

3. Countertopological Figurations

In this chapter, I will develop the methodological approach on which my work is based and (re)formulate a processual-spatial heuristic that enables me to work on the outlined problems and challenges in searching for the spatial figuration of childhoods. With this, I want to contribute to the ongoing endeavour to think of space as relationally constituted (Soja 1989; Lefebvre 1991 [1974]; Löw 2001; Amin 2002; Thrift 2006; Paasi 2011) and inseparable from time (Löw 2001; Massey 2005; Santos 2021).

3.1 Countertopology of Situated Globalities

To take these considerations and reflections into account and endeavour not to (re)produce the stereotyped image of African children as the victimised or romanticised ‘others’, I will pit the spatial heuristic against what I earlier called ‘methodological hemispherism’. Methodological hemispherism can be compared to its neighbouring concept ‘methodological nationalism’, which criticises that

‘social theory assumed the nation-state as its unit of enquiry; the terms “society” and “culture” referred unreflectively to what were perceived as distinct, independent and relatively homogeneous entities constituted by national borders, institutions and laws’ (Beck/Grande 2010: 189).

Methodological hemispherism orders and in this way reifies the world in similar categories but on a different scalar entanglement, taking as its unit of enquiry the ‘Global South’ versus the ‘Global North’ and treating them similarly as if they were homogeneous entities constituted by hemispheric borders. In order to avoid reproducing the logic of such hemispherisms in the context of my study, I shift the focus from *Where in the world are the speakers of my research situated?* to *How are they situated there?* This shift aims to avoid reproducing the global divide as a social divide within social theory.

It is important to note that the uneven landscapes based on categories such as ‘Global South’ and ‘North’ still prevail even though we have put a ‘post’ before colonialism. Nonetheless, much re-worlding is happening beyond this hegemonic spatial order, and

the social sciences sometimes fall short of grasping it. This is not only caused by the uneven concentration on contexts of the 'Global North'. It is also indirectly caused by an important but partial shift towards emphasising the postcolonial world – partial because the dominant focus lies on its on precarious pasts, presents, and futures, which unwillingly reproduces the representation of the 'Global South' as victimised, whereas the social worlds of local minorities, such as urban middle classes, and their global entanglements stay out of sight.

In this regard, I aim to undertake a less asymmetrical comparison of middle-class childhoods in Nairobi and Berlin. This comparison is of course also asymmetrical, but according to the above-described research gap, this asymmetry of children's situations has almost no empirical evidence and therefore must be explored. To theoretically grasp the situation of middle-class children in these two different locales, I draw on John Law's concept of 'situated globalities' (Law 2004, cited in Blok 2010: 508). Law criticises that the global is considered a singular, coherent, and big thing. He notes that '[o]n the contrary, the global is situated, specific, and materially constructed in the practices which make each specificity' (Law 2004: 22). The focus on the heterogeneous spectrum of middle-class childhoods in these geographically distant cities aims to contribute to the dialectical and constitutive power of both global and local processes in the production of childhoods.

This brings me to Cindi Katz's critical methodology of 'countertopography' (Katz 2004: xii, 2011:50), which she developed 'to connect disparate places and social formations by virtue of their analytic relationship to a particular material social practice, social relation, and/or cultural form' (Katz 2011: 58). Her approach has greatly inspired my methodological considerations, leading me to rethink the situatedness of children and childhood against the background of not one but many globalities, which also counters hegemonic cultural narratives connected to nation-states or contexts that frame my comparison, such as Africa or Europe. I discovered Cindi Katz's work at a point where I was struggling to make sense of the comparison between Nairobi and Berlin – two sites that were predetermined for my fieldwork by my aforementioned project affiliation with the CRC 1265. Cindi Katz's work explores 'the relationship between capitalist globalism and social reproduction' by 'examining global processes in their particular historical geographies' (Katz 2004: xii). This counter-perspective, she argues, helps to 'disrupt the seemingly contradictory assumptions that the imperatives of global capitalism are homogenizing, while at the same time their effects in one locale are separable from their effects in another' (Katz 2004: xii). In aiming to co-tell (hi)stories that counter dominant cultural narratives and cartographic depictions, I would like to consider my work as an additional perspective in her methodological tradition. Her critical methodology has been helpful in carefully developing the comparative analysis, as well as inspiring, allowing me to rethink the spatial-theoretical concepts on which such a comparison can be grounded.

In contrast to Cindi Katz, who frames her methodology as *countertopography*, I consider and later (subchapter 3.3) develop my methodology on the spatial-theoretical level as a *countertopology* of two situated globalities: middle-class milieus in Nairobi and Berlin. This does not mean that I contrast topology with topography, but rather, as the topological rationale suggests, topology can be understood as a wider frame for spatial inquiry (see Martin/Secor 2014: 422). As a network theory, the topological rationale

additionally rests on an understanding of space that is marked by relations and, as such, has a lot in common with the spatial theory developed by the sociologist Martina Löw (2016 [2001]). Martina Löw's relational and processual concept of space is important to my work because it offers a comprehensive theorisation of space, which is, despite its precision, open for collaborations with other existing spatial theories, because it was not strongly developed from a specific standpoint. As I will elaborate later, as such, it can easily be applied and modified in and by the myriad contexts my comparison brings with it. This approach resonates with premises articulated by the promoters of flat ontology (Marston et al. 2005; DeLanda 2006b), who – to say it very generally – wish to develop social sciences towards a more sensitive inquiry, which does not presume and therefore search for certain power structures in social space, while overseeing others.

These considerations frame the qualities of the spatial-theoretical concept, which, in conclusion, needs to make it possible to

- grasp spatial change contextualised by strong scalar dichotomies (e.g. Global South and North, local and global) beyond these dichotomies,
- document human and non-human agencies within the spatial constitution,
- understand spatial change from an intersectional perspective,
- and allow for the acknowledgement of all kinds of spaces, which could be myriad in the case of the spatial imaginaries that children are capable of.

In the following subchapters, I will develop a spatial heuristic to research figuration. For this, I will bring into collaboration several actors of spatial inquiry that have much in common but have so far practised rather little exchange and interaction. The actors come from spatial disciplines as different as sociology; human, cultural, and political geography; mathematics; anthropology; and philosophy. This collaboration will be conceptualised by the metaphor of string figure games.

3.2 Collaborating for Space in String Figures

Dipesh Chakrabarty (2021) argues that the crisis of the Anthropocene in all its facets worldwide forces us to rethink our often Westernised understandings of concepts such as modernity, globalisation, and, even more generally, historical processes. Cross-disciplinary collaboration is necessary to follow Chakrabarty's call. Some scholars of different disciplines have started to decolonise their tradition's history, and few have furthermore touched on its contribution in (re)producing the so-called nature-culture divide, such as in sociology (Latour 2005), philosophy (Komárek 2009; Gumbrecht 2012), afro-ecofeminism (Maathai 2006 [1985]), and neurosciences (Slaby/Choudhury 2018). In the 1950s Roger Callios developed the idea of a 'diagonal science' (1959) as a way of thinking and collaborating that synthesises science and the humanities to trace surprising connections. By creatively crossing disciplines, it breaks down boundaries to uncover common patterns that shape reality. In the following I will apply this method to develop synergies that are won on the spatial-theoretical level from the collaboration between different

fields of spatial inquiry, some of which have developed relatively unaware of one another in parallel debates.

For this I draw on and extend Donna Haraway's idea of 'string figures (sf)', which relates to 'science fiction, speculative fabulation, [...] speculative feminism, science fact, so far' (Haraway 2016: 2). As Katharina Block writes, '[t]he whole spectrum of Haraway's approach is hidden in the inconspicuous abbreviation "SF": Epistemologically, there is the claim to think outside of modern Western thinking, [...] the situated contingency and historical conditionality of forms of knowledge' (translated from Block 2021: 215). On the ontological level, the string figures appear next to scientific facts, and hence, 'the metaphor of the string figure in Haraway stands for an ontological, or better: ontogenetic figuration of the relational and steady becoming-with (sympoiesis)' (translated from Block 2021: 215). The string figure metaphor furthermore resonates very well with Chakrabarty's call to rethinking our often Westernised understandings of concepts, as playing with string figures can be a form of 'becoming-with, for staying with the trouble of inheriting the damages and achievements of colonial and postcolonial natural-cultural histories in telling the tale of still possible recuperation' (Haraway 2016: 125). Impossible to be played by a single person and usually played by many, the string figure guides me to generate knowledge and theory not as truth but as palimpsest. Hence, knowledge overlaps with other knowledge, sometimes creating figures that gain clear shapes, whereas others might be barely visible and therefore of a significance yet to be discovered. The degrees of saturation of such figures inform us about the relation between these overlapping knowledges. Studying these outlines in relation to what connects them at their centre seems very promising, because it helps me to come out of the position that I carry from my affiliation with one specific research tradition and enables me to shift perspectives. The string figure furthermore points to the possibility of the multiple in one. It does not just draw ideas and concepts from *one* history of each of these fields but from the many genealogies of epistemic thought.

Yet, amongst all the positive aspects of collaboration that I pointed out here, there is also the need to carefully handle the concepts of the diverse fields with which I collaborate. In this context, it is important to keep in mind what Jaques Derrida stated: 'Concepts are not elements or atoms and since they are taken from a syntax and a system, every particular borrowing drags along with it the whole of metaphysics' (2007 [1970]: 251). It is important to argue what exactly makes it a useful tool in understanding the subject of our research in its particular contexts, and it is important to be able to articulate which inherent assumptions, foci, or preferences it has that we perhaps distance ourselves from. Lastly and connected to that, collaborating in string figures as a creative form of diagonal science must bear a certain degree of insecurity in times of academic uncertainty, where it is worth making mistakes or working with some degree of imprecision instead of constructing the world again and again within the frameworks of our singular disciplines and concepts, marked by often Westernised understandings of social realities. I am calling for vulnerability here, vulnerability as a performative act against the stereotype of the clear and neutral academic (di)stance. I am calling for a position that sees the value of fragility, uncertainty, and experiment within collaborative knowledge production in cooperation between scholars and fields. Performing academic vulnerability is key to collaboration because it opens the representation of the thick and smooth struc-

ture of knowledge that we ascribe to our respective sciences and fields, and ultimately to ourselves.

Therefore, in the following I will invite different actors of academic spatial debate to a 'string figure play' – to creatively get into a theatrical dialogue, led by the aim to collaboratively develop a spatial theoretical base for my countertopology, as well as to develop spatial theory further in general and against the nature-culture divide in particular. The reason why I explore the potential of this form of collaboration in the form of a performance is, as Karen Barad notes, because

[u]nlike representationalism, which positions us above or outside the world we allegedly merely reflect on, a performative account insists on understanding thinking, observing, and theorizing as practices of engagement with, and as part of, the world in which we have our being. (Barad 2007: 133)

Representation comes with a certain distance, while performance comes with personal as well as collective engagement. The importance of this engagement has been aptly described by Anna Lowenhaupt Tsing, here summarised by Katharina Blocks, as a way to

expose oneself to encounters free of analytical assumptions and premises and to allow oneself to be productively irritated by renouncing common research practices – such as taking an analytical distance, problematising one's own presence reflexively, or entering the field with strong social theoretical premises – in order to allow new assumptions to emerge. (translated from Block 2021: 221)

The web character of the string figure is thereby not understood as a fixed pattern to be applied top down to the social realities of spatial inquiry but as a fragile and therefore reactive web that permeates the academic concepts. It is a translucent figure that webs into the concept like a rhizome, as it is precisely not entrusted with predefining the contours of that reality like the pattern would but is instead understood as a tool for signalling tension, marking where the thread of the string figure should be lost, dropped, picked up again, handed over, or cut. The negotiation of this process of losing, dropping, picking up again, handing over, or cutting the string in the figure will now be performed in what I call the 'string figure play'.

The aim in doing this is to develop a spatial theoretical base that can grapple in the widest sense with the political economy of ageing, which views age as a social construct based on generational as well as spatial orders, which play a central role in the Anthropocene. As outlined in subchapter 1.2, the figures of the bourgeois child in the Anthropocene operate not only as a social category but also as a biological and geological force. Positioned historically within the colonial discourse of othering, the child served to justify the dehumanisation and exploitation of colonised peoples by framing them as permanently immature. This legitimisation extended to the large-scale extraction of natural resources, embedding the child trope within broader structures of global exploitation. Furthermore, modern bourgeois ideals of childhood have sustained developmental narratives and consumer lifestyles that contribute to ongoing ecological and social crises. Therefore, the spatial theory developed in the following must be able to trace how these

historical and material constructions of the child operate across space and scale. As such, it must move beyond symbolic representations and engage with the material topologies of power embedded in the figure of the child, enabling a global critique that spans the social, political, biological, and geological dimensions of the Anthropocene.

3.3 String Figure Play: Towards a Theory of Spatial Becoming

The Players Martina Löw • Gunter Weidenhaus • Anna Secor • Lauren Martin • Annemarie Mol • John Law • Eric Sheppard • Bob Jessop • Bruno Latour • Karen Barad • Gilles Deleuze and Félix Guattari, reincarnated as a Janus-headed lilac dog • Girl named Mishiko, with a red painted face and a melon helmet • Lioness named Moombi • Woman from the audience who plays Doreen Massey • Claudia Mock

The Stage *The play takes place in the Lieberose Desert – a 500-acre wide open sand field in Brandenburg, southeast of Berlin. The desert initially developed after a huge forest fire in 1942. Later, the site became the core of the Soviet military training area Lieberose. Today, it is part of the Lieberose Terminal Moraine nature reserve. It is the end of summer. A day much too hot for that part of the season. Important props are a barren tree and a tiny sun sail span from one of the tree's branches towards the ground. Underneath it is a cooling box filled with bottles of water. Above the scene a hologram box is installed, which displays changing text and image projections in 3D and occasionally projects images onto the scene.*

3.3.1 Figures for Space

Text and Image Projection: Human-Beings Spatial Becomings

The Play *Everyone except the girl, the lioness, and the woman from the audience is gathered in the field and chats with each other in groups of two or three. At some point, Claudia Mock arrives and reads out loud the following poetic manifesto.*

Claudia Mock:

We become in space, and spaces become through our becoming.

Becoming is transcendental

by the dynamism of the universe's performance.

A universe in which some humans centred themselves as humans,
while decentring others as non-humans

in uneven landscapes barely tangible in their gated communities.

Becoming is gated.

Gates that are unsurmountable for small people.

By the inevitable failure to jump, they measure themselves.

The measurement indicates: 'child'.

Diagnosed children, they soon become adolescents.

Adolescents become adults, lawyers, drunkards, and eventually parents.

Generational orders. Generational conflicts!
 – amplified by the free speech of free internet.
 A great moment for resistance against ageism, but...

You will not be able to leave home, sister.
 You will just be able to get online
 and skip out for piddle during power cuts.
 The revolution will not hack your geo fencing app
 and tell you to go out on the streets.
 The revolution will not keep you from losing yourself
 on a Skag in Borderlands.¹

The revolution will not be televised on your CCTV.

Everything that is solid melts into the air.
 Crumbling figures of bourgeois childhoods.
 The next revolution might declare the becoming of all,
 by ruling out the being of some.
 The enemy is the idea of being itself –
 an idea that serves to exploit and rule over those
 whom it opposes as becoming.

Yesterday: Posthistory
 Posthumanism Now?

I am not blind.
 I see that de-centring the human is again about the human.
 My centre is the child.
 I de-centre the adult.
 From there, I think through space.

1 Skags are "large Pandoran creatures, easily identified by their canine appearance, strong bony armor plates, aggressive behavior, and distinctive three-jawed mouths", which are part of the action role-playing first-person shooter video game Borderlands (Borderlands Wiki, n.d.: para. 1).

Text and Image Projection: String Figure

Figure 5: *Os Pontos Cardeais Acrobatas* [The Acrobatic Cardinal Points].



Source: Illustration by Andrés Sandoval | Cosac Naify | São Paulo, Brasil | 2013²

While the text is displayed in the box, the image (Figure 5) is largely projected as a 3D hologram onto the sand and over the entire scene, including the players' bodies. Their movements distort and alter the string figure depicted amidst the hands.

Claudia Mock: I welcome all of you to the string figure play. I am very glad that we all gathered under the big sun today. We are here to collaborate for space and enact the synergies that can be won from both the similar and the different ways we imagine it. I understand childhood as a generational but also spatial order, which is constitutive of the Anthropocene. When it comes to childhood, I tend to emphasise with a radical thinking. This is because children's positions remain highly ambivalent compared to other vectors of inequality in the matrix of domination. Toby Rollo brings precisely to the point something that overarches my political position as a scholar when he states:

Despite centuries of progressive resistance, the enduring structures of empire, settler colonialism, hetero-patriarchy, white supremacy and neo-liberal capitalism have proven resilient. Alternatives have been forged within different scales and spatialities [...] yet these structures of domination persist and in some cases become stronger. [...] I argue that efforts to radically democratize norms and institutions have faltered because they have not been sufficiently grounded in relations of equality and mutual aid among children and adults. (Rollo 2016: 235)

Mock continues: The child-adult binary that Rollo describes here as an axiom of power is a perspective from where he concludes that it is not the Anthropocene we are cur-

2 Image available at: <https://andressandoval.com/os-pontos-cardeais-acrobatas/> [Accessed 5 March 2026, 10:25]

rently in but something that 'is more aptly called the *adultocene*' (Rollo 2016: 242). From this perspective, I understand the very act of becoming adult as part of anthropocentrism. This is why I am stressing the idea of *spatial becoming*, which sees everyone, despite age, in constant progress and regress, and outside a natural linearity of the stages of life. Such processes of human becoming, I would argue, are much less easily differentiable from other types of becoming, such as those of non-human others, and can therefore lead to a further understanding of the myriad processes at play within spatial figuration. Children, even though most affected by the geo-social epoch of the Anthropocene, have at the same time been utterly marginalised within its debates. By exploring childhood as a spatio-temporal order and from a classed perspective, I wish to contribute to uncovering children's positions within this order in different locales and reflect on the ways in which middle-class children are raised – accompanied by classed material cultures and values and within certain spatial arrangements. Engaged with debates on the Anthropocene, I would like to understand how these figurations of upbringing may participate – perhaps implicitly – in sustaining socio-ecological relations and temporalities associated with Anthropocene conditions. I would like to collaborate with you to build a spatial-theoretical foundation sensitive to such an endeavour. To collaborate, I want to play string figure games with you today. As Donna Haraway puts it:

Playing games of string figures is about giving and receiving patterns, dropping threads and failing but sometimes finding something that works, something consequential and maybe even beautiful, that wasn't there before, of relaying connections that matter, of telling stories in hand upon hand, digit upon digit, attachment site upon attachment site [...]. String figures can be played by many, on all sorts of limbs, as long as the rhythm of accepting and giving is sustained. Scholarship and politics are like that too – passing on in twists and skeins that require passion and action, holding still and moving, anchoring and launching. (Haraway 2016: 10)

Mock continues: The string figure games, I hope, will lead us to collaborative figures that can help me to explore children's *spatial becoming* beyond dichotomies, such as local/global, nature/culture and child/adult. I also hope it will help us better equip spatial inquiry in general to be applied to the challenges that the Anthropocene presents us with as scholars but also as humans. The situation is a little bit like that I put you in today, as there are too many of us for the water bottles and shade available, so either some of us are going to get thirsty and sunburned, or we will collaborate. To open the string figures games, I would like to ask you to speak out loud the terms, concepts, epistemologies, or subjects most central to our understanding of space. All at the same time! One, two, three!

Everyone says different words out loud, which appear as a word cloud (Figure 6) displayed out of the box as a 3D hologram.

Text and Image Projection: Relation

Figure 6: Word cloud.

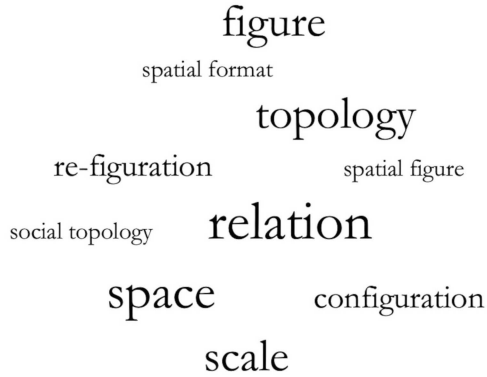


Illustration by the author.³

Claudia Mock: As I look at the cloud of words, I note that one term is most prominent: *relation*. Martina, would you like to take up the thread and start the string figure by telling us what relation means for your understanding of space and then pass the thread on to the next player?

Martina Löw: Yes! I understand the relational processes of spatial constitution in a way of observing ‘what is arranged and how spatial arranging occurs’ (Löw 2016: 164). Anna and Lauren, would you like to continue the figure?

Lauren Martin: It’s our pleasure! ‘[T]opology focuses on continuity, connectedness, and compactness and derives from set theory the principle that the relations among the elements, rather than the nature of the elements themselves, are the important aspects of a topological space.’ (Martin/Secor 2014: 423)

At the back, Anna Secor stands up and sits down under the shade next to Gilles Deleuze and Félix Guattari. She looks very exhausted. She takes a bottle of water and drinks it in one gulp.

Claudia Mock: Thank you! The second interest that many of you share is that in figures. Who wants to continue the string figure here?

Annemarie Mol stands up and walks while speaking.

Annamarie Mol: I tried to prepare a bit for this game – even though I was not sure what awaited me – and this is when I noted that there are many similarities between the

3 This word cloud (Figure 6) does not rest on a scientific analysis of the frequency of terms used by each of the scholars involved in the string figures games. It is rather a collection of terms evident in their work, which are relevant to my spatial theoretical considerations.

conceptualisations of 'spatial figures' (translated from Löw/Knoblach 2021: 14), 'social topologies' (Mol/Law 1994: 641), and 'spatial formats' (Jessop 2019: 77). All our research seems to have led to spatial patterns, and I wonder how these patterns relate. This is striking to me, considering that we have developed our theory mostly ignorant of each other's conceptualisations of space so far. This is not to say that we are not ignorant due to the differences between us, but I must admit that I was tempted to find out how we can learn from these differences. Of course, above all, I wonder how this can inform the spatial-theoretical foundation of Claudia's PhD on children's spatial figurations in Nairobi and Berlin.

Eric Sheppard: I noticed the same. And I would also be curious how they relate, but there's one question I'm itching to ask: Why was Henri Lefebvre not invited?

Laughter and chatter.

Claudia Mock: Thank you both for pointing to the patterns that already seem to create a web between us. Let's not lose this figure and come back to it later! Thank you for your question, Eric! I decided to concentrate on Martina's sociological conceptualisation of space, even though, as Gunter once put it, Henri Lefebvre's is similarly capable of 'offer[ing] categories that guide an empirical approach to spatial analytical considerations' (translated from Weidenhaus forthcoming: 72) but, '[i]t is clear from Lefebvre's concept that it was developed in the context of the city and therefore always includes the dimension of (state) planning in the form of "conceived space". How this dimension of conceived [...] (ibid.)

Anna Secor's body suddenly drops to the ground.

Gilles Deleuze and Félix Guattari: Oh no! Anna fainted!

Annemarie Mol: Bring us some water, John!

The group is in motion to help Anna Secor. Gunter Weidenhaus takes a notebook from his jacket pocket and fans her with some fresh air. Gilles Deleuze and Félix Guattari carry ice cubes from the cooling box to gently position them around her head while Karen Barad holds up her legs. After a few seconds, Anna Secor opens her eyes again. She is smiling.

Anna Secor: I'm fine. Don't worry about me! I had a terrible night at the airport. I did not sleep, and now the sun is so hot.

In the meantime, Martina Löw has reached for her phone to call an ambulance. This is when she notices that her phone has no reception.

Martina Löw: There's no signal here. It's very hot, and Anna is not well. We should return to the university and continue our string figures games there.

Bruno Latour: No!

Karen Barad: Bruno, how can you be so ignorant? Anna is not feeling well.

Bruno Latour: I'm sorry, Anna; if you wish, we will leave, but if not, I would like to ask that we stay a little.

Anna Secor: I'm fine. If you don't mind, I'll just sleep a bit under the sun sail.

Bruno Latour: The sun is unbearable, and the water is limited. It's very hard to concentrate, indeed! But on the other hand, the heat can inspire us to collectively build a spatial theory that can grapple with the crisis of the Anthropocene right here, where the Anthropocene is tangible.

Silence.

Claudia Mock: Bruno makes a very good point, yet the most important thing is that all of us feel safe while playing string figures games. If any of you would like to return to the university, kindly let me know at any moment during our game.

Silence.

Claudia Mock: Where was I? I said that how Henri Lefebvre's 'dimension of conceived space is to be analysed in the case of a social constitution of space such as "homeland [Heimat]", however, remains unclear' (translated from Weidenhaus forthcoming: 73).

Rob Shields: Henri Lefebvre's work is magnificent, yet his concept of space furthermore underlies a linear temporal approach that is deeply framed by Marxism and its respective historicism. Connected to this, he, like many others of his time, has a deficient view of so-called primitive cultures. And well, he didn't give women any recognition beyond what was mainstream for his time either (Shields 1998).

Claudia Mock: What I appreciate about Martina's concept is that it is not contextualised much. Her attitude towards conceptualising reminds me in some ways of that of Michel Foucault. Foucault always understood his concepts as 'little toolboxes' (Foucault 2002 [1975]: 887) that one can change and modify according to the context applied. Martina's spatial theory has exactly this quality. As such, it is applicable in diverse contexts. Its conduciveness to transformation and collaboration has already been noticed by scholars who work at the interface between architecture and sociology, such as Theresia Leuenberger, who points out the potential of merging it with insights from the actor-network theory (Leuenberger 2015, 2018). Martina, would you mind briefing us on your relational concept of space, so that we all start from the same ground?

Martina Löw: In my book *The Sociology of Space*, I develop an understanding of space in distinction to that in Antony Giddens's structuration theory. I aim to conceptualise space beyond the notion of a 'concrete place' (translated from Löw 2016: 199). Space, therefore, stands as an analytical category next to place, not as something abstract that derives from it. '[S]paces emerge initially only by being actively linked by people' (Löw 2016: 134). I therefore understand space generally as a social constitution and, more precisely, as a 'relational arrangement of living beings and social goods' (ibid.: 131). To reconstruct the processes of spatial constitution, I argue that it is helpful to analytically distinguish between 'what is arranged and how spatial arranging occurs' (ibid.: 164). I conceptualise these analytically distinct but empirically messy processes as 'spacing' (What relates to another?) and the operation of 'synthesis' (How does it relate to another?). Spacing refers to the process of spatial constitution 'through the

placing of social goods and people or by the positioning of markings that are primarily symbolic to identify ensembles of goods and people as such' (ibid.: 164). The operation of synthesis, on the other hand, is 'required for the constitution of space, that is, goods and people are amalgamated to spaces by way of processes of perception, imagination, and memory' (ibid.: 165). But if I may hand over the string here: What is space for you who work with the topologist rationale?

Lauren Martin: I would like to say that I see many patterns in post-mathematical topology that relate to your sociological concept, Martina. This is because '[t]opological thinking holds, for many, the promise of a post-Euclidean spatial theory, a way of thinking about relationality, space, and movement beyond metrics, mapping, and calculation' (Martin/Secor 2014: 420).

Rob Shields: The topological rationale was initially developed in mathematics and quantum physics as a network theory (Shields 2013). Like the relational space within social sciences, topology has a special position within mathematics – both spatial theorisations were conceived to grasp 'other' kinds of spaces and spatial processes.

Lauren Martin: Indeed! And in fact, to 'destabilize [...] the sedimented assumptions of Euclidean geometry' (Merzbach/Boyer, 2011, cited in Martin/Secor 2014: 422).

3.3.2 Social Theory and Societal Theory

Text Projection: Levels of the Game

Martina Löw: As we are all from diverse backgrounds, including those of our respective languages, I find it important that we understand each other to navigate the analytical level on which we play and collaborate. In the context of Marxist-oriented capitalism-critical urban studies, and precisely within the work of David Harvey, Doreen Massey, Neil Smith, and Edward Soja, I have noted that Anglo-American urban studies, in particular, tend to 'mix social-theoretical [*sozialtheoretische*] conceptual work and societal theory [*Gesellschaftstheorie*]' (translated from Löw 2018: 12). This is why it is important not to equate social theory in the Anglo-American sense with German social theory. Yet I would like to argue that the differentiation is 'helpful, however, in distinguishing the conditions of the possibility of the social from the specific manifestations of the social' (translated from ibid.: 13). Social theory marks what 'can be determined and grasped across societies and epochs' (translated from ibid.: 12). As such, it is always 'challenged by [the] results [of societal theory] and must change. The concepts of social theory are designed in such a way that they can be used to analyse different societies at different times. Even if this often fails in detail and the definitions of terms have a bias towards contemporary history, it is the goal of social-theoretical work that, for example, the concept of action or communication, but also the concept of space, be defined in such a way that they can be used to understand socialist and capitalist, early modern and modern societies.' (translated from ibid.: 13)

Gunter Weidenhaus: I agree with Martina! The differentiation helps us to keep apart 'which general statements on space as a social-scientific object [...] are separated from statements on different possible and historically changeable modes of consti-

tution of space' (Weidenhaus forthcoming: 74). It helps us, in other words, to distinguish what space is from how it is established.

Bob Jessop: I am glad to learn about this distinction. We could perhaps split the game into two rounds. Let's start with level one: What is space?

Text Projection: Lessons from the Möbius Strip (Level I)

Gunter Weidenhaus: Martina and I state that 'spaces are the ordering forms of proximity' (Löw/Weidenhaus 2017: 557). Therefore, on the social-theoretical level, I argue that '[s]pace as the possibility of proximity emerges on the basis of (positional) relations and enables orientation in the world in the form of meaningful, social-spatial constitutions' (translated from Weidenhaus forthcoming: 82). I see this as an ontological quality of space and claim that '[f]or two different entities to exist at the same time, they simply have to be somewhere else; otherwise they would not be distinguishable' (translated from *ibid.*: 77).

Claudia Mock: How would you translate proximity to German?

Gunter Weidenhaus: 'Nebeneinander' (Löw/Weidenhaus 2018: 212, Löw 2001: 66)

Claudia Mock: Ok, let me rephrase this: Things exist if they are distinguishable because they are next to each other (*Nebeneinander*), and when things are distinguishable, there is space. The distinguisher is the human, right?

Gunter Weidenhaus: Correct! From a sociological perspective, space is only relevant if it is socially constituted.

Bruno Latour: I disagree here, Gunter! I imagine a different kind of sociology. 'Even though most social scientists would prefer to call "social" a homogeneous thing, it's perfectly acceptable to designate by the same word a trail of associations between heterogeneous elements. Since, in both cases, the word retains the same origin – from the Latin root *socius* – it is possible to remain faithful to the original intuitions of the social sciences by redefining sociology not as the "science of the social" but as the tracing of associations. In this meaning of the adjective, social does not designate a thing among other things, [...] but a type of connection between things that are not themselves social.' (Latour 2005: 5) If we trace associations, we cannot presume that space exists only from the perspective of humans, who can distinguish entities.

Claudia Mock: From a physical point of view, for example based on the uncertainty theory, you cannot attribute an exact location to a particle. Therefore, you can never be sure that two 'entities' do not exist in the same place. If the human body, which is made up of an uncountable number of bacteria, were, for example, understood as an entity, then none of these bacteria would exist according to that spatial theory, as they reside within its space. Concluding from this, it seems necessary to first define what entities are. Are entities

- everything, including atoms and particles and stuff humans don't know yet or no longer know about?
- only what humans can perceive and understand (with/without the help of technologies)?

From here, the question of who can distinguish entities and how seems more complex than the term *Nebeneinander* suggests.

Karen Barad: Excuse me for cutting you short, but ‘posthumanism has no patience for principled claims presuming the banishment or death of metaphysics, especially when such haughty assertions turn out to be decoys for the covert resurrection of Man as the unspoken measure of what is and isn’t observable or intelligible.’ (Barad 2007: 136)

Claudia Mock: This raises the question of whether and when entities should be spoken of at all in the social-theoretical foundation of spatial theory. For if we assume that a relational theory of space examines processes in which humans, non-humans, and matter are involved, then not only does the directionality of these process participants in relation to each other remain a question of (historical) process, but so does the point where something in space ends and something new begins, and thus, in fact, the nature of the entities themselves.

Karen Barad: I have been thinking about this for a long time, and I am suggesting seeing entities as ‘phenomena’ and thus ‘dynamic topological reconfigurings/entanglements/relationalities/(re)articulations of the world. And the primary semantic units are not “words” but material-discursive practices through which (ontic and semantic) boundaries are constituted. This dynamism is agency. Agency is not an attribute but the ongoing reconfigurings of the world’. (Barad 2007: 141)

Anna Secor wakes up and joins the group again.

Gunter Weidenhaus: I see what you mean, but the social-theoretical base of spatial theory only serves as a ‘heuristic [which] has practically no empirical content whatsoever’. With only this level, ‘we would have a necessarily tautological nominal definition of space, which tells us what we call space, but nothing [...] about how we can analyse it’ (translated from Weidenhaus forthcoming: 74).

Claudia Mock: But in that case, there would be no more space where two entities are in one place. What about pregnancy? It is not very easy to distinguish the unborn subject from the pregnant subject completely. Of course, as the unborn grows, the belly grows, so space is gained. But there are so many materialised processes between the unborn and the pregnant subject that cannot be attributed to just one of them. Think, for example, of the umbilical cord and the placenta! There we can’t say where the unborn subject as an entity ends and the pregnant subject as an entity begins. Wouldn’t it be more logical to leave the directionality of these relations as an empirical question to be answered at the level of societal theory, questioning how space is constituted?

Anna Secor: In social topology we ‘treat figures as manifolds – spaces whose coordinates are not extrinsic, as in a line embedded within a Cartesian grid, but rather intrinsic to the surface itself – and focus on what aspects of a figure remain constant (such as the figure’s dimensionality or number of edges) when the surface is bent, stretched, or rotated, but not cut or augmented’ (Martin/Secor 2014: 423). So instead of focusing on what this space is between the unborn and pregnant subjects in the sense of defining borders, topologists would perhaps argue that their relation can be two in one.

Gunter Weidenhaus: This is interesting. Could you elaborate a bit more on this intrinsic-extrinsic relation?

Anna Secor: Let me show you the Möbius strip! Anyone got paper, pencil, and glue?

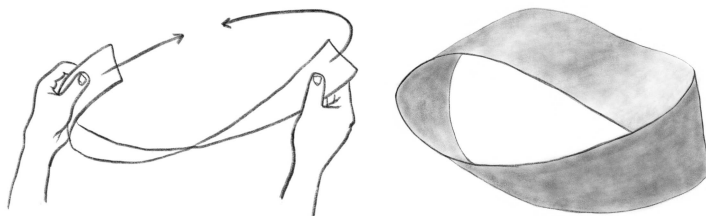
Karen Barad: I have paper and pencil.

Félix Guattari: I have a piece of chewing gum. It can be used as the glue.

Félix Guattari takes the chewing gum from his mouth to give it to Lauren Martin, who is folding a slim part of the paper to tear off a strip along the folded line.

Lauren Martin: Ok, I have a paper strip here (Figure 7). I will draw a middle line on it, just like this! Now, I twist the paper in the loop like this and glue the ends together with Félix's chewing gum – yummy! Now, I cut along the middle line. Voila! One large, twisted loop. '[T]he Möbius⁴ strip [is] a single-sided topological surface (a manifold) that nonetheless maintains a distinction between its two sides. [This manifold] has been drawn on by many theorists to explain a relationship in which difference and identity become indistinguishable. That the Möbius works in this way is easily demonstrated; a person can grasp the paper strip with fingers at the same point but on "opposite" sides, thus affirming that the figure has two distinct sides. Yet, if one runs one's finger over the twisted strip, it will cover "both" sides and end up where it started, thus proving that the figure has but one side.' (Martin/Secor 2014: 432)

Figure 7: Möbius strip.



Source: Drawings by the author.

Martin continues: In that context, Anna Secor and I suggest enforcing the topological form of the Möbius strip to enable conceptualisations of space to move beyond the dichotomies of intrinsic or extrinsic. The Möbius strip, we argue, helps to describe processes in which, for example, 'a movement between two inseparable states of being' (ibid.: 433) occurs.

4 Spelling as in the original text.

Claudia Mock: I think the Möbius metaphor effectively describes the spatial relation in which the unborn and the subject are.⁵ It also resonates with Stefan Hirschauer's description of the foetus as the 'internal external one' (*inwändiger Auswärtiger*) (translated from 2015: 95). Hirschauer also points out the inability of social theory to adequately describe 'prenatal sociality' (translated from *ibid.*: 94) and the communication between the pregnant woman and the unborn. He notes that against the background that the unborn can neither be seen nor can make itself understood linguistically, 'it is clear that under these premises what [...] sociological theory (for example, Luhmann 1995) has defined as communication cannot take place. On the other hand, such concepts of communication also contain premises that are not sufficiently attuned to this empirical case – prenatal sociality.' (*ibid.*: 94) As a childhood researcher, I find it important that spatial theory can engage with prenatal sociality. I see prenatal sociality as the example par excellence for being capable of inspiring the contested debates on nature-culture but also child-adult binaries. Therefore, prenatal sociality serves as a good point for collaboration.

Text Projection: From Developing to Becoming (Level I)

Gunter Weidenhaus: What would you suggest as an alternative to the term *Nebeneinander*?

Claudia Mock: I think that it needs to be a term that indicates temporality as well as spatiality and works without presuming direction. Lauren said that the Möbius metaphor helps us to describe movement between two inseparable states of being. This made me think of movement as a term. Yet movement also makes it seem as if we were dealing with physical space. Maybe *becoming* is a good term. It indicates movement in time and space simply as a process, without already ascribing a direction to this movement. It draws on neither succession nor continuity and therefore eludes a notion of development, which indicates linearity, acceleration, and therefore progress. Let's see how it sounds!

Space, as the possibility of becoming, emerges on the basis of (positional) relations and enables⁶ orientation in the world in the form of meaningful, social-spatial constitutions.

I also like becoming because it answers Doreen Massey's call to emphasise the dialectics of space and time and stresses the importance of concepts which move beyond this binary (Massey 2005: 86).

Martina Löw: Are you suggesting that space, as an organising principle of *Nebeneinander*, and time, as an organising form of *Nacheinander*, are hegemonic in modern societies

5 I would like to point to a work in which the Möbius metaphor is also applied to analytically describe a relation of two in one. This is the work of Joris Atte Gregor (2015) who, based on biographical material, analyses how intersex is constructed socially.

6 It enables, but it also *necessitates* orientation. For example, in cases of a sudden loss of orientation, when, for example, a person becomes a refugee, suffers postnatal depression or is challenged by a sudden blindness, but also more generally, as every spatial constitution is also ordering the social and, therefore, we *need* to orientate ourselves within it.

and must be understood as a historical phenomenon, which must be conceptualised on the societal-theoretical level?

Claudia Mock: Exactly! Because whether space is the possibility of juxtaposition, emergence, or culmination, and whether time is linear, episodic, or cyclic is historically contingent.

John Law: Oh my god! There is a lioness over there! Watch out!

Everyone is looking at the lioness, who resolutely approaches the crowd.

Karen Barad: Stay calm! We are many. I don't think she would attack such a big group of people. Don't scare her or make any loud noise or fast movements!

Rob Shields (nervously whispering): Jesus, how did she end up here? Shouldn't we run away?

Karen Barad (seriously): Don't move!

Now the lioness is approaching Gilles Deleuze and Félix Guattari.

Gilles Deleuze and Félix Guattari: Oh no, she's coming to us. *Sacrebleu!*

Karen Barad: Stay calm. I'll take you in my arms, Gilles and Félix. It'll be alright.

Slowly, Karen Barad moves towards Gilles Deleuze and Félix Guattari and takes them into their arms. The lioness stops her walk and sits down. Silence. Suddenly, there is a whistle from afar. The lioness jumps up and looks out for the whistle's source. From across the field, someone is approaching (Figure 8). Someone with a huge head. It's a girl. As she moves closer, her face appears painted red. She squints a little. She is wearing a helmet cut out from a melon on her head. When the lioness joyfully runs towards her, shouts of relief go around in the group.

Figure 8: Mishiko.



Source: Photo by David Favrod, 2012.⁷

7 Image available at: <https://www.davidfavrod.com/projects> [Accessed 5 March 2026, 10:25]

Gunter Weidenhaus to Martina Löw [whispering]: Could she be the suspected lioness filmed in Kleinmachnow in the south of Berlin back in the summer?⁸

Martina Löw to Gunter Weidenhaus: Possibly. They could not find any traces afterwards, so they ended investigations and said that it was possibly just a wild boar.

The lioness walks next to the girl, who gently pets her head. As she reaches the group, salutations are sent towards her. Calmly, she smiles and waves back.

Claudia Mock: Hey, how are you?

Girl: I'm good. How are you?

Claudia Mock: We were a bit scared by your lioness, but it looks like she is very calm.

Gunter Weidenhaus (excited): Is this the lioness that was in the news in July?

Girl: Yes. Her name is Moombi.

Claudia Mock: And who are you?

Girl: My name is Mishiko. It means 'light' in Japanese. Who are you, and what are you doing here? I live here, but I have never seen you around.

Claudia Mock: My name is Claudia. I'm pleased to meet you and Moombi. We're scholars from different fields of social sciences. We all care about social spaces – spaces that go beyond a house, where being together with others can make it feel like a home. Through the string figure games, we're trying to combine our similar and sometimes different understandings of social space.

Girl: I'm not sure I understood you.

Claudia Mock: Let me give you an example. You said you live here in the desert, right? I guess you've built yourself a little shed or something.

Girl: Yes, true! I also have several hiding places, and there's also a place where Moombi and I go to see the sunset. The desert is our home.

Claudia Mock: Voila! Then you've described very well yourself what a social space can be. Home is not just made of the shed and the ground you erect it on; it's also made of your ideas and, first of all, the urge to build a shed for yourself. It might be connected to feelings of safety or tranquillity. Also, Moombi belongs to it. Home is not the same thing for everyone. Some people have several homes or avoid being at home, rather feeling safe when they are out and about. And this is what all of us find so interesting.

Girl: But what about the string figure games?

Claudia Mock: Well, we're different players with different ideas about space, which we want to share here. One says something to start the game, while others join in, and figures arise. These figures arise from our positions. While some of us stand close together, others stand more apart, and this relation creates a figure that we can then discuss further. From there we find a new figure, and so on. To avoid overstretching the string, we might change our positions and see it from the other's perspective. But we can also drop it or tear it. Everything is possible.

8 On the night of the 19th to the 20th of July 2023, the Berlin police were informed that a lioness had been sighted in Kleinmachnow in the south of Berlin. Several search troops were sent out to catch her. Residents of the surrounding districts were instructed to stay at home via the NINA warning app. The lioness remains missing until today and is believed to be an optical illusion by those who reported on seeing her.

Girl: Can I play with you?

Claudia Mock: Yes please!

Everyone: Yes!

3.3.3 Space and Place

Text Projection: All Spaces Matter. All Matter is Space (Level II)

Everyone, including the lioness, sits down in a circle. The game continues.

Girl: Can I ask a question? What's the difference between space and place?

Claudia Mock: This is a good question, Mishiko! And to be honest, I'm not too sure about this either. In the past, Martina and Gunter, you said that in contrast to a space, 'place means a location, a position that can be specifically named, generally geographically marked' (Löw 2016: 167). Later you blurred that distinction to me by conceptualising space as theoretically distinctive from the spatial metaphor – which, as you argued, has no geographical position.

Martina Löw: This is true; we said that spatial metaphors can be used to describe social phenomena, such as 'family structures', 'communication networks', or 'class structures' (translated from Löw/Weidenhaus 2018: 209) spatially. A sociological perspective instead emphasises space as a relational arrangement with at least one geographical position. It draws on the 'positional relations' (of beings and social goods), a term that Gunter and I borrow from Benno Werlen (1987) to 'understand spaces as a product of linking performances between bodily objects' (translated from Löw/Weidenhaus 2018: 212).

Claudia Mock: I find the gesture of putting the geographical space and therefore matter 'back' onto the agenda important, because this can be seen as the first step towards modifying the theory, which, despite its social constructivist conviction, does not ignore material space. I also agree that the examples you gave are spatial metaphors, and it is very handy to differentiate. The challenges I am seeing are twofold and connected: first, I think that it is hard to differentiate place and space; therefore, place needs to be newly conceptualised. The second point is that we must be clearer in how we want to handle spatial metaphors and imagined places, such as heaven or hell, as these types of spaces challenge us to make clear how, in the sociology of space, Euclidian, social, and imaginative space are related.

Gunter Weidenhaus: Like virtual spaces, 'imaginary spaces, such as "hell" or "Atlantis", can [...] be understood as special cases [of space], whose elements derive from the imagination. This differentiation is ideal-typical, that is, there are no systematic boundaries between these types of space: The "eternal hunting grounds" consist of a mixture of material and imaginary elements (the spirits of the ancestors dwell on this mountain), and spectacles whose lenses function as displays can mix virtual and material elements (the billboard on this skyscraper is played or a Pokémon sits by this fountain), which can be synthesised into a spatial constitution, into so-called "augmented realities" (Weidenhaus 2015: 39).' (translated from Löw/Weidenhaus 2018: 211, in footnote)

Bruno Latour: But why do we need this analytical differentiation? What do we gain from declaring certain spaces 'special' types of spaces? Aren't we also creating a normative standpoint here? What about Claudia's question: How are Euclidian, social, and imaginative spaces related?

Lauren Martin: You're pointing here to a problem that topological theory is also dealing with. For us, the same question might be, 'What is the relation between topographical and topological space?' Despite the various forms of topological inquiry, many scholars use topology as opposed to topography. Anna and I found 'that geographers are attracted to topology because it provides a way of conceptualizing non-Euclidean space, but these approaches rely upon a problematic dichotomization [...], wherein topography becomes an analogy for fixity and topology for flow' (Martin/Secor 2014: 422).

Claudia Mock: Yes, this describes my point well. Let us think about the Earth's ice: on the one hand, it is something fixed. We might call it Euclidian or topographical and see it as something that only becomes social as it becomes a spectacle for touristic expeditions. But beyond that, through anthropocentric effects, such as carbon emission, it is also something very much in flow and topological 'by itself', because the ice is melting and changing the topology of the entire globe as the sea level rises. Its waters are also everywhere – hard to locate. As such, the melting ice is also a spatial metaphor for the climate crisis. It is real, yet imaginative, because very few people have seen it in reality. This is also why some people can claim that the ice is not melting and climate change is a myth.

Lauren Martin: This is why, instead, we argue that topology could be mobilised to work against the dualism of topological versus topographical, because 'no matter how much topology draws our attention to unexpected forms of connection and continuity, it must also account for processes of partition, filtering and hierarchization' (Mezadra/Nielson 2012: 59, quoted in Martin/Secor 2014: 430). So, in topological theory, 'Euclidian space [can be understood] as one possible topology among others' (Martin/Secor 2014: 430).

Claudia Mock: Then I would argue that not only Euclidian space but also imaginative spaces must be understood as one possible topology among others.

Gunter Weidenhaus: I'm not sure if you really understood me. Let me give an example: A chatroom is not a space but a spatial metaphor, because 'the positional relations of the communication partners have no meaning [...]. For understanding social processes in the chat room, a communication analysis is more promising than a spatial analysis. Accordingly, the internet in its entirety is initially not a space but a communication system.' (translated from Löw/Weidenhaus 2018: 210).

Claudia Mock: I agree partly here, because even if I think that a communication analysis works well in that example, I think it will inevitably lead us to socio-spatial questions. Your communicative partners are not spaceless. They do not communicate from the same standpoint. What is missing is the meaning of their own positionality. When you 'argue that objects of a spatial sociological consideration have a relevant "where-in-the-world" and that the relational positions of the elements that constitute the space are important' (translated from *ibid.*: 212), then this also applies to the chat partners in the chat room, as their communicative practice is also imbued

with the meaning of the 'where-in-the-world'. Just because the room itself is a spatial metaphor, it does not automatically mean that spatial inquiry is no longer useful.

Bruno Latour: Spatial constitutions are full of complex associations, and the borders between virtual, imagined, and real space are so thin. They overlap and change from one to another. Look at the example of Moombi, the lioness. She was captured by a video in July 2023 in the suburbs of Berlin – a place that is of course not her natural habitat. Her video went viral all over the city and beyond. Moombi's appearance created a wide media space in which local newspapers installed so-called life tickers showcasing the progress of her search, in which warning apps sent out messages to citizens advising them not to leave their homes and animal welfare organisations debated the morally just ways of catching her. A lioness in Berlin is a good example of positionality, as she is seen as not belonging there. She is positioned to the 'South'. To the inhabitants of Kleinmachnow, where she was first sighted, a lioness is exotic and dangerous. In fact, her appearance also made Kleinmachnow exotic and dangerous. The lioness is a non-human actant that performed a heavy agency through her appearance in a space identified not to be her natural habitat. As she was acting in real space, virtual space, and spatial imagination, she was real, virtual, and imagined. All three types of spaces and all three types of existence constituted each other and her reciprocally.

Text Projection: The Trouble with Place (Level I)

Girl: You still haven't answered my question! What's the difference between place and space?

Martina Löw: Place in differentiation to space must be understood 'as the goal and result of placements. [...] In contrast to spaces, places are always markable, nameable, and unique.' (Löw 2016: XVII) 'Space is a relational arrangement of social goods and living beings in places.' (ibid.: 178) I also argued that places could be 'generally geographically marked' (ibid.: 167) and that they 'are identifiable when occupied by social goods or people, but they do not disappear with the removal of the object, but rather are available to be otherwise occupied. Place is thus the goal and result of placement and not – like people and social goods – itself an element placed in spacing.' (ibid.: 167)

Claudia Mock: To be honest, this confuses me, because that means that place is both a 'where-in-the-world' and the result of spatial constitution.

Loud shouting appears from the audience and freezes the scene of the play, as everybody looks towards the scream's source.

Woman: Arrrrgggh! I can't stand this any longer! Why aren't any of you bringing up Doreen Massey? She has written about place excessively.

Claudia Mock: Would you like to join us here on stage and play Doreen Massey?

Woman: What?

Claudia Mock: I would be very happy if you joined us on stage and played Doreen Massey. Would you like to?

Woman: If you wish. Fine by me.

As the woman walks towards the players, the audience and the players applaud her.

Woman: We should not understand '[p]laces [...] as points or areas on maps, but as integrations of space and time, as *spatio-temporal events*' (Massey 2005: 130). We should understand places 'as woven together out of ongoing stories [...] as in process, as unfinished business' (Massey 2005: 131). And this history, as Bruno once said, 'is no longer simply the history of people, it becomes the history of natural things as well' (Massey 2005: 138, quoting Latour 1993: 82). Place is not a fixed thing but rather in a constant process of becoming – no matter how deeply collective memory might sculpt it out of and into the space again. We might forget that monuments also alter, so they document something different each time. Their very matter alters, and the way they matter alters too. To understand what place is, I suggest asking what 'here' is. "Here" is where spatial narratives meet up or form configurations, conjunctures of trajectories which have their own temporalities (so "now" is as problematic as "here"). But where the successions of meetings, the accumulation of weavings and encounters build up a history. It's the returns (mine, the swifts') and the very differentiation of temporalities that lend continuity. But the returns are always to a place that has moved on, the layers of our meetings intersecting and affecting each other; weaving a process of space-time' (Massey 2005: 139), which I am calling 'a global sense of place' (ibid.: 131).

Figure 9: Ammunition remnants on the former Lieberose military training area.



Source: Photo by Martin Roemers, 1998, Panos/Anastasia Photo.⁹

9 Image available at: <https://martinroemers.com/relicscoldwar/photos/#gid=2&pid=29> [Accessed 5 March 2026, 10:25]

A sudden rain breaks down from the sky. The players all squat down in a huddle and turn to the ground together to protect their faces from the heavy rain. The rain is so strong that the sand begins to open up, revealing remnants of ammunition. Slowly, the players return to the scene and discover what has been hiding under the sand (Figure 9).

Gunter Weidenhaus: This is incredible; the rain washed away the present and rinsed out the past. These must be the remains of ammunition from the former Soviet military training area that was here during the Cold War. How impressively this event relates to Doreen's sense of place that we just listened to.

Woman: 'What is special about place is not some romance of a pre-given collective identity or of the eternity of the hills. Rather, what is special about place is precisely that throwntogetherness, the unavoidable challenge of negotiating a here-and-now [...]; and a negotiation which takes place within and between both human and nonhuman.' (Massey 2005: 140)

Claudia Mock: I think Doreen's open or global sense of place once again speaks for the difficulty of distinguishing space and place, because it stresses the process-like nature of what is part of the placement and thus constitutes the placement on the level of performance, in which place is not a fixed entity but a 'throwntogetherness'. That connects place to practice or action. This means that place is always a spatial constitution. But then we can't say that 'space is a relational arrangement of social goods and living beings in places', as you mentioned before, Martina. Otherwise, we would ascribe place to a where-in-the-world.

What I propose is that we understand place as a spatial figure or format, and thus as something that is constituted through connections made between elements or phenomena, similar to a network or a territory. We said that places are always the result or goal of spatial constitution. Therefore, place should be an analytical category on the societal level of spatial theory. That means that analytically, the event (spatial constitution) does not occur in place but in space and always in relation to the specific position from which spatial constitution derives or to which it is projected. This is analytically spoken, because as always, in reality these processes are messy, and it is possible that a spatial constitution is made at a place, which was the result of another spatial constitution in the simple sense that I set up a home in a city, and that city might be a place.

I therefore advocate that analytically we should no longer call the position in space and time at which a spatial constitution occurs a place but a position, and we should only speak of place when we are talking about spatial figures. This is not easy, as we must separate ourselves from it colloquially. Analytically, it does not make sense to me to assert that a space is always made in a place on a social-theoretical level, because it could just as well be made in a network or territory. Places are complex spatial figurations, not a neutral where-in-the-world, as a positions in time and space.

Text Projection: Space Is... (Level I)

Claudia Mock: I think we've arrived at a clear figure here, which I would like to apply in my analysis of figurations of childhoods. In the figure, I see that

(a) space as ‘where-in-the-world’ is always bound to a specific ‘when-in-the-world’. Every event or phenomenon owns such a position. This position is not a fixed thing but should be understood as a process. Therefore, the relativity of time and space does not allow being but always produces becoming. This is what I call figuration. Figuration always refers to the becoming of space and the spatialisation of time.

This space-time dialectic causes everything that figurates, and thus also every type of space that figurates (Euclidian, imagined, geographical, metaphorical, topological, topographical, augmented, social, cosmic, etc.), to be bound to a where/when-in-the-world. That means that every space matters – imagined or not – as it is bound to matter. As such, it is performative.

Therefore, I see space, with some modifications, similarly to Gunter and note that, on the basis of these premises,

(b) space, as the possibility of becoming, emerges on the basis of (positional) relations and enables¹⁰ orientation in the world in the form of performative spatial constitutions.¹¹

Performative stands for the various types of agencies – human or non-human – that are part of each spatial constitution.

(c) Space is an analytical category on the first, the social-theoretical base, contrary to place, which is analytically located on the second, the societal-theoretical level, similarly to other spatial figures, such as territories or networks.

3.3.4 Adultism and Spatial Theory

Text Projection: De-Centre the Adult from Spatial Constitution

Bob Jessop: Here we go! For now, we will leave the social-theoretical foundation and come to the second part, the societal-theoretical level, and thus to the different possible and historically changeable modes of spatial constitution, which we have already touched on with the discussion on place. This will lead away from the question of what space is in general to how space is produced. And with the question of how arises the question of who produces it.

Martina Löw: Exactly, Bob, ‘[s]ocietal theory works on the conceptual foundation laid by social theories and strives to describe the forms and content of concrete societies [...] or to explain their mode of operation’ (translated from Löw 2018: 12).

Girl: Are only humans making spaces?

Bruno Latour: If you ask me, I will say that the social, as well as the spatial, is realised in the relations of humans and non-humans. I am advocating for a symmetric sociology; in this scenario, human actors are not a priori seen as asymmetrical to non-human actors.

¹⁰ It enables, but it also necessitates orientation.

¹¹ This version comes much closer to Massey’s definition of space: ‘We understand space as the sphere of the possibility of the existence of multiplicity in the sense of contemporaneous plurality’ (2005: 9).

Martina Löw: For me, 'space is a relational arrangement of living beings and social goods [and therefore] spaces emerge initially only by being actively linked by people.' (Löw 2016: 134)

Claudia Mock: Here, we can see the difference in the concept of the social that lies at the bottom of your theories. *The Sociology of Space* was originally based on Anthony Giddens's structuration theory and is now more and more reworked with the approach of communicative constructivism, informed by the sociology of knowledge (Knoblauch 2020; Knoblauch/Steets 2022; Weidenhaus forthcoming). Actor network theory-informed approaches in human geography and architecture have been actively involved in and transformed by the ongoing debates about the Anthropocene by challenging the nature-culture and human-non-human divide. Approaches that apply the spatial theory of the sociology of space, on the other hand, have not been much involved in these debates. The spatial-theoretical foundation developed here as the foundation of my research shall continue to rework sociological spatial theory against the background of this goal. But to continue the string figure, Martina, could you again remind us how you conceptualise spatial constitution?

Martina Löw: Sure! To reconstruct the processes of spatial constitution, I argue that it is helpful to analytically distinguish between 'what is arranged and how spatial arranging occurs' (Löw 2016: 164). I conceptualise these distinct processes as *spacing* (What relates to another?) and the operation of *synthesis* (How does it relate to another?). Spacing refers to the process of spatial constitution 'through the placing of social goods and people or by the positioning of markings that are primarily symbolic to identify ensembles of goods and people as such' (ibid.: 164). The operation of synthesis, on the other hand, is 'required for the constitution of space, that is, goods and people are amalgamated to spaces by way of processes of perception, imagination, and memory' (ibid.: 134–135). I thus conclude that, 'spaces emerge initially only by being actively linked by people' (ibid.: 134).

Girl: Don't you think that Moombi can also perceive, imagine, and memorise things and combine several things into one space? Otherwise, how would she find her way around?

Gunter Weidenhaus: I don't know if I can answer your question about Moombi, but I also noted that 'the act of synthesis (the combining of several elements into one space) seems a little like the act of a lonely self who, against the background of its socialisation, ultimately constitutes spaces on the basis of individual perceptions, ideas and memories' (translated from Weidenhaus forthcoming: 75).

Claudia Mock: As a childhood researcher, I would like to amplify Mishiko's question and point out an even more general problem here: Social theory remains connected to research traditions such as that of modern philosophy, which, with Hobbes and Locke, reserved the status of being fully human and connected to the realm of culture to white European adults, whereas children and Black people were considered feral beings in a temporal or permanent state of becoming and connected to the realm of nature. A sociology that argues that the constitution of space, as Martina says, 'emerge[s] initially only by being actively linked by people' (Löw 2016: 134) does not only rest on the ambivalent heritage of the humanities but furthermore positions the human at the centre of all worlding processes. It is a sociology that puts itself at the

centre, while other sociologies provoke questions like: 'Can the non-human speak?' (Chaplin 2017: 509).

Text Projection: Materialised Discursive Practice (Level II)

Bob Jessop: How can we develop spatial theory so that it stays sensitive to these issues?

How, exactly, can we modify Martina's societal-theoretical dimension of spatial theory towards a more inclusive version?

Claudia Mock: This question makes it necessary to discuss the understanding of practice.

In that sense, I find the debates at the intersection of subjectivation and spatial theory interesting. A growing number of scholars are stressing the potential of discourse-analytical perspectives (informed by Michel Foucault) within the field of geography and other spatial sciences, because they can help us to dismantle the relationship between power, knowledge, and space (Best/Gebhardt 2001; Glasze/Mattisek 2009; Füller/Michel 2012; Füller 2018). Henning Füller and Boris Michel conclude that a hitherto almost non-existent examination of space in Michel Foucault's works is useful, because 'the emphasis on the spatial suggests a topological perspective that is more capable of perceiving asynchronies and contrary developments' (translated from Füller/Michel 2012: 8). Hence, the authors advocate for a 're-materialization' of Foucault's notion of power. For many, this sounds contradictory, as discourses are predominantly understood as language, while the authors have pointed out that saying is just another form of doing.

Materiality, as Nadine Marquardt and Verena Schreiber note, 'is not a passive carrier of meaning in Foucault's analyses, spaces are not the "result" of the discursive production of meaning, they do not emerge as the end product of powerful discourses.' (translated from Marquardt/Schreiber 2012: 44). Thus 'discourses are not a form of representation that is superimposed like a secondary layer over reality, which is now only accessible to us in a mediated way' (translated from Marquardt/Schreiber 2012: 44).

In the *Order of the Discourse* (1984) Michel Foucault states that, '[i]f discourses must be treated first of all as sets of discursive events, what status must be given to that notion of event [...]? Naturally the event is neither substance nor accident, neither quality nor process; the event is not of the order of bodies. And yet it is nothing immaterial either; it is always at the level of materiality that it takes effect, that it is effect; it has its locus and it consists in the relation, the coexistence, the dispersion, the overlapping, the accumulation, and the selection of material elements. It is not the act or the property of a body; it is produced as an effect of, and within, a dispersion of matter. (Foucault 1984b: 22).

With a focus on power, everyday practice, and bodies, Antje Langer and Daniel Wrana also write about the relation between discursive and non-discursive practices in Foucault's work. They argue that it is not very useful to conceptualise the non-discursive as what marks the border of the discourse. Practices, they note, 'are not simply discursive or non-discursive, but rather [...] contain the discursive in different ways' (translated from Wrana/Lange 2007: n.p.).

Karen Barad: I find the re-materialisation of Michel Foucault's work very difficult. Also, 'Judith Butler's performative account of mattering thinks the matter of materiality and signification together in their indissolubility; however, Butler's concern is limited to the production of human bodies (and only certain aspects of their production, at that), and her theorization of materialization is parasitic on Foucault's notions of regulatory power and discursive practices, which are limited to the domain of human social practices' (Barad 2007: 145).

Claudia Mock: Thomas Lemke only partly agrees with this 'charge' (Lemke 2015: 5). He points to 'a posthumanist approach implicit, but not developed in Foucault's work by focusing on the idea of "a government of things", which Foucault presents in his lecture series on governmentality' (ibid.: 8). What matters to me is that Michel Foucault's notion of discursive practice, just like Martina's concept of space, can be modified in ways that allow me to frame my concept of *spatial becoming* as discursive becoming as long as I follow a dichotomy of discursive and non-discursive practice. Thus, I want to develop a spatial heuristic that avoids recognising only those who speak a language as being performative within spatial constitution. This means that I would like to understand both the living beings and the matter – from frogs to lava rocks – as a discursive formation, which, as such, acquires a quality that can suggest, enable, or constrain certain practices (Schrage 2005: 1806).

Karen Barad: This is what I call intra-activity. Also, to me, '[d]iscourse is not a synonym for language. Discourse does not refer to linguistic or signifying systems, grammars, speech acts, or conversations. [...] Discourse is not what is said; it is that which constrains and enables what can be said.' (Barad 2007: 147) 'Discursive practices define what counts as meaningful statements. Statements are not the mere utterances of the originating consciousness of a unified subject; rather, statements and subjects emerge from a field of possibilities. This field of possibilities is not static or singular but rather is a dynamic and contingent multiplicity.' (Barad 2007: 147)

Claudia Mock: This field of possibilities sounds like what I would call space (laughs). But how, exactly, do you integrate matter here, Karen?

Karen Barad: 'Matter(ing) is a dynamic articulation of the configuration of the world. In other words, materiality is discursive (i.e., material phenomena are inseparable from the apparatuses of bodily production; matter emerges out of, and includes as part of its being, the ongoing reconfiguring of boundaries).' (Barad 2007: 151–152)

Gunter Weidenhaus: Then discursive practice is also material?

Karen Barad: Exactly! '[D]iscursive practices are always already material (i.e., they are ongoing material [re]configurings of the world). Discursive practices and material phenomena do not stand in a relationship of externality to each other; rather, the material and the discursive are mutually implicated in the dynamics of intra-activity.' (Barad 2007: 151–152)

Gunter Weidenhaus: But then, which role do the dimensions of meaning and knowledge play in your conceptualisation of posthuman performative practices?

Karen Barad: 'Meaning is not a property of individual words or groups of words but an ongoing performance of the world in its differential dance of intelligibility and unintelligibility.' (Barad 2007: 149) 'Knowing entails differential responsiveness and

accountability as part of a network of performances. Knowing is not a bounded or closed practice but an ongoing performance of the world.’ (Barad 2007: 149)

Anna Secor: This connects well to our proposal of a poststructuralist potential that a post-mathematical reworking of topology holds to overcome the duality of subject and object. We also critically note that there are various and sometimes contradictory approaches and applications of topology in human geography, resulting in different possibilities to (re)think the subjects and their agency of research. Actually, there is an inherent relationship between structure and topology, and we think it is necessary to rework and develop instead of taking it for granted that topology will ‘automatically allow us to avoid modern presumptions of subject and object’ (Martin/Secor 2014: 421). To overcome the duality of subject and object, we draw on the power of the Möbius strip as a metaphorical figure for existing and emerging orders of spatio-temporal continuity of world-making processes. ‘[T]he Möbius¹² topology is thus one that enacts a poststructuralist dialectic in which it is difference itself that enacts the figure. Unlike structuralist dialectics, in which two distinct objects act on each other, a Möbius relation describes a movement between two inseparable states of being. [...] The Möbius thus demonstrates how the insights of topology – from the multiplicity of manifolds to the interplay of transformation and continuity – can be harnessed for the development of poststructuralist spatial theory.’ (Martin/Secor 2014: 433)

Claudia Mock: All these considerations are extremely helpful for conceptualising the theoretical base for my empirical analysis, but although I follow the suggestion of applying the Möbius strip to overcome the subject/object duality, I do not agree with the dualistic depiction of structuralism versus poststructuralism. I would also propose a Möbius thinking here and claim that the Möbius metaphor is also helpful in challenging the polarity between determination and freedom or structuralism versus poststructuralism.

As Daniel Wrana notes, ‘[T]he subject perspective does not assert that the subject is always active; rather, it postulates that the subject is fundamentally capable of doing so and demands that it redeem this potentiality. In more structure-oriented approaches, the central point of operation of meaning and agency is not located in the subject but in social, cognitive, discursive, or cultural processes. [...] However, even in such theories, subjectivity, reflection, agency, etc. are thought of and described as phenomena. Human actors are considered active agents insofar as they participate in processes and practices.’ (translated from 2015: 123–124)

The childhood researcher John Wall has furthermore criticised that both structuralism and poststructuralism have neglected age as a category of social inequality and failed to ask ‘[w]hat type of approach can move the conversation from not only understanding and including children’s experiences to also, and at the same time, critiquing and transforming the adultism of larger scholarly and social norms?’ (2019: 10). Childism, as Wall argues, ‘calls for new ways of understanding social theory itself: as a groundwork for not only constructing or deconstructing social relations but finally also, and in a more complex way, reconstructing them difference-responsively’ (2019: 12).

12 The spelling is as in the original text.

To summarise what I would like to take from this discussion: **I see spatial constitution as a discursive practice, and I understand discursive in Barad's re-materialised sense.** This helps me answer John Wall's call for finding approaches that can look at the intersection of children's voices and agencies, as well as the power constellations of wider societal processes and structures, such as the earlier framed *adultocene*. From this perspective, I would like to look at both – structure and agency – and stay open to the subversive potential in every spatial constitution.

3.3.5 Social Topology, Spatial Practice, Spatial Figure, and Scale

Text Projection: Becoming Through Differentiation, Assemblage, Linkage, and Movement (Level II)

Gunter Weidenhaus: But how, precisely, do you want to connect this perspective to the theoretical conceptualisation of spatial constitution? How does this affect the ways in which spaces are produced?

Claudia Mock: To Martina, *spacing* refers to the process of spatial constitution 'through the placing of social goods and people or by the positioning of markings that are primarily symbolic to identify ensembles of goods and people as such' (Löw 2016: 164). What is missing here next to the social goods is materiality, perhaps a formation of stones, which I will call *matter*. This does not mean that I understand the formation of stones as not social, because if we look at a drill core sample, its sedimentary layers will also illustrate the social inscription in matter. In other words, we will see the traces of human creation and destruction, which can be read in the sedimentary layers, for example as epochs with high carbon dioxide emissions. Nonetheless, the term social goods seems very human-centred; it hints more at classical human-made objects, perhaps those that belong to the market economy, such as a car or a building. Matter, understood as becoming-with humanity, seems to grasp wider aspects of (new) materiality. Another aspect that is missing here is non-human others. Besides 'people', Martina optionally uses 'living beings' (e.g., Löw 2016: 134). I would like to resolve this ambivalence, emphasise the living beings, and call them *becomings*. Therefore, a new materialist reading of Martina Löw's conceptualisation of *spacing* would argue that

spacing refers to the process of spatial constitution through the placing of becomings and matter or through the positioning of markings that are primarily symbolic to identify ensembles of matter and becomings as such.

Let us now come to the operation of *synthesis*, which, as Martina argues, is 'required for the constitution of space, that is, goods and people are amalgamated to spaces by way of processes of perception, imagination, and memory' (Löw 2016: 134–135), and therefore, Martina concludes that, 'spaces emerge initially only by being actively linked by people' (ibid.: 134).

Bruno Latour: Martina, I really like that you call the process of relating 'amalgamate' here. In the further course of your book, you speak of 'linking' (ibid.: 135, 169), but I think amalgamate better describes that the relation in which living becomings and matter are entering does not leave them in their initial form, shape, or condition. Rather, they reciprocally change. The *synthesis* also brings us back to Mishiko's earlier

question. She also wondered about Moombi's ability to perceive, imagine, and memorise and asked why Martina ascribes these attributes only to 'people'. It is clear that animals can perceive; most animals can also memorise, and as studies show, some animals can also imagine in no less than three forms: 'mental imagery, pretending and other forms of "perceiving as", and creativity' (Mitchell 2016: 326). Furthermore, spatial constitution also happens all the time beyond the perception, memory, and imagination of those who are part of it. This applies especially to the body. Corporeality is altered by multiple processes, in which living beings, such as bacteria, fungi, and parasites, but also matter, such as fine particles, UV rays, and toxins, take part in spatial figuration.

Claudia Mock: From this perspective, I propose to de-centre the human in the spatial constitution and define ways of **spatial constitution as a more-than-human performative practice**, arguing on the basis of Martina's considerations that **synthesis is required for the constitution of space, that is, living becomings and matter are amalgamated to spaces by way of an ongoing more-than-human performance of the world, within and beyond the consciousness of perception, imagination, and memory, beyond here and now.**¹³

Annemarie Mol: Claudia, do you feel that with the processes of spacing and synthesis, you can theoretically grasp the spatial constitutions that go on in the stories you have been collecting?

Claudia Mock: Thank you for this question, Annemarie. I am not sure whether spacing and synthesis alone serve to grasp the various ways in which spatial constitution takes place in the biographical stories. The more I read, look, and listen, the more I see different spatial patterns. Something that is strong is, for example, the act of differentiating. Often, a space, spatial relations, and spatial attachments are referred to through differentiation, and definition of its other.

Gunter Weidenhaus [to himself]: There we go; sounds like a territory!

Claudia Mock: What did you say, Gunter?

Gunter Weidenhaus: I said this sounds like a territory. What you are referring to strengthens my hypothesis that on the second level of spatial theory 'no general principle of [spatial] constitution can be asserted anymore' (translated from Weidenhaus forthcoming: 2). These considerations are not entirely new and are based on Martina's and my previous extensions of the sociology of space, in which we added 'differentiation' (Löw/Weidenhaus 2017: 559) to spacing and synthesis. In my extension, I additionally propose the action category of 'movement' (translated from Weidenhaus forthcoming: 73). In fact, I follow one unified concept of space-making and argue that spacing, synthesis, differentiation, and movement are ways in which different societies at different times constitute spaces.

Claudia Mock: This is interesting. It makes a lot of sense that there are different types of spatial constitution. But the processes of spacing and synthesis, as Martina has

13 This is not to take the human out of the responsibility, but to point to the matters of dynamism that still acts beyond the spatial constitution of a dump site, of its perception, imagination and memory.

developed them, seem so fundamental to me that I would have a hard time imagining them on the same level with practices of differentiation, which, as you argue in your joint article, forge the constitution of borders and therefore territories (Löw/Weidenhaus 2017; 2018).

Maybe we need to distinguish spatial constitution from spatial figuration. I think of spatial constitution as being on the level of social theory with spacing and synthesis, whereas spatial figuration, such as differentiation, is on the societal level. The processes of placing and synthesis are then always the necessary foundation for every spatial figuration, as they describe more the necessary processes of cognition that are at the base of spatial constitution. The practice of differentiation is then another layer of spatial constitution. It does not produce or acknowledge space and spatial relation as such but regards space as being in a certain figuration, e.g., a territory or place.

Text Projection: Becoming in Territories, Networks, Fluids, and Places (Level II)

Gunter Weidenhaus: Ok, despite the modification you made here, I still want to point to the relation that I see between spatial constitution, if you will, on the societal level of spatial theory, and spatial figures. Spatial figures, such as territory, network, trajectory space, and place, were coined by Martina and Hubert Knoblauch to function as ‘a heuristic for the analysis of refiguration’ (translated from Löw/Knoblauch 2021: 14). I propose that different spatial figures and different types of spatial constitution are connected with each other, at least they are if we speak of the dominant action of the constitution of a spatial figure. This then allows me to see both the actions and the spatial figures as generic ‘historical phenomena’ (translated from Weidenhaus forthcoming: 74), as ‘[t]his part of the theory should be understood as historically highly transformable, because certain spatial figures emerge only at specific times in history and because it is necessary to maintain an openness to new or as yet undescribed constitutional logics’ (translated from Weidenhaus forthcoming: 74).
Let me draw it in the sand!

As Gunter draws the table in the sand, it simultaneously appears as a 3D hologram projection.

Table 1: Table of systematisation of spatial action and spatial figure.

	Dominant action	mandatory action	Possible action	rather irrelevant action
network space	synthesis	placement	movement	differentiation
territory	differentiation	synthesis	placement	movement
trajectory space	movement	placement	synthesis	differentiation
place	placement	synthesis	differentiation	movement

Source: Translated from Weidenhaus forthcoming: 90.

Weidenhaus continues: This is how the connection between such figures and action could be, by means of an ideal typology. As the table (Table 1) also shows, spatial figures can each be assigned a specific category of action, which can be highlighted as the ‘dominant’, ‘mandatory’, ‘possible’, and ‘rather irrelevant’ (Weidenhaus forthcoming: 90) action in the mode of the production of spatial figures.

Claudia Mock: This can help me to analyse whether there are spatial figures that can be seen as middle class-specific. Also, it will be interesting to compare the nature of territory in childhood narrations from Nairobi with those in Berlin. It helps me to grasp the similarities between the two locales better, because a gated community is hard to imagine in Berlin. Yet when a gated community is theoretically broken down in spatial terms to the practice of differentiation as constitutive of territories, it helps me find other types of gatedness that also exist in Berlin. But let’s see how I can modify it according to my differentiation between spacing and synthesis as fundamental processes of spatial constitution and those of spatial figuration. Do you mind if I modify it right here in the sand?

Gunter Weidenhaus: No, go ahead!

Claudia Mock: Ok, if spacing and placement are analytical categories that are reserved for the social theoretical level, then I think the spatial practice for forging a network may be better described as linking, and thus in the sense of collaborating and connecting. And for a place to be enacted, the practice of assembling there is suitable.

Table 2: *Extended table of systematisation of spatial action and spatial figure.*

	dominant practice	mandatory practice	possible practice	rather irrelevant practice
network space	linkage	assemblage	movement	differentiation
territory	differentiation	linkage	assemblage	movement
trajectory space	movement	assemblage	linkage	differentiation
place	assemblage	linkage	differentiation	movement

Source: Translated and modified from Weidenhaus forthcoming: 90.

John Law: Gunter has already pointed to the messiness of these ideal types in real life, and I agree that in certain moments, it can be very hard to differentiate linkage and differentiation, because everything that is linked also indirectly marks a boundary and excludes (what is not linked). Ideal types, after Max Weber, are, as he warned, very powerful categories. They seduce us to adopt a specific focus and develop associated filters in our ways of seeing. We all know the satisfying effect when empirical results can be classified into ideal typologies. Almost magically, a figurative structure emerges, transforming a multitude of notched worlds into a smooth globe. Alternatively, they thicken the fragile border lines between worlds, strengthening dichotomies.

Gunter Weidenhaus: You're right, John, but I would like to emphasise one problem related to that, which is that the 'research-guided character' (translated from Weidenhaus forthcoming: 74) of spatial theory must be improved, and ideal types seem very promising for that. But I still agree with you that what counts for this aspect of spatial theory also counts for categories, such as ideal types: These categories need guidance.

John Law: I see that we agree. Then I propose that we enable an appropriate degree of reflexivity by continuing to web the string figure here. Annemarie, earlier you pointed to the relation between spatial figures, formats, and social topologies. Would you like to continue your thoughts here?

Annemarie Mol: Yes! So John and I are using social topologies, such as 'networks', 'regions', and 'fluids' (Mol/Low 1994: 641), to describe the analysis of the social space of anaemia. When interviewing medical doctors about their practice of treating anaemia, we started off wondering, 'Where in the body is anaemia?' (ibid.: 641), and we figured out that "blood" disturbs the spatial securities of anatomy [while] "anaemia" [...] disturbs other kinds of spatial securities' (ibid.: 642). Our research on medical practices concludes that anaemia, like blood, 'transforms itself from one arrangement to another without discontinuity' (ibid.: 664). This is what we call a fluid space.

Text Projection: Topology-Practice-Figure (Level II)

Anna Secor: Lauren and I see the generalising problem with ideal types, but we have also felt the need for such conceptualisation. The various phenomena, which are explored as topological, vary from 'borders, networks, computing security, memory, power, cities, bodies' to 'mobility' (Martin/Secor 2014: 420) and are '[a]ccompanied by a vocabulary of flows, deformations, twists, folds, torsions, severations, and cuts' (ibid.: 421). While Lauren and I value these different approaches, we also critically note that '[d]espite the fertility of these new spatial imaginaries, however, the sheer scope of these alternative topologies (fluid, fire, gel, or smoke) raises the possibility that their full potential for the development of spatial thinking may be lost in their endless proliferation' (ibid.: 425).

Claudia Mock: I think we can collaboratively find out how to deal with the tension that arises between the generalisation of complex realities and depthless descriptiveness. As an impulse, I would like to suggest that, first, the differentiation of social and societal theory, which served as the two levels for our game, can generally work to frame this 'endless proliferation of spatial imaginaries' without suppressing other possible imaginations. If fluid, fire, gel, smoke, etc. are framed under the societal-theoretical premise, then they can exist, but they do not have to everywhere and at all times. This theoretical classification immediately makes them appear less overwhelming. Second, we must recognise the potential of ordering through the action-theoretical focus Gunter proposed: By looking at how social topologies and spatial figures are constituted, no matter whether through action, intra-action, or discursive practice, commonalities could be found between, for example, fluid, fire, gel, or smoke, which could help the societal-theoretical spatial diagnoses to gain an epistemological sharpness. This could also mean that social topologies are what describe spatial relations on the social theoretical level, while spatial figures describe the spatial fig-

uration of space that is historically contingent and therefore lies on the second level. Annemarie and John, how do you, for example, define regions, networks, and fluids?

John Law: In the case of regions, ‘objects are clustered together, and boundaries are drawn around each cluster’ (Mol/Law 1994: 643). For networks, they are quite the opposite. In them, ‘distance is a function of the relations between the elements and difference a matter of social variety’ (ibid.: 643). Fluids then are both what region and network are not and what both are at the same time. Fluids are ‘the other kinds of space’, in which ‘neither boundaries nor relations mark the difference between one place and another’ (ibid.: 643).

Gunter Weidenhaus: Don’t you think that this classification comes very close to what I have drawn in the sand here if ‘one takes all territorially constituted spaces (for example, nation-states, regions, continents, etc.) as regions and translates “fluid space” with “trajectorial spaces”, because they are based on the movement of objects or living beings’ (translated from Weidenhaus forthcoming: 49)?

Bob Jessop: What exactly is a trajectorial space?

Martina Löw: ‘The concept of trajectorial space was developed by Gerhard Vinken (2008) in connection with a critical analysis of modern urban planning. Using Le Corbusier’s suburban visions as an example, he demonstrates how the contemporary city is, for the first time, consistently divided into spatially separated, formally and functionally differentiated zones and how the trajectory has implicitly been established as a leading figure in urban planning. Ulrike Jureit points out that these dynamics in modern society manifest themselves not only in urban contexts but also in the voyages of colonial discovery. Explorers, land surveyors, and adventurers followed clearly defined routes on foot or on horseback with the aim of expanding their knowledge of space. In fact, the linearity of their routes transformed the paths they took into trajectorial space. The information gathered along the way merged into a single map, so that the spaces beyond the route remained white areas on the map and were perceived as “empty” space.’ (Knoblauch/Löw 2020: 274–275)

Claudia Mock: Gunter, I agree with you in terms of regions. A territory rather than a region appears when ‘objects are clustered together, and boundaries are drawn around each cluster’ (Mol/Law 1994: 643). A region might be a type of territory and could, therefore, point to the potential of sub-types of these spatial figures. I don’t see the relation between what Annemarie and John identify as fluids with trajectorial spaces, because the fluid space is not necessarily based on repetitive action, nor must this action be institutionalised. And this brings me to an important point: I can see a highway, flight routes, or the routes of colonial exploration as trajectorial spaces, but in your unpublished habilitation project ‘The Spaces of the World’ (*Die Räume der Welt*) you draw on the indigenous culture of songlines in Australia (Weidenhaus forthcoming: 52) to exemplify this spatial figure. Here I would differentiate between different types of movement. But since both the spatial constitution of songlines and that of highways are connected to movement, I find fluid space much more fitting to frame the spatial figure under which these diverse types of movement can be placed. Movement does not necessarily lead to trajectorial patterns, and cultural routes should not be confused with infrastructural routes. What I propose is that

trajectorial spaces (e.g. highways) as well as routes (e.g. the songlines of indigenous Australians) are two of many possible social topologies that, through their dominant practice of movement, promote the spatial figure of fluid space. Although both social topologies are connected to the dominant action of movement, they are not connected to the same mandatory actions – for trajectorial space the mandatory action is differentiation and for routes it is linkage – a further engagement with them allows for reconstructing how the first is closely connected to the spatial figuration of the territory, whereas the latter is more closely connected to the spatial figure of network.

Text Projection: What About Scale? (Level II)

Bob Jessop: What about scale? Without scale, we are dealing with a flat ontology here, but such an anti-scalar approach ‘risks neglecting the hierarchical relations that often exist within and among networks’, because it equates ‘scale akin to horizontal network’ and fails to grasp ‘the complexity of links among different scales of action, which could be linked vertically, horizontally, transversally, centripetally and centrifugally’ (Jessop 2019: 59). Therefore, I would propose the territory, place, scale, network (TPSN) scheme developed by me, Neil Brenner, and Martin Jones (2008) as a heuristic for studying ‘spatializations, spatial formats and spatial orders’ (ibid.: 77).

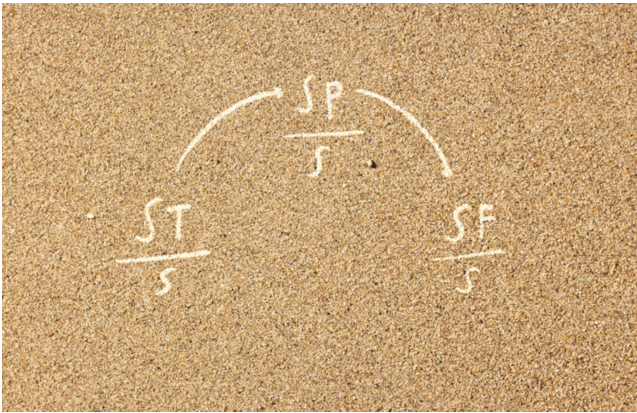
Claudia Mock: The scale debate is very important to my analysis of children’s spatial relations. This is, on the one hand, because of the general overemphasis of ‘agency over structure, concrete over abstract and local over global’ (Ansell 2009: 7) in childhood studies, which, as Nicola Ansell argues, inevitably leads to assumptions about children’s worlds as limited by the ‘micro-scale’ (ibid.: 7). Children then appear to have agency only in the concrete local, whereas they seem to be predominantly determined by structure in the abstract global. Nicola Ansell argues that this even accounts for critical scalar approaches, because they ‘largely juxtapose concrete (local) outcomes with abstract (global) causes’ (ibid.: 12). To overcome these binaries and hierarchisations, she suggests working with a topological ‘understanding of scale that rests on the material relations [and] requires a qualitative (but not dualistic) distinction between relations that are near or far’ (ibid.: 19). Additionally, scale matters to me because my comparison between Nairobi and Berlin is also strongly connected to the scalar entanglement of global and local, and I aim to show which aspects of this entanglement matter in children’s lives and how they reshape this entanglement.

Martina Löw: I also see that scale is important, but ‘[i]t is [...] of little help when [you], Bob [and your colleagues] (2008) suggest that every analysis of space must be structured around the categories “territory, place, scale, and networks” [...] [although you] do not provide a theoretical framework for these elements’ (Löw 2016: Preface IX). I do not understand scale as a spatial arrangement that develops in the process of communicative action between bodily subjects and material objects, but rather as a ‘possible form of synthesis’ (Knoblauch/Löw 2020: 273).

Claudia Mock: I agree with Martina that scale itself is on a different analytical level. But I would not agree that the practice of scale-making lies on the social theoretical level of space (like synthesis). On the contrary, I think that the making of scale, for example if a group or society is characterised more by the scale of the body or the scale of

the nation, is historically contingent and part of the societal spatial figuration. This theorisation of scale might also bring you into dialogue with the promoters of flat ontology. I say this because it solves a problem that Bernd Belina points us to when he notes that ‘the territory, place, scale, network scheme approach delivers a rather narrow structural approach, from which it looks at, and this way underestimates, social practices’ (translated from Belina 2013: 132). But if we emphasise the ways in which scale matters and how scale is produced, altered, and manoeuvred, as in the societal level of spatial theory, then we emphasise scale without setting it a priori. What must be clear is that scale will remain a matter of the empirical findings of my analysis. By looking at practices of scale-making, I situate the inquiry in between. Contrary to what the promoters of flat ontology suggest, I don’t conceptualise scale theoretically as flat. Nor do I assume it is within a fixed hierarchical order. Instead, I follow Nicola Ansell’s advice and empirically excavate the topologies inscribed into the biographical narrations and maps to see the material and social practices of scale-making inherent in them and the ways in which they co-produce spatial figures. Let me illustrate this order by drawing it in the sand (Figure 10).

Figure 10: Social topology, spatial practice, spatial figure, and scale.



Source: Illustration by the author.

Mock continues: This shows how I am theorising social topologies and spatial figures differently but in relation. Social topologies describe space in its ambiguity, processualism, and relationality. Social topologies are therefore important for arriving at the spatial figures in a sensitive manner in the analysis and for keeping the processual nature of spatial figuration in view. The social topologies thus help me to avoid defining space merely in terms of spatial figures. In doing so, I am guided by a focus on the practices that produce space in reconstructing figuration. This approach should also be in the spirit of the representatives of flat ontology, as space only takes on a powerful figure, for example that of territory, through a dense topological, i.e., relational, description that also looks at practices of spatial figuration. It should be

emphasised that the spatial figures compiled here are only the beginning of a figurative description of space and that, despite the logic of the ideal type, it is always a matter of keeping an eye out for new figures, regularly questioning the typology for pitfalls of epistemic violence, and rejecting or modifying it accordingly.

Now the good thing about theorising space on both levels of the spatial theory is that I can both choose a scale or scalar entanglement a priori, for example the home, and find out what social topologies are connected to the homes of a certain group of people. Let's say I am looking at the scale of the home in the context of upper-middle-class residents in Singapore. Perhaps on the scale of home, I will encounter the social topology of smart living and see which spatial practices are dominant in that topology. Eventually, I will recognise the many autonomous processes of monitoring and securitisation that can be described by the dominant practice of differentiation (for example the strong demarcation between public and private), which then forge the spatial figuration of territories in such contexts. But I can also look at the practices of smart living in Singapore and reconstruct the scalar entanglements connected to them. I might realise that the scale of home is contextualised by social topologies and spatial figures that are connoted not at all with the local urban site but with a global 'smart' urban community mediated to all kinds of technologies, virtual realities, and cultures that are part of the homely practices, such as a room with a huge screen, where partners who live in long-distance relationships meet through screens.

Bob Jessop: It would be helpful to add to Gunter's table so as not to lose the figures we made through our last string figure.

Claudia Mock: Good idea! Let me continue the drawing (Table 3).

Claudia Mock takes a branch and continues the table in the sand. As she draws, the table appears as a 3D hologram projection.

Table 3: Table of systematisation of spatial figure and practice, spatial topology, and scale.

	dominant practice	mandatory practice	possible practice	rather irrelevant practice	social topology examples	scale
network space	linkage	assemblage	movement	differentiation	Möbius space pregnancy symbiosis	body
territory	differentiation	linkage	assemblage	movement	enclave Vatican City dichotomisation	city/ nation

	dominant practice	mandatory practice	possible practice	rather irrelevant practice	social topology examples	scale
fluid space	movement	assemblage	linkage	differentiation	trajectorial space <i>Autobahn</i> linear movement	nation
place	assemblage	linkage	differentiation	movement	field <i>brownfield</i> playing	district/ global city
...	...	...	...	...	...	...

Source: Translated and modified from Weidenhaus forthcoming: 90.

Annemarie Mol: Claudia, do you think this table (Table 3) can help you to analyse your material well? Do you feel that collaboratively, we have thought of everything that seemed important to you? I also wonder how you evaluate the collaboration in the form of a string figure.

Claudia Mock: Thank you, Annemarie. I think it is a good moment to reflect, as it also feels as if with this last figure our play were coming to an end. Our collaboration initiated a deep engagement with spatial theory, which we reworked for contexts in which my analysis is situated. I am now equipped with a theoretical ground that allows me to see children's spatial subjectivity as fluid, processual, fixed, and static at the same time. It helps me to neither merely see the subject determined by structures that are topographically inscribed into space nor position the subject before the discourse as the authors of all spatial constitutions produced it from a sovereign subject position. Keeping a dialectic perspective enables an understanding of children's spatial relations 'as topologically established and topographically conditioned' (Kallio 2016: 375). Furthermore, it allows scales to be seen as fixed hierarchical sequences that structure the lives of children and powerful interpenetrating units in which children are embedded – but also as structures that children engage with, manoeuvre through, and re-constellate. A relational analysis of the complex reciprocal processes of the constitution of childhood and space conceptualises childhood and generational order, as well as space and spatial order, as both condition and effect of discursive practices. These practices are understood as performative, iterative, and mimetic and derive from certain subject positions, which are also always spatial and start from an individual or bundle of positionalities.

Additionally, with the reworking of Gunter's ideal-typical overview of spatial figures, we have developed a tool that can guide my analysis in a way that can grasp the figuration on the theoretical axiom of social topologies, spatial practices, and scalar entanglement. The collaboration on the social-theoretical level developed into a theoretical concept of space that supports me in grasping spatial progress beyond human exceptionalism and guides me in uncovering the middle class-specific material cultures and their performativity in the constitution of childhoods. In summary, we reached my goal of developing a spatial theory that guides my research in a way that I can

- document human, non-human, and matter performances within the spatial constitution.
- acknowledge many types of spaces, which could be myriad in the case of the spatial imaginaries that children are capable of.
- understand spatial constitution as a discursive practice, beyond a differentiation of discursive and non-discursive.
- reconstruct spatial figuration on the basis of spatial practices through a helpful ideal typology that is open and works with structuring analytical premises but also describing them in a complex way.
- grasp spatial figuration contextualised by strong scalar dichotomies (Global South and North, local and global) beyond these dichotomies.

Mock continues: But my goal was not only to play with you to develop a theoretical grounding for my analysis; I also aimed to develop socio-spatial theory further against a nature-culture binary and from an adult-critical standpoint. Playing and collaborating with you in this way kept my motivation to engage deeply with spatial theory in the context of my study. It was a test, an experiment, and as I noticed, it was sometimes hard for us to leave our positions and engage in playing. Therefore, I would like to thank you, Mishiko, for asking your prompt questions. They really helped us to get back to the essence of our respective thinking and writing on space. I see great potential in practising this collaboration more often and in more transdisciplinary contexts. When Mishiko and Moombi arrived, I realised that we are a homogeneous group in terms of age and profession, and I realised how little we as people are contextualised in non-European or non-Western worlds. I would like to imagine playing string figures beyond white academic practice and as a way to open up academic discourse for a broader audience. Additionally, I think that the experimental character resonates with the new situation the Anthropocene puts us in. And as Bruno mentioned earlier, it makes a lot of sense not to be locked into a university building while playing. As we were all here together in our presence, we automatically communicated in much more collaborative ways. The immediacy between us allowed us to dig deep and discuss things in real time, to pose questions and ideas more flexibly. We played it together in a different 'rhythm of accepting and giving' (Haraway 2016: 10), a rhythm that differs from that in the monologue of our publications. I want to thank all of you for joining me today.

The sun is about to set. The shadows of the players are stretching longer. The air is breathable again, and the sky is slowly turning from orange to pink. Out of the blue, music appears. It is the Kenyan sound artist KMRU, who is slowly walking through the scene and disappearing again at the horizon of the sand fields. He is wearing a vendor's tray with built in speakers which play his piece 'Spaces of Uncertainty' from the Album Jar, released in 2020.¹⁴ The music clears our heavy minds.

14 Sound bite available at: <https://kmru.bandcamp.com/track/space-of-uncertainty> [Accessed 10 December 2025, 14:30]

While the music is playing, the stage crew is joining the scene by de-installing the hologram projector and collecting the props. Everything and everyone disappear. Only Mishiko and Moombi remain.

3.4 Figuration

It is illogical to conceive time and space as fundamental factors of human existence and to understand the one concept as a social construction, but to reify the other, for example as a territorial concept. This creates an imbalance of structurally like concepts. It is logical to juxtapose the organization of succession to the organization of contiguity. (Löw 2016: 50)

With the terms *Nacheinander* and *Nebeneinander* (Löw 2001: 66), translated in the above quotation as ‘succession’ and ‘contiguity’, Martina Löw rightfully stresses the need for conceptual acuity in theory. In the string figure play, I clarified why I distance myself from the definition of space as an ordering form of proximity or contiguity. Now I would like to do the same for succession, following an understanding of time as a general ordering form of the linearity implied by the term. This is because understanding becoming on the basis of the temporal logic of contiguity would mean looking at process on the basis of the notion of transformation or development. Yet both notions suggest that there is a starting and ending point; therefore, becoming would be marked by acceleration. Such a notion would contradict my understanding of *spatial becoming*, and it would also seem wrong in the context of my methodology of countertopology, which compares the spatial figuration of middle-class childhoods in Nairobi and Berlin. Such an understanding of historicity would inevitably lead to an understanding of spatial processes under the global condition that derives from and reproduces hegemony. An example is the Eurocentric understanding of history inherent in modernisation theories that conceptualise development as progress, which creates entities that are fixed in time instead of understanding the entangled processes of complex relations – which I call *figuration*.

In the following, I will draw on the notion of figuration from the sociologist Norbert Elias to develop a heuristic that is suitable for theoretically and conceptually grasping the notion of time and process that underlies my analysis. In doing so, I will first introduce Elias’s notion of figuration and point out its similarities with the theory of assemblage. Inspired by their similarities and differences, I will then explain how I am distancing myself, on the one hand, from aspects of Norbert Elias’s work that already stand under a postcolonial critique and, on the other hand, from some ways in which the collaborative research centre’s ‘*Re-Figuration of Spaces*’ (CRC 1265) has applied Norbert Elias’s notion of figuration. Lastly, I will discuss the methods I use to conceptualise the translocal comparison between Nairobi and Berlin, drawing on the topological metaphor of wormholes.

3.4.1 Re-Figuring: An ‘Assemblaged’ Reading of Figuration

Norbert Elias uses the concept of figuration (1970, 1988) to explore the processual interactions between subjects and society, pursuing the goal of ‘overcoming a sociological subject-object dualism’ (Mikula/Lechner 2014: 28). Figurations can thus be described as pro-

cessual and dynamic social entities that emerge from the interweaving contexts (Elias 1978) of different actors or even players. With this spatial-theoretical extension of Norbert Elias's figuration theory, spaces can be understood as figurations in terms of the processualism of subject-object relations and examined as such. In this way, the concept of figuration enables an investigation of space that, first, allows the practices of various actors to be examined as performative practices that produce space, i.e., performative actions, and, second, allows the performance of material arrangements to be examined. In that context, Norbert Elias criticises the effects of the separation of human and natural sciences in the ways in which they suggest perceiving the world as divided into "nature and society", "nature and culture", "object and subject", "matter and mind" or "physical and experienced time" (Elias 1993: 85), while he notes that

all these dichotomies represent hidden battlefronts. [...] Each representative of a scientific specialism tends to perceive his own field of study as an object in isolation; he is apt to contribute to it an absolute autonomy in relation to the object of other sciences. [...], without asking the obvious question of how these different fields relate to each other. (ibid.: 86–87)

This aspect of figuration as a process-sociological concept that is critical to the nature-culture divide is very important for my analysis of *spatial becoming*, because it allows me to understand and analyse children's involvement with non-human others as well as the ways in which childhood as a classed spatial order materialises. Additionally, as such, figuration has much in common not only with the criticism of the nature-culture divide in actor network theory but also with the theory of assemblage (Deleuze/Guattari 1987; Deleuze 2006a; Manuel DeLanda 2016), which is often used as an alternative to structure, as it 'allows us to think about spatial formations as products that must be constantly defended, held together, maintained and repaired. Rather than [as] an underlying structure or a structural context, space thus appears as a relational effect.' (Farías 2011: 370) Increasingly applied as an alternative to structure in human geography (Farías/Bender 2010; McFarlane 2011a; Swyngedouw 2004), '[a]ssemblage – whether as an idea, an analytic, a descriptive lens or an orientation – is increasingly used in social science research, generally to connote indeterminacy, emergence, becoming, processuality, turbulence and the sociomateriality of phenomena' (McFarlane 2011a: 206). I am drawing on figuration with its similarities to assemblage theory to conceptualise the change I am documenting in the study of spatial figurations in Nairobi and Berlin on the basis of an idea of process and away from notions of progress.

The conceptual framework of 're-figuration' (Knoblauch/Löw 2017), later modified to 'refiguration' (Löw/Knoblauch 2021), was developed by Martina Löw and Hubert Knoblauch as an umbrella term for the interdisciplinary exchange within the CRC 1265, in which my PhD project was situated. The CRC 1265 is keen to explore societal change under the global condition from a spatial perspective. Löw and Knoblauch's suggestion of applying Elias's concept of figuration to 'grasp [...] change from its start as spatial' (translated from Löw/Knoblauch 2021: 25) seems very convincing to me, moreover, because of its specific processual character: Figuration aims to understand processes beyond a linear understanding of time and therefore serves to conceptualise the modes in which

complex relationships evolve and constantly change beyond a starting or ending point. In this way, it is suitable for grasping change beyond the idea of transformation and therefore allows qualitative analysis that aims to understand societal processes beyond the notion of one possible (narrative of the) past, present, and future. They furthermore note that 'Elias puts the focus on the *how* of the transformation' (Knoblauch/Löw 2017: 11). As such, it fits well with my understanding of *spatial becoming*. Knoblauch and Löw note that Norbert Elias's processual concept of figuration (Elias 1978) 'refers to the relation of interdependence; it is, therefore, explicitly relational in a way that does not separate different levels a priori, such as *macro*, *meso* and *micro*' (Knoblauch/Löw 2017: 11). Additionally, it serves as a methodological framework for grasping processes of globalisation precisely because it can serve as 'a conceptual answer to the [...] criticised static dichotomy of the local with the global and the national respectively' (translated from Löw et al. 2021: 11). In the anthology *Am Ende der Globalisierung* (At the end of globalisation) Löw and Knoblauch state that 'the plausibility of the concept of globalization [not globalisation itself] is coming to an end' (translated from Löw/Knoblauch 2021: 25). 'Refiguration', according to them, 'is a conceptual response to the [...] criticised constant juxtaposition of local and global or national and global' (translated from Löw et al. 2021: 11) in the concept of globalisation.

As such, the concept of figuration is a suitable framework for my endeavour to understand how the spatio-temporal order of childhoods changes over time and in two geographically and culturally distinct places. In the following, I will explain why the additional framing of 're-' proposed by Löw and Knoblauch brings with it a historical framework that I would like to distance myself from. Beyond adding an additional historical framework, I also see the danger that old Eurocentric frameworks inherent in Elias's work, like others of his time, are reenacted by it. Within Elias's writings on time and the process of civilisation, one can find several passages that point to his Eurocentric standpoint. In that context, he often speaks of developmental stages of societies and, for example, argues that '[t]here are, thus, stages in the development of human societies where men have hardly any social timing problems which require active synchronization of their own communal activities with other changes in the universe' (Elias 1993: 49). According to Boike Rehbein, claims as such do not rest on any empirical evidence, as his 'theory of the civilizing process [...] empirically disregards non-European societies and applies European criteria in assessing the state of civilization' (translated from Rehbein 2016: 171). Besides this necessary criticism, it must be noted that Norbert Elias's ideas of developmental stages and of 'primitive versus advanced' societies do not, as in the case of many of his contemporaries, rest on an unequal understanding of the human itself. After pointing to the increasingly complex interconnections that can be observed in what he calls 'higher' societies, he clarifies that

the highly differentiated and unrelenting attention to time which forms part of the social habitus of those brought up in more differentiated and more complex industrial state societies is no more surprising than the capacity of the hunting tribesmen to form a detailed picture of their prey from a couple of footprints. [...] There is no zero-point of civilizing processes, no point at which human beings are uncivilized and as it were begin to be civilized. (Elias 1993: 145–146)

Rehbein additionally argues in this context that ‘a closer study of the criticism reveals that Elias’s Eurocentrism is rooted in an objectivistic theory of science. The concept of figuration, which Elias applies in his theory of the civilising process, should therefore be decoupled from this theory of science and the associated Eurocentrism in order to construct a theory of the social sciences that is viable in the twenty-first century’ (translated from Rehbein 2016: 171). I elaborate in the following how this could look in practice.

In the meantime, assemblage theory will help me to explain why I find it more appropriate to work with the concept of figuration as a social-theoretical concept (ontological), which, as such, cannot be framed by a societal diagnosis of historical character that is moreover predominately observed from a certain geographical standpoint, such as Eurocentric or Western. This is precisely because, as Löw argues, and as elaborated in the string figure play (subchapter 3.3), social theory (in the German sense) must aim to serve as a theoretical conceptualisation of social processes beyond different societies and epochs. However, Löw and Knoblauch note that the concept of re-figuration

also holds the potential to point to changes and intensifications of social upheavals in recent decades in the sense of describing a refigured modernity. (translated from Löw/ Knoblauch 2021: 28)

They thereby rely on historical perspectives that are based on modernisation theories such as those of Charles S. Maier and Jürgen Osterhammel, who date a shift in the spatial order of the world (globalisation from a spatial perspective) to the late 1960s and early 1970s. This shift, they argue, has led to ‘the principle of centrality, hierarchical order and territoriality giving way to translocal work organisation, network structures and decentrality’ (Knoblauch/Löw 2017: 8). These relevant changes in globalisation processes (observed from the West) serve as a historical framing, which is theoretically set by the ‘re-’ as a prefix to figuration. In this context, the authors argue that ‘[a]lthough modernization theories represent a Western view of societal transformation, they make it possible to analytically highlight these societal and spatial changes in the globalization process’ (ibid.: 8). It is unclear to me what it is that we could gain from such a perspective. First of all, it seems questionable why a processual theory should be historically framed at all, and second, I wonder, against the background of my research in postcolonial contexts, why Löw and Knoblauch propose such an obviously Eurocentric perspective when re-figuration is intended as a concept for exploring spatial change all over the world, as it obviously highlights the ‘Western view’, as they admit, but not without the price of its epistemic violence. Therefore, in the context of my research in postcolonial contexts, I cannot adopt such a view, as it risks ordering the transnational comparison before I even come to scrutinise its figurations. Even though this is and will always be a side effect of research, this effect can be dealt with more carefully. Consider, for example, the major changes Nairobi and Berlin have undergone since the 1960s from a geo-political perspective, such as the construction of the Berlin Wall in 1961 or the collapse of the East African Community in 1977. Due to their complex socio-historical and political entanglements, these examples also illustrate how difficult it is to nevertheless determine a spatial form based on them. This is also because territories once drawn keep radiating their power. Hence, in the case of Kenyan independence in 1963, it is quite questionable whether the spatial figure of the

territory really lost its centrality or whether it was more about the change from one territorial logic to another, or whether the territory was, in other words, simply rescaled, as postcolonies are still politically and economically caught up in multiple global dependencies today, such as in the context of financialisation and the global depth economy (for more, see Federici 2019: 34–50). Even with the reference to specific indicators of re-figuration, Löw and Knoblauch remain largely on a genuinely Western perspective when they draw on the phenomenon of decentralisation in Western societies:

Indications of this re-figuration are changes in the economy and the development of communicative capitalism (Dean 2005), the massive deindustrialisation of Western societies, the transfer of advanced industries to other areas of the world and the reduction of the industrial workforce due to substitution by automatised, digitalized and increasingly roboterised production agents. (Knoblauch/Löw 2017: 8)

However, it must be borne in mind that this Western decentralisation, despite its global impact, does not produce the same spatial figures everywhere. This is because its spatial logic, particularly in the ‘Global North’, increasingly leads to deterritorialisation – through mobile capital, flexible production, and growing digital infrastructures. Yet this apparent deterritorialisation masks a simultaneous process of reterritorialisation elsewhere. Where outsourcing occurs, the underlying logics are also displaced and imposed. Crucially, these logics remain territorial at their core. Capitalism is historically and structurally grounded in a spatial logic of enclosure, extraction, and differentiation. This territorialisation enables the regulation of labour, the capture of value, and the reproduction of hierarchies. Far from being abolished in the process of globalisation, this spatial logic is reconfigured and intensified at the peripheries. Capitalism, no matter whether communicative or not, is therefore hardly conceivable without territorial differentiation, because it depends on uneven development. So the question is rather: For whom are the territories disappearing as the hegemonial ordering form of space? In a volume published in 2021, which presents their more advanced reflections on re-figuration, Löw and Knoblauch concede that

[t]his simultaneity [...] of various processes of spatialisation already occurred in earlier phases of social developments and in other regions, so that refiguration itself by no means describes a new phenomenon. What is new, however, is the development of the digital mediatization of social action, which has been accompanied by massive spatial changes since around the 1970s. (translated from 2021: 28)

I consider this clarification important, even though I would still not assume a logic of increase in the sense of an increase in the complexity of space, but at most formulate it as an empirical question. For even if re-figuration is a vaguely hypothetical social-historical phenomenon to be verified by empirical findings and is thus situated at the level of societal theory, Western historiography is inherent in it through the conceptualisation of the prefix ‘re-’, as it were, and additionally in some ways contrary to Elias’s understanding of figuration as a process and not as a progress.

The concept of assemblage, which has a lot in common with figuration and its understanding of processualism, is applied in much more fitting ways. Therefore, I would like to suggest an understanding of figuration that is close to Manuel DeLanda's reading of assemblages, which, as he notes, 'emerge from the interactions between their parts, but once an assemblage is in place, it immediately starts acting as a source of limitations and opportunities for its components' (2016: 21). With this strong focus on interactions, it can trace 'how globalization is reproduced through local places in practice' (Woods et al. 2021: 284). From this perspective, societies are not understood as entities but '*as an assemblage of assemblages*' (2016: 37), which could, in the string figure, perfectly intersect with an understanding of society as a *figuration of figurations*.

But then why not title the book 'Assemblages of Childhood'? The reason is that I do partly agree with the criticism of Brenner et al. that the concept of assemblage lacks depth due to its excessive emphasis 'on the ground' (2011: 230) – especially approaches that work with the assemblage theory of Gilles Deleuze and Félix Guattari (1987) and its application by followers of the actor network theory, such as DeLanda 2016 and researchers inspired by the promoters of flat ontologies (Marston et al. 2005; Escobar 2007; Anderson et al. 2012). In particular, the predominantly 'descriptive focus associated with ontological variants of assemblage urbanism leaves unaddressed important explanatory questions regarding the broader (global, national and regional) structural contexts within which actants are situated and operate' (Brenner et al. 2011: 233). Therefore, I find a middle ground by relying on the concept of figuration and reading it with the processual and relational understanding of assemblage theory. As illustrated in the string figure play, I therefore develop a topology of process that endeavours to enact analysis, typology, and power as well as description, topology, and agency with the aim of tracing a relation in a way that it 'cannot be "proved" because its totality is not approachable' (Glissant 1997 [1990]: 143–144). In this way, '[d]escription is no proof; it simply adds something to Relation insofar as the latter is a synthesis-genesis that never is complete' (ibid.: 143–144). With Edouard Glissant's notion of relation, I also reject an understanding of history that sees the world as a process that is becoming increasingly complex. Instead, I agree with Cindi Katz, who argues that

[h]omogenization is not the script of globalization so much as differentiation and even fragmentation. In fact while globalization may be nothing new, what is new, suggests Michel-Rolph Trouillot (1996), is the greater awareness of global processes among increasingly fragmented populations all over the world. (Katz 2001b: 1215)

Bruno Latour furthermore illustrates this by differentiating that while in the past modernity was related to progress whose direction was marked by the 'global attractor' (Latour 2018: 29), now the former positive connotation of 'globalization-plus' – a trans-local process that increases complexity and diversity – has been joined by 'globalization-minus' (ibid.: 13) – 'a *single vision*, entirely provincial, proposed by a few individuals, representing a very small number of interests, limited to a few measuring instruments, to a few standards and protocols, has been imposed on everyone and spread everywhere' (ibid.: 12–13). In order not to reproduce this dichotomy in social theoretical thought, I propose being sensitive to the practice of scale-making, starting the analysis from a flat ontology

that relies on an 'assemblaged' reading of the concept of figuration to fathom change and transformation. With this heuristic foundation, then, I do not assume that the spatial relations of children in general were fewer, simpler, more coherent, etc. in the past and that they will be more complex, multi-layered, and simultaneous in the future. Instead, I assume that it is possible, that according to uneven development and social inequalities worldwide, there are and always have been very specific differences according to the intersectional variables of age, class, gender, race, colour, sex, etc.

According to the art critic John Berger, who is famous for his analysis of paintings, 'consequences', contrary to what the term suggests, lie not (only) hidden in the future of their causes. Instead, he argues that '[i]t is space, not time, that hides consequences from us' (Berger 1974: 40). Similarly, Edward Soja warns us about the hidden forces of space as a tool for creating societal norms when he notes that '[w]e must be insistently aware of how space can be made to hide consequences from us, how relations of power and discipline are inscribed into the apparently innocent spatiality of social life, how human geographies become filled with politics and ideology' (Soja 1989: 6). Yet as Doreen Massey reminds us, it is important to keep in mind the dialectics of time and space. She stresses the importance of concepts that move beyond their binary, in which 'each *pure* imagination on its own tames the spatial' (Massey 2005: 86).

With the term re-figuring, I would like to follow Massey's call for un-taming and Berger's and Soja's call for un-hiding to make the historical frame or reach of my analysis transparent. This frame and the prefix 're-' are therefore employed here in ways that delineate the limits and potentials of my methodology, which draws from the experience and memory of childhood from people born between the 1960s and the 2010s and which allows me to re-figure the spatial order of childhood accordingly. Hence, I would like to differentiate between three ways of re-figuring:

- *Un-taming* is re-figuring spaces by theoretically grounding the analysis aware of epistemic dichotomies. First, this means that spatial theory cannot function without concepts of time or history. Second, it means that we have to become aware of the often hidden spatial dichotomies that are inherent in concepts and methodologies.
- *Un-muting* refers to re-figuring spaces by listening to those who are not heard or supposedly cannot speak (yet). In a posthuman context, un/muting does not mean that we figure out how to speak to mushrooms or make the mushroom speak to us but that we find ways in which we can listen to and take part in its world and from there trace relations, as Anna Tsing (2015) does in her ecological analysis of Matsutake and its relation to global capitalism.
- *De-archiving* points to the necessity of continuously reflecting on the power to co-produce history and archive, thus contributing to order and remembering the world (in that order). As such, this form of re-figuring is highly contextualised by the postcolonial power structures in which the research and the academic system are entangled. This accounts, for example, for practices of cartographical mapping but also for questions such as: Whose stories do we collect (in, for example, biographical research) and whose do we not collect?

In the following and last subchapter of Part II, I will elaborate how this method of re-figuring can work in a translocal comparison.

3.4.2 Figurations Behind Wormholes

“Uneven development is social inequality blazoned into the geographical landscape [...]” Neil Smith 2008 [1984]: 206

Figure 11: The Isometric Systems in Isotropic Space-Map Projections, The Doughnut, ink, metallic paint, and pencil, 43.8 x 37.5 cm.

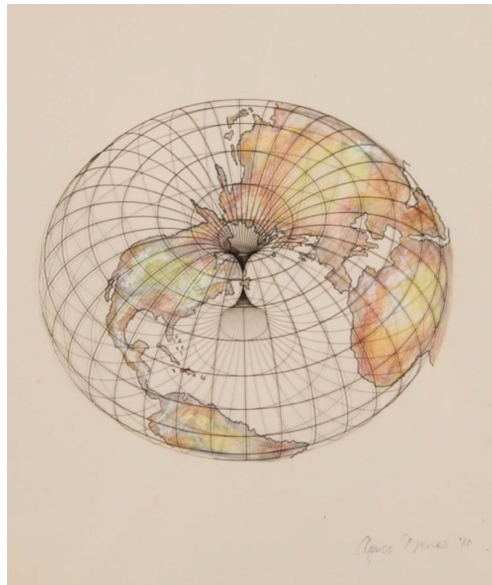


Illustration by Ágnes Dénes, 1980. Resized by the author¹⁵

Equipped with the spatial-theoretical foundation that resulted from the string figure play (subchapter 3.3), I would now like to reconnect to the methodology to lay out the processual theoretical base of the study (subchapter 3.4). It is entwined with the spatial, shaping what I mean by the wormhole metaphor, which serves to visualise the translocal comparison. This metaphor imagines the globe as a doughnut with antipodal points connected through a wormhole, as visualised by the conceptual artist Ágnes Dénes (Figure 11).

Admittedly, the globe is not as smooth as a doughnut, nor would a connection between the planetary positions of Berlin and Nairobi give it this shape, but from a topo-

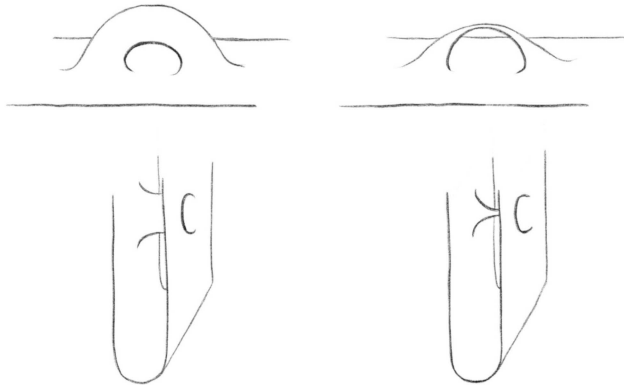
15 Available at: <https://awarewomenartists.com/en/artiste/agnes-denes/> [Accessed 5 March 2026, 10:25]

logical perspective, where relations matter, that does not change the figure (see Martin/Secor 2014: 423). With this figurative metaphor for comparison, I follow the call to think cities through elsewhere (Robinson 2016) and 'develop methods and theoretical practices which allow conceptual innovation to emerge from any urban situation or urbanization process, sustaining wider conversations while insisting that concepts are open to revision' (Robinson 2022: 3). It is important to note that it is not Nairobi and Berlin being compared through this wormhole but the childhood biographical narrations and maps, combined with architectural ethnographic material that I collected in both contexts and on the scale of home. The speakers were identified on the basis of socio-economic sampling ranging from lower- to upper-income groups, with a large proportion of middle income at the centre of this spectrum. Therefore, I am looking at entangled inequalities, framed here as situated globalities.

Neil Smith's idea of uneven development is very helpful for studies like mine, which explore how intersectionality and spatial figuration relate. Societies worldwide are becoming increasingly uneven in terms of who has access to and who can participate in space. Therefore, we must recalibrate the perspectives from which we try to understand such global inequalities. In the following, I want to explain how this approach of re-figuring works in the context of my study. For this, let us try to visualise Neil Smith's (2008 [1984]: 206) depiction of uneven development as 'social inequality blazoned into space' and imagine the globe full of small holes, like an Emmental cheese, but much bigger! Whereas most spatial process is imagined on the surface of the planet, I would like to make use of an imagery that follows the traces of mycelium – the complex root structure of fine filaments (hyphae) that spreads out like a mesh underneath a mushroom. Mycelium is a neural network that enables plants to communicate and nurture each other – as such, it takes part in multiple processes of becoming. Now, let's imagine the people who participate in my study as mushrooms and their (hi)stories as mycelium, which shape an interconnecting network between the times and spaces of their lives. People who are similarly situated but differently dispersed and therefore again differently situated. It is important to note that my mycelium is not natural. Even though natural processes might participate in it, it remains a scenario. A narrative. A spatial imagination. Produced in my, the researcher's gaze, their social relations are metaphorically traced through the world from two azimuthal standpoints. Although, in a topological sense, the planet is much more accurately depicted by complex hyphae structures, barely visible to our naked eye, my study only manages to grasp it, at most, at the complexity of a doughnut, such as that envisioned by the artist Ágnes Dénes in Figure 11. Yet treating the planet as a topological figure enables me to explore spatial figurations that are 'blazoned' *through* and not only 'into' (ibid.: 206) the planet's surface.

As a part of my practice of re-figuring is working with people's memory, I additionally do some sort of time travelling through their (hi)stories. In a utopian vision, wormholes do not just enable us to travel through space over great distances and in a short time; they also serve as a possibility of travelling back through time, a point I will come back to later (subchapter 5.1.1.2).

Figure 12: Two examples of long wormholes (top) and two examples of short wormholes (bottom) with different throat circumferences.



Source: Drawing by the author.

The wormhole (Figure 12) is a topological manifold that serves as a metaphor for imagining and exemplifying what countertopological research can aim for in a methodological sense. In the following, I will illustrate how the wormhole metaphor helps me not only in the common sense to time travel but to uncover new or better hidden or unseen relations between two seemingly different worlds or points in space-time. When the wormhole metaphor – a hypothetical tunnel connecting two different points in space-time – is applied as a tool for comparative research in Jennifer Robinson's sense of 'thinking [spaces] through elsewhere' (2016), an important methodological question appears:

Are the ends of the wormhole intra-universe (exist in the same universe) or inter-universe (exist in different universes)?

Applied to the context of my research, this raises the first important question: Are the middle-class milieus that make up my sample part of the same or a different universe? This question brings me to Eric Sheppard, who developed the metaphor of wormholes as a tool for describing 'the concrete geographies of positionality and their non-Euclidean relationship to the Earth's surface' (Sheppard 2002: 307), which he contextualised by the routes of colonial expansion:

When Captain James Cook sailed the Resolution into Waimea Bay, Hawaii, on 19 January 1778, the effect was to radically restructure the space/time vectors connecting Hawai'i with London. This rift in global space/time instantiated what I conceptualize here as a dramatic shift in positionality, opening a wormhole in social space/time that qualitatively increased the connectivity between the two places. The 19-month voyage to Hawaii seems desperately slow by contemporary standards, but it effectively con-

space x and space y from that moment on in a way that makes the uneven development connected to them practically irreversible. In fact, these examples end the existence of both in the same universe (intra-universe). Later in his text, Sheppard (2002) criticises 'the space/time imaginary of many mainstream neoliberal globalization theorists who argue that globalization makes old territorial structures irrelevant and equalizes development possibilities everywhere' (ibid.: 309), but at the same time he draws a picture of worlds fully unconnected before globalisation. What I would rather like to identify here as a problem common to academic thinking about globalisation processes is the common idea of development and historicism, which renders the world, just as in the logic of capital accumulation, as developing from 'primitive', 'simple', and 'unconnected' towards 'advanced', 'complex', and 'networked' – a problem that becomes highly evident in the context of multi-sited studies.

At this point, it seems important to note that I do not see both types of spatial relation as static and fixed (intra-universe and inter-universe). Socio-material relations oscillate between intra- and inter-relations. Whether the speakers in Nairobi and Berlin are either inter- or intra-universe relations depends on the positionality of standpoints and on the scale from which such a question is posed. From a global perspective, growing up in Nairobi and Berlin might seem utterly different, as a global perspective might highlight the unequal rights to move across the planet and point to the wider postcolonial entanglements that render the childhoods of the Global South and North extremely uneven. From a perspective that regards the local and global as reciprocally constitutive, these differences might shift to the scale of the house and home-making, where the type of house children grow up in renders their lives very similar, although one of these houses is located in a city of the 'Global South' while the other is located in the 'North'. Worm-hole metaphors are to be understood as tools in which we can move beyond the common and maybe hegemonial orders of worlding processes. Yet this view, as the critics of flat ontologies warn, must always be reconciled and examined in relation to the hegemonic powers that frame what has been viewed.

Only this dual perspective can reveal deep insights into the mechanisms of power. Speaking with Cindi Katz, looking at situated childhoods in situated globalities then means re-figuring 'intersecting effects and material consequences of so-called globalization in a particular place, not to valorize either experience of the local, but, quite the opposite, to reveal a local that is constitutively global' (Katz 2001b: 1214). This means that what I found in Nairobi and Berlin are not necessarily global (hi)stories but rather (hi)stories that can be found globally. Sarada Balagopalan, in this context, pleads for a new perspective on the 'universal' – a term that has been, for good reasons, under criticism within post- and decolonial discourses. Yet beyond that, she also noted that

[t]he critical reconsideration of the 'universal' [...] is not the same as saying that childhood is 'socially constructed' but rather about disclosing that these constructions are always already constituted by an exercise of power that has been global in character, with a recognition that what constitutes this 'global' shifts over time. (2019: 26)

Therefore, if we look at the ways in which children in Nairobi and Berlin are growing up generally, we will find livelihoods that are hard to compare. But if we sharpen the

lens towards a class-oriented perspective that takes the situatedness of children into account, we will encounter situated (e.g. classed) globalities that might entangle and relate disparate lives, and as such constitute the local and the global alike. Ignorant of the hegemonic cartographic depiction of the world's relations, I zoom into the (hi)stories of childhoods from an azimuthal vantage point that positions each city at the centre of the globe. From here, I want to forget for a moment all the arguments that declare growing up in Nairobi and Berlin as completely unequal (flat ontology) until ...

ripple by ripple,
wave back (!),
back, back, back,
ripple,
ripple,
ripple,
ripple,
ripple,
swell.
ripple, ripple, ripple.
wave, back!

... a biographical narration convinces me otherwise. This approach aims to uncover the entanglements of such situated globalities and thus to counter prevailing cultural narratives and cartographic representations of 'Global South and North' and the dualistic notions of childhood associated with them.