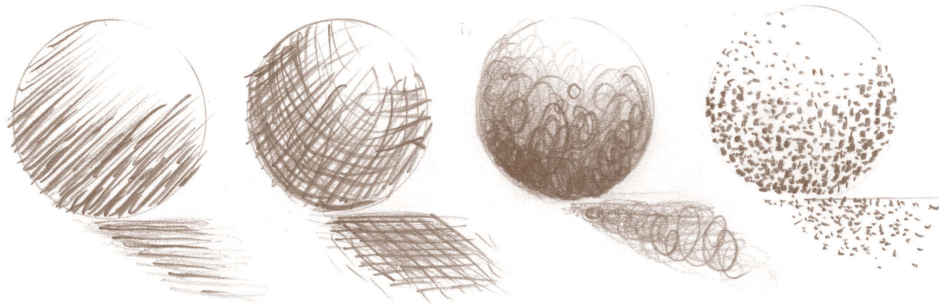
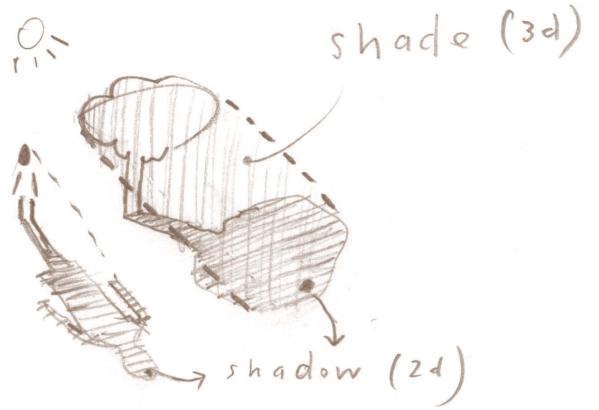


#### ˈvɔːr.tɛks

The term 'VORTEX' has developed from the Latin 'vertex', which originally meant the highest point of something, such as the crown of the head or the summit of a mountain. In geometry, a vertex is the point where two or more lines or curves cross. Vortex was used in the seventeenth century to designate rotating spiral movements, such as those frequently observed on the surface of water or in the air. It became prominent in astrophysics theories by René Descartes and others. The term probably stems from the proto-Indo-European root *wer-*, which means to turn or bend. This root can be found in several English words involving such movements, such as vertigo, controversy, and worm. Originally, vortex was used exclusively to describe a swirling motion of liquids, gasses, and other substances, while today, it is also used metaphorically to express other chaotic and swirling states.

# ARE KŌSA





s h a d e  
 / \ / \  
 \* s e a d e  
 \* s k a d o w  
 s k e w \* s k o t o

# MEMOIRS OF

I have seen many children grow up. As soon as they can reach my lower branches, they come, summer after summer. They return, gradually less often, but then others come. That's the way it's always been. There's nothing I remember as clearly as the very first time hands and feet ever climbed me. At first, it felt unusual, but I later learned a comfort and caress in their weight, spread across my branches. And those loud laughs, full of confidence – that came to fill me, making my leaves tremble and setting off a pleasant buzzing inside of me.

# AN APPLE TREE



ʃæde

The word 'SHADE' refers to a three-dimensional space that offers refuge from sunlight and can be distinguished from 'shadow', which denotes a two-dimensional figure cast by an object blocking light. These words derive from the Old English term *scead*, meaning both partial darkness, as well as shelter and protection, and *sceadu*, meaning shadow and shady place. Both come from the proto-Germanic root *skadwō* and, further back, from the proto-Indo-European roots *skew-*, meaning 'to cover' or 'to conceal', and *skoto-*, meaning darkness. It is worth noting that 'shade' shares the same proto-Indo-European roots with the German word *Schade*, which means 'harm' or 'damage'. Shade is used figuratively to refer to darker, more ambiguous realms of existence, such as the 'shades' of the deceased or the hidden dangers lurking in the shadows of the metropolis.

I love spring. The birds start singing, and suddenly, the children are back. They come every day. They stick their noses into my flowers. Mmm. Sometimes, one sneezes and then laughs out loud. And my branches invite them in. They climb up, wait for birds to join, and watch everything that crawls. They cry out excitedly when they touch a caterpillar. Some dare to go to the very top. They proudly shout to each other what they can see from above. And again and again, they jump down. From greater and greater heights. They seem to enjoy it. Sometimes, it doesn't go so well. Sometimes, one falls down accidentally. Tears. Then, they keep their distance for a short while. But I know they will come back. They say here they are free. They say here they can simply be. Maybe this is why I am known by children all over the world – even in lands where we apple trees don't grow. I am ubiquitous in children's books. Songs and poems entwine me. I am deeply rooted in the imaginations of children. I am a symbol of life and love and knowledge.

I love the summer. The children sit down on my roots, and I protect them from the hot midday sun. Sometimes, they are loud, they call, they run and dance around me. Sometimes, they are quiet, hiding from the grown-ups between my leaves, telling me their secrets. Sometimes, a kiss. Excited. They want to capture the moment. They scratch me until my resin spills. It can also hurt.

I love autumn. The children scramble for my most beautiful apples, admiring their redness, licking their lips and carrying their treasures home in their arms. Then I lose my leaves. Wistfulness. Everything passes away. But the children frolic blissfully through my foliage – I am comforted. It is bittersweet.

Winter is lonely. The children come very rarely. They pass by briskly. I hear their muffled voices and long for them. A warm blanket of snow brings the children back. I hear their laughter when they indulge in the snow. I have them all around me. Their laughter reverberates inside me, even under the blanket of snow.

But something is changing. I don't know what is happening. For quite a few summers now, fewer children have come. They often pass me by without taking much notice. Their heads are lowered, and they frequently touch a shimmering surface, gazing into other worlds. I miss them. They climb my branches with their bare feet less. Time now drags, and little happens. What absorbs them? What captivates them? It puzzles me. I'd like to know and understand. When they do come to pick an apple or two or enjoy the shade for a bit, my warmth returns. If I'm lucky, they'll still sit in my branches. But often now, there are flashes of light around them and strange noises and bleeps. I try to enjoy our fleeting encounters as much as possible, but I sense the times are changing, and I fear being alone. I'd like to hear their laughter more often – the cause of this buzzing inside of me.



FIGUR

ING

OUT

SPACES



## FIGURING OUT SPACES: A MULTIMODAL APPROACH

- 1 Nikolaus Gansterer, *Drawing a Hypothesis: Figures of Thought* (Vienna/New York: Springer, 2013).
- 2 Matt Ratto, 'Critical Making: Conceptual and Material Studies in Technology and Social Life', *The Information Society* 27, no. 4, 2011, 252–60, <https://dx.doi.org/10.1080/01972243.2011.583819>; Anthony Dunne and Fiona Raby, *Speculative Everything: Design, Fiction, and Social Dreaming* (Cambridge, MA: MIT Press, 2013).

Theorising, or 'building theories', in a large, interdisciplinary and socially diverse research consortium requires inventive and playful methods to get conversations started. This was the premise with which we began our one-year Collaborative Research Center 1265 (CRC) Theory Tandem programme. From April 2022 to March 2023, we were given the time, space, and resources to work towards a theoretical contribution to the research agenda of the CRC 'Re-Figuration of Spaces' based at Technische Universität Berlin. When preparing this collaboration and thinking about where to take it, in the fall of 2021 we came across the book *Drawing a Hypothesis* by Viennese artist Nikolaus Gansterer.<sup>1</sup> We contacted Nikolaus, and even before the official start of the programme, our tandem became a trio.

Apart from conversations spanning innumerable hours between the three of us, the process that led to this publication, the *Atlas of Spatial Figures*, was the exploration of the interplay between analytical and visual thinking. We were particularly interested in how theoretical concepts and ideas can be translated into diagrams, annotations, collages, or figures and how these, in turn, can be made fruitful for processes of theorising about space. Our research was based on sixteen multimodal workshops with subproject research teams at the CRC. We asked researchers to tell us about their work and research topics. We placed a table in the middle of our room with paper, modelling clay, wool, wooden sticks, metal wires, and many other materials. We then requested they build structures using these objects and describe their experience to us. Our method was aimed at materially exploring research fields as spaces of implausible possibilities. It can be loosely compared to what communication studies scholar Matt Ratto has called 'critical making' to describe the combination of critical thinking with hands-on making, as well as to what designers Anthony Dunne and Fiona Raby have called 'speculative design'.<sup>2</sup>

We videotaped these processes as they unfolded on the workshop table, and the recordings served as a basis for Nikolaus's 'table configuration' photo works, that is, the three-dimensional and multi-material diagrammatic compositions he produced in this book. These table configurations consist of words, lines, objects, and gestures on a black background that he arranged in his Vienna studio in response to and as an artistic reflection on the workshops. They are an invitation to the reader to think visually while navigating spatially through the respective research topics, promoting a perspective that goes beyond a purely analytical examination of the CRC's subject matter. By way of zooming in visually, the table configurations also allow for in-depth exploration of individual aspects.

We also selected descriptions, comments, anecdotes, speculations, explanations, and even jokes from the workshops that, in our eyes, captured the most intriguing conceptual and diagnostic insights in terms of spatial analysis. We then invited our colleagues to develop stories based on the things they had shared with us. We encouraged them to experiment with various literary genres, from ethnographic vignettes and short stories to speculative science-fiction. The outcome of this process of translating research findings into literary form is the engaging collection of thirty-six stories in this book, which pack field observations or theoretical ideas into compelling narratives that offer speculative reinterpretations of research topics.

We were interested in how each story captured or articulated a specific 'spatial figure'. Once we had their drafts, we used keywords to explore the unique spatial arrangement or practice we saw in each story. We didn't consult the authors about the spatial figures we saw in their stories. Instead,

we let the stories develop independently. Once we had a final list of figures, we began to research the etymological history of each of these associated keywords. For spatial research, etymologies can be used speculatively to develop multiple readings of spatial interpretations and to further stimulate empirical analyses. Next, we were interested in keeping the keywords as open and associative as possible, so instead of providing abstract definitions, we used their etymological origins to construct further stories. Some words have complex layers of meaning and are used differently in different languages, even if they share the same root. Their meanings may also change over time.

In a further process of translation, Nikolaus provided 'scribbled' drawings to all the stories that added a further level of interpretation to the research findings, sometimes by playing with their content, sometimes by playing with extracted spatial figures. Each of the four chapters on the 'reference problems of refiguration' starts with a synthesising map or visual landscape, in which the spatial figures that characterise the chapters are placed in relation to one another.

In the following conversation, we reflect on our collaboration, discuss theoretical and methodological questions, and go through some of the practical challenges we faced.

Ignacio Fariás, Silke Steets, and  
Nikolaus Gansterer

NIKOLAUS: I still remember very clearly when you contacted me in late 2021 and invited me to join your Theory Tandem programme in Berlin to accompany and interpret the research process artistically. Having a background in artistic research projects, my immediate thought was whether we could further develop my *Translectures* project methodologically within the framework of the CRC. *Translectures* are essentially a performative practice of the live translation of a lecture by somebody else in front of an audience. I've always been deeply fascinated by the highly dynamic spaces between thinking, drawing and acting, their relational interplay, and how these fleeting aesthetic and epistemic processes might manifest. For me, it's always about searching, disclosing, and setting but also about resetting signs.

IGNACIO: We didn't know your *Translectures* at the time. We contacted you mainly because of your book *Drawing a Hypothesis*, which, in the beginning, we thought was exactly what we needed to do in the project: to draw hypotheses about spatial refiguration. Could you briefly explain how the *Translectures* project developed from *Drawing a Hypothesis*?

NIKOLAUS: The book *Drawing a Hypothesis* began as a research project in 2013, where I explored the ontology of data visualisation in scientific and theoretical fields. I also explored the development of diagrammatic approaches to information analysis from an artistic perspective. Through extensive collaborations with over thirty scientists and artists, I examined how drawn 'figures' in these disciplines can reveal new narratives and ideas by tapping into their speculative potential.

A central methodological motif was to invite a variety of textual responses (such as figures of speech) to the collected diagrams, allowing me to react to these stories with new drawings. As my artistic research process unfolded, I began displaying the 'hypotheses' I gathered – comprising textual elements, drawings, objects, and other artefacts – by literally installing them in my studio as a 'table of contents' for my research, and later, in exhibitions.

On the other hand, *Translectures* is a kind of in-situ artistic interpretation of speech and thought and a showing and acting through materials – a kind of speculative thinking made manifest through hands and objects that weaves together different modes of making sense.<sup>3</sup> It is about a situative and haptic sensory figuration, configuring, and reconfiguring. Foremost, in *Translectures*, the table as a site of encounter plays a central role.

SILKE: The table also played a key role in our project. Could you describe this in more detail for the *Translectures*?

NIKOLAUS: At the time we met, in 2022, I was working closely with Klaus Speidel, a philosopher and curator based in Vienna, on a project about Ludwig Wittgenstein. Our focus was on exploring modalities of language and, specifically, how their multidimensionality and strata, including language games, can find a form. Similar to my *Translectures*, it was about a kind of 'thinking with and through materials'. We literally sat together at a table reading passages from Wittgenstein's *Philosophical Investigations*, and, while exchanging ideas, sketched and experimented with materials. The entire process was recorded on video. It was fascinating to see how thinking in dialogue translated into drawn lines and extended into materials and objects. Through this spatial and situated practice of placing, moving, and rearranging things on a table, a complex field of meaning emerged. Here, the table became a kind of micro-stage – a space that made processes of thinking visible in scenes and configurations. Thought and language assumed a physical space, a spatio-temporal dimension, and an embodied presence. It was about returning materiality to language – in an applied, performative sense in the way of Karen Barad's concept of space-time mattering.<sup>4</sup> That's why I thought I could bring this practice to Berlin and expand it with you.

SILKE: Although we both used a table, I think that one of the main differences between the set-up of our workshops and your *Translectures* project was that we created a very unusual, even irritating, situation for our colleagues and CRC subproject researchers. Our colleagues are very good at presenting their projects at conferences and to funding bodies as completely coherent and consistent. We wanted to avoid this way of talking about research. Therefore, we asked them to bring empirical materials from their research that still puzzled them. They brought photographs, excerpts from interviews, books, maps and audio pieces. Then, we asked them to present this material to us, not just verbally, as they are trained to do, but also by arranging it on our table – the stage. For an hour or so, we asked them: Why did you bring these materials? What is exciting or puzzling about them? What are the open questions? Without talking too much about general theoretical or conceptual interests, we wanted to stay *in media res* in the hope that we would discover unique spatial arrangements – what we later called 'topographic figures' [see 'Section 4. Spatial Figures: From Topological

3 For an example, see the lecture performance by Ignacio Fariás and Silke Steets (joint lecture) and Nikolaus Gansterer (live drawings) presenting this book's key concepts and four stories at the ICI Berlin, 6 October 2023: <https://doi.org/10.25620/e231006-1>.

4 Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham, NC: Duke University Press, 2007).

to Topographic', p. 17]. And, in a way, we were doing a transecture, for we were mostly listening to what was being said and drawing and sketching.

NIKOLAUS: Yes. I agree that one key difference was your explicit attempt to challenge or even irritate our research partners. Observing the different groups closely made me realise just how varied the ways of thinking, presenting, and arranging research artefacts on the table can be. This was most fascinating! I was pleasantly surprised by how quickly most groups grasped our methodological table experiment. It led to a shared process of presenting and discussing critical moments in their research, negotiated collectively in the space. I also noticed that the invited colleagues whose professional practices involve drawing, model-making, or working hands-on with materials – anything spatial – found it easier to engage with our table setup.

On the other hand, those who primarily work with text, digitally or on screens, seemed to struggle more when it came to translating their ideas onto the table and interacting with them. In the final part of the workshop, especially, it was our role to pose speculative questions designed to challenge the group. We repeatedly introduced these disruptions – sometimes through simple inquiries, other times by directly intervening in the material arrangements on the table.

SILKE: For me, probably the most productive intervention was the introduction of 'conceptual personas' that we would spontaneously come up with for each research project during the discussion around the table [see p. 16].<sup>5</sup> In the workshops, we operationalise conceptual personas as figures or actors that – when entering the scene – fundamentally change the unfolded figuration, often turning it upside down. In this way, they encourage speculation and reflection on the subject from a completely different angle. For example, for one subproject dealing with experiences of ontological (in)security in rural areas, we asked the participants to describe their research field from the perspective of a fox living there.<sup>6</sup> Ignacio's subproject on the phenomenon of urban heat was tasked with reconstructing a 'climatope', a concept used by the climatologists they are investigating, through the eyes of a wandering aerosol cloud.<sup>7</sup> Another sub-

project, which investigated middle-class housing in Nairobi, was asked to describe home-making from the perspective of a person who is homeless.<sup>8</sup>

Methodologically speaking, this speculative approach proved an excellent way to invent new readings of research subjects, which can then be made fruitful for the interpretation of the cases under study. Even though it was initially difficult for some colleagues to engage in these closed contexts that allow for open situations, the feedback afterwards was very positive. Many of them reported that it sustainably stimulated their imagination and theorising.

IGNACIO: For me, this methodological experiment connected very well with my interest in the scenographic as a mode of reimagining what fieldwork could be.<sup>9</sup> As you were explaining, rather than simply conducting interviews, we were trying to think ethnographically with our colleagues, trying to immerse ourselves in the fieldwork practices of the different research projects. And we were doing this by creating totally artificial, even alienating situations in which a strange kind of encounter with our colleagues, with their materials and with their field, could take place.

I say 'encounter' because this is one way of grasping what ethnography entails. An encounter is not just an interaction but, rather, a revelatory moment in which interlocutors open up to each other. The encounter is often imagined as a backstage moment, to use sociologist Erving Goffman's metaphor.<sup>10</sup> Well, the scenographic as a technique or method of creating spaces that facilitate ethnographic encounters opposes such searching for supposedly authentic backstages and seeks, rather, to create artificial conditions for revelatory moments. It entails the building of a stage, a frontstage, in which we can experiment with how to encounter each other.

SILKE: How have you been working with this approach?

IGNACIO: Well, I have basically conducted two projects in which research took place by scenographic means. In the most recent one, together with Rebecca Wall and Felix Marlow, we designed a place we called the Zauderbude, or literally, a booth for dithering. It was like the scenography

5 Gilles Deleuze and Félix Guattari, *What Is Philosophy?* (New York: Columbia University Press, 1994).

6 Jan-Carl Dihlmann and Ilse Helbrecht, 'Ländliche Räume als relationale Gefüge. Argumente für eine ontologische Wende in der Ländlichkeitsforschung am Beispiel einer Wiese', *Geographische Zeitschrift* (December 2023), <https://doi.org/10.25162/gz-2024-0002>.

7 Indrawan Prabaharyaka, Margherita Tess, and Ignacio Fariás, 'Touch Microclimate', *Holotipus* 2, no. 2–9 (2025), <https://doi.org/10.5281/zenodo.14843127>.

8 Makau Kitata and Jochen Kibel, 'Notions of Land: Spatial Figurations of Conflict. *Spatial Forms of Conflicts and the Making of Kaloleni and Makongeni*', in *Conflicts in Space – Spatial Conflicts: Current Research Perspectives*, eds. Hubert Knoblauch, Veronika Sommer, and Bettina Pfetsch (London: Routledge, 2025).

9 Ignacio Fariás and Tomás Criado, 'How to Game Ethnography', in *An Ethnographic Inventory: Field Devices for Anthropological Inquiry*, eds. Tomás Sánchez Criado and Adolfo Estalella (London: Routledge, 2023), 102–11.

10 Erving Goffman, *The Presentation of Self in Everyday Life* (Garden City, NY: Doubleday, 1959).

from a David Lynch film, filled with bizarre objects, like an embalmed pheasant looking over our interlocutors, and a strange sonic atmosphere, like the sound of an old modem in the background. The idea was to create a scenography that makes the familiar strange and inspires our interlocutors to have idiotic conversations, that is, conversations in which hesitation, irresolution, and dithering are possible.<sup>11</sup>

The other was a project with students who had done ethnographies of real-estate markets in Berlin. Based on that, we created three board and card games with the aim of capturing socio-technical practices that shape these markets. Interestingly, designing the games required testing, which we did at an art exhibition and a neighbourhood festival. The testing process was fascinating because the games didn't just work as elicitation devices, with people starting to talk about their own moves in the real estate market. The games also functioned as what we then called 'para-ethnographic devices', as they allowed participants to take an ethnographic perspective on the games and discuss with us the extent to which the games were able to provide a good representation of the field.<sup>12</sup>

**SILKE:** So, to return to Goffman, your research participants took on the role of ethnographic researchers?

**IGNACIO:** Yes! I would say para-ethnographic researchers, though. But the point is that the scenographic led to a symmetrisation of perspectives. And I think something similar happened at our table. On the one hand, our colleagues were, of course, reflecting on the 'method' with which we were proposing to speak about their projects. But, on the other hand, the scenography and the choreography that we established made things strange for them, producing an alienating effect regarding the research projects and materials they know so well so that we could also become para-ethnographers of their fieldwork, developing our own take on their materials. So the scenographic was not only the table but was also given by a set of rules and procedures to be followed, with the aim of creating an open situation in which things could flow in unexpected ways. Scenography is exactly what you just described as the creation of closed contexts that allow for open situations.

**SILKE:** Yes, but at the same time, we were interested in closure, in identifying spatial arrangements, or 'topographic figures', that could help us make a contribution to the theory of spatial refiguration. Thus, I see our work as being situated somewhere between openness, or

allowing for contingency, and closure, or striving for consistency. Put differently, while creating an open situation, we were doing at least two things aiming at producing consistency, namely, identifying ethnographic or speculative stories that we would then ask researchers to develop further and identifying topographic figures that would be connected with these stories.

And in your case, Nikolaus, you were filming the movements of all the objects on the table. Then, you sort of reenacted the tableaux in your studio to create the table configuration photo works by capturing the spatial relations of the materials on the table and connecting them to what our colleagues had told us about that puzzled them in their research, right? Can you explain how this reenactment process for the table configurations unfolded?

**NIKOLAUS:** When looking through the video recordings, I realised that we can't expect the other researchers, who might have less experience in the form of the visual thinking proposed by our table experiment, to immediately feel at ease with it. It became my role as the artistic researcher for the project to weave these multilayered research materials into a cohesive artistic whole by translating and developing a distinctive language – one that is versatile and diverse yet captivating and compelling.

**SILKE:** How did you know when all this rich material would cohere as a table configuration?

**NIKOLAUS:** It was definitely a process of trial and discovery. I started by immersing myself in the material – watching the videos shot from above the table, revisiting all my notes and sketches, and reading the transcripts aloud. Sharing the key points with my studio assistant, Desiree Palmen, who works also with photography, was also a big part of the process. Talking things through with her created a kind of resonance space where fragmented ideas and figures of thought could slowly take shape. From there, it was a mix of intuition and reflection. Sometimes, a gesture or arrangement in the videos stood out to me and became a starting point. Other times, it was the way certain materials interacted with the keywords or drawings I'd gathered. It was not a linear process – it was more about finding moments of resonance and letting them guide the process of reconfiguring.

**SILKE:** So, it became more than just reenactment?

**NIKOLAUS:** Definitely. It turned into this really sensory and immersive process – a kind of re-animating of a past encounter and the bringing of it into the

11 Ignacio Fariás, Felix Marlow, and Rebecca Wall, *Zaudern ums Gemeinwohl. Produktive Missverständnisse in der kooperativen Stadtentwicklung* (Hamburg: adocs Verlag, 2024).

12 Fariás and Criado, 'How to Game Ethnography', 102–11.

present in an alternate way. These table configurations were not meant to directly translate or illustrate what was said or shown. Instead, they were more like a speculative, idiosyncratic attempt to give form to these relational fields of knowledge. For me, it was about respatialising and materialising complex ideas by turning them into these layered, tangible assemblages. In this process, it wasn't about following predetermined rules but more about working with a kind of intuitive-reflective artistic intelligence.

IGNACIO: And you weren't just focusing on the spoken content, right?

NIKOLAUS: Exactly. Spoken language, the narration of the researchers, was one layer, but, for example, their body language was just as important. How someone introduced an idea or placed an object on the table – the how-ness of a situation, its atmosphere – that held so much qualitative information for me. Every gesture carries its own weight and often sparks inspiration. Walter Benjamin stated, 'Translation is a mode'.<sup>13</sup> I kept coming back to that idea – the act of translating isn't just about the content; it's about finding a new mode of relating to and getting in touch with the many layers of content. What emerged were these multidimensional landscapes or topographies of knowledge. As a hybrid between diagram, map, and model, they operate as open spaces for thinking beyond objective scales or measurable outcomes. I believe they draw from something deeper – a poetic dimension that underpins everything.

IGNACIO: I'd really have loved to be there with you, following and even collaborating in the process of making these table configurations. I've long been interested in researching studios as spaces, where it actually becomes clear that cultural production or artistic practice does not rely on creativity as a sort of high human or spiritual capacity but, rather, on material memories, negotiations, and mediations, that is, as spaces in which materials and objects, tools and technologies, bodies and bodily skills become the key drivers in form-giving processes that lead to the production of cultural artefacts, knowledges and aesthetics.<sup>14</sup>

And I say that I'd have loved to collaborate with you because I have the impression that it is crucial for social scientists to learn to think and work through more-than-textual media. In the context of anthropology, I've argued that we need to think

about what it might mean to do a 'studio anthropology', that is, to think of the 'studio' as a key epistemic place that is in relationship to the 'field', as well as to the 'offices' where we write our ethnographies.<sup>15</sup>

NIKOLAUS: I also loved working with both of you, as it allowed me to discover many new aspects of research culture, particularly within such a large research cluster. Experimenting with different approaches to writing about spatial topics was also a central part of our experiment, and you worked closely with the authors to develop their stories. Could you reflect on that experience?

SILKE: This was probably one of the most challenging yet exhilarating parts of our project. We had a solid theoretical foundation guiding us, particularly Michel de Certeau's idea that 'every story is a travel story', which emphasises that every narrative is fundamentally about space.<sup>16</sup> Then there's Donna Haraway's mantra: 'It matters which stories we tell to tell other stories with.'<sup>17</sup>

So while our goal of making an artistic-analytical contribution to refiguration theory was clear, the practical execution was quite complex. The first major hurdle was selecting the stories we wanted the project teams to tell. On the one hand, it was relatively straightforward to revisit the workshops through the video documentation and identify the stories that resonated with us – those memorable anecdotes and parables that lingered in our minds – or even the stories we wished the authors would have told us. But on the other hand, we faced the challenge that these stories didn't always align with or represent the broader themes of the research projects they stemmed from. This created a sense of betrayal in the selection process, which we had to communicate delicately to the authors.

IGNACIO: As we began to receive stories, we were fortunate to have Mark Soo on board as a development editor, collaborating with us and the authors. Overall, we encountered three main challenges. First, many authors had a tendency to include contextualising or explanatory remarks, treating their narratives like vignettes in a social-science paper. Our interest lay in stories that *showed* rather than *told* or *explained* spatial refiguration. Second, we aimed to steer clear of genre conventions that could lead to predictable outcomes – stories that were either overtly dystopian or wrapped up with happy endings or narratives that

13 Walter Benjamin, 'The Task of the Translator' [first printed as introduction to a Baudelaire translation, 1923], in *Illuminations* (New York: Harcourt Brace Jovanovich, 1968), 69–82.

14 Ignacio Fariás and Alex Wilkie, *Studio Studies: Operations, Topologies & Displacements* (London and New York: Routledge, 2015).

15 Ignacio Fariás, 'Studio Anthropology: Experiments with Ethnography as a Practice of the Artificial', in *Fieldsights* (4 April 2025), <https://culanth.org/fieldsights>.

16 Michel de Certeau, *The Practice of Everyday Life* (Berkeley, Los Angeles, and London: University of California Press, 1984), 115.

17 Donna J. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham, NC: Duke University Press, 2016), 12.

inadvertently reinforced stereotypes. Lastly, and perhaps most surprisingly for Silke and me, was understanding Mark's perspective on the stories, which often revolved around how a story functions *as a story* – ensuring, for example, that the stories included all essential elements for clarity and comprehension, as well as clarifying the action or plot, emphasising what happens, how it unfolds, and the motivations behind it. This was not always in line with our primary interest, which was that the stories would make apparent a specific spatial arrangement, which we would then identify with one word and then write a story about their etymological origins.

NIKOLAUS: And how was the process of writing etymologies for these topographic figures?

IGNACIO: In our exploration, we drew inspiration from the theoretical framework presented in *Metaphors We Live By* by George Lakoff and Mark Johnson.<sup>18</sup> They argue that metaphors are essential to our understanding of the world. For them, metaphors extend beyond analogical or poetic expressions; they are deeply embedded in the concepts we use to relate to the world and communicate with others. Interestingly, etymologies reveal the metaphoric nature of many concepts, illustrating how words evolve from designating concrete entities to embodying more abstract ideas. This insight prompted us to investigate the etymologies of the spatial concepts and figures we identified in each story.

One critical objection we encountered when presenting this etymological approach to our colleagues was that it seemed to rely on a Heideggerian and somewhat romantic assumption that language is the 'house of being' and that deeper truths reside within language, waiting to be uncovered through etymology.<sup>19</sup> This was far from our intent. Our approach was playful and experimental, relying on artificial connections rather than seeking ultimate truths. When exploring specific etymologies, we did not limit ourselves to etymological dictionaries; we also engaged various AI tools (such as ChatGPT, Bard, and others) with prompts that encouraged the AI to speculate about word origins. From the extensive results we received, we selected etymological possibilities that opened up broader semantic horizons within these etymological stories. And I emphasise stories because this is how we treated them. The focus was on telling good stories, that is, stories that suggested contradictory meanings or opened up unexpected connections.

Ultimately, the process was not about uncovering a singular truth regarding these spatial figures but about expanding the meanings of words in diverse ways, allowing new meanings to emerge.

SILKE: This brings us back to our initial intuition: that our collaboration with you, Nikolaus, would involve literally 'drawing' hypotheses about contemporary spatial refiguration. And, indeed, the last step in a long chain of translations – starting from the enacting of sixteen research topics in scenographic workshops to the identification and narration of research results in stories and to the definition of spatial figures and their exploration in etymological stories – has finally led to the drawing of two types of 'hypotheses'. First, you made scribbles for each of the thirty-six spatial figures we had identified and written etymologies about, and second, based on the stories, you drew four visual landscapes, each for one of the refiguration reference problems we have identified: extimacy, splintering, uninhabitability and ferality [see 'Section 5. From Figures to Refiguration: Problematising Modern Spatial Arrangements', p. 22]. How did it feel to create these drawings? Did they represent a culmination of our efforts, perhaps achieving a higher level of synthesis or abstraction? Or do they feel more like mere scribbles that have lost touch with our original ambition but that represent a new starting point? Or are they simply another mediation in a long chain of mediations?

NIKOLAUS: Yes. These are two quite different types of drawings or, rather, modalities of notation (in German, *Aufzeichnungen*), each serving a distinct function and operating differently. Firstly, there are the map-like drawings, which connect key points in all the storylines, literally 'drawing them together' and weaving them into a sort of visual landscape fabric. They are mental maps with a specific perspective on our four reference problems and function both as an overview and a field of associations, continuously generating new links between the stories. Secondly, there are the annotation doodles – scribbles – which relate to various spatial figures. These are small drawings I created to explore the layers of language, the semantic field of each term, and its associative inner images, all captured in quick, sketchy strokes. For me, they are fleeting traces of thought – an intuitive process of formulating, shaping and capturing ideas – not yet signs but thinking lines. These notes play with the concept of 'notation', which oscillates between the notions of note, notice, notate, and annotate. In both forms of drawing, different possibilities emerge – how to do things with lines and, conversely, how lines do things with you and shape your perception and response as a viewer. For me, they reveal how speculative thinking is sparked and how meaning is generated in the dynamic interplay between trace, line, sign, map, and diagram. I hope they are perceived as mediations, invitations, and portals, offering a visual way to engage with the spatial figures.

18 George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: University of Chicago Press, 1980).

19 Martin Heidegger, *Basic Writings. Revised and Expanded Edition* (New York: Harper Collins, 1993).

SILKE: I have long been fascinated by the use of maps and drawings in collaborative ways of thinking and theorising. Regarding the epistemological function of visual material in social science research, I find social theorist Richard Swedberg's differentiation between theory pictures, theorising diagrams, and visual sketches very interesting.<sup>20</sup> While theory pictures are simply illustrations of theoretical ideas or models, theorising diagrams have an explicitly heuristic, that is, knowledge-evoking function. They are meant to draw connections between empirical data and theorising, but working with them is methodologically quite demanding.

I personally find visual sketches the most striking category for our context. They probably come closest to your drawings, Nikolaus. What Swedberg calls visual sketches are the little doodles and scribbles that many of us make as we try to understand a text we are reading or as we try to work out what the key elements of our research are and how we can synthesise our findings. As a kind of 'boundary object', visual sketches are particularly useful for shared ways of thinking and for developing collaborative ways of researching.<sup>21</sup> Swedberg describes them as 'liquid, amorphous, and temporary by nature'.<sup>22</sup> That is, they are there to be drawn on, crossed out, and drawn over in order to organise thoughts. Visual sketches clearly show that thinking is a multimodal process that takes place not only in an individual's head but also is physical, involves different media, and is collaborative.

NIKOLAUS: In your own research, have you ever used visual sketches?

SILKE: Yes, indeed. For example, in our CRC subproject, which deals with the spatiality of digital infrastructures, we worked with visual sketches.<sup>23</sup> Among other things, we reconstructed the spatial differentiation of regional internet registries (RIRs) as a process. RIRs manage the allocation and registration of internet number resources within a specific world region. Interestingly, there are five of them, but they don't cover the five continents as you might expect. For example, RIPE covers Europe and parts of Asia, while APNIC covers other parts of Asia and Australia. We wanted to understand how these macro-territories of internet governance came to emerge. To do this, we undertook extensive research to reconstruct the history of the RIRs

and, crucially, the many informal personal connections between the pioneers of the internet. In order to understand this social network of internet pioneers, which is, in fact, closely linked to the emergence of the internet's digital infrastructures, we have begun to graphically record the connections we researched – in ever-new visual sketches. What was interesting was that each visual sketch raised new questions, and we kept experimenting with alternative sketches and forms of representation with cartographer Inès Marie Gartlinger. In the end, we did not come up with a classic map but a space-time organisation chart in the style of the Bureau d'Etudes.<sup>24</sup> Without the visual sketches as a constant but changing boundary object, we would not have been able to ask certain questions and might even have come to a different conclusion.

IGNACIO: In this regard, *Atlas of Spatial Figures* operates as a multimodal artefact. In the last few years, there have been some important methodological and epistemological discussions in anthropology and the social sciences about multimodality.<sup>25</sup> Multimodality stands for more-than-discursive practices of research and representation, including but also going beyond the audiovisual. Indeed, ethnographic films have been around for a long time as an established mode in which anthropologists and social scientists have experimented with the documentary character of their work.

But in recent years, we have seen a fascinating displacement into new media, such as comics and graphic novels, podcasts and sound installations, dramaturgical exercises and performances, games and interactive installations, and many other media experiments in which the aim is to reimagine knowledge production beyond the centrality of the logos and to open up to bodily and media-attuned modes of knowing.

Now, what is often overseen in this conversation is that multimodality is not just about exploring one specific media. Rather, it works best when these quite diverse media or modes of knowledge production stand in relation to each other. This is what we have done in the book: to push each of the modes radically into its own logic.

SILKE: Exactly. In the book, we communicate our findings in a variety of media, always using the logic (*Eigenlogik*) of a medium – project descriptions, stories, scribbles and diagrams, table config-

20 Richard Swedberg, 'Can You Visualize Theory? On the Use of Visual Thinking in Theory Pictures, Theorizing Diagrams, and Visual Sketches', *Sociological Theory* 34, no. 3 (2016): 250–75, <https://doi.org/10.1177/0735275116664380>.

21 Susan Leigh Star and James R. Griesemer, 'Institutional Ecology, "Translations," and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907–39', *Social Studies of Science* 19, no. 3 (1998): 387–420.

22 Swedberg, 'Can You Visualize Theory?'

23 Silke Steets, 'Maps as Epistemic and Communicative Devices', in *Historical Social Research*, forthcoming in 2025.

24 Bureau d'Etudes, *An Atlas of Agendas: Mapping the Power, Mapping the Commons* (Eindhoven: Set Margins, 2019).

25 Tomás Criado, Ignacio Fariás, and Julia Schröder, 'Multimodal Values: The Challenge of Institutionalizing and Evaluating More-Than-Textual Ethnography', *entanglements* 5, no. 1/2 (2022): 94–107.

urations – to bring specific aspects of spatial research to the fore. The stories, for example, thrive on narrating space and developing a tension (*Spannungsbogen*) that gradually builds – and dissipates. The elements of a story are usually organised linearly. In turn, Nikolaus’s scribbles and diagrams create a nonlinear juxtaposition of elements. They are also graphically highly abstracted. Philosopher Sybille Krämer argues that diagrams follow the cultural technique of ‘flattening’ (*Verflachung*), or transforming three-dimensional phenomena into two-dimensional representations.<sup>26</sup> This means the areas ‘in front of’ and ‘behind’ the diagram are ‘flattened’.

The advantage of this technique is that it allows the relationships depicted to be seen more clearly. Nikolaus’s table configurations, again, function differently. Similar to the diagrams, they create a juxtaposition, that is, a form of simultaneity and spatiality, albeit much more material, corporeal, sensual, and three-dimensional. They could probably be seen as a synthesis of stories and diagrams. It is crucial that they do not live from analytical reduction but from the complex layering of narrative elements, movements, objects, linguistic and graphic signs, and materials. They are wonderful to lose yourself in, which almost happened to me while talking...

NIKOLAUS: Yes. I agree with you, and this intertwined process of knowledge production reminds me of my Choreo-Graphic Figures research project, where I worked with an interdisciplinary team to explore how artistic sense-making unfolds.<sup>27</sup> Our main questions were: How does meaning emerge? How can it be recorded artistically? A key insight for me was the mutual interplay between ‘figuring’ and the emergence of ‘figures’. Figuring refers to the small, often subtle shifts in perception that guide our sense-making. This process can be felt as a change in taste, intention, or atmosphere and experienced at varying intensities. Figure, on the other hand, is the moment when all these shifts crystallise into something tangible and communicable. It is a multimodal, multidimensional entity that integrates visual, verbal, and bodily capacities. Gathering for weeks at a time in what we called the Method Lab, we spent over four years, to perform, observe, and describe these processes of figuration towards embodied diagrammatics. But Silke, there is another thing you mentioned earlier that I wanted to pick up on, which is the tension between consistency and contingency in our project. Could you elaborate on that?

SILKE: Yes, of course! Well, first of all, an atlas, per definition, should develop a consistent theoretical and aesthetic language in order to make its contents readable for the audience. This is where Katja Gretzinger, our book designer, comes in. She has been working with us to develop the aesthetic language of the book. I think this language reflects the tension between consistency and contingency in a wonderful way. A major challenge was that both the book’s topic – sixteen research projects from seven different disciplines exploring spaces – and the media in which we worked were characterised by great heterogeneity. Not levelling this heterogeneity through too narrow a theoretical and aesthetic language was always crucial to us. Rather, our aim was that by reading, viewing, and navigating the book, this heterogeneity should be made tangible. In my opinion, the difficulty was to keep the process of knowledge production – from the workshops to writing the stories, to translating them into spatial figures and etymologies, to abstracting them through visual sketches, diagrams and scribbles, and, finally, to presenting research topics in table configurations – as open as possible and to allow and make productive use of the contingencies that arise from each of these translations. Of course, there was a certain risk of failure.

NIKOLAUS: In my opinion, contingency is a core element of any research process. Failure, in this context, can also be regarded as an opportunity, a chance. Contingency is a phenomenon I’ve explored intensively over the last five years within the framework of my cross-disciplinary research project *Contingent Agencies*.<sup>28</sup> The focus of this research is an inquiry into atmospheres and environments, in all their diverse meanings, and how they emerge through dynamic forces, constantly interacting with each other and mutually influencing one another. The contingency of an atmosphere, in particular, cannot be separated or objectified by the observer. For me, as an artist, these contingent processes of sense-making and atmospheric processes unfold in very similar ways.

IGNACIO: Yes, but the risk that results from this epistemic openness was contained by very simple rules and formats, a kind of formal closure. We have stories, and we have etymologies, scribbles, and table configurations. That’s it. It is a kind of controlled contingency, which reminds me of science historian Hans-Jörg Rheinberger’s notion of the lab as an experimental system, which is designed to produce results that would surprise the scientists, creating conditions for new insights to arise without knowing which insights these

26 Sybille Krämer, *Figuration, Anschauung, Erkenntnis: Grundlinien einer Diagrammatologie* (Berlin: Suhrkamp, 2016).

27 Nikolaus Gansterer et al., *Choreo-Graphic Figures – Deviations from the Line* (Berlin: De Gruyter, 2019).

28 Alex Arteaga and Nikolaus Gansterer, *Contingent Agencies – Inquiring into the Emergence of Atmospheres* (Berlin: Hatje Cantz, 2025).

might be.<sup>29</sup> But there is a major difference, I guess. Scientists can trust their labs as experimental settings; they can trust their methods, their machines and apparatuses, and they know that in working there, something new will come out. In our case, we didn't have a lab. We were improvising a procedure along the way, and the only thing we could trust was ourselves as a team. And that means not only trusting each other in our professional roles but also as individuals. The clue has been in us becoming friends over the course of the project.

SILKE: I agree. This experimental working process aims not only to explore spaces of the contemporary but also to test new modes of collaboration between academic work, visual art, storytelling, graphic design, and book-making. Achieving this requires everyone involved to develop a sense of each other and each other's ways of thinking and acting. This takes time: time to learn how to communicate on an equal footing. Maybe it's a bit like 'making music together', to quote sociologist Alfred Schutz.<sup>30</sup> Although each of us plays our own instrument, we always work towards developing a common, albeit complex, sound. In our case, this also required a certain amount of improvisation.

NIKOLAUS: Plus a certain form of playful, explorative curiosity! Yes, and in addition to the central agency of trust, resonance plays a key role in research – the mutual ability to resonate with each other.

29 Hans-Jörg Rheinberger, 'Experimental Systems: Historiality, Narration, and Deconstruction', *Science in Context* 7, no. 1 (1994): 65–81.

30 Alfred Schutz, 'Making Music Together: A Study in Social Relationship', *Social Research* 18, no. 1 (March 1951): 76–97.





#### Qusay Amer

is an architect and PhD candidate at the Habitat Unit – Technische Universität Berlin. He is also a research associate with the CRC C08 'Architectures of Asylum' subproject. His research interests sit at the intersection of the production of physical spaces for and by migration, the urban agency of refugees, and translocal structures of (urban) spatial governance.

#### Zozan Baran

is a doctoral student at the Institute for Media and Communication Studies, Freie Universität Berlin and a research associate with the CRC B05 'Translocal Networks' subproject. Her research interests include social movements, space and place in contentious politics, digital activism, and climate justice.

#### Philip Baumbach

is a student research assistant with the CRC B04 'Locative Media' subproject. He is currently studying sociology with technical specification at Technische Universität Berlin. In his studies, he focuses on the effects of digitisation processes on our daily lives, especially urban development strategies and the constitution of different spatial realities.

#### Dorothea Biaback Anong

is a migration scholar and research assistant at Humboldt-Universität zu Berlin. She is a researcher in the CRC C01 'The Borders of the World' subproject, which analyses border and migration regimes in regional integration arrangements, focusing on selectivity in regional migration governance.

#### Francesca Ceola

is a geographer and PhD candidate at the Habitat Unit – Technische Universität Berlin. She is also a research assistant at the CRC C08 'Architectures of Asylum' subproject. Her work focuses on mapping the intersections between forced displacement, makeshift urbanisms, and socio-political ecologies in shifting landscapes in Lagos.

#### Daddy Dibinga

is a film director and film scholar. He holds a Cinéma et Réalisation Audiovisuelle de Création (CIRAC) master's degree from the University Gaston Berger of Saint-Louis, Sénégal. He is a PhD candidate at the Technische Universität Berlin with the CRC C06 'Streaming Series' subproject.

#### Carl-Jan Dihlmann

studied geography, political science and socio-cultural studies. He is a research associate at the geography department at Humboldt-Universität zu Berlin and a doctoral candidate with the CRC A01 'Geographic Imaginations' subproject. His research subjects include rural areas in Germany and Canada, ontological security, and more-than-human geographies.

#### Ignacio Farías

is a professor of Urban Anthropology at Humboldt-Universität zu Berlin and the principal investigator of the CRC C05 'Urban Microclimate Planning Regimes' subproject. His research addresses current ecological and infrastructural transformations of cities and the experimentation with ethnography as a mode of city-making performed with others and by multimodal means.

#### Sung Un Gang

is a postdoctoral research associate with the CRC B03 'Smart People' subproject. He earned his doctoral degree in Theater and Media Studies from Universität zu Köln. He is the author of *The Making of Modern Subjects: Public Discourses on Korean Female Spectators in the Early Twentieth Century* (Bielefeld: transcript 2024). His works focus on the intersections of social minority and space, the postcolonial historiography of East Asia, and the Asian diaspora in Germany.

#### Nikolaus Gansterer

is an artist-researcher teaching at the University of Applied Arts Vienna. His work explores transmedial systems of notation between drawing, writing, and performance. He creates diagrams of moods, environments, and situations by focusing on their intertwined processes of sense-making. Funded by the Austrian Science Fund, Gansterer is a researcher developing innovative methods for mapping atmospheres in the cross-disciplinary *Contingent Agencies* research project.

#### Daniel Grönefeld

completed his Bachelor's degree in Sociology at Technische Universität Berlin and is currently pursuing a master's degree at Humboldt-Universität zu Berlin. His bachelor thesis was based on the empirical data of the CRC B04 'Locative Media' subproject and focused on the negotiation of uncertainty in the initiation of sexual encounters between physically co-located Grindr users. For Grönefeld, sociology is a means of fostering the ability to take the perspective of other people and, thus, show that their behaviours are often less arbitrary than may seem at first glance.

#### Christina Hecht

is a sociologist and research associate with the C07 'Platform Economy' subproject. Her current research focuses on how digital platform companies become embedded in established markets. In Hecht's dissertation, she explores this question by conducting case studies on conflicts around Airbnb in Cape Town and Berlin. By combining approaches from economic and spatial sociology, she investigates how contested references to time and space are crucial for understanding stability and change in fields following Airbnb's market entry.

#### Anna Juliane Heinrich

is a postdoctoral researcher and lecturer at the Chair for Urban Design and Urban Development at the Institute of Urban and Regional Planning, Technische Universität Berlin. She is co-head of the CRC's graduate school and principal investigator of the CRC A02 'Spatial Knowledge of Young Adults' subproject. Her research focuses on spatial knowledge, geographies of childhood(s) and youth(s), hybrid spaces, participation and co-creation in urban development, social infrastructures, and methodologies and methods of research in planning and design.

#### Linda Hering

is a sociologist and postdoctoral researcher at Humboldt-Universität zu Berlin. Her main areas of interest are agri-food studies, the sociology of space, and sustainable transformation. She is a research associate with the CRC A03 'Knowledge and Goods' subproject, which analyses the spatiality of the trade and consumption of food in Berlin, Nairobi and Singapore.

#### Jochen Kibel

is a postdoctoral researcher at the Department of Sociology at Technische Universität Berlin and the principal investigator of the CRC A05 'Being Home' subproject. He earned his doctorate from the Research Training Group 'Identity and Heritage' with a dissertation on identity discourses and museum architecture. His research interests include the sociology of space, housing, and social memories, as well as subjectivation and discourse research. In 2023, he was a visiting fellow at the University of Nairobi, where he explored the relationship between housing and subjectivation.

#### Hubert Knoblauch

is a professor of General Sociology and Theories of Modern Societies at Technische Universität Berlin and the principal investigator of the CRC B02 'Control/Space' subproject. His research interests include sociological theory, sociology of knowledge and religion, and qualitative methods, especially video-graphy. Recent publications include *Communicative Constructions and the Refiguration of Spaces* (with Gabriela Christmann and Martina Löw; Routledge, 2023) and *The Communicative Construction of Reality* (Routledge, 2020).

#### Alexander Kohrs

is a research assistant with the CRC A03 'Knowledge and Goods' subproject. He is working on his PhD project in urban geography, exploring the development of food markets and urban food consumption in fragmented urbanisation processes at Nairobi's periphery.

#### Eva Korte

is a PhD candidate and a research associate with the CRC A05 'Being Home' subproject. She holds a BSc in Computer Science and Media (HS Furtwangen), a BA in Political Science (LMU Munich), and an MA in Sociology and Technology Studies (TU Berlin). Her research interests include the sociology of space, spatiotemporal contexts, home-making, and biography research.

#### Sophie Krone

is a sociologist and associate member of the CRC 1265 'Re-Figuration of Spaces' in Berlin. Her research focuses on emotions, the built environment, and feminist geographies. She also works on qualitative methods of spatial research, especially on mappings.

#### Jae-Young Lee

is an architect and doctoral researcher in the 'Social Innovations in Rural Spaces' research group at Leibniz Institute for Research on Society and Space, Erkner. As a research associate with the B01 'Peripheralised Rural Areas' subproject, she explores territorial strategies of spatial production and negotiation in the face of incoming (digital) forms of commerce and commodification. As an architect, she has been practising with Gyaw Gyaw at the rural Thai-Myanmar border since 2016.

#### Séverine Marguin

is a postdoctoral researcher and head of the Methods Lab and the Graduate School within the CRC. She is also the principal investigator of the CRC C06 'Streaming Series' subproject. Her interdisciplinary research focuses on culture and knowledge production, the sociology of space, nature-culture relationships, and experimental and design-based methods. In her current research projects, 'Afronovelas: Spatial Stories and Production Regime in West-African Soaps' and 'The Refiguration of Nature Conservation: The Case of Botanical Gardens', she is developing a sociological perspective on the fictionalisation of spaces.

#### Angela Million

is a professor of Urban Design and Urban Development at Technische Universität Berlin and the principal investigator of the CRC A02 'The Spatial Knowledge of Young Adults' subproject. She is the director of the Global Center of Spatial Methods for Urban Sustainability (SMUS) and a member of the UIA Built Environment Education network.

#### Camilo Bravo Molano

is a documentary filmmaker, photographer, and anthropologist based in Bogotá. His latest audio-visual works explore the peace process in Colombia, migration and representation in Europe, and the entanglements of armed conflict, soy monoculture, and peasant lives in Paraguay.

#### Maria Norkus

is a postdoctoral researcher at the Institute of Sociology at Technische Universität Berlin and the principal investigator of the CRC A06 'Trajectories, Networks and Places of Disparate Infrastructures' subproject. Her research interests include inequality, social structure analysis, and the sociology of work and labour, as well as methods and methodology of empirical social research, with a focus on mixed methods.

#### Zoé Perko

is a sociologist and research associate at Humboldt-Universität zu Berlin. She conducts research in the CRC C01 'The Borders of the World' subproject, which researches border and migration regimes in regional integration arrangements, focusing on conflicts and barriers in free movement frameworks.

#### Simon Pohl

is a sociologist and research associate with the CRC C07 'Platform Economy' subproject. His research concerns the socio-spatial orders associated with Airbnb and how state actors intervene in Airbnb's global expanse. In his dissertation, he focuses on dimensions structuring the platform's digital marketplace, utilising computational and traditional quantitative methods.

#### Indrawan Prabaharyaka

is a postdoctoral researcher at Humboldt-Universität zu Berlin and a research associate in the CRC C05 'Urban Microclimate Planning Regime' subproject. He has been studying the application of climatology in urban planning in Stuttgart. In Indonesia, he founded a transdisciplinary collective, Labtek Apung, which is currently experimenting with the transplantation of life forms and the recomposition of chemicals in critical urban zones.

#### Nadine Schabét

is a sociologist at Friedrich-Alexander-Universität Erlangen-Nürnberg. With a focus on digital infrastructures, she researches the interdependencies of power and space and is currently writing her PhD thesis on the socio-technical imaginaries of the Feminist Internet. Schabét works as a research associate with the CRC B02 'Control/Space' subproject, which analyses the spatiality of digital infrastructures in contexts, maps, and discourses.

#### David Joshua Schröder

is a postdoctoral researcher associated with the CRC 1265 'Re-Figuration of Spaces'. He specialises in the sociology of religion and knowledge, as well as the sociology of social problems and social control. In his dissertation, he examined the changing working conditions in infrastructural control rooms and their recent trend towards consolidation.

#### Sezgin Sönmez

is a sociologist and postdoctoral researcher at Technische Universität Berlin. His main areas of interest are the sociology of knowledge, sociology of culture, digitalisation, and discourse studies. He is a research associate with the CRC B02 'Control/Space' subproject, which analyses the spatiality of internet infrastructures and imaginaries.

#### Silke Steets

is a professor of sociology at Friedrich-Alexander-Universität Erlangen-Nürnberg and the principal investigator of the CRC B02 'Control/Space' subproject. Her research focuses on urban sociology, spatial and architectural sociology, the sociology of religion, qualitative research methods, and sociological theory. In addition to numerous other publications, she is the author of the monograph *Der sinnhafte Aufbau der gebauten Welt* (Suhrkamp, 2015), in which she develops a sociological perspective on materiality, objects, and buildings.

#### Daniela Stoltenberg

is a postdoctoral researcher with the CRC B05 'Translocal Networks' subproject at the Institute for Media and Communication Studies, Freie Universität Berlin. Her research interests include digital public spheres, the relationship between communication and the construction of space, and computational research methods.

#### Margherita Tess

is a doctoral researcher in urban anthropology at Humboldt-Universität zu Berlin and a research associate at the CRC C05 'Urban Microclimate Planning Regimes' subproject. Their PhD investigates how increased heat plays a role in the spatial transformation of urban Japan and how heat-adapted spaces are planned and infrastructured. They have a background in Japanese Studies and Environmental Anthropology.

#### Ludovica Tomarchio

is a postdoctoral researcher at the chair of Urban Design and Development, and Digital Communications Manager at Aedes, Berlin. Tomarchio's research focuses on hybrid space, exploring the integration of physical and digital environments. She earned her PhD from the Singapore University of Technology and Design (SUTD), affiliated with the ETH Centre, where she researched the intersection of art, social media, and public spaces. As a CRC 1265 'Re-Figuration of Spaces' member, she works on issues related to the spatial knowledge and hybridisation of young people.

#### René Tuma

is a sociologist and postdoctoral researcher associated with the CRC 1265 'Re-Figuration of Spaces' at Technische Universität Berlin. Tuma has held academic positions at the University of Amsterdam and the University of Vienna. He is the principal investigator on 'Visions of Policing', an ORA Research project. His research interests include interpretive methods and interaction analysis, the sociology of technology, studies of policing, and studies of violent interactions.

#### Janin Walter

is an artist, urban planner, and the project coordinator of the CRC Ö 'Spatial Migration and Tourism' subproject from 2022 to 2023. She is a research associate with the CRC 1265 'Re-Figuration of Spaces'.

© 2025 the authors and artists;  
published by jovis Verlag,  
an imprint of Walter de Gruyter  
GmbH, Berlin/Boston

This publication is available as an  
open access publication via  
[www.degruyterbrill.com](http://www.degruyterbrill.com).



This work is licensed under the  
Creative Commons license  
CC-BY-NC-ND 4.0 (Attribu-  
tion-NonCommercial-NoDeriva-  
tives 4.0 International). The full  
license text can be found at  
[https://creativecommons.org/  
licenses/by-nc-nd/4.0/](https://creativecommons.org/licenses/by-nc-nd/4.0/).

A CRC 1265 'Re-Figuration of  
Spaces' project  
Funded by the Deutsche  
Forschungsgemeinschaft  
(DFG, German Research  
Foundation) – Projektnummer  
290045248 – SFB 1265



SFB 1265  
'Re-Figuration von Räumen'  
Technische Universität Berlin  
Ernst-Reuter-Platz 1  
10587 Berlin  
[info@sfb1265.tu-berlin.de](mailto:info@sfb1265.tu-berlin.de)  
<https://sfb1265.de>

Edited by Ignacio Farías,  
Silke Steets, and  
Nikolaus Gansterer

#### Authors:

Qusay Amer, Zozan Baran, Philip  
Baumbach, Dorothea Biaback  
Anong, Francesca Ceola, Daddy  
Dibinga, Carl-Jan Dihlmann,  
Ignacio Farías, Sung Un Gang,  
Nikolaus Gansterer, Daniel  
Grönefeld, Christina Hecht, Anna  
Juliane Heinrich, Linda Hering,  
Jochen Kibel, Hubert Knoblauch,  
Alexander Kohrs, Eva Korte,  
Sophie Krone, Jae-Young Lee,  
Séverine Marguin, Angela Million,  
Camilo Bravo Molano, Maria  
Norkus, Zoé Perko, Simon Pohl,  
Indrawan Prabaharyaka, Nadine  
Schabét, David Joshua Schröder,  
Sezgin Sönmez, Silke Steets,  
Daniela Stoltenberg, Margherita  
Tess, Ludovica Tomarchio, René  
Tuma, and Janin Walter

#### Etymological texts:

Ignacio Farías, Silke Steets, and  
Daniel Jarczyk

All etymological quotes are from  
Etymonline, accessed December  
2020, <https://www.etymonline.com>.

#### Table configurations, drawings, and photos:

Nikolaus Gansterer

#### Photo assistance:

Desiree Palmen

© 2025 for Nikolaus Gansterer's  
produced works: VG Bild Kunst,  
Bonn, the artists, and their legal  
successors

Story editorial codevelopment:  
Ignacio Farías, Silke Steets,  
Nikolaus Gansterer, and Mark Soo/  
[linguistic.services](http://linguistic.services)

Editorial coordination,  
copy-editing, and proofreading:  
Mark Soo/[linguistic.services](http://linguistic.services)

Coordination assistance:  
Tiziana Ratcheva

Proofreading:  
Christen Jamar

Design:  
Studio Gretzinger  
[www.studiogretzinger.de](http://www.studiogretzinger.de)

Lithography:  
Bild1Druck, Berlin

Printed in the European Union

For questions about the General  
Product Safety Regulation  
please contact  
[productsafety@degruyterbrill.com](mailto:productsafety@degruyterbrill.com)

Bibliographic information  
published by the Deutsche  
Nationalbibliothek  
The Deutsche Nationalbibliothek  
lists this publication in the  
Deutsche Nationalbibliografie;  
detailed bibliographic data  
are available on the Internet at  
<http://dnb.d-nb.de>

jovis Verlag  
Genthiner Straße 13  
10785 Berlin

[www.jovis.de](http://www.jovis.de)

jovis books are available  
worldwide in select bookstores.  
Please contact your nearest  
bookseller or visit [www.jovis.de](http://www.jovis.de)  
for information concerning your  
local distribution.

ISBN 978-3-98612-220-1  
(Softcover)  
ISBN 978-3-98612-221-8  
(PDF)