Re-thinking the Peri-urban: A Sensory-visual Exploration of the Making of Mexico City

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Declaration of Originality

I certify that this thesis is solely my own work. References to the work of others have been cited and indicated throughout.

Christian von Wissel
Abstract

This thesis explores the everyday making and thinking of the peri-urban. The condition of the peri-urban is a troubled one, caught between uneven spatial development, rapid land use changes and competing ‘rural’ and ‘urban’ logics. At the same time, its condition is central to the broader urban process as it is here that planetary urbanisation materialises in the form of ever more houses, neighbourhoods and streets. Accordingly, the peri-urban is frequently described as a ‘territorial crisis’, as a ‘lack of city’ and as a planning and administrative ‘problem’ posed to urban sustainability.

Without denying the urgency of this situation, this thesis starts by observing that the perspective of the everyday tends to be absent from peri-urban accounts. Its intention is to re-think the peri-urban from the viewpoint of those living in its socio-material circumstances. It does so by attending to infrastructural practices, that is, to the inventive ways by which practitioners of space reach beyond themselves and nurture spaces of opportunity. In particular, it focuses on the physical effort these practices imply, as well as on the making of city they entail and the socio-spatial consciousness they afford. As a result, this thesis identifies four types of city-making labour and distinguishes fifteen layers of cityness by which the peri-urban is apprehended through the practising body when emplaced in concrete peri-urban situations.

The findings of this thesis are the fruit of a combination of sensory and visual methods that are particularly receptive to the corporeality and materiality of practice and the space in which it occurs. Fieldwork was carried out in the northern stretch of the Metropolitan Area of the Valley of Mexico, and specifically in and around an affordable housing development, a self-built settlement, the communal land of a farmers’ organisation (ejido) and the highway which ties these sites together.
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Special thanks to my peers at Goldsmiths’ Sociology department and at the Centre for Urban and Community Research (CUCR), my colleagues at Technische Universität Braunschweig and Munich, and my fellow stipendiaries at Akademie Schloss Solitude who let me share my thoughts with them at different stages of the process and who helped me with their valuable comments channelling its path(s) at the same time as inspiring important detours from it.

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I dedicate this thesis to peripheral life and the centrality that rests therein.
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<td>ANT</td>
<td>Actor-Network-Theory</td>
</tr>
<tr>
<td>BRT</td>
<td>Bus Rapid Transit</td>
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<tr>
<td>FOVISSTE</td>
<td>Fondo de la Vivienda del Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado / Housing Fund of the Institute of Social Security and Services for State Workers</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographical Information Systems</td>
</tr>
<tr>
<td>INFONAVIT</td>
<td>Instituto del Fondo Nacional para la Vivienda de los Trabajadores / Institute of the National Workers’ Housing Fund</td>
</tr>
<tr>
<td>NAFTA</td>
<td>North American Free Trade Agreement</td>
</tr>
<tr>
<td>PAN</td>
<td>Partido Acción Nacional / National Action Party</td>
</tr>
<tr>
<td>PRI</td>
<td>Partido Revolucionario Institucional / Institutional Revolutionary Party</td>
</tr>
<tr>
<td>RCCP</td>
<td>Región de Conurbación del Centro del País / Central Conurbation Region</td>
</tr>
<tr>
<td>ZMVM</td>
<td>Zona Metropolitana del Valle de México / Metropolitan Area of the Valley of Mexico</td>
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Introduction: Re-thinking the Peri-urban

Víctor and I meet at the gates of one of the closed-off streets to the rear of the Sierra Hermosa development located in Tecámac, State of Mexico, in the northern stretch of the Metropolitan Area of the Valley of Mexico (ZMVM). He is selling fruit and vegetables from the back of his van, attending a few customers and waiting a little while before packing everything up again in order to move on. ‘The neighbourhood is only about seven years old’, he tells me in a moment of rest. ‘Before that, this was all farmland’. Our eyes pass through the fence opposite the row of single-storey houses and out into the adjacent fields.

These neighbourhoods grow very fast. Over there is another development, and on the other side of the road one more: Villas del Real… If you walk this way you’ll get to a village. Over there, where the trees are, that is San Pedro Atzompa. That is still a village.

Víctor and I stand right at one of the many rupture points of the peri-urban realm of Mexico City. Here, mass-produced affordable houses stand face-to-face with the communal land of a farmer’s organisation (ejido). We also stand at a fleeting moment in peri-urban time: only a year later, half of the field we are overlooking in 2010, will be covered by the building works of Provenzal del Bosque, partially inhabited already by 2012 and finished with its 3,000 dwelling units in 2014. In other words, the condition of the peri-urban is a troubled one, caught between uneven spatial development, rapid land use changes and competing rural and urban logics. At the same time, its condition is central to the wider urban process as it is here that planetary urbanisation materialises in the form of ever more houses, neighbourhoods and streets. Accordingly, the peri-urban is frequently described as a ‘territorial crisis’, as a ‘lack of city’ and as a ‘problem’ posed to sustainable planning and administration. This is the case also in the Mexican context.¹ Hence, the multiplicity and swift changes of the socio-material conditions that Víctor and I engage with are the ground on which this thesis unfolds.

¹ E.g. Iracheta and Eibenschutz 2010.
At the same time, considering Víctor’s work as a one-man mobile grocery shop also establishes the lens of my research. Víctor has found a way of turning the peripheral position of the neighbourhood – and his own position and mobility within it – into a business idea, providing what is missing on a makeshift basis.

Four years ago I got sacked, so I set up this business. We lived in the Federal District but when I lost my job we had to look for a future here. The problem is you move to the State of Mexico [because housing prices and rents are much cheaper] but there is no employment. So you have to look for a way to make it here, you have to be creative in your searching [hay que buscarle].

Such creative searching for opportunities is a key characteristic of the peri-urban realm. It is a response to the structural dependencies in which urban peripheries are caught. This is particularly the case in the context of the agglomerations in the Global South for which the term peri-urban is predominantly mobilised.² Yet how does one make sense of this creative searching? While many accounts turn to the notion of informal activities as one of the decisive features of the peri-urban,³ they often overlook the precise methods by which peri-urban dwellers actually deal with their circumstances. How do Víctor and those like him put themselves to work in order to thrive in conditions of want and marginalisation? How do they employ the specific socio-material settings of the peri-urban as their resources? Answering these questions, I argue, requires attending to infrastructural practices, that is, to ways in which practitioners of space mobilise themselves in order to make ends meet with what is at hand. Víctor, in this sense, provides this study with a first example: he is a mechanical engineer by profession but his livelihood in Tecámac depends on buying in the city in the morning⁴ and selling on the periphery in the evening, enacting himself as a one-man supply chain while profiting from the distance between the fringe and the centre.

There are things here in the State of Mexico that are very expensive, travel fares for example. … The products I offer are basic household goods and, to be honest, they sell very well.

² Adell 1999, 7.
³ Adell 1999; Browder, Bohland, and Scarpaci 1995.
⁴ Víctor buys his products in the central supply market in Ecatepec.
The turn to infrastructural practice I am advocating draws on AbdouMaliq Simone’s notion of ‘people as infrastructure’, that is, on his analysis of the ‘process of conjunction, which is capable of generating social compositions across a range of singular capacities and needs (both enacted and virtual’).\(^5\) At the same time, it slightly shifts the focus from acting as infrastructure to doing infrastructure: not infrastructure as a noun is at the centre of attention now but practising infrastructure as a verb. This is because I argue that particular attention needs to be paid to the \textit{body at work} when enacting itself in infrastructural ways, and thus bringing into focus the \textit{labour} of the body this implies.

Last but not least, the conversation with Víctor points to the aim pursued by this research and to the methods to employ. In this thesis, I will argue that turning to infrastructural bodily practices re-thinks the peri-urban from the viewpoint of those living in and with its social and material circumstances. This is to describe the peri-urban not as crisis or problem but as the \textit{matter} (material ground and concern) of urbanising life – a perspective that is often neglected in peri-urban accounts yet that can help to address, I argue, the critical questions that the peri-urban realm poses not only to the future of cities but also to how we make sense of them.

When I ask Victor whether he feels this neighbourhood to be part of Mexico City it soon becomes visible that it is not at all clear what \textit{Mexico City} is or where it starts or ends.\(^6\) Instead, Víctor tells me how people in the State of Mexico ‘walk more slowly’, although many of them commute to the Federal District on a daily basis. This is to say that Víctor, too, shifts the attention to practices (in addition to referring to delimited political entities) in order to describe how centre and periphery are distinct yet closely intertwined. Sensory-visual explorations, I will show, enable research to \textit{tune in} to such practices and to reveal their entanglement with material conditions. They provide a means to carefully listen to ‘life passed in living’ as Les Back suggests.\(^7\)

\(^3\) Simone 2004, 410-1.
\(^6\) Víctor and I meet at the beginning of my PhD process in 2010. To the very end of it, on January 29th, 2016, the Federal District was converted into a federal state with the name Mexico City.
\(^7\) EUM Presidencia 2016.
\(^7\) Back 2007.
Above all, then, describing the city through bodily practices points to a way of thinking it in its own right, grounded in the *material engagement* of the spatial practitioner with the environment.\textsuperscript{8} This I call the socio-material apprehension of the city, that is, the *city thought out of its bodily making*. It describes an awareness of individual position and fields of actions in relation to the wider socio-material context, an awareness of ‘the city’ not as a fixed object but as a process of *cyness*, that is: as an ongoing making of city entailed in intersecting differences in consequential ways.\textsuperscript{9}

**Urban Peripheries at the Centre**

By the time of this writing, the notion of the Urban Age\textsuperscript{10} has shifted from revelation to commonplace. Yet despite this awareness, the planetary scope and ongoing transformation of the urban condition continue to pose far-reaching questions that demand to be (re)addressed.\textsuperscript{11} For example, cities are now home to the majority of the world’s population\textsuperscript{12} and are expected to increase their share to 60 per cent by 2030.\textsuperscript{13} Yet, as territorial entities they no longer cohere in recognisable city units\textsuperscript{14} despite the fact that they physically cover a minimal area of the Earth’s surface.\textsuperscript{15} Likewise, concentrating the world’s economic activity, energy consumption and CO2 emissions,\textsuperscript{16} urban areas have been identified as a decisive cause of global warming while also being key to the mitigation and (human) survival in the anthropocene, the geological epoch shaped by mankind.\textsuperscript{17}

In light of these wholesale transformations of the coordinates of life, the Age of Cities demands careful examination with regard to who, where and what is

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\textsuperscript{8} This draws on both Carter 2004; and Ingold 2000.
\textsuperscript{9} Sassen 2010, 14; see also Pieterse 2010; Simone 2010.
\textsuperscript{10} Burdett and Sudjic 2007; 2011; see also UN-Habitat 2002, 8–9.
\textsuperscript{11} Cf. e.g. Brenner, Madden, and Wachsmuth 2011.
\textsuperscript{12} For a critical yet affirmative analysis of this claim see Satterthwaite 2007.
\textsuperscript{13} UN-Habitat 2002, 8; 2013, 6.
\textsuperscript{14} Amin 2007, 102; Amin and Thrift 2002, 8.
\textsuperscript{15} Burdett and Rode 2011, 10, speak of two per cent yet the definition of urban area is an open one, affected not least by the discussion on the peri-urban realm to which this thesis is making its contribution.
\textsuperscript{16} Burdett and Rode 2011, 10.
\textsuperscript{17} Davis 2009; see also Steffen et al. 2011 on the definition and implications of the anthropocene, denoting human activity’s decisive impact on the environment and the planet in its totality.
turning urban, to how this process of urban becoming is taking shape, and how to make sense of it. This directs our attention to the periphery of cities and to the people who live there. In particular, it directs the view to the peri-urban conceptualised effectively as a distinct yet always fleeting thirddspace, intermediate between ‘rural’ and ‘urban’ (analytical) poles while capturing both the specific position of structural dependency and the specific dynamic of the extraordinary pace of its transformation. The crucial contribution of the peri-urban, hence, is evidencing the centrality of fringe spaces to the urban process at large.

On the one hand, it is in the peri-urban realm that the quantitative and qualitative transformations of planetary urbanism become strikingly material, putting under severe pressure the ecological and social sustainability of city-regions (and thus the planet). The dispersion of city functions across the region and the multiplication of non or not-yet urban bits and pieces leads scholars to ask what ‘the city’ might be, what it can do, and whether it should instead be addressed as a process.

On the other hand, the peri-urban is characterised not only by its fragmented and rapid development but is regarded as an ‘uneasy phenomenon’ precisely also because of the supposed deprivation of its qualities in light of the accumulation of a simultaneous ‘loss of “rural” values’ and ‘deficit of “urban” attributes’.

These implications are particularly pressing in the Global South, where the peri-urban is at the frontier of planetary urban becoming. For example, Pieterse and Parnell point to the global impact that the (local) urban expansion of African cities will have. At the present moment, urban agglomerations in developing countries concentrate twenty per cent of the world’s population growth while, at the same time, growing much faster in size, increasing by 50 per cent their share of the

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18 Soja 1996 does not refer to the peri-urban himself but describes a similar simultaneousness of contradictory elements for the ‘expolis’ and ‘postmetropolis’ in the US context.
19 See e.g. Douglas 2006, 18.
20 Hoggart 2005, 2.
21 See e.g. Allen 2006; Satterthwaite 2007, 60.
22 Amin and Thrift 2002; Brenner and Schmid 2015; Davidson and Iveson 2015 in response ask what the notion city can do. For a distinction between city as thing and urbanisation as process see Harvey 1996.
24 Pieterse and Parnell 2014.
planet’s urbanised land. This means that many of today’s and tomorrow’s urban dwellers will not simply live in cities but in territories – as of yesterday – at the fringe of sprawling agglomerations. In this light, zooming into the periphery of Mexico City provides a sound example with global contemporary processes impacting on the city’s escalating ‘expanded periphery’, leading to what Adrian Guillermo Aguilar calls ‘another type of city’ in the process of becoming.

Making City by Doing Infrastructure

Re-thinking the peri-urban, as set out in the title of this thesis, also means resisting the othering implicit in the language of the centre when speaking of peripheries by turning to the street with its lived relations. This, I will argue by drawing on the work of Tim Ingold, entails shifting the perspective from a remote ‘detachment’ to close, immediate ‘engagement’ with the world. As mentioned above, such a shift brings into perspective both practice and its corporeality – and it entails the possibility of reframing descriptions of informal activities as ways of doing infrastructure.

Infrastructures, both physical and practised, are key to describing the working of cities and their sociality, exerting and channelling movements of all kinds. Infrastructures, and particularly the lack of their physical components, are also key to what it means to make a living in urban peripheries. In this light, practising oneself as infrastructure, I argue, is an important means by which dwellers of peri-urban conditions (and beyond) make centrality by making connections. By inserting their own movement into the movement of others, as Simone puts it, people engage in ‘incessantly flexible, mobile, and provisional intersections’ while ‘operat[ing] without clearly-delineated notions of how the city is to be inhabited and used’. This doing by trial and error, I argue, is how

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27 Aguilar 2008, 134.
28 MacLeod and Ward 2002, 164.
29 Ingold 2000, 11.
30 Simone 2015, 375-376.
31 Amin 2014, 143.
cities are made through direct engagement with the social and material constituents of the environment. Highlighting the corporeality at work in such making, my findings describe four types of infrastructural city-making labour. These are: the Labour of Conjunction, the Labour of Presence, the Labour of Cohesion and the Labour of Travel.

Turning to infrastructural bodily practices responds also to contemporary processes that impact on social relations far beyond the context of peri-urban Mexico. Arguably, what people accomplish on the streets of Tecámac and Tizayuca (and countless other streets in Latin America and the Global South) is at the forefront of a global condition of uncertainty. Fritz Böhle and Margit Weihrich elucidate how in a global process by which ‘institutions lose their action-guiding and problem-solving power’, social actors increasingly need to produce their social integration themselves and are able to do so by employing their ‘ability to establish fluid order with the body’. From this perspective, individual bodily practice in general becomes a key resource for dealing with ‘uncertainty, ambiguity and unsureness’.

At the same time, Elmar Altvater discusses infrastructural practices – albeit without the particular focus on corporeality and shifting the focus back to the notion of the informal – as the violent ‘expression of structural adjustment to global market forces’. He reveals informalisation to be a global project of governmentality that makes people ‘circumvent’ manmade constraints ‘in order not to be excluded from society’. Critically engaging with informality and with the entanglement of the formal and the informal, therefore, remains a recurrent theme in the analysis of infrastructural bodily practices in this research.

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32 Compare the discussion raised by Angelo and Hentschel 2015; particularly relevant in my context is Tonkiss 2015, who in her afterword draws attention to the embodied labour that makes infrastructure.
33 On such condition of uncertainty see Beck 1996; Beck, Giddens, and Lash 1994.
34 Böhle and Weihrich 2010, 14, own translation.
35 Böhle and Weihrich 2010, 11, own translation. The authors define these three categories as follows: ‘Uncertainty (Ungewissheit) is characterised by the condition that one does not know what parameters are relevant to the decision; in situations of ambiguity (Uneindeutigkeit) it remains open what goal to set for oneself; and acting under conditions of unsureness (Unsicherheit) means one does not know about what those others will do of whose actions the success of own action depends’.
36 Altvater 2005, 54.
37 Altvater 2005, 54.
38 Altvater and Mahnkopf 2003, 23, own translation.
Thinking City Through Practice

In this thesis, I will also argue that infrastructural bodily practice furthermore entails a way of thinking space and the city. This is to say, drawing on Paul Carter, that making city in one’s own infrastructural body-work is also to *materially think* it. City-thinking, too, is a practice of the body, a coming to know about one’s own positions and fields of possibility within the wider urban context by laying hands on the becoming of both the self and the environment. As mentioned above, it describes city as the making of consequential connections, as the site and process of interacting, a verb for which scholars have come to use the term cityness.

As an analytical category cityness is mostly mobilised to speak of urban conditions in, or associated with, the global South. It is explicitly regarded as depicting what the Western notion of urbanity has difficulty seeing – or, for that matter, what Western urban theory (and politics) rejects seeing because it haunts its attempts to regulate the unruly unfolding of social space. It can therefore be understood also as a project of ‘cognitive justice’ in the sense proposed by Boaventura de Sousa Santos, in order to bring to the fore those epistemologies that have been suppressed by ‘systematic injustices’. Turning to urban peripheries in the global South, and describing them in terms of the city-making they entail, can thus be understood as taking up the invitation of de Santos. Other research endeavours akin to such a posture, as I argue, point to the entanglement of periphery and ‘lively infrastructure’, possibility and citizenship.

For the research encounters that comprise this thesis I identify fifteen *layers of cityness* that describe the peri-urban from the vantage points of distinct infrastructural bodily practices set in distinct socio-material conditions. These

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40 Sassen 2005; Amin and Thrift 2002, 2, drawing on Doreen Massey’s work, employ the term to describe the spatiality of the city as combining density and juxtaposition of difference in practice albeit not necessarily in physical proximity.
41 Sassen 2010 for example refers to ‘immigrant vendors’ on the streets of New York.
42 Sassen 2010, 14.
43 Simone 2010, 3, 8.
44 De Sousa Santos 2013, 731-732; 2014.
45 Amin 2014.
46 Simone 2010, 33, 40.
47 Holston 2009.
layers range from experiencing the peri-urban as individual and hard work to
dealing with it as unknown in various ways, from navigating its
compartmentalisation to making the most of the plasticity of its space by not only
adapting to but also bestowing form on its shifting material circumstances.

**Studying Corporeality and Materiality in Space and Time**

This thesis comprises practice-based research elements developed in the context
of the Visual Sociology PhD programme at Goldsmiths, University of London. In this light, the following analysis will also pay attention to the contributions
made by this methodological approach.

In particular, it will show how ethnography and a particular combination of
sensory and visual methods make it possible to bring the materiality,
corporeality and temporality of (urban) space, practice and change into view.
Exploratory research walks, ‘participant sensation’, photographic video and
ethnographic conversations were combined in order to be receptive to the
*physical effort* implied in accomplishing infrastructural practices as well as to
capture the role played by the *concrete socio-material situations* of peri-urban
space in which they occur. This is to say that the particular sensibility of the
blend of methods in this research enables us to explore a knowing that is rooted
both in the practising body and in its material placement – and movement – in
space. Different wanderings on foot and by bus were employed in order to find
ways into how practitioners of space materially think the environment through
corporeal engagement. At the same time, audio-visual modes of exploration
enriched this ‘fieldwork on foot’ by carefully observing the ‘thinking through
making’ infrastructural practices entail in relation to both the working of the body and the socio-material specificities of the immediate environment.

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48 Despite its name, the programme is understood to raise awareness of the role played by *all* the senses. See Goldsmiths Visual Sociology Handbook. See also Guggenheim 2015.
49 Howes 2006, 121-122.
50 Cf. Pink 2009, 23.
52 Lee Vergunst and Ingold 2006.
The images and videos included in this thesis speak of peri-urban infrastructural labour in dialogue with the written analysis and are best viewed during the reading.

Exposing the researcher’s own body to the concrete conditions of the peri-urban, furthermore, is how I first accessed and, subsequently, established multiple connections across the municipalities of Tecámac and Tizayuca, in the states of Mexico and Hidalgo, respectively. Walking and riding the bus, taking photographs and recording video is how Víctor, Santa, Melba and all the other *makers of space* whom we will meet over the following chapters entered this research and how their voices began linking up what they are doing, where their doing takes place, and how they relate their doing to the wider urban context. Exposing myself to Mexico City’s peri-urban condition is also how I came to identify the specific research sites that comprise the socio-material ground for the following analysis. Turning to specific practices requires turning also to the specific materialities in which these practices unfold and how they influence their unfolding. In this sense I identified four distinct categories and corresponding exemplary sites of socio-material space characteristic of Mexico City’s peri-urban realm. These are: the mass-produced, formal development of affordable housing called Sierra Hermosa; the self-built, informal settlement named Colonia Antorcha, which is organised by the social movement Antorcha Popular; the communal land of a farmers’ organisation (*ejido*) based in the historic village of San Pedro Atzompa; and the federal highway, the Autopista México-Pachuca, by which these sites are tied into the territorial expression and continuous process that is Mexico City.

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54 This is drawing on Reckwitz 2003, 290.
55 For a similar approach see Duhau and Giglia 2008, 16.
56 These will be introduced in chapter three.
Outline of Chapters

In this introduction, I have outlined the centrality of the peri-urban to the urban process and of infrastructural bodily practice for making sense of it. I furthermore introduced the notions of city-making and city-thinking that will guide us through this thesis.

Chapters one to three lay out the ground for this research. Chapter one (Urban Becomings) brings together literature on the rise and study of the peri-urban realm, on the everyday innovative ways in which people respond to peripheral conditions, and on relational bodily practices and the material thinking they give rise to. Its main purpose is to discuss key concepts and to set out the theoretical argument that emerged in dialogue with the empirical study.

Chapter two (In Touch with the Peri-urban) introduces the research process and the blend of methods with particular emphasis on practice-based visual and sensory elements. In this chapter, I discuss the responsiveness of my methods to the corporeality, materiality and temporality of practice and the peri-urban process.

Chapter three (Centring the Periphery) characterises the sites and context of my fieldwork. It discusses Mexico City’s current urban growth pattern and introduces the specific urban situations that inform its findings. It also provides the first example of my research techniques.

Chapters four to eight present the core of the ethnographic analysis. Therein I follow different practitioners of peri-urban space into their relational practice, as well as following different material conditions into the practices they enable.

Chapter four (Providing Lives) first develops the notion of infrastructural practice. It discusses opportunity work by which people make their living, framing this first set of practices as expressions of a Labour of Conjunction. From there, it asks about the distinct perspective entailed when handling the material of life through the work of the body, accordingly describing the first three of a total of fifteen layers of cityness, namely the Self-made City, Laborious City and Instant City.
Chapter five (*Growing Houses*) turns to the making of houses and shows how in peri-urban Mexico City houses, too, are part of bodily practice and how they act as infrastructural extensions of their makers. This chapter challenges clear-cut distinctions between the formal and informal registers of urbanisation. It describes what I call the Labour of Presence as well as three more layers of cityness – the Prospect City, Uncertain City and (potentially) Transitory City – that this labour entails.

Chapter six (*Nurturing Neighbourhoods*) consequently investigates the making and thinking of city, grounded in the collective and in the construction of collectiveness. It interrogates the Labour of Cohesion while, at the same time, following the ecological conditions in which peri-urban selves, houses and collectives emerge. How do social, political and legal as well as environmental-material characteristics of the local promote or curtail people’s positions and opportunities? In doing so, this chapter describes four more layers of cityness to be materially thought, to which I will refer as the Compartment, Prairie, Pioneer and Tidal City layers.

Chapter seven (*Riding the Highway*) moves away from the local turf of residential spaces and directs the attention to what I call the Labour of Travel. This is important, since much of people’s peri-urban lives are spent commuting. Taking and riding the bus, as well as managing their movement, are interrogated with regard to how distance is overcome and made productive, and how people’s own bodies are inserted into the movement of the bodies of others. Drawing from these practices and their materialisation, this chapter engages in the discussions on both the specific plasticity of peri-urban space and informality’s established improvisation, discussing the final five layers of cityness – the Outpost City, Sequence City, Landscape City, Bottleneck City and Plastic City – revealed through this research.

Chapter eight (*Counter-Urban Endeavours*) shifts the focus from practices that think city by making *city-full* connections to those that determine notions of cityness out of *city-less* ways of doing accomplished in light of rural perspectives. Taking up a rural stance, I argue, is important to remind us of the multiplicity of
perspectives that accrue in the peri-urban – and of the making and thinking of space they entail.

In the conclusion, finally, I bring together the multiple threads laid out by this thesis. I will summarise how the peri-urban is materially thought out of infrastructural practice according to fifteen layers of cityness, while also drawing connections from the specific situations of the analysis to the overarching concerns they speak to. I will also interpret rural perspectives against those nurtured on the basis of urban practices. Furthermore, I will argue for thinking of cities as practice, and for speaking of *bodily practice* rather than *embodied labour* when referring to the activity of infrastructural beings. Finally, I will provide an overview of open questions, focusing in particular on what I sketch out as an urban Labour of Citizenship.
1. Urban Becomings: Peripheries, inventive practice and the body

Introduction

The aim of the present chapter is to lay out the theoretical grounds for embarking on the journey of this thesis. Accordingly, it will bring together literatures on urban peripheries and the peri-urban, on ways in which people accomplish their lives in conditions of want and marginalisation,¹ and on the corporeality of practice together with the materiality of concrete space. More specifically, I will focus on the perspectives that the living body, as well as the rural sphere, has on the peri-urban realm; draw on extensive literature on doing life on the margins that was particularly developed in response to conditions of urban becoming in Mexico City; and carve out the dimension of physical effort entailed in the labour of the body in practice. In terms of outcomes this engagement with the literature leads to identifying what is missing in peri-urban accounts; putting forward the notion of infrastructural practice in light of discussions on informality and cityness; and identifying how everyday urban practice is essentially also a practice of thinking our own and the city’s becoming by engaging with the socio-materiality of peri-urban life itself.

Urban Peripheries in Perspective (Section 1)

The rise in the physical extent and the increase in complexity of the social and material composition of urban peripheries is the result of a worldwide and comprehensive restructuring of urban form and relations from metropolitan-centred to regionally-dispersed patterns.² In broad terms, since the 1980s, combined suburbanisation and globalisation processes fragment and regionalise

¹ I am aware of the analytical difference between on the margin/marginalised and periphery/peripheral. As highlighted by Nivón Bolán (2005), the former refers exclusively to a condition of socially barred access to decision-making powers, yet which in the industrial city often – not, however, always nor necessarily – happens to coincide with a geographical location on the fringe of the city. However, for the purposes of this research, periphery and marginalisation do correlate to a certain extent, which is why I draw connections between the two terms.
² Scott 2011, 290-1.
city-suburb as well as city-hinterland relations. As a result, the socio-material fabric of urban agglomerations dissolves into territories and constellations that exceed the definition of sprawl by incorporating essentially also other-than-urban sites and processes. This rise of urban peripheries increasingly impacts also on the global South. In terms of overall numbers and the pace of the development, today it is Asian, Middle Eastern and increasingly African cities that ride the wave of global urbanisation.

In sum, the current urban process sees a gravitational shift of population and land-use to the fringes of agglomerations, a multiplication and expansion of intra- and inter-urban relationships, and a thoroughgoing social re-stratification on a planetary scale. This has led to a debate on the supposed loss of the city to peripheral conditions. Also under debate is the analytical usefulness of the notion city in times of its regional diffusion, asking whether we should think of cities not as bounded territorial objects any longer but as socio-spatial processes and/or emancipatory political projects. What is certainly beyond any doubt is that planetary ‘peripheralization’ – the ‘inherently and instrumentally political’ geographies that ‘now push us away from the centres of power’ transforms the socio-material habitat of many. Furthermore, as I will show in the discussion of cityness versus urbanity below, any culturally-charged socio-political model of the European city has little to offer to make sense of the (ever new and expanding) whirling edgelands. Whether it entails a ‘sea change in how we live in cities and experience urbanism’, as Edward Soja argues in view of the emerging post-metropolis, is a question underlying the concerns of this thesis.

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3 For detailed accounts of this process, as well as its implications, see Dematteis 1998; Foot 2000; Scott 2011.
4 Defined here as continuously built, low-density and car-dependent settlement type. See Glaeser and Kahn 2004.
5 I will come back to this point below.
6 ibid. 2011, 300.
8 See e.g. Borja 2005; for a critique of the Mexican periphery as lacking city qualities see Iracheta and Eibenschutz 2010.
9 Brenner and Schmid 2015.
10 Davidson and Iveson 2015.
12 Soja 1992, 122.
14 Soja 2000.
At this point it is pertinent to briefly reflect on what perspectives are mobilised when speaking of urban peripheries. First, urban peripheries are made sense of according to their territorial expression. Changing population numbers, commuter flows, economic activity and provision of infrastructure are among the most important aspects surveyed under this perspective. Second, when turning to the social implications, urban peripheries are brought into relation with concepts like marginalisation, poverty and lack of mobility. Thirdly, and hidden underneath this second perspective, is that urban peripheries are conceptualised predominantly in contraposition to notion of a centre. In this regard, John Galtung describes centre-periphery relations as ‘imperialistic’ structures of interaction between peripheral positions and their core. On the one hand, this perspective emphasises the quality of interaction between sites rather than defining absolute positions according to form or geographical location. It furthermore keeps in view the multiplicity of peripheries in the orbit of one centre. On the other hand, in describing centre-periphery relations it becomes clear that centres hold all that is non-central at a distance and in a position of dependency.

This, it is argued, also affects the use of language. For example, sites described as urban peripheries are often perceived as if they were ‘panorama-cities’, seen from afar, from the vantage point of an idealised centre. This has the risk either of imagining them as ‘badlands’ or of romanticising them for their everyday struggle for survival. Between the lines, both these angles lead to describing urban peripheries as ‘anti-’, ‘non-’ or even ‘failed city’. In the Mexican context, for example, the term periphery refers to those areas of the outer city comprised of low-income, popular neighbourhoods and social housing estates in distinction to the residential areas of the upper and upper-middle classes (located at the same

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15 Nivón Bolán 2005, 141-142.
16 Nivón Bolán 2005, 143.
17 Nivón Bolán 2005, 145; see also Ramírez Velázquez 2007, 71.
18 Galtung 1971.
19 Cf. Ramírez Velázquez 2007 who makes a similar point.
20 A term introduced by de Certeau 1988, 92.
21 Foot 2000, 12 describing the image of Milan’s periphery as produced in the 1960s movie Rocco i suoi fratelli by Italian director Visconti.
distance and directly adjacent to popular neighbourhoods), which in turn are referred to as suburban.\(^{23}\)

In order to overcome the centre-periphery dichotomy, a fourth perspective deliberately turns to the macro-regional scale. In doing so, urban peripheries appear as one element among others in the overall urban process.\(^{24}\) This is to do justice to the multiplicity and complexity of transformations as well as to recognise the agency of the periphery itself with regard to these processes. In particular, the notion of centrality needs to be reassessed with regard to the territorial scale in which it has an effect (that is, differentiating between city-central or region-central).\(^{25}\) Furthermore, this perspective is sensitive to different directions at work, distinguishing between processes of rural-to-urban migration and those of urban-to-rural expansion.\(^{26}\)

Accordingly, thus, central concepts developed to describe the rise of urban peripheries – concepts like Jean Gottmann’s ‘megalopolis’,\(^{27}\) Christopher Bryant’s ‘regional city’,\(^{28}\) Edward Soja’s ‘postmetropolis’,\(^{29}\) and Allen Scott’s ‘city-region’\(^{30}\) – can all be read as attempts to make sense of the multiplication, transformation and geographical transferral of urban centralities into peripheries. In this light, the Greater Los Angeles ‘exopolis’,\(^{31}\) the Lombard-Venetian ‘città diffusa’,\(^{32}\) and the ‘Zwischenstadt’ (interstitial city) of the Rhine region\(^{33}\) all describe urban peripheries as critical thridspaces with specific characteristics. Peripheries, in other words, are essentially being considered as acquiring new, different – not necessarily desirable – but certainly their own centralities.\(^{34}\)

\(^{23}\) Zamorano Villarreal 2007, 23. Suburbia, it is worth noticing, refers to a particular U.S. American and European socio-spatial development pattern that is difficult to transfer to the global South. See Wehrmann 2005, sec 3.1.1.; Gilbert and De Jong 2015, 518. This is despite the fact that it has ‘colonised’ southern urban imaginaries. See Hiernaux 2008; Lindón 2007.

\(^{24}\) Nivón Bólán 2005, 145.

\(^{25}\) Ramírez Velázquez 2007, 71.

\(^{26}\) Ramírez Velázquez 2007, 73.

\(^{27}\) Gottmann 1961.


\(^{29}\) Soja 2000.

\(^{30}\) Scott 2001.

\(^{31}\) Soja 1992.

\(^{32}\) Dematteis 1998.

\(^{33}\) Sieverts 1997.

\(^{34}\) For Mexico City e.g. see Aguilar 2008, 134.
This allows us to turn to a fifth perspective on urban peripheries, that is, to their agency with regard to the making and thinking of city. AbdouMaliq Simone rejects the idea of the periphery’s clear location in space, suggesting instead that it is a space characterised by social and theoretical in-between-ness, a ‘buffer’ of what is included and excluded.\textsuperscript{35} Consequentially, therefore, it is a ‘potentially generative space’, a space ‘where different ways of doing things, of thinking about and living urban life, can come together’.\textsuperscript{36} In a similar move, Ananya Roy calls for exploration of the analytical potential of the periphery for writing ‘subaltern’ urban theory.\textsuperscript{37} The ‘promise of the concept of periphery’, she states, is ‘to demonstrate various foreclosures that complicate political agency and to call into question the conditions for knowledge’.\textsuperscript{38}

As we will see, adopting an \textit{inside perspective} for this research involves the attempt to respond to these multiple ways of making sense of urban peripheries. Such a view turns to the materiality of the periphery’s territorial expression and to the practice of its social implications. It pictures urban peripheries without comparing them to unacknowledged assumptions of the centre (while nevertheless recognising the structural forces that impact on their becoming), explores their own centrality and agency and, finally, emphasises the thinking of city that emanates from engaging with the periphery’s socio-material conditions. In part, therefore, this thesis responds to Eduardo Nivón’s call to look inside urban peripheries in order to reveal them as ‘spaces in which the most relevant cultural contradictions of our times make themselves apparent’.\textsuperscript{39} It does so by adopting a specific perspective that adds to complementary research endeavours developed in the context of Mexico City and that turn, for example, to the experience of trans-urban travelling\textsuperscript{40} or to the ‘visual construction of the megalopolis’.\textsuperscript{41}

\textsuperscript{35} Simone 2010, 40.
\textsuperscript{36} Simone 2010, 40-41.
\textsuperscript{37} Roy 2011.
\textsuperscript{38} Roy 2011, 232.
\textsuperscript{39} Nivón Bolán 2005, 148 own translation.
\textsuperscript{40} García Canclini, Castellanos, and Mantecón 2013, albeit developing their argument in light of the metropolis as a whole.
\textsuperscript{41} Krieger 2004; 2011; 2012.
Particularly worthy of mention is Clara Salazar’s study on territorial mobility and the use of urban space in the everyday life of household members from poor and peripheral neighbourhoods, as well as Alicia Lindón’s and Daniel Hiernaux’s accounts of residential practices, suburban imaginaries and ‘ways of living’, much of which they have developed in light of detailed ethnographic research in the emergent urban space of Valle de Chalco, south-east of the ZMVM. Emilio Duhau and Angela Giglia have turned to the experiences of particular ‘types of habitable space’ (suburban developments, social housing estates, gated communities, popular neighbourhoods and incorporated historic villages) of which much of the periphery is composed, including the ‘informal city’ and ‘island city’. These and other authors continue to call for a deepened analysis of the interaction between form and practice, as well as between territory and imaginary, in order to better understand urban peripheries.

The Peri-Urban in Perspective

Gradually recognising the centrality of urban peripheries to the overall transformation process of cities, these territories were first addressed under the notion of the ‘urban fringe’, referring to a ‘transition zone’ between city and countryside characterised by suburban growth and mixed urban and rural land use. By the 1960s they were first referred to as ‘peri-urban areas’, which aimed to understand them as the result of unique conditions and dynamics. However, with the rise of poly-centric urban growth patterns in the US and Western Europe, a new terminology widely replaced the notion in Western-centred urban

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42 Salazar Cruz 1998.
43 Hiernaux and Lindón 2003.
44 Hiernaux 2008; Lindón 2007.
45 Lindón 1999.
46 Hiernaux, Lindón, and Noyola 2000.
47 Duhau and Giglia 2008.
48 Giglia 2010.
49 Ramírez Velázquez 2007, 86.
50 Hiernaux 2008, 35.
51 Adell 1999, 5, tracing back the term’s use in the US; see also Hoggart 2005, 2, who traces its European origins back to the 1930s following the concept of ‘city hinterlands’.
52 Adell 1999, 5.
literature. Consequently, and as the result of extensive work by French scholars on periurbanisation in Africa, the term is predominantly used in urban development literature.

Here, the peri-urban commonly denotes spaces and processes on ‘the poor or “informal” fringes’ of cities. At the same time, the peri-urban bears witness to comprehensive globalisation effects. Furthermore, it is increasingly emphasised that peri-urban processes place natural support systems of cities and regions under ever greater pressure. In sum, peri-urban processes denote rapid modifications of land-use patterns due to human activities and the profound hydrological, ecological and socio-economic effects to which these modifications lead. In particular, peri-urban processes lead to conditions of overlapping frameworks that span from legal to conceptual. Power vacuums and the diversion of meaning are often the result.

Additional themes running through the literature are: rural-urban linkages that work both ways; informal activities characterised, above all, by petty commodity production, multiple job-holding, self-built housing and neighbourhood lending strategies; land conflicts due to speculation, competing claims and unstable arrangements under simultaneous formal and informal development; and the interference of a variety of state, commercial, social movement and individual actors.

Adriana Allen, Nilvo da Silva and Enrico Corubolo, finally, describe the peri-urban in the light of three confluent perspectives of analysis: first, the peri-urban is understood as the periphery of the city, comprising those spaces that undergo the actual process of ‘citification’ and urbanisation. Hence, their constitutive

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54 Adell 1999, 7.
55 Adell 1999, 7.
56 Aguilar 2008.
57 Allen 2003; 2006; see also McGregor, Simon, and Thompson 2006b, 319; Satterthwaite 2007, 60.
60 Browder, Bohland, and Scarpadi 1995, 312-13; see also Adell 1999, 7-8.
62 Häußermann, Läpple, and Siebel 2008, 22. With ‘citification’ (Verstädterung) the authors refer to the quantitative, material transformations caused by the growth of urban populations. ‘Urbanisation’ (Urbanisierung), in contrast, is defined by them as the qualitative, socio-cultural transformations of society. Cf. Lefebvre 2008.
condition is a specific simultaneousness of their proximity to and remoteness from urban areas. Secondly, the peri-urban is seen as a relational space where urban and rural dynamics interact. Thirdly, the peri-urban is held to be a social category that builds on intense rural-urban coexistence, found at the edge of cities yet possibly also existing independently of its spatial location. In the words of Allen et al., ‘periurban communities are those which have a dual urban-rural orientation in social and economic terms’. Peri-urban spaces are caught in a characteristic double deficiency, effected ‘either by the loss of “rural” values (loss of fertile soil, natural landscape, etc.) or the deficit of “urban” attributes (low density, lack of accessibility, lack of services and infrastructure, etc.)’.

Given the complexity of finding a definition, it is not surprising that the material composition of the peri-urban, too, is subject to prevailing ambiguity. On the one hand, different patterns of intraregional and macro-regional integration as well as varying stages of ‘urban system evolution’ produce distinct expressions. On the other hand, this very ambiguity is regarded as beneficial for not losing sight of the form-giving processes above physical form.

Accordingly, the peri-urban poses difficulties also with respect to its methodological apprehension. Scholars agree that the ambiguous and constantly shifting nature of peri-urban processes make them essentially a question of (quantitative) measurement. At the same time, Aguilar and Ward argue that many of the dynamics taking place are left unseen because of fixed, and too narrowly-defined, statistical criteria. The emphasis on the use of geographical information systems (GIS) and aerial (digital) photography is a response to these shortcomings of conventional measurement. However, here too the pace of peri-urban transformation poses problems to accurately representing the

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64 Allen, da Silva, and Corubolo 1999, 3.
65 Geyer 2002.
66 Hoggart 2005, 6-7.
67 Aguilar and Ward 2003, 8; Hoggart 2005, 7; Nivón Bolán 2005, 141.
68 They demonstrate how the most common measurement methods applied in the USA, i.e. population density, commuting patterns and intensity of settlement, are largely unable to incorporate the nature of evolving peri-urban dynamics beyond the established metropolitan boundaries. Aguilar and Ward 2003, 8.
69 McGregor, Simon, and Thompson 2006b.
70 Aguilar 2008; Douglas 2006.
phenomenon. Furthermore, grasping city-regions with their peri-urban zones as integrated entities is undermined by competition between multiple bodies and levels of governance.72

Taken together, it is argued, these methodological implications hinder the effectiveness of a political response through adequate apprehension as well as urban governance and planning at a regional scale.73 The phenomenon is therefore commonly framed as a planning problem,74 employing notions like infrastructural ‘difficulty’,75 ‘threat’ to environmental sustainability,76 and – very prominent in the Mexican debate – ‘territorial crisis’.77 At the same time, planning itself is problematised in light of the peri-urban condition: Julio Dávila, for example, suggests that policies should be well aware of the special needs of the peri-urban yet should not be specifically designed for them, as transformations are taking place so swiftly that any policy trying to address a given circumstance would be doomed to failure.78

With regard to ontological implications, scholars disagree on the question of whether to understand the peri-urban realm as a ‘continuum’79 or ‘interface’,80 touching also on notions such as ‘in-between’,81 ‘transition’82 or ‘interaction’ zone.83 What is at stake in this debate is how to think of the interaction of two theoretical poles, the urban and the rural, while simultaneously employing and overcoming their distinctiveness in the description of a ‘critical thirding’.84 Interface, I argue, maintains the ‘analytical edges’85 of both poles while, at the

71 McGregor, Simon, and Thompson 2006b, 313.
75 Brook, Bhat, and Nitturkar 2006.
76 Aguilar 2008.
77 Iracheta and Eibenschutz 2010.
78 Dávila 2006.
79 Aguilar 2008.
82 Pryor 1968; Rakodi 1999.
83 Douglas 2006.
85 Krause 2013, 236.
same time, emphasising their interaction.86 Employing the notion of continuum, in turn, argues that continuous change, comprehensive juxtaposition and the transformative effect of intimate contact collapses any distinctiveness between the urban and the rural,87 making it difficult, if not impossible, to define and locate a clear border between them.88 Finally, it has been argued that for administration and planning concerns, their theoretical antagonism has ‘ceased to have much meaning in practice or for policy-making purposes in many parts of the global South’.89

Shifting Perspectives

Adopting an inside perspective, I argue, makes it possible to contribute to this debate by turning to concrete situations – and following these situations into the socio-spatial consciousness they afford.90 Inside refers to the point of view taken on when actually being emplaced in socio-material space and deriving one’s perspective in active corporeal-material engagement with the environment.91 By this I mean bringing into view the peri-urban zones as lifeworlds rather than as both socio-material and conceptual problems. What is the human condition of urban peripheries (in Mexico City)? How are urban peripheries made and perceived with, through and for the body?

Indeed, the dichotomy between rural and urban is blurred if peripheral urbanisation and peri-urban land-use changes are identified on a large scale. If traced on the micro-level, however, they re-surface as ‘a much more complex kaleidoscope’ as Nivón suggests.92 Following the peri-urban experience by foot and by bus, making it the topic of ethnographic conversations and tracking its

86 In computing, an interface is described as a ‘shared boundary of exchange’. From a social perspective, Richard Sennett, 2011, elaborates on the distinction between boundary and border, describing the former as a clear-cut limit like that of a wall and the latter as an ‘active zone of exchange’ like that of a cell membrane. The definition of interface complicates Sennett’s categories by describing a third space that is both wall and membrane, limit and exchange.
88 Aguilar 2008, 134.
90 Compare Angelo 2011, 571.
91 Cf. Ingold 2000; see also Pink 2009, 23.
material transformations over time with the photographic camera is how this thesis aims to insert itself into life lived.93

At the same time, an inside perspective of this nature allows us to ask how concrete rural space effects urban positions and possible ways of thinking ‘the city’, a topic I take up in particular in chapter six. Monica Krause reminds us, that both the urban and the rural act as placeholders for assumptions about specific qualities of places and lifestyles that usually go un-acknowledged.94 Furthermore, the way the city is named first reveals the ‘intellectual imperialism of the urban’.95 Challenging this primacy is to bring into view how rural spaces are as complex and contradictory as their urban counterparts, subjected to both global and local processes of transformation, as well as driving these processes themselves. In this light, Michael Woods as well as Jesse Heley and Laura Jones point to the multi-scalar and multi-temporal processes of the countryside, to antagonistic politics of the rural and to complex performativities of rurality that are repeatedly underestimated when described from the vantage point of the urban and subsumed under the urban outlook.96

Importantly also, the rural as analytical lens has specific contributions to offer. These are, above all, a heightened awareness of the role and agency of the materiality of space (urban and rural)97 and of the city’s ‘extended ecology’98 where human and non-human actors jointly produce space.99 This points to the need to review the rural-urban, urban-rural linkage in both its territorial and theoretical dimensions.100 This I do in chapter eight, as well as in the final chapter of this thesis.

Summing up, adopting an inside and, at times, rural perspective makes it possible to respond to peri-urban concerns differently. On the methodological grounds laid

93 See chapter two.
94 Krause 2013, 233.
95 Krause 2013, 234.
97 Heley and Jones 2012, 211 drawing on Murdoch 2003, 264.
98 Farias 2011, 368.
100 Cf. Woods 2009, 852.
out above, this perspective substitutes ethnographic conversations for measurement and sensory-visual explorations for aerial photography. I will describe my methods in greater detail in chapter two. With regard to focus, an inside perspective adds qualitative accounts of peri-urban life and practice to the predominantly quantitative approaches that prevail in academic literature.101

Four aspects, I argue, are underrepresented in peri-urban studies. These are:
How is the peri-urban realm made in everyday life? How are peri-urban dynamics and spaces thought out of this making? How do formal and informal registers of production influence such practices? And, how does turning to corporeal practice and socio-materiality shift our understanding of peri-urban spaces? These questions will guide me through the analytical and discursive chapters of this thesis.

Inventive Practices of Urban Becoming (Section 2)

In order to delve into the thick of peri-urban life, in the following section I will first review the Mexican body of work which has studied ways of inhabiting, resisting and overcoming marginalisation. These ways of doing with unfavourable urban circumstances I describe as inventive practices of urban becoming. I develop this notion drawing on Michel de Certeau’s study of the ‘invention of the everyday’ through an ‘art of practice’.102 Furthermore, by focusing on the possibility of everyday invention I am placing the individual practitioner of space at the centre of the analysis.103 In a second step, I will relate these accounts to the current debate on urban informality and cityness.

103 Lindón 1999, 27-28. The author highlights that contrary to the Marxist term alienation, which favours the study of the everyday through the lens of structures that impose their force on how lives are lived, invention is a term routed in a phenomenological perspective that foregrounds the ‘creative capability of the individual’. 
The unprecedented inflow of rural migrants into Mexico City during the 1950s to 1980s was accompanied by much academic analysis. For the purpose of this thesis, however, I will focus only on those works that addressed the everyday lives of these new city dwellers. In particular, I will read these studies in light of their more or less implicit descriptions of practices of urban becoming, of the inventive ways of doing by which people in conditions of poverty, marginality and rural-urban migration make their (new) urban lives.

Oscar Lewis’s *The Children of Sanchez: Autobiography of a Mexican Family* is among the first to be mentioned, bringing into view life lived in ‘slum-like housing settlements’.\(^{104}\) Lewis’s focus is placed on the event of scarcity and hardship – and on the multiple methods employed by the family members in order to overcome their circumstances. ‘[P]overty’, he writes, ‘is not only a state of economic deprivation, of disorganization, or of the absence of something’ but also a ‘design for living’, that is, an ethos of survival.\(^{105}\) Lewis’ description of the poor engaging actively with their condition of poverty has been widely criticised for supposedly ‘blaming the victims of poverty for their poverty’.\(^{106}\) Much to the contrary, David Harvey and Michael Reed suggest that Lewis's work is in fact an important appraisal ‘of the resilience and resourcefulness of the poor’.\(^{107}\) ‘Frequent buying of small quantities […] as the need arises’, pawning, borrowing, recycling and the organisation of collective ‘spontaneous informal credit devices (*tandas*)’\(^{108}\) help mitigate and improve precarious (urban) lives. These ‘artful everyday tactics’ – to borrow an expression from de Certeau\(^ {109}\) – and their particular inventiveness for making city by making connections (re)surface time and again in the infrastructural practices under examination in this research.

Twelve years later, Larissa de Lomnitz, elaborates on the subject by asking about the practices by which conditions of marginality are being met. In *How Do The

\(^{104}\) Lewis 1963 Lewis’s study is located not on the geographical periphery but in an inner city *vecindad*.

\(^{105}\) Lewis 1963, xxiv.

\(^{106}\) Harvey and Reed 1996.

\(^{107}\) Harvey and Reed 1996.

\(^{108}\) Lewis 1963, xxvi.

Marginalised Survive? the author shifts the focus from describing a condition of low income to interrogating a structural position of ‘disconnection from the urban-industrial system of economic production’. Marginality is framed as the sum of economic, cultural and physical distance from the city while nevertheless being subjected to its structures. Within this location, Lomnitz identifies a ‘network of exchange’ by which the marginalised circulate goods, services and, above all, personal favours among relatives and neighbours, in order to ‘positively resolve the problem of adaptation in a hostile urban environment’. Janice Perlman, in turn, critiques the concept of marginalisation, asserting that the term blurs the complexity of centre-periphery relations. In her study on Urban Poverty and Politics in Rio de Janeiro she revealed that such a position of distance from the modern economy is precisely how the marginalised are integrated into the system on a precarious basis. Furthermore, the attribute marginal – like that of informal and, I argue, peripheral – fosters the internalisation of negative properties in those who are being addressed by the term while, at the same time, it professes a paradoxical desire to lead those sectors of society ‘into the very system which is producing the social and economic situation’ of their exclusion.

Wayne Cornelius, for his part, turns to the inventiveness inherent in political participation. ‘Are the migratory masses revolutionary […] or apathetic and ignorant?’, he asks provocatively, coming to the conclusion that, contrary to both these common reductions of his time, the urban poor are actually engaging in relational processes of political apprenticeship in order to either assimilate into or manipulate the system. Cornelius in particular points to the decisive role played by the urban context. Much of the differences in political formation among neighbourhoods he explains as variations in group consciousness based on distinct

110 Lomnitz 2011.
111 Lomnitz 2011, 17, 22.
112 Lomnitz 2011, 22.
114 Perlman 1979, 91.
115 For a discussion see Inclán 2013, 37.
116 See e.g. Lombard 2012.
117 Perlman 1979, 92, 247-248.
118 Cornelius 1980.
social and political structures and forms of organisation, as well as by means of the socio-material integration into the metropolitan complex.\(^{120}\) According to these variables, the author develops what he calls the ‘structure of opportunities’ of each neighbourhood, that is, the ‘field and frequency of opportunities to participate in politics to which people have access by virtue of their residence in certain communities’.\(^{121}\)

Importantly for the context of this thesis, Cornelius’s structures of opportunities combine material, practised and imagined aspects of the urban: the socio-material conditions, the active assessment of needs and external threats and the quality of expectations that the group allows itself to articulate are intimately linked.\(^{122}\) In other words, what people do with the city – and how they come to make city by making themselves\(^{123}\) – is tied to what their (partly self-made) urban context allows them to think they can do. City-thinking is inscribed in city-making and vice versa.

Finally, in *Housing by People* John Turner draws out the differences between the ‘helpful hut’, accomplished in a ‘local and self-determined housing system’ of the urban poor, and the ‘burdensome house’ of the social housing industries provided by the state through ‘pyramidal structures and centralising technologies’.\(^{124}\) In this way, the author reassesses the ‘value of dwelling’, concluding that the cost-benefit balance is more favourable in self-help housing due to the higher degree of freedom of decision over the use of financial resources and the ability to cover part of the costs in kind.\(^{125}\) Self-built housing *does* something for its occupants instead of simply *being* something for them: it acts as a resource and activates other resources like their own handiwork and the inventive use and recycling of cheap or leftover materials.\(^{126}\)

\(^{120}\) Cornelius 1980, 14-15 These include: size and density of the population, the neighbourhood’s socio-economic homogeneity and compositional stability, its social, political yet also physical integration into the metropolitan complex, the (shared) origin of the residents, the shape of internal hierarchies as well as party political divisions and competitions, and the size and nature of the problems and necessities that are being faced (pages 138-147).

\(^{121}\) Cornelius 1980, 148.

\(^{122}\) Cornelius 1980, 246-248.

\(^{123}\) Compare Harvey 2008, 23.

\(^{124}\) Turner 1978, 32-33, 45-50.

\(^{125}\) Turner 1978, 68-73.

\(^{126}\) Turner 1978, 81.
Today, Turner’s study is to be regarded as a mixed blessing. On the one hand, it helped to see physical houses as active and responsive devices employed by resident-builders in order to support their survival – an important aspect I take up in chapter five. On the other hand, by identifying the enemy in the state – instead of a more qualified acknowledgment that it is bureaucratic planning and administration rather then welfare as such that causes social housing to be a burden – he opened the door to co-opt self-help into a neoliberal agenda. In any case, Eckhart Ribbeck reveals that self-building is ‘efficient yet not spectacular’ when it comes to providing adequate room with adequate means for its residents.

Reconsidering Informality

What I have introduced above as inventive practices of urban becoming is also frequently approached under the notion of informal activity. Here now it is pertinent to address the tensions between (urban) formal and informal registers. This is particularly relevant as the notion of the informal was largely shaped in response to Latin American experiences, yet is currently being sidelined in an emerging field of (English-speaking) postcolonial urban studies. Furthermore, the variety of interpretations and intentions makes critical attention paramount, particularly as the marginalisation of informal settlements is the product also of the discourses by which they are comprehended.

Urban informality is predominantly interpreted in three ways. First, it is regarded as a deficiency of planning and ‘lack of proper urban policies’ that demands eradication and prevention through the promotion of strong local institutions. From this perspective, informality is labelled a problem at the same time as a

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127 Turner’s study has been highly influential for the World Bank to adopt a policy of aided self-help – while Turner himself remained critical of this use of his work. See Harris 2003.
129 E.g. for the case of the peri-urban by Adell 1999, 7.
130 Varley 2013, 5.
131 Varley 2013.
133 UN-Habitat 2013, 6.
positive vision of the democratic state is upheld as something that needs to be extended into those territories that nestle on its margins. Second, informality is often understood as resistance, mobilising, for example, the connotation of an urbanism that is in its essence anti-state.\textsuperscript{134} Within this perspective, many celebrate how the marginalised supposedly ‘re-conquer’ the urban.\textsuperscript{135} Third, it is regarded as a deliberate form of governance that produces ‘grey spaces’ and populations that are ‘neither integrated nor eliminated’.\textsuperscript{136} In this sense, Elías Huamán frames the informal as an unjust and violent ‘business model’ based on irregularity while ‘generating multiple economic and political gains’.\textsuperscript{137}

In any case, a growing number of authors regard the sphere of the informal to be decisive for future urban development in both the global South and North.\textsuperscript{138} The argument they make is not solely quantitative – half of the built-up area of Mexico City’s metropolitan area, for example, has its origin in informal settlements\textsuperscript{139} – but also analytical and political. Edgar Pieterse, in this light, sees the benefit of the informal register in calling for ‘a more provisional approach before one pronounces on either what is going on, or what must be done to improve the quality of life and freedom in a city’.\textsuperscript{140}

So what exactly is urban informality? Conceptually and methodologically, the term is regarded as highly problematic.\textsuperscript{141} It is either framed economically (as activity to provide for a livelihood),\textsuperscript{142} spatially (as a distinct type of settlement)\textsuperscript{143} or denoting a particular building process.\textsuperscript{144} Underpinning these conceptions is the agreement on placing a legal framework at the heart of their definitions. In so far as informality is employed to speak of the production of

\textsuperscript{134} See Varley 2013, 7 who is challenging this perspective.
\textsuperscript{135} Brissac Peixoto 2009, 246.
\textsuperscript{136} Yiftachel 2009, 88, 92; See also the discussion on Turner’s reception by Harris 2003.
\textsuperscript{137} Huamán Herrera 2014, 71 own translation.
\textsuperscript{138} E.g. Altvater 2005.
\textsuperscript{139} CONAPO 2000, 41-65.
\textsuperscript{140} Pieterse 2008, 3.
\textsuperscript{141} Lombard 2012, 32-33.
\textsuperscript{142} E.g. de Soto 1987.
\textsuperscript{143} E.g. Brillembourg, Feireiss, and Klumpner 2005; for Mexico e.g. Aguilar and Santos 2011; Lombard 2012; Ziccardi and González Reynoso 2012, 29.
\textsuperscript{144} E.g. Turner 1976.
houses this means making ownership the focus of attention. Other contributions centre on material form as the common denominator, albeit doing so at the risk of homogenising local specificities and reducing the phenomenon to a stereotypical image of the (irregular, hillside, etc…) favela as only sometimes found in Rio de Janeiro.

A very basic approach places the informal ‘outside the regulatory framework’, thus establishing a strong divide with what is perceived as formal. With more precision, however, the informal is regarded as a ‘legal system of exceptions’, placed not against but rather continuously intersecting with the formal system in order to ‘take refuge when the costs of fulfilling the law exceed the benefits the law provides’. Responding to de Soto, Marie Huchzermeyer suggests that it is not the ‘contravention of laws’ that drives people into informal activities, but the ‘lack of rights’. Armando Cisneros points to how informality generates ‘structural precariousness’ and weakens urban citizenship through establishing conditions where ‘pecking orders rule’. Edgar Pieterse concludes that informality is a ‘pervasive system of… unjust structures of opportunity’. This points to the fact that informal registers also need to be understood as an expression of global transformations. Elmar Altvater identifies (planetary) informalisation as part of the world’s structural adjustment to the processes of globalisation and urbanisation. In this view, informality is systemic to advanced capitalism, and effectively the expression of a ‘new regime based on the permanent condition of uncertainty’. In other words, informality is highly attractive to the formal economy and state because many of the costs and risks of urbanisation are delegated to the individual. This is what Gregory Wilpert

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145 For the case of Mexico City see: Cruz Rodriguez 2001; Duhau and Schteingart 1997; see also Wigle 2010.
146 Varley 2013, 8.
147 Saskia Sassen in Brillembourg and Klumpner 2005, 39; see also: Porter et al. 2011, 115.
149 de Soto 1987, 12-13 own translation; see also Daniels 2004; Simone 2004a, 25-26; Alarcón 2008; Lombard 2012.
150 Huchzermeyer 2004.
151 Cisneros Sosa 2014, 211, own translation.
152 Pieterse 2008, 2.
154 Sassen 2005b, 85.
156 Jachnow 2003, 90-91; see also Gilbert and De Jong 2015, 520.
describes as a ‘neoliberalism from below’, a condition in which the neoliberal project has left people with nothing more than individual responsibility and the rejection of the social collective.

Undoubtedly, persisting under the adverse conditions of both marginalisation and informalisation requires effort and endurance – which is what this thesis will describe, particularly in chapter four. As such, the costs implied in urban informality should not be underestimated. Motivation, Alexander Jachnow concludes, most likely comes ‘from the desire to leave behind the uncertain and oppressive state of informality as soon as possible’.

**Infrastructural Practice and the Contributions of Cityness**

This points to reading urban informality essentially also as practice, instead of interpreting it as a fixed category of demarcated space or economic labour. What needs to be acknowledged is that those who live under conditions of, and make a living from urban informality accomplish great achievements with very little. These positive results rely on the ability to identify, assess, nurture and make productive the limited opportunities that make themselves present; and to do so within shifting constellations.

Putting practice first, then, informality emerges as a particular mode of urbanisation. This urbanism we can describe as based on ad-hoc, site-specific and just-in-time negotiations. In other words, urban informality is a way of making ends meet, resolving current needs by aligning resources at hand with

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157 Wilpert 2003, 112.
158 For a critique of too light-headed accounts of informality see Roy 2011 as well as Varley 2013. Some discourses, in particular those informed by more affluent contexts where informality is not a question of survival but of creative expression, picture informality as the, supposedly, more innovative (because of its inherent flexibility), more sustainable (because of its openness to self-determination and recycling) and, ultimately, state-defying way of city-making in comparison to formal planning.
159 Jachnow 2003, 91.
160 McFarlane 2012; see also de Soto 1987, 12.
161 Porter et al. 2011; Roy 2005.
162 For an account of just-in-time and ad hoc principles in planning see Alfasi and Portugali 2004, 32-33.
concrete local situations on the basis of the opportunities they offer. It is a practice of improvising, understood here as a ‘specific productivity’ that reveals, and as a ‘performative praxis’ that deals with, uncertainty. In the light of this (uncertain) performance of uncertainty, informality is necessarily emergent and ‘temporary in nature’, yet not merely spontaneous and unstructured. Rather, it builds on experience, codes and intuition in combination with appropriating and re-appropriating what is there. This allows thinking the doing of informality in line with what Tim Ingold frames as ‘practical enskilment’, that is, as ‘the embodiment of capacities of awareness and response by environmentally situated agents’. At the same time, informality as practice resembles much of what Michel de Certeau describes as a particular way of ‘making do’ in and with a given urban social and physical situation. Informality as practice, we can thus infer from de Certeau’s words, brings into play ‘a way of thinking invested in a way of acting, an art of combination which cannot be dissociated from an art of using’. This thread is taken up by AbdouMaliq Simone in his writing on ‘people as infrastructure’ in which he reveals the making of connections, and putting these connections to work, as the foundations of urban life.

In Simone’s words, those who live in and on constellations of uncertainty employ themselves as the resource by which ‘to reach and extend themselves across a larger world and enact [their] possibilities of urban becoming’. The ‘flexible, mobile, and provisional intersections of residents’ that result from this practice become an infrastructure in its own right, ‘a platform providing for and reproducing life in the city’. What Simone does is to turn the dominant view of infrastructure on its head: not physical infrastructures that afford social interactions but social ‘architectures of circulation’ that materialise in the

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163 Bormann, Brandstetter, and Matzke 2010, 12, 14, own translation.
164 Varley 2013, 12 discussing the work, among others, of Mehrotra 2012.
165 On the structuredness of improvisation see Dell 2007.
166 Ingold 2000, 5.
168 de Certeau 1988, xv, emphasis added.
169 See e.g. Simone 2004a, 24 ff.
170 Simone 2004b.
171 Simone 2004a, 3.
conjunction of things and (practising) bodies are places in the focus.\textsuperscript{173} This is not to ask about the ‘social work that infrastructure does’, but rather to emphasise the ‘social work that does infrastructure’, as Fran Tonkiss suggests.\textsuperscript{174}

Simone’s notion of people as infrastructure sheds new light on the discussion around informal activities and urban inventiveness, as outlined above. While inventive urban practices have been studied before, these have not been analysed with regard to the role they play in urban becoming. In the past, research questions have stayed on the lines of how the marginalised survive \textit{in spite of the lack} of city.\textsuperscript{175} Now, other questions can be formulated like: how is city being made by putting the margins to work? Thinking infrastructure as human, and people as the infrastructures that sustain city life, has the potential to abandon our fixation with ‘the city’ and to redirect our concern to \textit{city-making} as practice.\textsuperscript{176} Furthermore, informal-inventive activity can now be understood as \textit{infrastructural practice} by which objects, spaces, persons, and practices join up in a specific way, one that is beneficial for the actor. In chapter four I will introduce such \textit{opportunity work} by drawing on concrete examples and will examine in detail the physical labour they entail.

At the same time, considering the practitioners of urban space to be their own (living) infrastructure – and informality to be a practice of urban becoming – also allows us to rethink the broader sense of city. This leads me to turn to the notion of \textit{cityness}, a notion employed to describe a distinct and, simultaneously, more inclusive quality of the urban than what Western theory came to mean by \textit{urbanity}.\textsuperscript{177} The (Western) notion of urbanity goes back to Luis Wirth’s ‘Urbanism as a Way of Life’, from 1938.\textsuperscript{178} In this essay, Wirth establishes a ‘minimal’ sociological definition based on the relative size, density, permanence and heterogeneity of a settlement in order to describe what a city is. These values, he suggested,
constitute a condition of urbanism that is decisive in the formation of a way of life distinct to the rural/provincial other.\(^\text{179}\) The notion of urbanity emerges from this discussion as a ‘cultural-societal way of life’ characterised by a ‘special quality of the enlightened, bourgeois city’ which was meant to signify a ‘tolerant, cosmopolitan attitude’.\(^\text{180}\) Despite early critiques,\(^\text{181}\) the social and cultural dimension of urbanity has often been reduced to merely denoting built density and reproduced and commodified as a scenic image of the city.\(^\text{182}\) In its essence, furthermore, it defines the city on the basis of modern European experiences. Today, this interpretation is having contradictory effects. On the one hand, the notion of urbanity has lost much of its usefulness for making sense of the post-Fordist ‘postmetropolis’,\(^\text{183}\) as well as of peri-urban territories worldwide and, in particular, in the global South. On the other hand, it still fosters picturing these new urban realities as spaces of want and deficiency in the mostly unacknowledged comparison to a European norm.

In response, the notion of cityness is introduced as ‘an instrument to capture something that might easily get lost’ to the Western eye.\(^\text{184}\) Drawing on Massey’s work, Ash Amin and Nigel Thrift describe it as the ‘intense social effects’ that result ‘from “dense networks of interaction”?’.\(^\text{185}\) That is to say, cityness is where multiple people, spaces, things, activities and ideas intersect and, together, make city by inciting multiple relations.\(^\text{186}\) These intersections are ‘unruly yet dynamic’\(^\text{187}\) and, above all, ‘consequential’, as it is through them that novel urban constellations unfold.\(^\text{188}\) This making and being in-the-making is key to the definition of cityness. Simone even describes cityness as a ‘state of

\(^{179}\) Wirth 1938, 8.
\(^{181}\) Gans 2005, 49-50. Herbert Gans rejected Wirth’s ‘ecological concepts’ of urban and suburban, as well as the variables of population number, density and heterogeneity to give any account for distinct sociality because they merely portray distinct environmental conditions to which humans adapt.
\(^{182}\) Sieverts 1997, 32-33, see also footnote 20 on page 166.
\(^{183}\) Soja 2000.
\(^{184}\) Sassen 2005a, 1.
\(^{185}\) Amin and Thrift 2002, 2.
\(^{186}\) Simone 2010, 3.
\(^{187}\) Simone 2010, 12.
\(^{188}\) Sassen 2010, 14-15, 17.
emergency’,\textsuperscript{189} as a way of life open to the (urban) world’s rough and tumble, its perpetual becoming.

In sum, cityness is something that can only be constituted in practice, unlike urbanity which is laid out conceptually as something independent to human agency. Essentially, too, cityness is not taken for granted but needs to be renegotiated constantly: a ‘simultaneous promise, threat, and resource’ that has to be enacted both with and against the spatial, social and physical adversaries that limit its unfolding.\textsuperscript{190} Inventive urban practices and informal activities, I argue, exemplify those registers of urban life described by the notion of cityness. Infrastructural practices are both relational and generative, that is, they are \textit{ways of doing} in emergent urban conditions as well as \textit{ways of making} these conditions. Furthermore, turning to infrastructural practices and cityness does not come without political implications. In this light, AbdouMaliq Simone suggests why Western conceptualisations of the city predominantly rejected recognising cityness as part of the experience: because it ‘haunts’ Western attempts to keep (urban) life ‘in line’ both operationally and theoretically.\textsuperscript{191}

**Practice, the Body and the Materiality of Space (Section 3)**

This third section of the present chapter engages with the role and agency of the body in infrastructural practice and in light of the discussion on cityness. It enquires into the particular focus of this research: what \textit{physical labour} do practitioners of peri-urban space need to carry out when employing themselves as infrastructure, and what meaning of space do they acquire through this bodily practice? In what follows, I will first turn to the study of practice and then elaborate on the perspective that emerges from such practising bodies.

\textsuperscript{189} Simone 2004a, 4.
\textsuperscript{190} Sassen 2010, 3, 17; Arguably, cities can never be taken for granted. See Gandy 2011 drawing on Ruth Glass.
\textsuperscript{191} Simone 2010, 8-9.
Practice theory is a broad field that has emerged both from inside mainstream social science and from its fringes. What practice approaches have in common is that they understand the social foremost as a collective ‘nexus of doings’ (doing so before, not in contrast to acknowledging also structural, economic-individual and normative theories). This conception of the social gives rise to the particular attention to both materiality and corporeality. Practices, it is agreed, are essentially always ‘movements of the body’ and the ‘skilful handling of things’. As such, they point to a specific double materiality of both the practicing body and of the materials being handled. They also speak of a characteristic situatedness of practice in both the space and time of its enactment.

What practice theory further does is to bring into view the influence non-human elements have on the constitution of the social world. This, however, has sparked controversies with regard to placing the human in relation to multiple and potentially active materialities, and how to make sense of life lived. Of particular relevance for this thesis in this regard is the discrepancy between assemblage urbanism on the one hand, mobilising Actor-Network-Theory (ANT) and the vitality of the material for urban analysis, and, on the other hand, what we may call dwelling urbanism by drawing on Tim Ingold’s notion of ‘dwelling perspective’. In broad terms, while the former perceives of the relationship between equal ‘actants’ (human and non-human) as a network composed of discrete entities, Ingold’s approach ‘gathers’ people and things as ‘a tangle of threads and pathways’ that dissolves the boundaries of the concrete and redefines

192 For an overview see Reckwitz 2003, in particular 283; see also Ortner 1984.
193 Reckwitz 2003, 286-287, 290 drawing on Theodore Schatzki; see also Hörning and Reuter 2004, 15.
194 Reckwitz 2003, 290.
195 Reckwitz 2003, 290 own translation.
196 Reckwitz 2003, 290.
198 Farías and Bender 2010.
200 Bennett 2010.
201 Ingold 2000, 5, 154.
202 The term has been introduced by Bruno Latour and is now used by assemblage urbanists.
the relation not as based on (inanimate) connections but on ‘lines along which life is lived’.203

A third way is proposed by Colin McFarlane, who reads the perspective of dwelling into the thinking of assemblages in order to qualify its wider-than-human imaginary with a human dimension.204 McFarlane does so specifically in order to bring into view ‘the depth and potentiality of sites and actors in terms of their histories, the labour required to produce them, and their inevitable capacity to exceed the sum of their connections’.205 Yet, responding to McFarlane’s descriptions of the urban assemblage, Hilary Angelo rightly states that assigning agency to things as if this were an inherent property hinders understanding the work of mediation they accomplish.206

At the same time, the dis- and re-location of the human through urban assemblage thinking has also sparked a controversy with critical urban theory. Here, Neil Brenner et al. identify the risk that excessive attention to the material and its affordances/agency can entail ignoring ‘underlying contexts and causes of urban sociospatial polarization, marginalization and deprivation’.207 This critique is countered by Ignacio Farias who argues that, in contrast to a (Marxist) political project envisioning the revolution of structures, the empowering critique of assemblage perspectives is one of participation that unveils the uneven (re)production of practices, processes and orderings by ‘following actors’ into the ‘actual urban situations’ that ‘define the space of intervention for an urban democratic public’.208 Hence, while the former approach (urban critical theory) sees urban practitioners subjected to ‘specific historical structures’ that ‘produce determinate constraints on the possibility for social transformation’ the latter (assemblage urbanism) places human urban actants in an uncertain, incomplete world in the making, an (urban) world that ‘may be made this way or that according as men [sic] judge, prize, love, and labor’.209

203 Ingold 2011, 91.
204 McFarlane 2011, 667.
205 McFarlane 2011, 667 emphasis added.
206 Angelo 2011, 572.
207 Brenner, Madden, and Wachsmuth 2011, 233.
209 Farias 2011, 372 citing Dewey 1918:44; emphasis added.
With his analysis of *The Social Production of Space*,

210 Henri Lefebvre, I argue, puts into perspective the different strands of urban theory introduced above.

211 More important in the context of this thesis, however, is that he places the body ‘both as point of departure and as destination’,

212 arguing that all ‘bodies […] produce space and produce themselves.’

213 This is to say that, essentially, Lefebvre’s conception of space is one of bodily practice in which social space only exists through bodily occupation and for the activity of living bodies.

214 ‘Spatial practice’, that is ‘the action of subjects’ presupposing ‘the use of the body’

215 stands at the centre of his triad of social space; and it is through and for bodily practice that the other two layers, ‘representations of space’ (plans and maps ‘establishing relations between objects and people’ and intervening ‘by way of construction’)

216 and ‘representational space’ (‘[r]edolent with imaginary and symbolic elements’ by which spatial formations ‘speak’ to individuals and societies)

217 are articulated.

With his work, Lefebvre inserts a wider discussion on bodies as the site of the social into the realms of (social) space and the city. Furthermore, by speaking of ‘a specific body, a body capable of indicating direction by a gesture, of defining rotation by turning round, of demarcating and orienting space’, he emphasises the body as the subject of social production, not merely as its object.

218 Elisabeth Grosz picks up this thought by indicating how the social production of bodies is to a great extent also a spatial production. ‘It is our positioning within space, both as the point of perspectival access to space, and also as an object for others in space,’ she states, ‘that gives the subject a

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210 Lefebvre 2009.

211 For critical theorists, he provides a framework for envisioning the possibility of spatial justice through accomplishing a ‘right to the city’. See Lefebvre 1996, 158; Marcuse 2009; Soja 2010; compare Brenner, Madden, and Wachsmuth 2011, 236; at the same time, Lefebvre provides the cue for ‘putting space and cities first’ ‘as an encompassing viewpoint through which to make practical and theoretical sense of the complexities of the (post)modern world.’ Soja 2003, 272; compare Farias 2011, 376.

212 Lefebvre 2009, 194.

213 Lefebvre 2009, 171, drawing on Weyl.


215 Lefebvre 2009, 33, 40.

216 Lefebvre 2009, 41, 42.

217 Lefebvre 2009, 41, 42.

218 For an overview see Stadelbacher 2010.

219 Compare Stadelbacher 2010, 53.
coherent identity and an ability to manipulate things, including its own body parts, in space’.\(^{220}\)

Accordingly, Edgar Pieterse and Mamadou Diouf remind us, bodies register and make readable for others how urban lives and emergent socialities are forged in hard work.\(^{221}\) That is to say, the bodies of urban practitioners are a decisive territory of cityness.\(^{222}\) AbdouMaliq Simone elaborates that ‘[t]he body is not simply a container or a physiological support […] but rather a tool to shape and convey particular affects and objectives, as well as an instrument to attain a particular consciousness of what one is’.\(^{223}\)

In sum, I argue, these considerations point to the double characteristic of a corporeality of the social as outlined by Fritz Böhle and Margit Weihrich, indicating in its essence that human beings have bodies through which they become social objects and instruments, yet they also always are bodies through which they perceive and comprehend with their senses and intervene in the world in practice.\(^{224}\) This, my argument continues, resonates with Tim Ingold’s conception of the organism-person, which he describes as a ‘singular locus of creative growth within a continually unfolding field of relationships’,\(^{225}\) and whose perspective is precisely that of dwelling.

In light of the discussions outlined here, the path I suggest treading within this thesis is one that draws together critical theory’s attention to uneven urban development and the re-production of peripherality with dwelling urbanism’s sensibility to the relational making and thinking of the environment in laborious practice. This is to say, rephrasing Simone, that the focus is on studying humans as infrastructure, rather than studying infrastructures as more-than-human assemblages. More precisely, practising peripherality by being infrastructure is my concern, not describing the structure of any centre-periphery ‘imperialism’\(^{226}\)

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\(^{220}\) Grosz 1995, 92.

\(^{221}\) Pieterse 2010, 11; drawing on Diouf 2003.

\(^{222}\) Pieterse 2010, 11.

\(^{223}\) Simone 2010, 58.

\(^{224}\) Böhle and Weihrich 2010, 12.

\(^{225}\) Ingold 2000, 3. Ingold’s entry point however is a different one, explicitly aiming at overcoming the Cartesian distinction between mind and body.

\(^{226}\) Galtung 1971.
expressed by infrastructural deficiency. Finally, I will attend to individual and collective *material* engagements with space rather than to seemingly intangible social institutions structuring people’s lives.\textsuperscript{227}

The body as site of the urban social has on occasion been addressed before – albeit without placing a specific focus on infrastructural *practice* and the *making* of city. This is the case when Martha Schteingart, for example, points to the ‘time, effort [esfuerzo] and suffering’ on which city life rests for the poor;\textsuperscript{228} or when Alicia Ziccardi and Arsenio González Reynoso emphasise how informal houses are the accomplishment of the ‘effort [esfuerzo] of the household’.\textsuperscript{229} Ann Varley confirms this view by pointing to the cost of autoconstruction being financial, physical and emotional in nature, recalling her research participants describing the process by alluding to the notion of ‘suffering (sacrificios)’.\textsuperscript{230} Likewise, Ash Amin points to the physical ‘labour of building homes, utilities and the neighbourhood’ by which residents build their informal settlements in Belo Horizonte, Brazil, on the basis of ‘infrastructural interactions’.\textsuperscript{231}

**Making and Thinking Space Through the Practising Body**

Ingold’s ‘dwelling perspective’ draws on Martin Heidegger, for whom dwelling describes a being-in-the-world that is also a making and knowing of the world.\textsuperscript{232} It also mobilises the work of Maurice Merleau-Ponty, which frames as a ‘primacy of perception’ the particular knowing which the body has of the body and world *through* the body.\textsuperscript{233} Catherine Malabou confirms these old and new phenomenological approaches by revealing that all intellectual conception

\textsuperscript{227} These social institutions do of course affect humans’ lives by materialising in space, for example, as uneven development.\textsuperscript{228} Schteingart 1997, 790, own translation. According to the Velázquez Dictionary, *esfuerzo* translates as (1) courage, vigor; (2) effort, strong endeavour, exertion, labouring; (3) confidence, faith and (4) help, aid.\textsuperscript{229} Ziccardi and González Reynoso 2012, 29, own translation.\textsuperscript{230} Varley 2002, 457. *Sacrificio* in Spanish implies the idea of suffering through hard work in addition to translating as sacrifice and giving up something for something else.\textsuperscript{231} Amin 2014, 145-146, emphasis added.\textsuperscript{232} Heidegger 2001, albeit employing the term ‘building’ that Ingold argues against.\textsuperscript{233} Merleau-Ponty 2002, 121, 215-216, 239.
emerges in relation to biological processes of the perceiving body. Arguing from the perspective of contemporary neuroscience, she explains that in the brain neuronal and mental activity describe a plastic continuity – at the same time receiving and bestowing form – that weaves organism and person, body and world together in an ongoing, multiple process of biological and, at the same time, cultural consciousness of the self and world.

The advantage of drawing on Ingold’s anthropology of the Perception of the Environment is that it allows us to weave lines of connection between bodily practice and the perspective this practice enables. Essentially, Ingold emphasises that worlds are not (intellectually) constructed ‘before they are lived in’, but that ‘the forms people build, whether in the imagination or on the ground, only arise within the current of their life activities’. Making, accordingly, is to be understood as a ‘growing’ and ‘nurturing’ of the world accomplished with, through and for the body, rather than as a ‘building’, or constructing, of previously conceived designs. Likewise, thinking is to be understood not as an activity of the mind, detached from the environment and its becoming, but as a relational process of knowing, a coming-to-know of the world while making it – again – with, through and for the living, practising body.

In this view – and applying this view to the context of this thesis – making city, then, implies not the building of houses and infrastructures per se, nor the pursuing of possibilities and the establishing of relations per se while acting as infrastructures. This is to say, that it does not describe city-making in terms of people bringing these elements and activities onto a substrate that is the environment. Rather, making city denotes the bodily engagement in a ‘process wherein both people and their environments are continuously bringing each other into being’. Ingold refers to such making (of city) through bodily practice as a

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234 Malabou 2008.
237 Ingold 2000.
238 Ingold 2000, 153-154, emphasis added.
239 Ingold 2000, 153 ff.
240 Ingold 2000, 87.
‘poetics of dwelling’, that is, as a creative, productive way of making the world through inhabiting it.\textsuperscript{241}

We find similar ‘poetic ways of making do’ in Michel de Certeau’s analysis of an ‘art of practice’,\textsuperscript{242} a conception of everyday inventiveness that Simone draws upon when framing his notion of people as infrastructure.\textsuperscript{243} De Certeau describes such practices as tactical ways of operating in everyday (urban) life, as ‘clever tricks’ or ‘manoeuvres […] within the enemy’s field of vision’ and as the ‘victories of the “weak” over the strong (whether the strength be that of powerful people or the violence of things or of an imposed order, etc.)’.\textsuperscript{244} Drawing on Malabou’s notion of a socio-material plasticity of space and life, this is to say that practitioners of space not only adapt to the conditions of space and follow the opportunities it presents, but enact themselves as the resources by which to create, invent and overcome previous creations of the world with and through their bodies.\textsuperscript{245} To give form to, (re)model and restore space, yet also to destroy it or to passively adapt to space, remain immobile or be crushed by it are the multiple possibilities opened up by this perspective.\textsuperscript{246}

At the same time, Paul Carter argues that acts of making entail a specific kind of knowing rooted in practice. He frames this coming-to-know-in-practice as ‘material thinking’, a term he develops while analysing art practice as research.\textsuperscript{247} Introducing art practice at this point might seem far-fetched, yet the relevance of Carter’s approach to the topic of this thesis is readily demonstrated. Ingold, for example, suggests that ‘what we in the West would call “art” should be understood not as ways of representing the world of experience on a higher, more

\textsuperscript{241} Ingold 2000, 11; this use of poetic draws on the etymology of the Greek term poïesis = making. See Carter 2004, 2; Sassen 2006, 2.
\textsuperscript{242} de Certeau 1988, xv.
\textsuperscript{243} Simone 2004b, 409.
\textsuperscript{244} de Certeau 1988, xix, 37.
\textsuperscript{245} Malabou 2006, 23-24. In this sense, Malabou distinguishes plasticity from flexibility, the later denoting ‘plasticity minus [creative, form-giving] genius’.
\textsuperscript{246} Malabou 2000, 204; 2006, 102, 23, 26. Malabou develops these possibilities by drawing on the plasticity of the brain as well as on the plasticity of the term plastic itself, alluding to both ‘those concrete shapes in which form is crystallized (sculpture) and to the annihilation of all form (the bomb)’.
\textsuperscript{247} Carter 2004.
symbolic plane, but of probing more deeply into it and discovering the significance that lies there…

Translating Carter’s notion into wider contexts of material making, Barbara Bolt describes the knowing inherent in the engagement with material things more generally as ‘a very specific sort of knowing, a knowing that arises through handling materials in practice’. Hans-Jörg Rheinberger, in turn, elaborating on the praxis of experimentation in the natural sciences, art and technology, explicitly frames such handling materials as ‘thinking with the hands’ while making things. These conceptions of a particular knowing rooted in hands and materials coming together in practice, I argue, can be extrapolated to life lived, that is to both the (human) living body and to wider (urban) socio-material situations. In a similar move, Ash Amin and Nigel Thrift draw attention to the fact that ‘hands are crucial means of thinking the world, pathways of understanding’, reminding us that ‘[T]here is almost no urban practice in which hands are not richly implicated’. Surely, this applies also to the practice of urban research: sensory-visual methods as those employed for this thesis resonate with the research topic and provide a fruitful way of capturing the stream of peri-urban infrastructural life.

Hence, material thinking directs attention also to the making of knowledge, not to knowledge as something fixed. Any acquisition of knowledge, just as all expressions of culture and society, practice theorists assert, is always accomplished in and through praxis. As early as 1929, Ludwik Fleck stated that knowledge is not acquired by passive contemplation nor by getting hold of a somehow previously given insight. Rather, Fleck suggests, ‘knowledge acquisition is […] a mode of re-shaping and being re-shaped, in short, a mode of creating/making [ein Schaffen]’. Creating knowledge, Rheinberger elaborates further, is a mode of literally ‘tapping around’ and into new ways of seeing things,

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248 Ingold 2000, 11.
249 Bolt 2010, 29.
250 Rheinberger 2002.
251 Rheinberger 2001, 79.
252 Amin and Thrift 2002, 86, emphasis original.
253 See chapter three.
254 Hörning and Reuter 2004, 10; Reckwitz 2003, 290.
255 Fleck 1929, 426, own translation.
a ‘mode of feeling one’s way forward’. This pays deliberate attention to the materiality and corporeality of all acts of knowing – including those of thinking city out of the practice of making it. Carter, in this light, refers to Thomas de Quincey arguing that ‘reasoning… carried on discursively [is to] mediate […] that is, discurrendo – by running about to the right and the left, laying the separate notices together, and thence mediately deriving some third apprehension’.

**Conclusion**

This chapter presented the theoretical frameworks underpinning this thesis, providing an overview of the relevant literature while structuring it into the three related fields of knowledge I aim to bring together: urban regional becoming, ways of doing infrastructure and the city, and the role of the living body in making and thinking space.

In section one, I discussed the rise of urban peripheries and reflected on the perspectives being mobilised in order to speak of them. Primary modes of apprehension either see them in opposition to a centre or as integrated on a macro-regional scale. Within this context I introduced the notion of the peri-urban as a critical thirding to capture the centrality of fringe processes to the wider urban process. Most notably, the peri-urban realm is the site of simultaneous, multiple, uneven and rapid urbanisation and citification, that is, of social-cultural and material-physical urban becoming of both society and space. Working from within the reviewed literature I then identified a general lack of attention to everyday sociality and socio-materiality. Hence, I suggest shifting to an *inside perspective* that allows engaging with the concrete situation of Mexico City’s peri-urban realm as life lived (which I will do in chapters four to seven).

Additionally, I discussed the analytical potential of a rural perspective, preparing the ground for the discussion in chapter eight.

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257 De Quincey 1888, 137 cited in Carter 2004, 5, emphasis original.
Section two shifted the focus to the study of inventive practices of urban becoming. In this section I reviewed seminal works that took peripheral conditions in Mexico City as the backdrop in order to account for social and material responses to marginalisation. This compilation of *ways of doing* of the marginalised led me to critically engage with (differing) notions of urban informality. Essentially, I came to understand informality as a particular mode of urbanisation as well as, more specifically, a practice. This was not without emphasising informality’s extra-legality, pointing to the lack of rights it speaks of and identifying it as being part of the world’s structural adjustment to a globalisation and planetary urbanisation that is grounded in perpetual uncertainty. I then introduced Simone’s concept of ‘people as infrastructure’.\(^{258}\) This allowed me to reframe informality and inventive urban practice under the notion of infrastructural practice and to conclude, that such practices exemplify what the notion of cityness aims at capturing as ‘productive intersections’.\(^{259}\)

The last section of this review turned its attention to practice theory, the corporeality of the social and the role and agency of the body in socio-material space. Outlining the analytical contributions offered by phenomenology, this section engaged above all with Ingold’s ‘dwelling perspective’ in which the world and living body emerge in mutual engagement.\(^{260}\) Drawing on this conception, I discuss city-*making* as a mode of poetic, that is, world-making urban everyday practice. At the same time, I discuss city-*thinking* as entailed by such making practice, describing it, drawing on Carter, as a particular knowing through handling materials in practice.\(^{261}\) These two concepts in particular will guide us through the analytical chapters.

\(^{258}\) Simone 2004b.
\(^{259}\) Sassen 2010, 14-15, 17.
\(^{260}\) Ingold 2000.
\(^{261}\) Carter 2004; Bolt 2010.
2. In Touch with Peri-urban Mexico City: An Introduction to Methods

Introduction and Overview

In this chapter I will set out the methods employed in this thesis. I will lay out how sensory-visual explorations, together with ethnographic conversations, expand the researcher’s attentiveness to the corporeality of practice and the materiality of space. In addition, I will provide an overview of the particular path my own research took over the years, in-between worlds and according to its focus on the making and thinking of city in peri-urban Mexico.

The research carried out in this thesis is based on multiple sites that stand for specific socio-material situations by which Mexico City’s northern peri-urban fabric is being composed. Following Duhau and Giglia I therefore treat them as ‘witness areas’ (áreas testigo)\(^1\) of the peri-urban realm. By witness areas these authors mean spaces with particular material and social characteristics that represent different ‘orders’ of inhabited space in Mexico City (the estate, the residential compound, the historic village, etc…) each of which affords a particular experience of the city as a whole.\(^2\)

In this sense, Colonia Antorcha represents a self-built, informal settlement (albeit with a particular institutionalised form of organisation as will be discussed in chapter six). Sierra Hermosa stands for a mass development of affordable housing as has proliferated since the turn of the century. The ejido land of the villages of San Pedro Atzompa and San Francisco Cuautliquixa stands for agricultural land at the crossroads of becoming urban, and the Mexico City-Pachuca highway represents a traffic infrastructure while also actually connecting the aforementioned sites in the municipalities of Tecámac and Tizayuca.

The selection of these case study sites was based on their specific physical appearance, social organisation and relative proximity in space. I will introduce them in detail in chapter three. In addition, several other locations surrounding these sites are occasionally drawn into the discussion as research participants themselves call upon them for comparative reference.

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1 Duhau and Giglia 2008, 16.
2 Duhau and Giglia 2008, 15, 16-17.
My research is based on ethnographic fieldwork, which took place at regular intervals over a period of six years as well as during a three-month residency in Sierra Hermosa at the midpoint of the process. For this engagement with the field I employ a combination of methods with a particular emphasis on visual-sensory techniques that also comprise the elements of my practice-based Visual Sociology PhD programme.

My methods involve perceptive explorations – a combination of ‘walkabouts’\(^3\), ‘participant sensation’\(^4\) and ‘creative research’\(^5\) – that take the body of the researcher as the point of departure for engaging with others and for reflecting on the experience of the peri-urban realm. These \textit{wanderings} by foot and by bus, I argue, materially think space through practice, hence providing a path for accessing spatial practitioners’ dwelling perspectives\(^7\) more generally. They also include photography and video recording as a way of seeing that not only accompanies and registers these explorations but affords their investigation by deliberately working with their audio-visual outputs as the material data for analysing and representing bodily practice and urban material becoming.

Furthermore, perceptive explorations are informed by, and inform, equally important interview techniques. Multiple conversations with street vendors, job-seekers and creators of opportunities, with residents, home-builders, neighbours and fellow travellers – both within the principal research sites as well as in surrounding locations – allowed me to write an ethnographic account of their practice and the labour and material thinking it entails. The selection of these informants arose from my explorations. Some of these encounters developed into follow-up interviews as well as experimental ‘walking interviews’\(^8\) and bus interviews. I also conducted semi-structured interviews with key institutional representatives that helped me set the scene in chapter three. A list of all interviews can be found in appendix A. In total they cover 92 recorded research encounters in addition to the countless conversations that did not make it onto tape but nevertheless informed my sense of place, practice and matter.

\(^3\) Clark and Emmel 2009.
\(^4\) Howes 2006.
\(^5\) See e.g. Carter 2004; For the possibilities of creative research in the social sciences see Back and Puwar 2012.
\(^6\) Carter 2004.
\(^7\) Ingold 2000.
\(^8\) Clark and Emmel 2008; Jones et al. 2008; see also Kusenbach 2003, 463.
Perspectives of the In-between: the Field, the Focus and I

The story of my research starts long before the actual PhD process. It is the story of an architect who moved into space-related social sciences, switching his interests from single constructions to urban agglomerations, from building houses to coming to know about their socio-material agencies. In addition, it is the story of splitting my life and geographical location between Germany and Mexico (in addition to the United Kingdom where this thesis has its intellectual home at the Centre for Urban and Community Research at Goldsmiths).

Through these shifts and moves I have come to occupy multiple in-between positions that inform this research. I have become a foreign resident to Mexico City as well as a resident scholar of its multiple expressions. In other words, I continuously fall between cultural and disciplinary certainties; yet the particular perspective born out of this position, I argue, enables me to appreciate the multiple facets of the (urban) world. Following Paul Stoller, the particularity of such a position is precisely that it can 'draw strength from both sides of the between’ thus allowing one to see the world in its complementary expressions. In this sense, alluding to the ‘creative power of the between’ establishes the first path into my approach and methods for this research: in order to tune in to my object of study (which is no object at all but rather practices and processes) I deliberately draw together insights across different scales, theoretical stances and methodological divides. For example, I set out confronting the predominantly quantified notion of the peri-urban with insights taken from qualitative experiences gathered by the living body when placed within the socio-material (peri-urban) world. Furthermore, I simultaneously draw on the ‘pure’ versus the visual-sensory strands of social analysis and mobilise what is referred to as creative ways of doing research.

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10 Stoller 2009, 4.
11 Stoller 2009.
12 Cf. e.g. Tonkiss 2005, 149, pointing to the ‘gap between the city as a kind of “machine” for organizing social life and the ways in which subjects make space for themselves in the city’.
13 I will discuss the relation of what is sketched here as an opposition further below.
Alluding to the in-between, secondly, points to my position in the ‘field’. On the one hand, I argue, it complicates the insider-outsider divide that ethnographers face working with ‘natives’. This is not to pretend to transcend difference but to problematise it as part of the research process and its findings. Following Charlotte Davies in her call for multi-layered reflexivity, I acknowledge how Mexico City, its northern fringe, the intellectual and physical challenges born from my engagement and the personal relations that span from, to and across it all changed me and my thinking over time.

On the other hand, it also means interrogating the notion of the field ‘as an independently bounded set of relationships and activities which is autonomous of the fieldwork through which it is discovered’. Rather, the duration of the overall process, the fragmentation of both the site and my engagement with it – as well as bridging the cultural and academic horizons of three languages – made the field evolve together with the research and myself. And it did so quite literally, too (graph 2.1.): when I started my PhD process in autumn 2009, settlers of Colonia Antorcha had just begun breaking the ground and building the first shacks of their future habitat. In summer 2015, when I visited the field for the last time, the settlement had doubled in size and received electricity and drainage, and some of its houses had by now developed into three-story edifices. Sierra Hermosa, in this same period, had passed from lying isolated among fields to being flanked by a new housing development, in addition to boasting a revamped entrance. The focus of my PhD thesis, in turn, had shifted from addressing the peri-urban as non-city to recognising it as a particular kind of city in practice, enquiring into the labour accomplished in shaping and thinking this very cityness.

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15 See e.g. Hine 2000 as well as Jones 1970 who point to the critical edge inherent to distance.
17 Amit 2000, 6.
Mutual advance of the field and PhD thesis. The graph shows the birth and development of the research sites together with the history of my PhD process. Marked in solid red lines are regular fieldwork periods.
Thirdly, the perspective of the in-between resonates directly with the subject of my study. Both the peri-urban realm and practices associated with notions of urban inventiveness, informality or cityness are repeatedly described as sitting between the categories. Thomas Sieverts, for example, frames the extended periphery as ‘Interim’ or ‘In-between City’ (*Zwischenstadt*) caught ‘between local and global, space and time, city and countryside’.\(^\text{18}\) AbdouMaliq Simone, in turn, suggests how turning to people who enact themselves as infrastructure can enhance our understanding of social life precisely because what they do, and where, sits in an ‘unruly’ but ‘prolific’ manner between conventional labels.\(^\text{19}\) I have introduced these discussions, and how Mexico City sits within them, in chapter one.

Finally, alluding to the potential of the in-between also guides me in the way that I present my findings. As mentioned above, this positioning entails a particular perspective that dwells in shifting viewpoints without collapsing their distinct analytical points of access. I deliberately present this perspective as being layered in order to draw on Lefebvre’s conception of social space as comprised of multiple distinct yet tangled dimensions of socio-spatiality.\(^\text{20}\) Accordingly, in what follows, I describe how different infrastructural bodily practices entail different ways of thinking the city as *layers* of cityness that are specific, yet which intervene jointly in the formation of a peri-urban socio-material consciousness.\(^\text{21}\) As Setha Low reminds us, such layers are not meant to be urban typologies, but ‘to be heuristic and illuminating’\(^\text{22}\) precisely by being brought together.

At the same time, I engage with the ‘history of naming’ sparked by the magnitude and significance of the wholesale transformations that planetary citification brings about. Early on, Soja asserted that language, too, is subjected to ‘spectacular transformation’ in light of the urban change it is trying to describe.\(^\text{23}\) In this light, following the example of Carlos García Vázquez in his book *Ciudad hojaldre*

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\(^\text{18}\) Sieverts 1997 albeit initially drawing on German case studies.  
\(^\text{19}\) Simone 2004, 16; 2010a, 10 drawing on case studies from urban Africa.  
\(^\text{20}\) Lefebvre 2009, 86 using the metaphor of mille-feuille pastry (a thousand leaves); for a discussion see Brenner 2009, 28, 31.  
\(^\text{21}\) For similar approaches by layers/pastry see Low 1999; García Vázquez 2004; As well as Calvino 1978.  
\(^\text{22}\) Low 1999, 5.  
\(^\text{23}\) Soja 1992, 95.
I am convinced that only in the overlaying of different layers of interpretation can a more integral – albeit possibly antagonistic in its parts – understanding of the peri-urban realm in Mexico City and elsewhere be reached. As Ash Amin and Nigel Thrift suggest, any naming of places (and layers, I might add) is necessarily selective, ‘[b]ut somehow the fragments do come together’ composing a picture that we can work with.

**Researching Peri-urban Materiality and Practice**

Sensory-visual explorations, I argue, allow one to be *in touch* with the corporeality of practice and the materiality of space. This is to say, following Alex Rhys-Taylor, that they make available in the body of the researcher a material and practised understanding of how concrete socio-material conditions affect both what can be done within, and what can be thought of, these precise conditions. This allows recording the corporeal effort accomplished by ‘bodies at work’. It also grasps the materiality of space and allows its agency to be mapped. At the same time, I am aware that personal experiences cannot speak for the experiences of others, hence I bring them into dialogue with conventional social science interview techniques to fill the gap.

**Visual Sociology**

My starting point is taking seeing as a *practice* by which sighted human beings establish their place in, and know of, the world and its continuous becoming. Accordingly, I employ the visual as a way of *doing* research, in distinction to other approaches that concentrate on analysing visual products, including those

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24 García Vázquez 2004; a direct translation being ‘Puff-pastry City’ yet with the Spanish term placing emphasis on the layered-ness.
26 Rhys-Taylor 2010, 231, emphasis added.
27 Wolkowitz 2006.
29 Berger 2008; see also Knowles and Sweetman 2004, 1; cf. Grosz 1995.
30 Knowles and Sweetman 2004, 5.
that take the built and lived reality as visual sources which can be scrutinised in
terms of their cultural, political and ethical production and meaning.\textsuperscript{31} Doing
research by seeing entails understanding visual practice as an integral part of a
wider set of senses employed for the analysis of everyday space and life. It also
led me to employ a number of different visual outputs.

I used a small, fully-automatic and light-sensitive digital camera that takes
pictures and video and can be operated, if required, with one hand only. The many
images gathered on its memory card, I argue, depict my particular interests in the
field in relation to how it unfolded through my research. Letting the lens follow
my eyes here and there is what I call \textit{doing my seeing} with the camera. In the next
stage, the immediate (and partly automated) coding and continuous accessibility
afforded by digital photography supported \textit{working with images} (as opposed, for
example, to analysing their meaning).

First, the images and videos taken in the field worked as my fieldwork notes that
helped me stay attuned to my sites of intervention. Alex Rhys-Taylor suggests
that still photography acts as memory-aid ‘fully able to rekindle synaesthetic
memories and associations’\textsuperscript{32} Together with the moving images and audio
recorded on video they helped me reconstruct the context of my explorations even
when I was at a distance.

Second, they also made it possible to incorporate their material sense data into the
analysis.\textsuperscript{33} Following Les Back, I listened to the background noise of my
fieldwork,\textsuperscript{34} and thus was able to reveal, for example, the material texture of
buses rushing in and out at the wayside bus stop in chapter seven.

Third, the extensive register of all kind of things noticed – houses, objects, people
and their absence, practices, surfaces and textures, etc… – allowed me to identify
the \textit{physical manifestation of change and permanence} by going back in time and

\textsuperscript{31} Krieger 1999; 2006; 2009; 2011. Rooted in approaches developed within art history as image
science, the author particularly draws on Mexico City as the object of study to put forward what he
describes as a ‘contemporary urban political iconography’.
\textsuperscript{32} Rhys-Taylor 2010, 32.
\textsuperscript{33} Nina Wakeford, in this sense, calls for exploiting the ‘material properties’ of, for example,
interview recordings for social analysis: Goldsmiths Visual Sociology Research Student
Handbook 2010-11, personal copy.
\textsuperscript{34} Back 2012, 32.
pulling things out time and again for comparative analysis. Both intentionally and by chance (when they attracted my attention afresh due to specific material qualities) I came to take pictures of the same fields and houses over several years. The register of these changes, or their absence, posed questions I could then carry back to the participants of this research in follow-up interviews.

Fourth, the visual register of material conditions and their transformations was used in a capacity that Michael Guggenheim refers to as ‘the documentary’. At selected moments, my visual notes are reproduced for the reader of this text to see what I have seen. Wherever this is the case, their aim is to make a given yet fleeting situation ‘accessible for others who were not co-present’. Fifth, I also move beyond such mimetic understanding of the visual. That is to say, I deliberately employ my imagery as a device for thinking and telling, that is, as a way of doing the analysis, interpretation and communication of my research findings. The particular techniques used in this regard are video editing and to intervene in my images using pen and pencil in order to emphasise certain elements of the information they contain.

Most notably, it was by editing long video observations that I could study in detail the movements of the body, for example, of the wayside professionals in chapter seven. Likewise, the physical, multiple and fleeting interplay of materiality and corporeality in the meeting of buses and travellers I describe in the same chapter, I argue, is far better apprehended in edited video than in my textual accounts, which with their linear word-by-word structure fail to convey the pace and simultaneous nature of actions.

In a similar manner, it was by overlaying my documentary fieldwork-photography with hand-drawn wire-frame-like sketches that I could focus on the agency of houses, for example, in chapter five. The purpose of these interventions is to point to the physical adjustments and extensions that infrastructural houses receive over time – in order to make my argument. This technique, in particular, draws from my background as an architect for whom manufacturing lines is a way of materialising thoughts on paper. Elsewhere, I was involved in a research project

35 Guggenheim 2015, 368.
36 Guggenheim 2015, 359.
37 Guggenheim 2015, 359.
that used wire-frame drawings for visual analysis and storytelling purposes. In that case, too, photographic images of the material transformation of a Mexican social housing development were overlaid with architectural wire-frame drawings in order to assist the viewer in reading the pictures.\textsuperscript{38}

At the same time, these drawings allude to Tim Ingold’s argument that walking, observing, thinking, telling and writing all proceed along lines,\textsuperscript{39} that, like imagination, describe ‘the creative impulse of life itself in continually bringing forth the forms we encounter’.\textsuperscript{40} In other words, my particular approach to drawing as visual research sits between conventional classifications of either sketches or architectural specifications.\textsuperscript{41} They \textit{search} for how houses are grown while simultaneously articulating this growth. In that sense, they invite the viewer to look \textit{with} them at the images they intervene, not to look \textit{at} them as if they were the representation of a design.\textsuperscript{42}

\textit{Sensory Sociology}

The second strand of research methods employed for this thesis draws from sensory ethnography and art practice as research. Sensory Sociology, first of all, is a commitment to pay attention to what often goes un-acknowledged, namely that all social research, and empirical research more broadly, is made ‘through the medium of the senses’.\textsuperscript{43} As with Visual Sociology, the persistent exclusion of the senses from much of mainstream Sociology can be regarded as the constituting condition for this sub-discipline’s existence.\textsuperscript{44}

In this regard, participant observation, for example, implies tuning in to informants and their life-worlds not only by means of vision and speech, but also more broadly through touch, smell, taste and hearing, as well as by the researcher’s own bodily practice, sense of balance, thermo-sensitivity and

\textsuperscript{38} Luque 2014.
\textsuperscript{39} Ingold 2007.
\textsuperscript{40} Ingold 2010, 23.
\textsuperscript{41} Compare Ingold 2013, 125-126. Ingold distinguishes between ‘propositional’ construction drawings and designs, on the one hand, and evolving, ‘gestural’ sketches, on the other.
\textsuperscript{42} Ingold 2013, 125, 127.
\textsuperscript{43} Simmel 1921.
\textsuperscript{44} Guggenheim 2015, 346-347.
proprioception, before these experiences are translated into the form of a coherent text.\textsuperscript{45} Such an ‘attuning [of] our bodies [and] ways of seeing’,\textsuperscript{46} however, goes mostly unacknowledged. Sarah Pink therefore introduces the notion of the ‘emplaced ethnographer’, with the aim of attending to the sensory encounter with the material environment.\textsuperscript{47} She suggests that by occupying ‘similar, parallel or related places to those people whose experiences, memories and imaginations’ ethnographers seek to comprehend ‘can provide a basis for the development of ways of knowing that will promote such understanding’.\textsuperscript{48} In this light, studying peri-urban bodily practice undoubtedly meant practising it myself.

The first thing to be mentioned is that this entailed travelling the length and breadth of the field. Following David Howes, much of this travelling can be framed as ‘participant sensation’,\textsuperscript{49} that is, shifting the emphasis from (visual) observation alone to perceiving with all the senses while participating in a research encounter. Not only was journeying by bus, colectivo van and taxi at different times of day, and using all possible routes available to me and my fellow peri-urbanauts\textsuperscript{50} my entry point to the subject and its inherent corporeality and materialisation, but the highway and bus became key research sites also in themselves (chapter seven). It was on the bus that I first encountered the situation of the northern stretch of peri-urban Mexico City with its ongoing changes; it was on the bus that I wrote many of my (textual) fieldwork notes, and it was here that my explorative movements around the peri-urban, my seeing, listening and touching of the environment, as Ingold would have it, revealed themselves as facets of \textit{one and the same activity};\textsuperscript{51} namely that of making and thinking city through bodily engagement with its constituents, including the practice of travelling.

Secondly, I employed walking, alone and together with participants – as well as standing still – as the research techniques at the core of my sensory-visual explorations. These ambulatory practices – mobile and immobile – I regard as

\begin{itemize}
\item \textsuperscript{45} Cf. Coffey 1999, 59; Rhys-Taylor 2010, 10-11; Guggenheim 2015.
\item \textsuperscript{46} Pink 2008, 193.
\item \textsuperscript{47} Pink 2009, 23.
\item \textsuperscript{48} Pink 2009, 23, 43.
\item \textsuperscript{49} Howes 2006, 121-122, emphasis added.
\item \textsuperscript{50} That is ‘navigators of the peri-urban’. See Lozano Rivera 2010, 157 footnote.
\item \textsuperscript{51} Cf. Ingold 2000, 261.
\end{itemize}
self-experimental, in this way emphasising the researcher’s own body as a media device employed for the investigation of practice and space. Jean François Augoyard describes how ‘vagabondage (off-track, deroutant, and unremarkable)’ is particularly apt to thinking ‘everyday life through its own logic’.

Likewise, as Clark and Emmel put it, their own sensory awareness allows the researcher to ‘feel what it is like to walk around a place’. Importantly, my research methods do not focus on making the mobility of things and people the subject of inquiry. This is despite their inherent mobility that others have employed in order to enquire into local expressions of globalisation.

Rather, I pay close attention to what we can call an ecological approach to bodily perception, drawing on Tim Ingold and James Gibson who argue that perception is the achievement of the body while moving in and with the environment.

At the same time, self-experimental research practice cannot provide direct access to the experiences of others. As Rhys-Taylor asserts, its social scientific value instead lies in ‘an embodied understanding of the traffic between the researcher’s own body, and the sensoria and social forms constituting the field’.

Tim Ingold describes similar research endeavours as ‘fieldwork on foot’ while emphasising the particular dwelling perception they entail. In my case, these wanderings shift the positioning of the body in material space from bus seat to pavement. This is despite the fact that they afford essentially the same relational engagement of the organism-person with the world. In other words, once off the bus I found myself following with my body the ‘thick and thins’ of everyday peri-urban life; and such bodily following material life entailed distinct conceptual and analytical achievements in response to the objectives of my research.
My particular walking practice resembles what Andrew Clark and Nick Emmel refer to as ‘walkabouts’, a method most commonly practised by researchers of place.62 ‘Local knowledge’, Edward Casey expounds, ‘is at one with lived experience’ because ‘[t]here is no knowing or sensing a place except by being in that place and to be in a place […] is an ingredient in perception itself’.63 In this regard, walkabouts perform the coming to know of the local through experiencing it with and for the (researcher’s) body. Furthermore, if practised regularly, Clark and Emmel suggest that this method allows not only the materiality of social space to be registered, but also the transformations of this space over time.64 Last but not least, walkabouts allow the researcher ‘to be seen in place’,65 thus laying the ground for locals to become familiar with my presence, which in turn triggered countless encounters and conversations over specific questions elicited directly from the material surroundings.

On certain occasions, I practised walking also as a combination of ‘go-alongs’66 and ‘walking interviews’,67 taking informants on an accompanied walk and asking them to show me their neighbourhood.68 This technique was employed in particular to draw ambulatory sensing of the environment and ethnographic interviewing together in the form of a shared experience. Walking together allowed discussions of material markers of space – the church, different development stages of houses or simply the paving of the road – while jointly asking questions and sharing reflections regarding their meaning. Being aware of my inevitable intrusion onto the lived experience of the participants of my research,69 the aim was not to capture the working of embodied perception directly,70 nor to gain insights into everyday life’s entanglement with place,71 but

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62 Clark and Emmel 2009, 8.
63 Casey 1996, 18.
64 Clark and Emmel 2009, 9.
65 Clark and Emmel 2009, 10.
67 Clark and Emmel 2008; see also Jones et al. 2008.
68 Kusenbach regards such form of go-alongs to be experimental because they ‘take informants into unfamiliar territory or engage them in activities that are not part of their own routines’: Kusenbach 2003, 463-464; in distinction to Clark and Emmel, my site visits were not planned in advance: Clark and Emmel 2009, 13.
69 Kusenbach 2003, 464.
70 Kusenbach 2003, 466.
71 Clark and Emmel 2009, 13.
to ‘reveal how informants situate themselves in the local social landscape’ by making this landscape the topic of our conversation.

Every now and then, walking was replaced by hanging out at strategic places: the entrance square, the median strip of the access road and outside the market and school in Sierra Hermosa, for example, or at the building supplies shop and outside the meeting grounds of the Sunday gatherings in Colonia Antorcha. Standing still enabled me to capture the dynamics of the mobility of the other practitioners of space, in this way revealing the labour of conjunction, for example, of Doña Margo (chapter four), or of the making of a bus stop by nothing more than stopping buses (chapter seven). As suggested by AbdouMaliq Simone, hanging out was key to finding out ‘how spaces get turned into crossroads’, thus aligning once again my methods and the subject of research.

Creative Research

Attending to a bodily doing of research is supported also by insights that take practice – and in particular art practice – as a specific path for the production of knowledge. In this light, Graeme Sullivan suggests artistic practice offers ‘unique insight into the human knowing and understanding’ by following imaginative and creative, while nevertheless rigorous paths that are complementary, for instance, to the social sciences. In a similar move, Paul Carter reminds us that despite a ‘research paradigm in which knowledge and creativity are conceived as mutually exclusive’ research always involves imagination and creativity as it sets out ‘finding something that was not there before’ or ‘was already there (and merely lost)’.

This is particularly the case, he continues, if research is practised as ‘a method of materialising ideas’ for which he introduces the notion of ‘material

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72 Kusenbach 2003, 466.
73 Simone 2010b, 287.
74 Sullivan 2005.
75 Sullivan 2005, xi, xvii, xix.
76 Carter 2004, 7.
thinking’. Carter derives this concept from the analysis of the making of art, conceptualising such making as a practice of asking ‘What matters? What is the material of thought?’ Barbara Bolt takes up this question, spelling out the making it describes more broadly as a ‘tacit knowledge […] grounded in material practice’.

Drawing on these insights, the contribution of art practice to urban research, I argue, lies precisely in thinking city through *the making of matter*, that is, thinking it through corporeal engagement with the materiality of urban space. ‘Ordinary experiences’ as well as ‘cognitive aspects of the arts’, Bob Catterall agrees, make up a ‘university of the street’ that contributes to the critical potential of urban studies by fostering ‘de-academicised curiosity’ and expanding its agenda.

I have pursued this path of creative (visual-sensory) research both in and outside my PhD process. In 2012, I sketched out a theory of material knowing by following artisans, visual artists and architects into their material practice. The insights I draw from this exploration are that making things by hand implies *feeling forward* the thing’s becoming, that is, investigating both its possibilities and impossibilities while responding to the *give-and-take* their making entails and re-thinking – as well as re-making – the maker’s own position in regard to the things made. This supported the formulation of my hypothesis that hands-on city-making does affect how spatial practitioners grow and interpret their position with regard to society and space.

In 2009, I also conducted preliminary explorations of peri-urban Mexico City along the country road that connects both Sierra Hermosa and Colonia Antorcha with the wider urban-urbanising context. For these explorations I took the land-artist Robert Smithson’s ambulatory practice of ‘site-seeing’ as a cue to expand on Carter’s notion of material thinking as well as on Ingold’s conception of the dwelling perspective. I did so in order to explore walking as a method for seeing

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77 Carter 2004, 7.
78 Carter 2004, xi.
79 Bolt 2010, 29. See chapter one.
80 Catterall 2013, 123.
82 Smithson 1996; see also: Reynolds 2003; Marot 2006.
material space with the feet. In a nutshell, I suggest that ‘operations of recognition’ (a term I borrow from Sébastien Marot describing Smithson’s walking practice as a form of creative research) are modes of creating self-consciousness about one’s subjective engagement with the world; and that their potential lies in finding a language to name this conscious subjectivity of perception. In this regard, they allow thinking in practice how practitioners of space – researchers and inhabitants alike – grow their relationship with space through the senses. The subjective insights these operations offer, I concluded, unfold their full potential when employed in conjunction with ethnographic techniques such as interviews, for which they can serve as a basis for the formation of concepts. This is how self-experimental walking and environmental perceiving entered my PhD: by thinking in practice concepts like urban infrastructural labour.

Extending this discussion today, I argue that employing such creative practices of enquiry also responds to Les Back and Nirmal Puwar’s call for ‘live methods’, that is, for employing methods that are – among other capacities – ‘in touch with the full range of senses and the “multiple registers” within which social life is realized’. Methods, also, that explore and incorporate ‘more artful’ ways of thinking and narrating sociology and allow an opportunity for ‘expanding the vantage point for social observation’ and ‘learning new strategies for [...] affecting and persuading the audiences of sociological work’. What became apparent during my research was that such live methods help penetrate the limitations of the other, more conventional ethnographic techniques I employed. Alan Latham, for example, reminds us that participant practices can prove impractical when researching everyday activities that span across extensive areas of space and/or long periods of time. Moreover, however, it was my interviews that often failed to find suitable ways to get to the heart of the matter: most of my conversation partners could not follow my failing attempts to put into words my concern with urban bodily labour and the making and thinking of city.

83 Marot 2006, own translation.
84 Wissel 2012.
85 Back and Puwar 2012, 11 emphasis added.
86 Back 2012, 33-34.
Yet both they and I were constantly practising this kind of labour. As a result, the answers were found in ‘the doing of social life’\(^{88}\) at the same time as they resisted revealing themselves in words. Only by thinking through practising could I sharpen my concepts and learn to communicate them in my conversations.

**Micro-Politics of Body and Space**

Any research endeavour is shaped also by the relationship of what is fore- and backgrounded from the analysis. Gender, race and the experience and perception of urban violence are among the most significant aspects that despite their importance had to remain at the margin of my main argument, which coalesced around the physical labour that people undertake when accomplishing their urban lives. Here, I present the rationale for taking other directions while, at the same time, pointing to how these concerns nevertheless intervened in the analysis.

**Gender**

Practices of the body, and the politics of such practices, necessarily play out through race and gender.\(^{89}\) This holds true certainly also for the specific practices under review in this thesis.\(^{90}\) Fran Tonkiss argues that ‘gender and sexuality’ – as well as race – ‘affect the perception and use of urban space’\(^{91}\) as much as they ‘become visible in the city […] through modes of spatial practice’.\(^{92}\) This is why gender and race – and the marginalisation and injustices they are inscribed in – are among the central concerns of critical urban studies.\(^{93}\)

Despite this assertion, I argue, focusing on the physicality of corporeal urban practice is a novel approach and therefore requires the full attention of this thesis. In much of urban theorisation, space and practice remain immaterial and

\(^{88}\) Back and Puwar 2012, 11, original emphasis.

\(^{89}\) See for example Butler 2004, 21 on the body as the site of ‘doing’ and ‘being done to’.

\(^{90}\) See for example Büscher 2011, 11 on informality.

\(^{91}\) Tonkiss 2005, 94 ; on race and the ‘micro-politics of space’ see 2005, 69-72.

\(^{92}\) Tonkiss 2005, 111, additional modes being the ‘symbolic coding of space’, interactions that include ‘material divisions and exclusions in’, and ““micro-geographies” of the body”.

\(^{93}\) Brenner, Marcuse, and Mayer 2009.
actors remain without living bodies even when these bodies actively do things or experience in flesh and blood the active doings of others. For that reason, I looked at the very laboriousness of everyday urban becoming, that is, at the sometimes painstaking effort of urban practice that makes people sweat and their backs ache.

For my research I identify specific practices in specific places and then follow them into the particular city-making and city-thinking they entail. This means looking at both female and male bodies without differentiating among them explicitly. At the same time, this means acknowledging also that certain practices are achieved more often or differently by either women or men. Wrestling with buses, for example, was accomplished equally and in equal amounts but wrestling with buses with children – which perhaps tellingly I seldom witnessed – was a concern expressed predominantly by women (chapter seven). Strikingly also, those practices that allowed their practitioners to adjust or incorporate additional family duties – above all child-care – were predominantly those accomplished, again, by women. Compare, for example, how Ivan rides opportunities when recycling iron from debris while Margarita and Doña Margo are tied to street vending practices based on waiting because these allow them to simultaneously be mother or grandmother (chapter four). Gender and family roles thus make a clear difference in terms of the type and particularity of infrastructural work being accomplished. I will point to these differences throughout the analytical chapters.

With regard to the role played by gender, my findings, therefore, confirm existing research in Mexico and elsewhere. García Canclini, for example, suggests that the inner-urban itineraries of women are ‘more complex and lengthy’.

Women not only incorporate places of work and home into their lives but also the school, after school child-care and most of the household’s everyday shopping, thus facing the need to make more frequent journeys back and forth between these places.

Likewise, in her study of the entanglement of space and everyday life in Mexico City, Salazar Cruz concludes that ‘there is a distinct use of urban space and the practices of urban displacement according to gender’.

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94 García Canclini 2013, 39, own translation.
95 García Canclini 2013, 39.
96 Salazar Cruz 1998, 131, own translation.
circulate much more around domestic sites than those of men: not only in order to look after their own homes and children but also because employment for many poor women involves providing household labour and childcare in other parts of the city.\textsuperscript{97}

At the same time, Ann Varley reminds us of women’s ‘secondary relationship’ to property.\textsuperscript{98} Despite the equality emphasised by Mexican civil law, property, she asserts, is to a great extent often ‘family property’ where ‘women’s ability to “own” a home’ depends largely ‘on their status as wives and mothers’.\textsuperscript{99} As I will confirm in chapter five with regard to the ‘stability’ of houses, it is social relations that nurture and sustain individuals’ rights to property, yet the negotiation of ‘overlapping entitlements’ plays out differently among the sexes.\textsuperscript{100} This extends also to the physical labour these negotiations, as well as the actual building of houses and neighbourhoods, entail. In this regard, Martha Schteingart recalls from her research on poverty, living conditions and health in Mexico City, that ‘the time, effort [esfuerzo] and sacrifice’ of many of the new urban settlers was ‘particularly evidenced in the stories of women’.\textsuperscript{101} In light of this research, my own explorations aim at adding to existing discussions of the differentiated roles of female and male urban bodies by pondering on the shape of bodily labour itself, while always emplaced in specific gendered situations and contexts.

\textit{Race and Class}

Race and social class are two more aspects that necessarily affect the urban, and urban practice, yet are kept at the margin of my main argument. It is often overlooked that Mexico City is a cosmopolitan city in two senses, composed of diverse ethnicities from all over Mexico and from around the world. At the same time it is the home of speakers of the Náhuatl language who descended from the

\begin{footnotes}
\item[97] Salazar Cruz 1998, 131.
\item[98] Varley 2010, 92.
\item[99] Varley 2010, 92.
\item[100] Varley 2010, 91-92; in general terms, the very notion of property as the foundation of bourgeois law is heavily gendered. See Collier 2007.
\item[101] Schteingart 1997, 790, own translation.
\end{footnotes}
original inhabitants of the Valley of Mexico. On the other hand, being indigenous in Mexico is a self-assigned categorisation, recognised at constitutional level only since 2001 while burdened, still, with social stigmatisation, everyday and structural racism and the experience of vulnerability and the lack of rights. Consequently, race is likely to be omitted if not especially made a topic as was the case in this research. In this light, it is important also to unpack *mestizaje*, the (Mexican) project of racial and cultural mixture, as an ideology and ‘a concrete strategy of power that is mobilized to simplify or divert attention’ from racism. Mónica Moreno Figueroa reveals how in the Mexican context, whiteness is both the site of racism and of ‘legitimacy and privilege’.

Despite these assertions, I nevertheless argue that race did not surface as a significant category in this research. Research participants were not differentially racialised nor did they differentiate themselves and their fellow peri-urbanites in any way through race. Likewise, although different socio-economic layers among urban developments and across different settlement types were clearly acknowledged, these did not play out in the socio-spatial consciousness of the research participants’ own position and perceived fields of possibility that are nurtured through practice. Differences in research participant’s socio-spatial consciousness occurred with respect to the varying forms of group organisation or the physical appearance of neighbourhoods and their levels of enforced privacy, yet not directly on the basis of class. Finally, my own whiteness did not intervene in terms of race but in terms of the academic/middle class privilege. I enjoy by coming ‘out here’ from the Federal District to hang around and take pictures of neighbourhoods that most of the people I met regarded as not worth mentioning (especially when they interpreted my presence as that of an European tourist).

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102 Chenaut 2015, 3.
103 Chenaut 2015, 3.
104 Chenaut 2015, 5, 8, 9.
105 Moreno Figueroa and Saldivar 2015.
106 Moreno Figueroa 2010.
Residents of the housing developments and settlements see themselves above all as urban dwellers. Predominantly, they have moved to the peri-urban from more central areas of Mexico City’s metropolitan zone. Farmers and members of the local ejido (some of them still farmers, others no longer so), on the other hand, employed the notion of the original village (pueblo originario) in order to legitimise a special relationship with the land and to mark a cultural distance between the rural and the urban, yet never employed this notion in order to highlight racial difference. This confirms Hernán Correa Ortiz in his view that the ‘ethnopolitical’ concept of the original village is a ‘resource of defence’ that does not seek to construct a racial identity but is employed predominantly against the advances of a process that shifts political power from local villages to the municipal level (see chapter eight).

As for my research methods, once again my approach was to follow specific practices in specific situations. This way, infrastructural bodily practices were explored in terms of their achievements in making and thinking city, not in terms of the possible impact of race, racism and class on their shaping. In this sense, the importance of building networks, for example, was analysed not as a tactic to counter ethnic discrimination – or poverty – but to organise individual and family survival in conditions of peripheralisation.

Fear

The third aspect of the politics of body and space that plays out in peri-urban Mexico City is the matter of quotidian violence and insecurity. At the time of this writing, fear reigns in different ways in the city and country of Mexico, and this had an impact also on my research practice and findings. In particular, the expanding and growing violence originated by organised crime and by the Mexican state declaring a ‘war on drugs’ increasingly impinges on all aspects of private and public life everywhere in the country. In addition, the

108 Correa Ortiz 2010, 61, 66, 83.
‘ecology of fear’\textsuperscript{109} of what is arguably considered the usual offences and risks associated with urban conditions (burglary and theft, traffic and pollution, as well as confronting the ‘untameable unknown’ to mention just a few of the most common) affects people’s living conditions – and they do so both objectively and subjectively, that is, on the basis of real and perceived grounds.\textsuperscript{110}

At the same time, letting fear take over the questions I pursued would have led to a different thesis, and I say so despite the fact that Edgar Pieterse calls on us to ‘stare terror in the face’ if we want to advance in ‘re-describing the city’ and in ‘taking cityness seriously’.\textsuperscript{111} My main aim in response to fear, therefore, was to pay attention to, but not be inhibited by violence as it unfolds in peri-urban Mexico \textit{as an underlying condition} of both the practices and the materialisations of urban becoming. The proliferation of gated compounds as a result of ‘island urbanism’\textsuperscript{112} and the particular perspective these enclaves entail (see chapter six) are as much a result and a sign of fear’s omnipresence\textsuperscript{113} as are the accounts of peri-urban travellers that pictured the road as dangerous and the position in space of the travelling body as highly vulnerable (described in chapter seven).

In any case, violence and the fear thereof actively intervene in the organisation of the territory, co-author the micro-politics of urban practice and inscribe themselves into the urban imaginary. In addition, the accounts shared by research participants showed once again that it is women who experience the limitations established by these conditions most severely.

In methodological terms, self-experimental walkabouts and working with photography proved highly responsive to capturing violence’s regime in socio-material space. In my previous research concerned with the materialisation of socio-spatial segregation in Mexico City I demonstrated how security measures (walls, barbed wire, CCTV and private security guards) can be researched with visual methods and analysed as visual data.\textsuperscript{114} However, in the course of the

\textsuperscript{109} Davis 1998.
\textsuperscript{110} del Olmo 2000; for a discussion on Mexico see Wondratschke 2005.
\textsuperscript{111} Pieterse 2010, 9 doing so ‘without any anticipation that it will come to an emancipatory end’.
\textsuperscript{112} Duhau and Giglia 2008; Urban Catalyst 2007; see also Borsdorf and Hidalgo 2010; Borsdorf, Hidalgo, and Sánchez 2007.
\textsuperscript{113} Cf. Duhau and Giglia 2008, 135.
\textsuperscript{114} Wissel 2002; 2007; 2008; see also: Krieger 2001; 2009.
current research I also, involuntarily, registered *practices* of fear in my own body: most importantly, when I was repeatedly, and sometimes violently, confronted about the purpose of my wanderings and photography. In a particular incident, residents perceived me as a potential kidnapper and surrounded me in a circle. The tense atmosphere of the encounter made it a delicate process to explain to them the academic reason for my presence. This, I believe, exemplifies the anxious state in which public space finds itself in Mexico City and its metropolitan area in particular. It also points to the ethics of my research and research practice.

**Research Ethics**

The majority of research encounters took place on the street, in public as well as in semi-public urban space, that is, inside gated communities for example. As such, the respondents’ and my own safety were for the most part not endangered, yet unconsciously needed to be negotiated afresh with each encounter and corresponding socio-material situation (which included both engaging with strangers and securing our position while conversing, for example at the bus stop with cars rushing by at high speed). In-depth semi-structured interviews were conducted mostly in the office spaces where my conversation partners work.

With regard to securing anonymity for the participants of this research the particular nature of my research offered a mixed blessing. On the one hand, ethnographic conversations allowed informants encountered on the streets to remain mostly anonymous, or they could easily be anonymised later (the only personal data recorded being their name and, sometimes, their address and job position). On the other hand, the close attention to concrete sites, and their visual documentation and representation, makes the material context of these encounters even more recognisable. Still, direct relationships between specific houses and their residents-makers become apparent only in a very few cases.

All informants were in the position to reject my request or to withdraw from the conversations at any time. They were recruited spontaneously or, in the case of the institutional representatives, contacted beforehand, while consent was
obtained orally at the beginning of the encounter after introducing myself and informing them about the interest, scope and anticipated audience of the study and the nature of their participation.

Minors were not included in the research yet it is here that the particular concerns regarding the ethics of *visual* research practices become apparent: children were present at the sites of my research and were present also discursively while actually being physically absent. This is to say that parents expressed their concern about their children’s safety even if they did not appear deliberately in my imagery (above all due to the widespread fear of kidnapping).

I responded to these concerns by concentrating my photography on the material conditions of the spaces researched as well as by asking practitioners for their consent prior to taking their image. Nevertheless, taking images of houses and empty streets, too, is a political affair and sits necessarily within the local, and changing, state of fear. While in 2009, taking images was less of an issue, it become more so towards the end of my research in 2015 due to the general deterioration of trust in the public realm in light of the perceived and real increase in arguably conventional as well as organised crime (in particular, informants mentioned the rise in burglaries and the dealing and consumption of drugs). In my experience, ‘suspicious behaviour’ in Mexico always included wandering around, loitering and taking pictures, yet the level of determination in the response proved to be on the rise, even leading to banners being hung on local streets threatening to lynch anyone found to be intruding on the peace of the neighbourhood.\(^\text{115}\)

**Conclusion**

This chapter discussed the methods employed in researching this thesis, emphasising the specific combination required *to get in touch* with the materiality of both peri-urban space and bodily infrastructural practice.

\(^{115}\) On the alarming increase of lynchings in Mexico see Wondratschke 2005, 182.
It began by presenting the geographical and operational characteristics of my fieldwork as well as by introducing myself and discussing the mutual becoming of field, research and researcher.

I then engaged in a detailed discussion of visual and sensory sociology, and of practice as creative research, and how I deploy them as a *doing* of ethnography. The particular combination of methods consists of ethnographic conversations, semi-structured and follow-up interviews combined with participant sensation, walkabouts, self-experimental perceptive explorations and site- and activity-sensitive amalgamations, such as experimental go-alongs/walking interviews and bus-interviews.

From the field of artistic research I extracted the notion of ‘material thinking’ – supported by insights from anthropology with respect to a ‘thinking through making’. The perspective offered by these two notions will guide my further analysis as it is particularly fruitful, I suggest, for capturing the intertwined making and thinking of city grown out of bodily urban practice.

Finally, this chapter accounted for the micro-politics of body and space that remained at the margin of my research. Following different conjunctions of living bodies and material space into their afforded practice – and from there to the city-making and city-thinking they entail – led me to subsume gender and race into specific situations. This is not to say that they are not played out violently or do not mark significant differences in opportunities that can be forged and pursued, but here the primary concern was on recognising the agency that bodily labour as such has on the space-making and space-thinking of these bodies.

Violence and the fear thereof were discussed, too, as an underlying condition of the becoming of peri-urban Mexico City and its subjects. Again, my approach was to engage first of all with a given practice-space constellation, and only where fear made its appearance in the analysis to follow where it leads, taking me, as will be seen in chapter six, for example, to the expression of island urbanism and the perspectives it entails.

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116 Howes 2006.
117 Clark and Emmel 2009.
120 Ingold 2013; Välitalo 2012.
3. Centring the Periphery: Life and Space North-north-east of Mexico City

Introduction

This chapter introduces the immediate context of my research, namely Mexico City’s current urban development pattern, with a focus on the transformations underway along the north-north-eastern development axis with the municipalities of Tecámac and Tizayuca, which contain the four research sites and their surroundings. I will first provide an overview of the dynamics and tensions and, in the second section, immerse myself in the concrete situations at the heart of this thesis.

This second section draws for the first time on the sensory-visual explorations that comprise the methods of this research. It was through my photographic engagement with the material constituents of the peri-urban in combination with semi-structured interviews with representatives of key institutional actors that I first engaged with the object of my study (that is, with the making and becoming of the peri-urban). Images and interview excerpts now provide me with a foundation for describing the wider socio-material context of the northern stretch of the Metropolitan Area of the Valley of México (ZMVM) as it unfolded together with my research.

The Case of Mexico City and its Metropolitan Valley

Despite the attribute ‘city’ in its name, the twenty-first century Mexico (City) is an urban agglomeration outnumbering, outpacing, and outreaching what a so-called traditional conception of ‘city’ might possibly contemplate.\(^1\) \textit{Mexico Citying}, then, as a process, stretches over some 1,600 square kilometres of continuously built-up land, covering – and continuing to eat up – former lakes and farmland, wooded hills formed of igneous rock, rivers and canyons.\(^2\) As of

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\(^1\) See e.g. Krieger 2001; 2006, 357. See also chapter one.

\(^2\) It does so, including the small island where the original city of Tenochtitlán – a metropolis in its own right – was founded by the Mexicas/Aztecs in 1325 and destroyed and re-founded by the Spaniards in 1521.
2005, this urban region covered 76 boroughs and municipalities in three federal entities: the Federal District – the administrative entity that contained the city called México up to its demographic and territorial explosion – the eastern third of the State of Mexico surrounding the D.F. and the southern-most tip of the state of Hidalgo.³

At the same time, this *urban process* called Mexico is more or less contained in a single valley,⁴ thus giving rise to its denomination as the ZMVM. This urban-urbanising valley is what we refer to when we talk about Mexico City being a city of twenty million inhabitants. Beyond this valley, the ZMVM is merging into an expanded urban system with the two neighbouring agglomerations of Toluca, capital of the State of Mexico, and Pachuca, capital of Hidalgo state, giving rise to the Central Mexican Megalopolis.⁵

Mexico City’s peri-urbanisation is driven by the decentralisation of urban functions and populations.⁶ This development continues the shift from centre to periphery in the distribution of the region’s population with nine million people living in the Federal District compared to eleven million, as of 2009, living in the surrounding two states.⁷ It also reflects the implementation of policies driving a multiple process of neoliberalisation as well as democratisation⁸ that leads to ‘privatisation, liberalisation and deregulation’.⁹

On the one hand, the growth of metropolitan sub-centres and megalopolitan knots (metropolitan areas in their own right like the cities of Toluca or Pachuca located within the RCCP) provides evidence of an economic deconcentration that was the political response to the exponential growth of Mexico City

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³ These and the following definitions and numbers are based on Garza 2000; SEDESOL, CONAPO, and INEGI 2007; COESPO 2009, 24, 34. They all refer to data from 2000, 2005 and 2009 provided by INEGI and CONAPO. As of January 2016 the Federal District was converted into a federal state with the name Mexico City. See EUM Presidencia 2016.

⁴ Technically, it is more correct to speak of the *endorheic basin* of Mexico as this is what characterises it: the lack of a *natural* exit for its water. By the time of 2016, the politically defined ZMVM includes also areas that are geographically outside this hydrological basin.

⁵ Further including the metropolitan areas of Puebla, Cuernavaca and Tlaxcala, the macro-region is described as the nation’s Central Conurbation Region (RCCP): COMAH n.d., 24.

⁶ Aguilar and Ward 2003; see also Ward 1998; for an overview on previous stages of the development process see Ward 1991.

⁷ COESPO 2009, 3.

⁸ Guarneros-Meza 2009.

⁹ García Balderas 2011, 50.
between the 1960s and 1980s.\(^\text{10}\) In addition, over the past decades, certain decision-making powers have gradually been devolved to local government level. This is the case for example of the municipality of Tecámac, which did not issue its first ever municipal development plan until 2003.\(^\text{11}\) Since the 1990s, in the broader Mexican context, this process of democratisation ‘has focused both on reforming representative democratic institutions and on promoting direct participatory methods’.\(^\text{12}\)

On the other hand, the city’s rural hinterland has been put under severe pressure. First, small-scale farmers and collective agrarian landowners (ejidatarios) were left alone to deal with strong international competition as a result of the economic circumstances that culminated in the North Atlantic Free Trade Agreement (NAFTA) in 1994.\(^\text{13}\) Two years earlier, ejidal land had already lost its constitutional protection, leading to its now formalised incorporation into the urban economy.\(^\text{14}\) Finally, significant amendments to the national housing finance system throughout the following years fuelled the production of mass-produced affordable housing by opening it up to private capital.\(^\text{15}\) Particularly noteworthy in this regard is the excess of new housing in comparison with the actual increase in population numbers. In Tizayuca, Hidalgo, for example, between the years 2000 and 2005 the growth rate of new dwelling units was double the population growth over the same period.\(^\text{16}\) At the same time, self-built housing activity for those without the prospect of obtaining housing credit continues to expand, too.

Accordingly, the placement and displacement of people, commodities and capital responds to the contradictory yet complementary forces of agglomeration, fragmentation, and dispersion, by which the footprint of human activity continues to both intensify and become dispersed. This is the tale of what Adrian Guillermo Aguilar and Peter Ward describe as ‘region-based urbanization as opposed to city-
based urbanization’.\textsuperscript{17} It is also what Eduardo Nivón addresses as a process of comprehensive peripheralisation, that is, as the multiplication of the experience of the periphery.\textsuperscript{18}

Diffusion happens simultaneously to sub- and re-concentration, socio-spatial fragmentation parallel to the integration of scattered spaces and populations into the megalopolis. Aguilar, for example, identifies the massive expansion of the periphery \textit{combined} with a selective formation of pockets and corridors of economic and demographic centrality.\textsuperscript{19} In a similar synchrony of contradictory trends, segregation in Mexico is reported as being both heterogeneous \textit{and} polarised: here Paavo Monkkonen\textsuperscript{20} confirms earlier research by Rosa María Rubalcava and Martha Schteingart\textsuperscript{21} showing the general dispersal of low-income households throughout the urban region \textit{paired} with their region-based dispersed concentration mainly to the east of the valley.\textsuperscript{22}

At the same time, the economic gravity of the Federal District still continues to dominate the regional and national panorama.\textsuperscript{23} The morphological, social and functional result is a mix of combined (city-based) centripetal as well as centrifugal \textit{and} (region-based) polycentric forces of urban transformation and expansion. Furthermore, when it comes to territorial expansion, the ZMVM still remains rather compact if compared to other agglomerations worldwide.

Comparing the city-region with that of Los Angeles, for example, reveals that the Mexican megalopolis occupies only half of the territory of the Californian counterpart while being one-third larger in terms of population. Elsewhere, I have

\begin{footnotesize}
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\item\textsuperscript{17} Aguilar and Ward 2003, 4.
\item\textsuperscript{18} Nivón Bolán 2005, 144.
\item\textsuperscript{19} Aguilar 2002; 2008, 134-36.
\item\textsuperscript{20} Monkkonen 2010.
\item\textsuperscript{21} Rubalcava and Schteingart 2000.
\item\textsuperscript{22} In my previous research I frame this situation as ‘polarised heterogeneity’ and reveal its material expressions. Wissel 2002; 2008. Factors that explain this trend are multiple, including the climatic, geomorphic and environmental conditions of land (see several chapters in Garza 2000) as well as its tenure and regularisation (Iracheta and Smolka 2000; Mertins, Popp, and Wehrmann 1998; Varley 2002) and the enforcement of the law. Generally speaking, the east of the Mexican Central Valley combines the conditions of former lakebeds, plain farmland and collective ownership (\textit{ejido}) that have favoured large settlements of both self-help and mass-produced low-income housing. In contrast, the stable rock and extensive woodlands on the hills to the west of the valley have seen more residential housing production, dotted with informal settlements built on often unsuitable land on the steep sides of the ravines.
\item\textsuperscript{23} CEFP 2009, 14.
\end{itemize}
\end{footnotesize}
described this contradictory process as compact peripheralisation.\textsuperscript{24} This notion describes the simultaneous multiplication of the experience of peripherality – the result of growing numbers of inhabitants being subjected either to the effect of geographical distance directly or to the experience of an increasingly complex kaleidoscope of centre-periphery relations\textsuperscript{25} – while nevertheless being contained in relative proximity and density.

To sum up, we can state that Mexico City undergoes the extension and multiplication of urban peripheries in close proximity. This results in a particular socio-material composition of the peri-urban, where urban, sub-urban and rural territories and aspects are juxtaposed with industrial compounds, federal (military) exclusion zones, wastelands and ecological reserves. Furthermore, these many compact peripheries of Mexico City are currently witnessing the simultaneous development of both formal and informal urban growth, inscribed in fragmented and contradictory urbanisms with their respective practices of planning and doing city. Housing materialises either in the foundation(s) of self-built principles in under- or un-serviced settlements, or in the form of mass-produced, credit-driven and private enclaves. It does so in more or less equal parts,\textsuperscript{26} and both within or around patches of agricultural land either left on hold or in resistance, depending on the perspective.\textsuperscript{27}

This situation is the starting point of this thesis: the materialisation of a morphological, demographic, functional, economic and social kaleidoscope of bits and pieces of Mexico Citying, emerging out of the simultaneous expansion and internal fragmentation of the rural-urban interface and pointing to a complex and contradictory restructuring of the relationship between centre and periphery. Addressed by many as the ‘spatial crisis’ of this and other Mexican cities,\textsuperscript{28} it seems pertinent to examine how these development tendencies manifest themselves in lived, socio-material space in order to explore, with this thesis, how people actually contribute to and make sense of them.

\textsuperscript{24} Wissel 2012; 2013.
\textsuperscript{25} Nivón Bolán 2005, 155.
\textsuperscript{26} Castillo 2007, 184.
\textsuperscript{27} These perspectives become apparent in the comparison of chapters six and eight.
\textsuperscript{28} Iracheta and Eibenschutz 2010.
Inside Peri-urban Crossroads: Entanglements of the Research Sites

All journeys start with setting foot on a road; and for the purpose of this research it is the Mexico City-Pachuca highway that will be our road to follow. This express toll-road, together with the historic country-road running in parallel, is the backbone of the urban development of the municipalities of Tecámac (State of Mexico) and Tizayuca (Hidalgo).29 Along its course, the situation described above, with its driving forces and contradictory tendencies of change, becomes particularly visible.

Both municipalities lie at a crossroad of developments in the region: on the one hand, they are located on the ZMVM’s north-north-eastern development axis. Tecámac, in this regard, was gradually affected by the region’s population displacement from centre to periphery since the 1980s.30 Tizayuca, in turn, has been an industrial hub for the region for a similar length of time, as well as a long-time candidate for an alternative/additional airport. As of 2005, Tecámac is incorporated into the ZMVM on the basis of its ‘conurbation’, and Tizayuca due to its ‘distance, functional integration and urban character’.31

Currently, both municipalities are undergoing accelerated expansion and a reasonable level of integration, as outlined above. During the course of this research, for example, an additional twenty-one municipalities in the state of Hidalgo were officially incorporated into the ZMVM for the purposes of enhancing metropolitan planning.32 At the same time, an integrated metropolitan transport system and infrastructure network, still considered urgently lacking in 2000,33 is arguably being improved: in 2010 a Bus Rapid Transport (BRT) route opened between Ciudad Azteca (the north-eastern terminal of Mexico City’s metro system) and Ojo de Agua (half way into the municipality of Tecámac); and a second north-south connection is currently under construction connecting Los Héros Tecámac (at the south of the municipality) with the bus and metro system hub Indios Verdes.

29 ‘Rural’ logics, I will argue in chapter eight, have a different directionality.
30 Correa Ortiz 2010, 71.
32 Flores Peña, Bourmaouz Marcou, and Soto Alva 2012. As of 2016, this political expansion of the ZMVM is not yet reflected in many academic accounts.
33 Islas Rivera 2000.
On the other hand, Tecámac is located in the so-called Valley of Cuautitlán–Texcoco, a semi-circle of municipalities surrounding the Federal District. Strengthening the metropolitan patterns of what we could describe as a circumferential growth axis is regarded as key to the comprehensive development of the region. The principle features of this policy and investments over the past years have been the introduction of new retail and periphery-to-periphery transport infrastructure (another BRT line and, above all, a new circumferential highway). They also include the declaration of Ciudades Bicentenarias (Bi-centennial Cities) – with the village of Tecámac being one of them – that will be a focus of future economic and social development leading them to grow into urban (sub)centres. This geostrategic development project is deliberately designed to inscribe the State of Mexico directly into global financial circuits and to re-structure the ZMVM as a whole. In particular, it aims at countering the region’s ‘concentrated de-concentration’ pattern focused on the west side of the valley, by improving the ‘very restricted polycentric structure’ in the north-east. However, in 2015 Aguilar and Hernández complain that ‘the emerging spatial structure is [still] highly uneven in its nature’, predominantly market-driven and fostering linear developments in the more consolidated periphery while leaving the dispersed periphery to the effects of ‘scatteration’.

As a result of these development trends and policies, both municipalities are among those in the region that report the highest levels of population growth as well as the most extensive construction of mass-produced housing. Yet self-building activity also remains strong, in particular in Tizayuca; and both municipalities are among those that, in 2015, still offer extensive areas of agricultural and other land free from construction. This is why they were selected as the sites for my research.

34 Correa Ortiz 2010, 71-72.
35 Rangel Vargas and Mosiños Naranjo 2009, 79. Bi-centenary refers to the celebration of 100 and 200 years of the Mexican Independence and Revolution in 2010.
37 Aguilar and Hernandez 2015, 16.
38 Aguilar and Hernandez 2015, 16-17.
40 These interpretations are based on my own observations.
Satellite image of Tecámac and Tizayuca with principal research sites marked in red. Additional research sites and places of interest marked in white. Source: adapted from Google Maps, INEGI, 2016.
Mexico City’s northern peri-urban realm thus presents itself as a complex juxtaposition of urban, urbanising and rural land-uses undergoing transformation. All shades of suburbs, housing estates, settlements and historic villages are found alongside more or less fragmented, as well as more or less globalised and industrialised agricultural farmland. In addition, industrial areas, ecological reserves and communal landfills, recreational spaces (national parks, lakes, commercial fun parks) and military camps and airfields complete the picture.\textsuperscript{41} Development companies compete for inhabitants with access to credit, offering residential neighbourhoods of all sizes, socio-economic profiles and levels of gated-ness.\textsuperscript{42} Small-scale private/individual landowners, too, continue to push into the market, subdividing and selling bits and pieces of land with or without access to urban services and thus fostering the emergence of patches of embryonic settlements throughout the territory. To a lesser degree, yet thirdly, social movements like Antorcha Popular provide platforms of operation for the poor, buying cheap farmland and urbanising it through the means of mass protest and, above all, through the only seemingly simple means of inhabiting it.\textsuperscript{43} At the same time, local planning bodies formulate their visions of the future of each municipality (while struggling with the pace of the transformations, with incongruent scales of planning and with their own legal and professional restrictions).\textsuperscript{44} Last but not least, farmers are in disagreement about their potential gains and losses from selling sooner or later, now or never.

The accompanying images (images 3.1. to 3.14.) and video (video 3.1.) assemble the multiplicity of these expressions in light of their materialisation and often antagonistic placement in socio-physical space. These images are the result of my exploratory research walks that I began long before initiating the PhD process, and thus document the change of Mexico City’s northern peri-urban realm over a period of ten years between 2005 and 2015. Accordingly, they also cover a territory broader than the four particular research sites that make up this thesis.

\textsuperscript{41} Compare also Douglas 2006.
\textsuperscript{42} Interview with Salvador Bedoya, head of the Tecámac sales division, Casas Geo development company.
\textsuperscript{43} I will discuss what ‘inhabiting’ newly occupied land implies in chapter six.
\textsuperscript{44} Interview with Víctor Martínez from Tecámac’s sub-direction of planning.
picturing a variety of socio-material expressions of peri-urban space throughout the municipalities of Tecámac and Tizayuca.

Additional accounts by representatives of key institutional actors complement the picture. These include: the head of the sales office of the development company, the director of the municipal urban planning body, the president of the ejido council, the municipal leader of the popular housing movement and – an actor more in the field of critique than of action – the official chronicler of the village and municipality of Tecámac. Their voices informed this thesis in as much as they provided important entry points for both my seeing and my ethnographic conversations with the actual practitioners of space at the centre of my focus. Likewise, both my seeing and my street-conversations informed these semi-structured interviews. This is to say that I carried over insights from the planning, formal development, and commercial point of view to the inside perspective of the everyday inhabitants, and vice versa. The following extracts are taken from interviews held in 2011 and 2012. At this point of my writing, they engage in a dialogue with the visual notes from the wider field in order to give a sense of the tensions inherent to the peri-urban and the way different actors make sense of it.

Last but not least, the following images also bring into view the concrete sites of my research. This chapter concludes with short introductions to the four ‘witness areas’45 that provide the concrete situations for my explorations. The dialogue between image and text serves to provide the rationale underlying their selection.

45 Duhau and Giglia 2008, 16.
‘What we offer is not a just a residence, we do not just sell houses... What we sell is a place to live. We have always thought that the most important asset a person has in life is a house. [...] We do not sell houses to earn a commission, we sell houses to generate satisfaction.’

(Salvador Bedoya, head of Tecámac sales office, Casas Geo)
‘Public transport provides a good, efficient service here. There are different long distance and urban transport routes involved. They come from Hidalgo: Temazacalapa, Tizayuca. There is a large influx of transport and they operate on both routes, the federal road and the highway. […] Few people travel to Pachuca, but there are some who go to work in the Tizayuca area. Most people, however, go to Mexico City. Nevertheless, transport coming in from Hidalgo has been instrumental in the growth of Tecámac.’

(Victor Martinez, Urban Planning Department, Tecámac)
‘In structural terms, that is, with regard to the pattern of the urban fabric that can be observed: all developments are located along the road, because the road is leading people to their workplaces.’

(Victor Martínez, Urban Planning Department, Tecámac)
‘Look, Tecámac […] is a municipality that has taken care of its planning, so efforts have been made. It has not been able to control everything, but Tecámac has had its orderly growth, with some exceptions.’

(Victor Martínez, Urban Planning Department, Tecámac)
‘The government does not realise that Tizayuca, right next to the overcrowded State of Mexico as it is, is where these people turn to. They are not aware that Tizayuca is growing too fast […] So I say: Tizayuca is not planning for all the people who are arriving, that’s why their projects are short-sighted. What is happening here is not what they believe is happening but what you can see.’

(Maestra Melba, Leader of Antorcha Popular Tizayuca)
‘The main argument for me is the lack of employment. How is it possible that new urban developments are being authorised, if the economic parameters are not capable of absorbing all the people who are coming? […] That is to say, the creation of alternative projects that would generate jobs both for those who are arriving and for those who work the land was simply neglected.’

(Victor Martínez, Urban Planning Department, Tecámac)
‘When the sale is made yet there is no satisfaction, that is, when the client is not informed about what he is actually acquiring, when the house was simply sold for the sake of selling and the client buys it for the sake of buying. […] This is why people abandon their houses. Or they abandon them because they cannot afford them. […] This is obviously a problem […] so what we do is we send clients to a workshop before the sales contract is signed. This workshop is called “how to buy a house properly” and there it is explained to the client what he is getting, what he is going to face, what life in his new home and neighbourhood will be like: from transfers to the costs.’

(Salvador Bedoya, head of Tecámac sales office, Casas Geo)
‘The new housing estates now begin to need small shops, yet these are not allowed. So people, because they lack formal employment, start looking for alternatives, and the alternative there is informal trade. […] But you cannot prohibit people from doing this. So the government needs to be a little more permissive, it needs to find the right balance. […] But there are still no elements to say how to negotiate this. This is something that is pending.’

(Victor Martínez, Urban Planning Department, Tecámac)
‘Casas GEO is the largest housing company in the Americas, and not only the largest in terms of numbers but also in terms of service, in terms of compliance with the social efforts that the federal government requires of development companies in order to fulfil their goals currently set for Mexico City with regard to the production of affordable housing. […] A very ambitious goal Casas GEO has set itself is to have 60,000 sale contracts signed each year, and to raise this number over the next few years, so we will be the first development company in the Americas that manages to sign 100,000 contracts nationwide in 2015.’

(Salvador Bedoya, head of Tecámac sales office, Casas Geo)
‘The future of farmers is very uncertain because of the powerful pressure from real estate capital. Unfortunately, farmers see this reflected in their own needs: if they have a piece of land, and find it difficult to earn enough from it in order to eat, then they decide to sell their land and to have a ‘livelihood’, which is a livelihood in quotes only because it is temporary, because it is not forever.’

(Victor Martínez, Urban Planning Department, Tecámac)
‘You only have to take a look at the neighbourhoods further south: La Gloria, Diamante […] Although the houses might look just the same, it is a totally different thing. My impression is that here, in Colonia Antorcha, we do achieve the formation of a community. You can perceive it. Simply look at how the colony has grown in these two years! See how many people are here! By now, we even have basic services [water, electricity]. The other neighbourhoods, after the same two years, they are still all empty […] That is to say, in Diamante they look at it like an investment: they buy a house and then, what are they betting on? Well, they are betting on urban growth […] they see it as a business.’

(Maestra Melba, Leader of Antorcha Popular Tizayuca)
Neighbourhood in formation Diamante, sales point, January 2012 and February 2014.
‘It is about building city, not just about having settlements appear. We must build city and city building must take political, social, economic, sustainability aspects into account. We need to build sustainable cities.’

(Victor Martínez, Urban Planning Department, Tecámac)
Sierra Hermosa

Sierra Hermosa is an urban development (*fraccionamiento*) in the affordable housing market segment built by the Casas Geo development company. It is characterised by its exposed location at the fringe of the urban fabric. Its 7,153 housing units form an urban expanse measuring approximately two kilometres by 300 metres, reaching out into surrounding rural and other un-built land (designated as a future public park).^46^ The development is located south of the town of Tecámac in the municipality of the same name, in the State of Mexico. It was officially inaugurated in 2002 and is designed to accommodate a maximum of 34,191 inhabitants. In terms of population numbers it can thus be regarded as constituting a small town in itself.

A small market hall and an administrative unit at the centre of the development, as well as two schools (primary and secondary) and a weekend *tianguis* (street market) that occupies the median strip of the access street provide for its inhabitants’ basic needs. In addition, houses along the access road have gradually been converted into small shops and workshops (hairdressers, a carpenter, restaurants, and so forth) while several *misceláneas*, small corner shops, are operated from the neighbourhood’s more peripheral houses.

At the same time, the neighbourhood does not ‘feel’ like a town – at least it does not for the researcher’s Western eye, which is why he is concerned with making sense of the site’s ‘city-full non-cityness’ (Edward Soja’s term). Clearly, the majority of Sierra Hermosa’s residents are working elsewhere during the day, and those who are not are looking for ways of putting themselves to work in order to make a living.

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^46^ This and the following data is based on the official planning documents provided by the local administrative unit and the municipal planning office.
Sierra Hermosa.
Street view, January 2010 (above) and morning hours on the main access road, January 2012 (below).
The Land of the Ejido

The adjacent land to the south and west of Sierra Hermosa is farmland in the hands of the ejidos of San Pedro Atzompa and San Francisco Cuautliquixca. Small strips of land are used to cultivate corn or alfalfa. They are separated from the streets and houses of Sierra Hermosa by a fence and a knee-high rise in the terrain.

Ejido land is a Mexican variety of communal land tenure (propiedad social) first granted in 1917 as a result of the Mexican Revolution and still seen as embodying revolutionary principles in practice.47 In its original conception, it was assigned to agrarian use and, most importantly, intended to subordinate individual property rights to social rights.48 As mentioned above, this status was lifted with the 1992 constitutional reform with the effect that tracts of ejido land could now be privatised and legally sold. Even before this, however, the ‘social utility invested into the ejido […] had been systematically undermined in Mexico City to the benefit of private interests’.49

With regard to the incorporation of ejido land into Mexico City’s growth process, the outcome of the 1992 reforms was to merely formalise the, until then, informal transfers of land that in any case was being urbanised.50 At the same time, this change in rules did essentially redefine the position of the actors involved: strengthening the ejidatarios while compromising the prospects of consolidating their tenure for settlers still living in an irregular situation.51 The extent to which formal housing is being developed on ejidal land in Tecámac is exceptional52 yet it is part of the overall process of accelerated formal citification of the northern peri-urban realm as it is promoted through neoliberal policies on state and municipal level with an international investment friendly shake-up of the national financing system for housing or the above-mentioned Ciudades Bicentenario development strategy.53

47 Varley 1985, 1.
50 Jones and Ward 1998.
51 Salazar 2012.
52 This observation is based on personal conversations with Ann Varley.
Agricultural land.

Elected leaders of the San Pedro Atzompa ejido (above) and fields between Sierra Hermosa and San Pedro Atzompa (below). Both January 2012.
Outside the entrance of Sierra Hermosa lies the old Mexico City-Pachuca country road. To either side of its tarmac, mechanic workshops, supermarkets and other roadside utility shops offer essential goods. Also lined up along this road are the entrances – gated to a greater or lesser extent – of the many and differentiated residential compounds that make up the urban fabric. On the road itself, what is most prominent is the number of minivans (colectivos), full-size inter-urban coaches and taxis moving up and down the spine of this urban development axis as well as to and from the separate gated communities, estates and low-income neighbourhoods.

Another 500 metres further on from the Sierra Hermosa entrance, on the other side of the historical village of San Francisco Cuautliquixca, the Mexico City-Pachuca federal toll-highway runs parallel to the country road. This road is protected from the surrounding houses, streets and corresponding activities by an embankment and crash barrier. It cuts through the peri-urban realm with only a few but, as we will see in chapter seven, significant points of connection to the local territory: the realm of speed and linearity that is accessed by travellers by no other means than stopping buses. Notably, it is just as crowded with vehicles providing mass transport as the country road, albeit the proportion of inter-urban full-size coaches is significantly higher.
The two roads.
The country road north of the village of Tecámac (above) and the express toll-road at the 5 de Mayo neighbourhood (below). Both January 2010.
**Colonia Antorcha**

Colonia Antorcha is located further north than the previous sites, outside the town of Tizayuca, in the municipality of the same name, in the state of Hidalgo, yet tied into the system of urban fragments by the same country road. The emerging *colony* lies at a distance of 100 metres from this road, surrounded by pastoral land and fields.\(^5^4\) To its south a few houses are scattered over the territory of what are referred to as the, similarly embryonic, emerging neighbourhoods (*colonias populares*) Diamante and La Gloria. Access is provided by a narrow dirt track or simply by walking across the field. In 2011, the settlement consists of three parallel streets with self-built houses in their initial state. To the rear, an extension is traced out with chalk in the dirt. A sole electricity cable provides power to one single house in the front row. By 2015, houses have grown, water and electricity infrastructure has been formally brought in, and the settlement has doubled in size.

Colonia Antorcha is one of two settlements in the municipality organised by the social movement/organisation Antorcha Popular, the urban branch of Antorcha Campesina.\(^5^5\) Founded in 1974, the organisation fashions itself as a benefactor of the deprived by helping them to self-organise.\(^5^6\) The principle purpose of the urban branch is to secure land for members to build their homes. Furthermore, the envisioned development includes setting up transport and schools for their settlements and members. At the centre of the neighbourhood a piece of land the size of a football pitch has been set aside and each household has contributed a small plant to initiate the growth of the future park. The movement’s principal modus operandi is by organising members to form a political mass that can uphold claims made on their behalf. Every now and then, settlers and aspirants are obliged to travel to Pachuca or Mexico City in order to march for their rights before political institutions.

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\(^{54}\) The Mexican term *colonia* (also *colonia popular*) generally translates to ‘settlement’ or (poor and working-class) ‘neighbourhood’. The notion of a *colony of the urban* set within a still-largely rural context is however intriguing in the context of this research. It makes particularly sense also with regard to the way in which the social movement Antorcha Popular operates.

\(^{55}\) MAN 2013. Also referred to as Movimiento Antorchista Nacional which translates to ‘National Torch Movement’.

\(^{56}\) Interview with Melba, see also MAN 2013.
Colonia Antorcha.
View along the front row houses with sole electric connection (above) and settlers in front of their plot (below). Both January 2012.
4. Providing Lives

Introduction

In this chapter I follow practitioners of the streets in terms of how they make their living in peri-urban Mexico City. For analytical reasons, I divide my examination into two sections: first, I will give an account of the bodily practice by which key informants provide for their lives in and around Sierra Hermosa. This first section not only presents a picture of how inhabitants employ themselves as live infrastructure but also sheds light on how city is being made by such self-infrastructural practice. The second section will then focus on the specific thinking of city that emanates from such practices. As outlined above, I will group this city-thinking into analytically distinct layers of cityness, each of which describes a particular notion of space that in turn brings into view the positioning and field of actions inscribed in the research participants’ concrete activity.

Any analysis of the provision of livelihoods in Mexico City has to be seen in relation to the extensive body of work on the strategies and tactics of survival employed by its inhabitants. However, in contrast to works such as Larissa Lomnitz’s *How do the marginalised survive?*, my research shifts the central question from mastering adverse urban conditions to the making and thinking of city entailed in this activity. Hence, I scrutinise the consequential intersections they make with each other and the city as resource on the grounds of socio-material bodily practices that entail specific forms of peri-urban cityness, in this way revealing the *labour of conjunction* they imply. As mentioned above, AbdouMaliq Simone’s notion of people as infrastructure is the starting point for this endeavour.

The second lens through which I will analyse the making and thinking of city contained in people providing for their lives is that of the urban practitioner’s own hands and body and the distinct perspectival access to socio-material space these entail. The material groundedness of practice – the decisive influence that the

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1 See chapter one.
2 Lomnitz 2011.
3 Simone 2004a; 2004b.
material condition of a given environment exerts on social activity unfolding within it – is also centre stage. Borrowing Tim Ingold’s words, the implicit perspective I will follow is that of ‘growing’ the city out of relational ‘engagement’ rather than ‘building’ it from a position of ‘detachment’.\textsuperscript{4} Drawing on Paul Carter, ways of \textit{practising} the street in peri-urban Mexico City can thus be read as ways of thinking the city by handling it’s materials in practice.\textsuperscript{5}

\textbf{Infrastructures that Live: Doña Margo}

We meet shortly after noon on the empty street leading deep inside the Sierra Hermosa neighbourhood. The sun is burning and the only shade is where Doña Margo is sitting and, so it seems, where she is waiting for the researcher to pass by. Doña Margo is selling cloth and, in order to do so, she has adapted an unused bus shelter into her comfortable street vender’s stall: she is sitting on the bench surrounded by trousers, shirts and blouses laid out next to her or hanging from the roof of the simple concrete structure (image 4.1.). In a basket underneath the bench she also has some food as well as a container full of water, which she offers me as soon as I come closer.

Doña Margo invites me to sit and refresh myself and, naturally, we start talking. She is a pensioner who boosts her family budget by selling clothes – right here, at the bus stop, which she has made her own. There are five of these stands, originally built as part of what would have been the formal public transport terminal of Sierra Hermosa. However, things developed differently, and the transportation hub connecting the neighbourhood with the wider urban field was informally established further down the road. Instead of buses, a market is now held once a week and the five bus shelters have become the permanent marker of this deflection.

Getting hold of such a privileged site for doing business, and holding on to it, is a job in itself, she tells me. For example, permits have to be paid or circumvented while tricksters claiming to be charging for these permits must be identified and scared off. Hence, specific street-vendor’s \textit{skills and knowledge} are needed in

\textsuperscript{4} Ingold 2000, 11.
\textsuperscript{5} Carter 2004.
order to engage in complex negotiations located in the overlap of the formal and the informal. At the same time, these skills and knowledge need to be acquired individually (nurturing friendly relationships with authorities for example) and the special arrangements they often entail need to be concealed.

You have to defend yourself, show them... so they know who they are messing with. Personally, I don’t let them get away with it… This is why I tell people: look, everyone finds a way to defend themselves… And then people ask me, what do you tell them so they don’t charge you? And I say: What do you want to know? It’s a secret.

Furthermore, time and energy need to be expended. This entails the – only seemingly banal – activity of showing presence in space. In order to use the bus shelter as her market stall during peak hours of customer traffic, Doña Margo has to lay claim to her customary right during less lucrative times of the day and week – including the midday hours when the sun is burning hot and only a few people (and researchers) come walking by.

This time is the down time of her work but as such it is highly important. It is her investment in future periods of busy selling: it would appear that if she did not spend long hours here each day she would not be able to be here at all. It is also the time she uses to establish and nurture good relationships with her clients – a practice that Israel, with whom I walk the streets on a different occasion, refers to as ‘getting along and selling’ (congeniar y vender). Accordingly, our conversation is punctuated by Doña Margo continuously greeting passers-by: ‘buenos días’, ‘cómo le va’, ‘que le vaya bien’. Some of them are already customers, while others are people she simply knows by sight.

These relations are important to her business but they also reap benefits for the neighbours, she explains to me. Doña Margo sees most, if not all, of what goes on in this part of Sierra Hermosa: no researcher or thief or anyone else can pass by without being intercepted. Thus, practising her business by sitting out time is also a way of providing the area with a security service based on the social control that her eyes and ears can provide.

To make this down time even more productive, Doña Margo has found yet another function while she occupies the bus stand: she also helps her son and

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6 ‘Good day’, ‘how do you do?’, ‘I hope you are doing fine’.
7 Cf. Jacobs 1993, 45.
daughter-in-law by looking after their two children during the day. As her son and family live near-by, their arrangement is that the older child has to report to her when he goes off to secondary school, which he attends in the afternoon cycle. For the younger child she has lunch and water ready when he comes back from primary school at noon. This way, both her working time and the working time of the children’s parents need not be reduced in order to look after the youngsters. With this double function of her work she directly supports the network of exchange\(^8\) of her family’s survival unit. In return, so to speak, Doña Margo lives rent-free at her sister’s place in another section of Sierra Hermosa. Undoubtedly, Doña Margo is entangled in a specific matrix of domestic favours and obligations that speaks in a particular way of her being a women, mother and grandmother. Worth mentioning, furthermore – although she does not speak about it – is that such family arrangements bear the risk of dependency and conflict. With this regard, Miriam Glucksmann, for example, provides insights on the interconnections between informal working conditions on one side and family structures, gender relations and intergenerational relations on the other.\(^9\)

In sum, by running her business Doña Margo provides goods to her family and neighbourhood in three ways: offering clothes, social control and childcare. More importantly, however, Doña Margo’s example shows how it is people themselves providing the infrastructure they need in order to meet the shortcomings of their situations.\(^10\) In acting out her social relations, Doña Margo herself is the infrastructure that sustains her business. She is a corner stone of the infrastructure enabling her family to organise their survival and she is part of the infrastructure that provides the neighbourhood with safety. This being infrastructure is something she plays out through making presence and time. At the same time, being infrastructure is achieved through individual labour. It is the fruit of a practice that requires particular skills and knowledge that are kept private, and that is endured with the body (sitting out in the heat). Furthermore, this practice is creative insofar as it builds on existing material and social resources, which are either diverted in their function (the bus stand) or gainfully

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\(^8\) Lomnitz 2011.
\(^9\) Glucksmann 2000.
\(^10\) Simone 2004b.
reconnected (family relations). Acting as infrastructure includes the possibility to hook up to existing infrastructures and to infrastructural remnants.

Essentially, Doña Margo is not only filling a gap left by a lack of urban institutions, opportunities and equipment, but she herself constitutes these aspects. In making infrastructural connections, productive in several ways and on several layers of sociality, she is making city – not city as a fixed thing but city as a process in the making, as a ‘capacity to provoke relations of all kinds’. 11

In addition, by performing as infrastructure for the neighbourhood and family she makes the street a friendlier place. Doña Margo tells me that I am not the first person to whom she has been offering water and rest in the shade. Hence, even though her interventions in the social space of the street are far from being neutral and far from being open to everybody, with her presence and agency she is contributing to seeing the street – both literally and figuratively. Her city-making is a mode of participating in the unfolding sociality of the street and neighbourhood. As Suzanne Hall suggests, it is ‘not only a practice of social conviviality, but a cultural and political process’ by which she intervenes in Sierra Hermosa’s urban becoming. 12

A young woman passes by and Doña Margo exchanges some words with her. When the woman walks on she turns back to me with the words:

We got to know each other just like this. It is nice knowing each other, isn’t it? (Nos conocimos así […]. Es bonito conocerse, verdad?)

11 Simone 2010, 3.
12 Hall 2015, 865-866.
The bus stand and surrounding pavement and walls that Doña Margo has made the shelter from which she acts as infrastructure. December 2011.
Handling Movements: Eduardo

Every morning, from the window of the little studio I rent during three months in 2011/12, I can see Eduardo and his wife setting up their juice stall on the sidewalk of Sierra Hermosa’s single access street and I make it a habit to start the morning with a glass of his juice.

As we are on the main road with our stall, it does pay off (Como es sobre la avenida, si funciona),

Eduardo explains the rationale for their choice of location. As it turns out, choosing the right site for street-vending operations requires deep knowledge of what is actually going on. As we have seen with Doña Margo, it implies skills and a time commitment to set up a street vendor’s stall on the busy, lucrative streets. Accordingly, if sustaining down time is too costly, many opt for opening their miscelánea or food stall out of their front-room window or garage in whatever side street they are living (this way they can do other things while still attending their business). Hence, what Eduardo refers to is not the practice of making connections that we have seen in Doña Margo’s case, but the practice of pursuing and riding your opportunities – including the practices of anticipating or warding off possible adversaries.

Eduardo and his wife came to Sierra Hermosa because, having started a family, they were looking for a way to get by and thought this neighbourhood provided the right spot for them to try. Drawing on extended family networks for the set-up and logistics of their business, Eduardo describes its birth as follows:

First we came and saw what the movements are like (vimos como iba a estar la movida).

This act of seeing movement, it turns out, is a key practice for making a living on tight margins. First of all, seeing movements is the confirmation in practice of what is often difficult to grasp when trying to describe a given urban situation: things move. The city, as much as life, is neither stable nor fixed but a process in constant revolution. The fact that any observer of social space is placed in a
particular site and moment and thus constrained to a limited perspectival access to the city is often confused with the city itself being a thing set hard and fast.\textsuperscript{13}

The practice of city life has taught Eduardo better: setting up a business is no one-off intervention but a practice of \textit{continuously intervening} in the movement of things. It is acting, a verb; not action, a noun. In order to run and live off their business, Eduardo and his wife knew that they would have to \textit{align their own movements with the movements of others}. This recalls Tim Ingold’s insights that all things and social formations emerge through ‘practical movement’ and ‘within the relational contexts of the mutual involvement of people and their environments’.\textsuperscript{14}

Hence, they started out with a sweet shop, which they operated outside their house: ‘something that would have several options, that would work’, as he puts it, because it would be sufficiently common yet rare enough to intervene in the economy of the neighbourhood. Encouraged by their inaugural success they soon moved on: they saw the movement generated by the local school and tried tapping into it (image 4.2.). Schools are heaven for street vendors because of the numbers of pupils and parents consuming. So Eduardo and his wife changed products and set up a juice stall outside the main entrance together with all the other vendors. Yet things moved differently outside the school. Competition is higher and so is the determination to control it and make a profit on this control. As soon as they moved their business to the school, Eduardo and his wife got into trouble with the \textit{operativos} run by the local police, which required them to get a permit for selling in public – something they now hold. But the formal law was not the only law that was being enforced outside the school. In addition to the permit from the municipality, they were obliged to seek the approval of the school’s head teacher, who turned out to be the person deciding who gets what piece of the pie outside her premises. When Eduardo and his wife refused to pay a bribe they had to move to the main road, 500 metres away from the school, in order to be left in peace with their stall. This is where we now talk over fresh orange juice each morning.

\textsuperscript{13} Cf. Harvey 1996.
\textsuperscript{14} Ingold 2000, 88.
When Eduardo tells me their story, we come to the conclusion that it is a process of *learning by doing* that they had to go through in order to get to where they are now. Yet when I suggest the need to know many things, especially the informal laws, Eduardo strongly disagrees with my wording: it is not about knowing as such, but about ‘knowing how to handle’ (*no ‘saber’ sino ‘saberlo manejar’*) he corrects me.

Because you can acquire knowledge (*el saber uno lo aprende*), but *handling things (manejar las cosas)*, this is more complicated. Because nobody knows, or rather, nobody lets you know.

This is the second aspect where seeing movements is of great importance: apart from describing the city as a process of lines that have to be brought into conjunction, what Eduardo indicates is that practical skills are needed to participate in this urban alignment. Knowing, too, is a ‘making process’, an ‘active, lively engagement of relations’ as the epistemologist Ludwik Fleck declared.¹⁵ It is a *coming to know*, not a pre-existing and fixed thing passed on from A to B; a dynamic and relational process ‘arising directly from the indissoluble relations that exist between minds, bodies, and environment’.¹⁶ The knowing of the street vendor can therefore be described as a practice of seeing and handling movements while moving him or herself and following the movements of others. In de Certeau’s terms, street vending is a tactical way of operating, a ‘manoeuvring’ in which the practitioner of space cannot fall back on a stable position, and nor can he or she take a distance from the movements of ‘the enemy’.¹⁷ In a material sense, we can also compare it with the ‘working knowledge’ with its particular ‘feel’ that Douglas Harper describes as a practical knowing of the ‘elasticity of materials’.¹⁸ In our context, these materials would be the street and its movements. Opportunities have to be identified and then pursued either by navigating relations as they emerge or by warding off adversaries as they interfere seemingly out of the blue. Paraphrasing Eduardo’s words, *hands* have to *grasp movements*, both one’s own and those of others, in order to channel them in

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¹⁵ Fleck 1929, 426, own translation.
¹⁶ Marchand 2010, 2.
¹⁷ de Certeau 1988, xix, 37.
¹⁸ Harper 1987, 118 refers to the feel of a mechanic which would be here the feel of the street-practitioner.
the right direction. Clear-cut knowledge is surely too slow and square – ‘dead’ that is – as everything is alive and ambiguous and suddenly upon you.

Following this description of Eduardo’s practice, the role of the living body comes to the fore. Eduardo and his wife have come to know about how to handle their opportunities by inscribing their living bodies into the movements of the neighbourhood, school entrance and street. They have gained distinct perspectival access to the social and material conditions of Sierra Hermosa by the way they have positioned themselves within these conditions. Yet they have surely also become objects in space for others. As Elisabeth Grosz asserts, it is from within this particular twofold bodily positioning that their sense of the self, their sense of their space of possibilities and ability to manipulate things arises.19

At the same time, Caroline Knowles reminds us that this positioning in practice resembles a navigation that is not fluid, as it is often claimed, but implies bumping into things and stumbling over textures that mark the path.20 Only in engaging with the materiality of movements do Eduardo and his wife access their local ‘structures of opportunities’.21

19 Grosz 1995, 92.
The street in front of the school with its *material movements* from which Eduardo and his wife seek their opportunities. January 2012.
Forging Opportunities: Ivan

On my research walks across the fields and around the housing compounds that have risen in their place, one day I meet Ivan on a derelict site next to the entrance of Provenzal del Bosque (image 4.3.). He is standing on top of a pile of rubble separating reinforcement steel from concrete with his sledgehammer. Nearby, a couple of people are at work on another pile, and there are plenty of piles still waiting. When we start talking, Ivan is friendly but not particularly happy about the interruption. His earnings depend entirely on the time he actually swings the hammer: time that he is now losing to the interview. So while I try to make my questions quick, he interweaves his answers with extended periods of hammering. Ivan lives in San Pedro Atzompa, and is the child of a stock farmer. He comes here once a week, in his ‘leisure time’ as he describes it, whenever the development company of Provenzal del Bosque is dumping its reinforced concrete rubble. We are conversing about the transformation of his surroundings and the value and logic of land use as expressed by the development company excavating and filling successive sites with debris, when he makes the following comment:

Everybody earns what he finds (Cada quien va ganando lo que encuentra).

One day, he tells me, he saw the development company dumping their rubble and from then on started mining it in order to make money from the recycled steel. But in this case, I would suggest that his comment refers less to the amount of scrap reinforcement steel that can be sold for recycling, than to the ability to see rubble as an earning opportunity and the capacity and strength needed to turn it into suchlike. This interpretation is implied in the word he uses to describe the earning enabled by finding: encontrar, whose meaning contains the notions of ‘coming across’, ‘unearting’ and ‘working things out’. Finding opportunities, thus, reveals itself to be a practice in its own right and, explicitly, one that implies physical labour.

In this sense, Ivan’s leisure time hammering is of interest because of its highly visible corporeality. Opportunities on the margin, his practice shows us, have to be physically made and require the effort and endurance of hands and the body:
you have to roll up your sleeves and swing the hammer. Or, more generally speaking, opportunities are forged by what is actually, and physically, done. This material doing can come in the form of sitting in the sun making connections, as in Doña Margo’s case, or in observing and responding to movement like Eduardo does, or by turning the debris of new construction into a livelihood. Accordingly, the distraction of the interview does not mean he is falling behind the others – there is more than enough debris for all of them to capitalise on – but he is losing time for his own opportunity work. At day’s end, the steel Ivan recycles in five to seven hours bring him some 80 to 100 pesos.  

Observing Ivan in his doing, we come to recognise that there are huge differences between opportunities and the physical work they entail. Mining opportunities with the hammer is surely one of the most arduous; as is working the fields, something he also does according to seasonal requirements. This is revealing in two ways. On the one hand, thinking about the arduousness of his labour points to the costs of fading strength and health implied in forging opportunities. Ivan is a strong man but I am sure that some day his back will hurt from such work. The heavy reliance on his body is surely to be considered a risk factor for his infrastructural practice, weighing against the benefits, as he describes them, of flexible working hours and being one’s own boss. The cost of the worn body we also encounter in the case of Doña Margo, where long hours of physical presence is exchanged for synergies of reciprocity and the possibility of connections; or in Eduardo’s case, whose trial-and-error approach requires a lot of effort (esfuerzo) in order to get a grip on handling the ambiguity of the circumstances. Ivan confirms that if there were better jobs for him to do he would not be ‘battling like this’ (batallando) with the debris. However, in his less arduous occupation as a clown he is struggling with an unstable income and irregular contracts. He is booked for parties only once in a while, so his main workday is Sundays when he performs games, zany magic and

22 In early 2016, this is equivalent to approximately five Euros. By comparison, the official minimum wage for non-professionals established for Tecámac is 61.4 pesos per ordinary working day. See CNSM 2012.
juggling in the central plaza of the village of Tecámac. So here he is, once a week, swinging the hammer.

On the other hand, comparing urban and rural work points to competing logics of the peri-urban: while both of Ivan’s occasional working practices are equally hard work, recycling steel does pay off if seen in comparison with cultivating crops. This we might call the irony of the urban hegemony: even in the form of rubble, that is, in the form of junk materials, errors of execution and demolished housing, citification, the material transformation of the territory that urban growth brings about,\textsuperscript{23} pays more than agriculture.\textsuperscript{24}

Through his example, we can see that city is being made even from the debris and junk of cities. This is not a novel finding in itself if we look at the re- and up-cycling that is part, for example, of much of early-stage self-built housing or of informal waste management in Mexico and elsewhere. But I am not pointing here to the material cycle of resources alone, to the ‘seven lives’ that waste has in Mexico as artist Francis Alýs has proposed.\textsuperscript{25} Rather, I am interested in the additional, hidden values that those mining the city’s waste or debris relate to their opportunity material. Francisco Calafata has unearthed these values as being concerned with the environment, social justice or charity, in addition to the economic revenue resulting from re-introducing waste into the cycle of production.\textsuperscript{26} Building on these insights, I argue that such hidden values speak also of the relations of reciprocity and exchange that we find in the modes of urban inventiveness discussed in chapter one. Forging second and third (and so on) lives out of things, like Ivan does with steel, reveals itself as yet another tactic of making ‘unruly’ yet ‘consequential’ and, above all, ‘productive intersections’ among people, things, materials and spaces that Saskia Sassen and AbdouMaliq Simone have suggested to be at the heart of cityness.\textsuperscript{27}

\begin{footnotesize}
\textsuperscript{23} Häußermann, Läpple, and Siebel 2008, 22.
\textsuperscript{24} On competing logics of land use and rural practices and perspectives see chapter eight.
\textsuperscript{25} Rocha 2010.
\textsuperscript{26} Calafate-Faria 2013, 335. The author does so for the case of waste-pickers in Curitiba, Brazil, who ascribe alternative values to solid waste when collecting, separating and preparing it for retail.
\textsuperscript{27} Sassen 2010, 14ff; Simone 2010, 3ff.
\end{footnotesize}
The *junk city* material that Ivan *mines* as his opportunity work. January 2012.
Standing Strong: Margarita

A few days after being in conversation with Ivan, when I come by the same site again, both the scrap metal and Ivan have gone. However, opposite the huge portal to Provenzal del Bosque, I meet Margarita, who is watching over a display of metal goods. Margarita’s job, she tells me, is to offer potential clients from the gated community the products that a local blacksmith has designed for them: above all, protection grilles for doors and windows and special locking systems for additional security. Margarita is not supposed to do the actual selling of these products as they need individual adjustment and she cannot give prices for that. Her work consists in simply being there, demonstrating the blacksmith’s designs and establishing contacts. On good days, she hands out some leaflets; on bad days she does nothing. The rest of the time she sits next to the few objects on display (image 4.4.).

Time works differently for her than for Ivan, yet for both them it works through the body. While for him the amount of reinforcement steel, and thus of money, he collects is directly proportional to the time spent swinging the hammer, she is paid for her presence on the basis of a fixed amount of hours. Hence, she covertly tries reducing the actual time spent on site as this works directly in her favour. Willingly she tells me how she tries coming late and leaving early in order to fight boredom. When I meet her, she is working on a piece of embroidery:

I bring it to avoid boredom… Only by doing one does not get bored so much, one kills a little bit of time (Sólo haciendo no se aburre uno tanto, mata uno un poco el tiempo)… I also get to read. A bit. But it is very frustrating (desesperante) to be here… It’s not pleasing at all to be sitting on the same spot all day… There are long lapses where there is just nothing, you fall asleep or… [just think about how difficult it is] going to the bathroom. But what can you do? The need is great.

The need is great, indeed: Margarita is a mother of two, with the older daughter soon to become a mother herself. Currently, she lives separated from her husband because they do not get on very well. Like Ivan, Margarita earns 100 pesos a day – on the days she works – and like Ivan she did not receive much formal education. She dropped out of school in the second year of secondary education.
because she got pregnant and now her daughter is in the process of repeating her story: dropping out of school (albeit at high-school level). Margarita has been working at the entrance gate for a month. In her former job she was painting street signs for one of the large development companies in Tecámac, making 1200 pesos per week, three times more than what she is making now. But Margarita lost her job when the first of December came round because, as she claims, ‘they sack people to avoid paying the Christmas bonus’.

So now, Margarita is killing time for a modest income. She could also turn to her family network, as she tells me. But she is a strong woman, and proud, and does not want to receive the charity of her father. He offered to give her the same amount as what she had earned at her former job, but they have their quarrels since she left school against her parents’ advice. Since then she has preferred to make her own way in life, independent of her parents.

Any work that comes around is good, because each time, the situation is worse. But hey, here we are! You have to face making your life (Hay que enfrentar a hacer la vida). You have to stand on your own feet.

Margarita makes two strong points drawn together in one statement: you have to make your life and you have to face this making. Both insights are true in the socio-material conditions of Tecámac as much as they are true everywhere else. But they do provide a particular sense of how things can turn out wrong. As we have seen before, knowing how to handle and how to work out one’s opportunities is a process of learning (by doing); yet this process can also meet serious drawbacks or even fail; not only because of one’s own faults but also because the circumstances were unfavourable. Either way, one has to face one’s life and ‘pull your life forward’ (sacar la vida adelante), carry it with all its weight, as Margarita puts it.\footnote{‘Sacar la vida adelante’ translates to ‘carry on with your life’ or ‘make the most of your life’.

I can’t just throw everything into the gutter. I am the mother of my children. It all depends on me.
Margarita’s case therefore speaks of the uneven risk distribution and new forms of oppression playing out violently when people rely on forging their opportunities on the basis of being their own – and only – infrastructure. Elmar Altvater and Birgit Mahnkopf highlight how informal and precarious employment conditions constitute the deliberate project of split modernisation based on permanent and comprehensive uncertainty.\[^{29}\] Thus, while Margarita’s as well as the other research participants’ work constitutes the provision of new, additional and formerly-lacking city functions (security, child care, environmental services and simply an increase in offer and choice), the risks they take are excluded from being institutionally shared by any formal social and economic security measures; the risks they carry solely on their own shoulders.\[^{30}\]

\[^{29}\] Altvater and Mahnkopf 2003, 20.
\[^{30}\] Altvater and Mahnkopf 2003, 24-25. See discussion in chapter one.
Image 4.4.

The street corner where Margarita displays her employer’s metalwork. January 2012.
City Thought out of Infrastructural Practice

So far, we have seen how practitioners of the streets in peri-urban Mexico City make connections and align and tie their living bodies into the movement of other bodies, things, practices and spaces. Such making of lives out of their own infrastructural practice, I argue, is how city, too, is being made in practice. This is how I come to frame these practices as urban labour and, in particular, as forms of a specific labour of conjunction.

In the following, I will discuss how such bodily city-making nurtures the growth of a particular sense also of the city. This is to ask how the immediate intervention and bodily engagement with an environment is also a particular way of materially thinking it in relation to its becoming.

As has been mentioned, I will try grasping such material city-thinking as a series of concrete yet intertwined layers of cityness, that is, as emerging notions of city that are profoundly rooted in practising urban becoming. These layers, together with those identified in consecutive chapters, work together in the way that self-infrastructure practitioners of peri-urban Tecámac make sense of their environment by laying hands on it and intervening in it with their own lives.

Self-made City

The first notion of city thought out of infrastructural practice is the notion of the Self-made City. We find this notion in Doña Margo transforming a bus shelter into her business by making time and social relations become productive, in Eduardo and his wife setting up their new life by seeing and intercepting movement with a fruit juice stand, and in Ivan forging opportunities and earnings out of rubble.

Locating the micro practices of the participants of this research in an overarching framework, we see that their lives and infrastructural activities are set in the context of an urbanisation project that does not bring about the formal

opportunities that the city offered in previous decades – or that the city continues to offer in other parts of the metropolitan area. This, at least, is how Israel sees it, a temporary inhabitant of Sierra Hermosa who led me through the neighbourhood in 2012. The question of whether this ‘offer’ ever truly existed in Mexico or elsewhere, still exists somewhere else, or even does so for all inhabitants equally is beyond the scope of this research. In any case, Israel describes a significant difference between Tecámac and other, more industrialised municipalities of the metropolitan area of the Valley of Mexico:

The main difference between Cuautitlán Izcalli and Tecámac is that in Cuautitlán Izcalli there are many companies. There is work while here there is not... From Tultitlán to Ecatepec there is a lot of industry so people are able to get on. They earn little but [at least] they are working near to their homes... Here what you have to do is go to the D.F.

As we can see from this quote, the response to the lack of formal work is two-fold. Either people commute, as Israel does, or they work out their opportunities right where they are caught up in space, as Doña Margo, Eduardo, Iván and Margarita do. This second approach is what constitutes the Self-made City: the city and the self made by taking the urban becoming of both individual and city into their own hands. In the Self-made City there are opportunities to be sought, makeshift ones, precisely by working them out oneself and directly in everyday urban practice. These opportunities are not provided primarily by the legal and administrative (formal) framework, nor by the (equally formalised) societal solidarity based on citizen rights and obligations – according to Becker et al. this we could frame as the more or less fulfilled dream of a Continental European project of the city anchored in comprehensive social security systems – but they are provided essentially by each and everyone on their own. ‘Networks of exchange’, ‘structures of opportunities’ and ‘helpful huts’ do of course imply

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32 Schteingart 2008 suggests that migrants of the 1950/60s arrived in a city that did provide a framework for improving individual living conditions while from the 1980s onwards this prospect was no longer available.
33 Becker et al. 2003, 8-9 argue that the idea of the city offering genuine opportunities to its citizens has always been to a significant extent illusory, born out of the grand narrative of European (urban) modernity, exported to Latin America and living on in contemporary discourses and enterprises of the region’s modernisation.
34 Lomnitz 2011.
35 Cornelius 1980.
36 Turner 1976.
collaborations at different levels, but the risks taken rest essentially on the shoulders of each individual alone. The price, then, of the Self-made City is that of being on one’s own in one’s city-making practice. Accordingly, Simone’s notion of ‘people as infrastructure’ does not describe people working together, sharing their risks and securities, but how individual players make productive connections precisely without transferring into these makeshift conjunctions any of their own responsibility for everything they do and the precariousness that comes with it. Doing infrastructure is the work of everyone alone – but translates also into self-blaming: if you don’t make it, it is entirely your own fault. This is the ghost that haunts Margarita. According to the neoliberal logic that underpins the self-made subject and city, you should simply have worked harder.

**Laborious City**

The accounts and observations from section one point to a second aspect through which city is being thought out of infrastructural practice: that of hard work. Making the city oneself is tough physical labour and with this labour the idea of the city being made is enveloped in sweat and the aching of the body. *Your own work* is what qualifies the self-making activity we encounter on the Mexican periphery; hence the notion of the *Laborious City* emerges as another of the city layers thought in practice in the peri-urban realm.

It is pertinent to introduce the category of laboriousness due to the excessive use of the terms self-made and DIY (do-it-yourself) in recent urban literature. Self-made and making with one’s own hands in peri-urban Mexico City do not refer to inhabitants participating in the planning of their home and neighbourhood nor do they describe deliberate processes by which inhabitants change the city for the better; yet such are the readings that have been attributed to the terms self-made and hand-made when referring to initiatives, for example, as diverse as the Berlin

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37 See chapter six.
38 Altvater and Mahnkopf 2003.
39 Simone 2004b.
40 Altvater and Mahnkopf 2003, 25; drawing on Wilpert 2003, 112.
co-housing movement\(^{41}\) or community-run projects that aim to upgrade urban living conditions in Mexico City and elsewhere.\(^{42}\) The care and craftsmanship rooted in making something by hand to which these authors allude may or may not exist in making city oneself and with one’s own hands in the ways I propose using these terms. The point being made, to the contrary, is that attributing such values is often counter-productive to the analysis of city-making practice. Connotations like ‘care’ and ‘change’ – or, for that matter, of ‘resistance’ as discussed by Ann Varley\(^{43}\) – have to be assessed with caution, as they tend to idealise informality at the expense of neglecting to account for its material and social constraints.

Therefore, the notion of self- and hand-made, as I find them materially thought out of the research participants’ practices, refers to a making of intersections – and thus of city – that is born out of corporeal labour. It describes a city-making by engaging with the material bedrock of the city’s and the practitioner’s own becoming. Weaving social relations, laying hands on movements to make them come one’s way, mining opportunities and shouldering risks – let alone enduring heat, squeezing juice from oranges, hammering concrete and killing time – all come down to the living body doing physical work and thus to what I call the Laborious City.

*Instant City*

A third layer of cityness that can be materially thought out of the infrastructural practice of this research’s informants is that of the *Instant City*.\(^{44}\) This layer directs the attention to the relations of time in which the process of city-self-making unfolds.

On one side, it points to the pace by which the northern stretch of the ZMVM is being transformed. Here, Edward Soja’s seminal description of exurban Los Angeles provides a helpful entry point to grasp its significance. As mentioned in

\(^{41}\) Ring 2013.
\(^{42}\) Rosa and Weiland 2013.
\(^{43}\) Varley 2013, 16. See chapter one.
\(^{44}\) I use the notion differently from the experience of city produced through parachute technology events as conceived by the architecture collective Archigram under the same name. See Cook 1999, 78 ff.
chapter one, Soja described the vast transformations of Orange County as the ‘frontierland’ of urbanisation being ‘nowhere yet now/here’. While certainly referring to a very different socio-economic context, the space-time collision and oxymoron of nowhere-now-here describes the situation in Tecámac and Tizayuca very well, too. As in the Californian postmetropolis, the citification of Mexico City’s hinterland happen so fast that it takes any observer by surprise. Most of the research participants have clear memories of how different this place looked only a few years ago. Farmers and developers, former village dwellers and new formal and informal settlers, all describe to me how fast rural features of the landscape are being annihilated, displaced or overshadowed by urban growth. Here is how the topic surfaces in a conversation I have with a local taxi driver:

Before, the streets were cobbled. There was no pavement like there is now. Before, all this... well, it was a village. Here, what is Casas Geo, Sierra Hermosa, this was a ranch of some Colonel. All this was farmland, the estates of haciendas. 
– When was ‘before’? How long has it been like this as we see it now?  
– Well, we are talking about some 10 years.

The layer of the Instant City thus tells about the perception of fast urban transformation from the perspective of the spatial practitioner. The pace of this transformation is confirmed by my own long-term photographic documentation. From one field visit to the other dramatic changes have taken place, the most significant being the emergence of the entire neighbourhood of Provenzal del Bosque seemingly out of nothing (images 4.5. to 4.8.).

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45 Soja 1992, 113, 94.
46 Nevertheless, (some of) these (idealised) landscapes of the rural do persist, albeit under pressure and often reduced to islands of distinct land use in a growing sea of houses. See chapter eight. Furthermore, other urban lands, too, follow a distinct logic of time than that of the Instant City. Why this is I describe in chapter six under the notion of Tidal City.
From field to urban development. Inside and on the border of Provenzal del Bosque in the years 2010, 2011, 2012 and 2014 (top to bottom).
More importantly than the perception of the astonishing pace, however, is that making city is an activity of the here and now in itself. This is at the core of the notion of Instant City. Ivan gives an impression of this instantaneousness: the moment the development company dumps its debris is the very moment at which the opportunity to convert it into a modest earning arises. Material situation and infrastructural practice are directly linked in time and space. I call this the hidden dimension of Soja’s poetic framing of the city being nowhere while being now and here: If the peri-urban city is substantially made by people being and doing infrastructure, and if their inventive urban practice is at the heart of a distinct understanding of city as cityness born out of the making of multiple, productive connections, it is first and foremost the concrete and local actions of practitioners of peri-urban space that immediately make instant cities.

City is happening right where Doña Margo appropriates a bus shelter and diverts it into the node from which to weave her relations. Margarita’s and Eduardo’s wayside stalls instantaneously transform the street into a place of conjunctions where things and people meet. And while this transformation of space through activity – this making of city in practice – is certainly not unique to Mexico’s northern periphery, it nevertheless becomes highly visible and corresponds very well with the specific conditions of peri-urban becoming. Here, on the social and physical margin, the city cannot be taken for granted. Rather it has to be taken as day-by-day engagement. In formal (Western) terms, that is in terms of physical infrastructure, services, building permits, etc…, the city is not only not familiar in peri-urban Mexico but it is arguably not (yet) present. In practical terms, to the contrary, that is in its quality of being in the making by people making connections, the city is undoubtedly everywhere and immediately around.

Conclusion

In this chapter I have presented how four of the key research informants in and around Sierra Hermosa provide for their lives. Their tactics range from making and nurturing relations (Doña Margo), via seeing and handling movement (Eduardo) to

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47 Arguably cities can never be taken for granted. See Gandy 2011, 4; drawing on Glass 1964, xiii.
forging opportunities in physical labour (Ivan) or enduring time and hardship (Margarita). These four practitioners of peri-urban space stand as examples for the many living bodies that make city by making themselves in the time and space of their own urban becoming and that of their surroundings. Drawing together the different aspects of their self-infrastructural opportunity work I come to describe such practice as bodily labour of conjunctions, as the physical agency of the body in making connections and making connections work.

Analysing their practice, I have furthermore come to identify three layers of how city can be thought out of the perspective of dwelling, that is, when engaging with and handling its material conditions through and for the living body. These are the Self-made City, the Laborious City and the Instant City, pointing to how inhabitants of the peri-urban realm think of themselves and their social and spatial position as the product of individual, hard and self-reliable work accomplished in the here and now.

These insights, I argue, are relevant for the study of the peri-urban and for urban studies in general. Analysing how people make their lives and make sense of their lifeworlds-in-the-making through bodily practices, I argue, allows thinking the peri-urban differently to the dominant accounts framing it as a combination of underdevelopment and territorial crisis. What leads to addressing the situation as a lack of city does not account sufficiently for the perspective of the inhabitants who productively engage with, and thus co-constitute, their socio-material circumstances. Furthermore, coming closer to understanding the perspective of peri-urban practice allows us to picture, for example, how networks of exchange and local structures of opportunity are grown rather than accessed. The following chapters will take this discussion further, looking at the making of houses and neighbourhood.

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48 Ingold 2000.
49 Cf. e.g. Iracheta and Eibenschutz 2010.
50 Lomnitz 2011.
5. Growing Houses

Introduction

This chapter directs attention to the making of houses. In the previous chapter we saw how people provide for their lives and make and think city out of their labour of conjunctions. Here I will analyse how houses, too, are corporeally practised on the periphery of Mexico City, and the role they play in peri-urban becoming and thinking. Houses, too, emerge out of the movements that are individually and collectively aligned. They are the socio-material manifestation of infrastructural work and act themselves as infrastructures.

To make my argument, I will draw on insights taken from interviews and observations in both Sierra Hermosa and Colonia Antorcha. More than in the previous chapter, I will make use of my visual field notes and long-term photographic documentation of both sites. In order to combine these different ways of telling, I will therefore vary the narrative structure used to represent my findings: rather than individual informants and their accounts and practices guiding us through the text, I will draw together a range of voices with selected complementary visuals.

I will start my analysis with the moment that dwellers enter the process of the physical making of their houses. I will then turn to the making of houses as such, showing how they are grown either from scratch or from a pre-existing starting point, yet how they are always characterised by their quality of progressiveness. Thirdly, I will analyse how houses are made out of the physical presence of their occupants’ bodies as much as out of conventional building materials. Together, these three aspects frame the infrastructural synergy of houses and inhabitants, a relational becoming by which residents put their houses to work as part of their own infrastructural practice.

Finally, I will offer a picture of the particular corporeality and fragility of the ‘paper-work’ employed in the growing of homes – that is, of the bodily labour implied in securing houses by registering them on paper. All these practices evolving from the making of houses I draw together under the notion of a labour of presence.
What these explorations reveal is that homes in the peri-urban realm of Mexico City are forged out of bodily praxis and, in turn, support this praxis. They are literally grown, both in light of their incremental manufacturing over time and in accordance with Tim Ingold’s notion of a relational engagement with the social and material constituents of the environment. At the same time, this chapter engages explicitly with notions of informal housing: putting bodily praxis and its material groundedness centre stage stage challenges, I argue, the commonly drawn opposition between the formal and the informal.

In the second part of the chapter, I will discuss once more the layers of cityness, which are materially thought out of growing homes. Again, I adapt the notion of the layered city in order to present my analysis in terms of distinct yet complementary tiers by which peri-urban cityness can be grasped. At the end of the chapter I will reflect on the significance of having an address and on how it is employed.

Breaking Ground

As we saw in chapter four, homes in the northern stretch of the ZMVM are established on what was previously farmland. This land has to be transformed and put to work by means of a series of actions that can be accomplished out of two theoretically antagonistic yet systemically intertwined modes: the formal and the informal. In both these registers, land has to be acquired and developed: it has to undergo a change in legal status; and it must be fenced, subdivided, sold and covered with buildings in order to be converted into actual houses and brought to life as yet another emerging neighbourhood.

Describing the formal and informal registers with their, at times, surprising similarities and interdependencies is a task all its own. However, in the context of this research it is not our concern to analyse the above steps in terms of whether they are accomplished formally or informally, or even legally or illegally. Much has been written on the fine line that practitioners living on urban or social

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1 Following Ingold, houses are always grown (Ingold 2013, 47 ff.) but this growth process becomes particularly visible in the incremental house.
margins navigate in order to make the most out of both. Rather, the distinct operational logics and time frames of key actors are of importance. How and when do development companies and inhabitants, that is, planners in contrast to practitioners of space, intervene in the process?

According to a simplified working definition, the developer centralises all these activities of preparing and working the land before selling the finished houses at the end of the process. This mode of production has been called a ‘vertically integrated system’, split into more than 60 different stages including the allocation of mortgages, the operation of factories that produce building materials and the provision of post-sales services.

In the opposite model, dwellers themselves accomplish the same steps – albeit in a different, less linear fashion – in an incremental manner. They do so under a scheme of collective and up-front ‘financing’ based on their own engagement. Hence formal and informal roadmaps to housing, I argue, overlap in what they achieve yet can be substantially distinguished by the moment when the actual residents enter the process – and the way in which this process is achieved, sustained and paid for through the use of their own bodies.

Señora Santa, for example, is a resident of Sierra Hermosa. She arrived in her new house three years after the first construction phase of the development had been handed over to its new inhabitants. This was back in 2005. Santa remembers, that at the time…

Houses looked really beautiful. The neighbourhood was in good shape, [because] not so many people came at first.

Today, she and her family like living in Tecámac, yet she also mentions that they bought their home here not because they wanted to but because they had to make use of their state workers’ housing credit scheme.

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2 See e.g. Altvater and Mahnkopf 2003; Alarcón 2008.
3 Inclán 2013, 104.
4 Loans are issued by either INFONAVIT (for salaried employees in general) or FOVISSSTE (for state employees) as is the case here. Workers, however, not only have access to but are induced to use the system. See Monkkonen 2011, 673. They are obliged to contribute while at the same time loosing their rights again in case of unemployment. In general terms, the system is criticised because it restricts access to loans on the basis of stable employment, which many do not have. Connolly 1998; Monkkonen 2011. It also restricts people to certain types of housing that can be
Three aspects in her account are of importance: first, residents of Sierra Hermosa enter the home production process at the stage of completed houses which, in the case of Santa, are described as aesthetically pleasing. Secondly, the material condition of the neighbourhood is also laid out before people enter the site and is positively perceived precisely because the roads, sidewalks and buildings are new and still match their original designs, as they have not yet been altered or worn down by use. Thirdly, the house is financed mainly by a mortgage that is granted on the condition of previous and future employment. We can say, therefore, that payment for the house and urban infrastructure is accomplished off-site, which in our case means Santa’s husband working for a state institution (leaving Santa’s self-infrastructural practice aside for the time being). 5

Very different indeed are the experiences and payment schemes of residents of Colonia Antorcha. Here, residents physically enter the stage long before the first cut with the spade. They not only physically produce their homes themselves but also produce the material condition of the neighbourhood, in parallel to their houses. In this way, they pay for both through the employment of their living bodies on the site. They enter, establish and sustain a group of settlers, lay out the streets and plots, endure the lack of services while demanding them from authorities, buy, collect and transport every piece of building material and erect their houses partly by their own work. In other words, they break ground themselves, collectively, by their own presence and engagement – and in this way define an entry point very distinct from that of the formal housing scheme, one that is profoundly rooted in material practice. 6

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5 Santa, for example, is contributing to the family household by running a restaurant business inside their own home. I will come back to how houses are employed to support household economies in the following sub-section.

6 An account of this collective work follows in this chapter and is further developed in chapter six.
Growing Custom-made

Turning to the bodily making of houses also brings to the fore their material conditions and how these conditions change over the years. What becomes apparent is that the notion of the completed house implicit to Santa’s description is only partially true. Rather, houses in both Sierra Hermosa and Colonia Antorcha are hardly ever finished. They develop and change with, through and for the needs of their occupants. Regardless of whether they are built from nothing or moved into as a (supposedly) ready-to-use building – or starting from any point in between – houses are transformed by their inhabitants in accordance with the uses these occupants make of their homes and in light of what they can make happen and how they can make their homes happen. In other words, houses function as infrastructure to provide for and sustain the lives of their residents – and they do so in a custom-made fashion.

Here again, the interplay of formal and informal registers presents complex nuances. For example, the architect Jose Castillo has pointed to the process of counter-directional development and, eventually, convergence of formal and informal housing. Houses that start out from informal situations are gradually developed to meet formal standards as land ownership is regularised and formal urban infrastructure, equipment and services are brought in over the years by the state, private sector or through the work of the resident-builders themselves. Likewise, yet in the opposite direction, houses that start out from a formal situation are gradually transformed to meet the needs or aspirations of its inhabitants. Thus, ready-to-use buildings take on the characteristics of informal housing while being expanded and adapted often knowingly in violation of the

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7 For a growth typology for self-built housing see Ribbeck 2002, 48. In a consolidated neighbourhood houses can eventually acquire a state of ‘saturation’.
8 ‘Site-and-service’, for example, is a developmental urbanisation strategy where the state, international aid agency or commercial developer provides services like drainage, water and electricity to a site yet does not engage in the actual construction of the house.
9 Castillo 2007, 183.
relevant construction laws, land-use rulings and specifications in neighbourhood preservation and environmental protection codes.\textsuperscript{10}

However, while this convergence of formal and informal housing holds true, it does not capture the central point relevant to the context of this study. The description of the formal turning informal and vice versa misses the fact that in both modes resident-builders develop their houses by taking the same direction: that of pursuing, building, sustaining and continuously adapting the basis on which their lives are made. Rather than persisting with thinking in terms of an analytical dichotomy between the formal and informal, what counts here is that in both modes the growing house is employed as the material extension of each occupant’s individual opportunity work, that is, as an active infrastructure enhancing self-infrastructural activity.

In this light, we can turn to Tim Ingold’s general account of how houses are being build.\textsuperscript{11} Elaborating on the inevitable ‘kink’ between ‘the world and our idea of it’, Ingold rejects the idea of the house as a fixed thing, suggesting that \textit{residing} is never a matter of ‘taking up’ something ‘that has already been constructed’ but of participating in the ‘flow of materials’ of life.\textsuperscript{12}

The houses of Sierra Hermosa are paradigmatic in this sense. According to the economy of scale of mass-produced urban developments, most houses resemble a common prototype: in this case, a single storey, two-bedroom terraced house with a surface area of 45 square meters plus a ten-square-metre parking space and small courtyard. This size is regarded as being ‘very’, if not ‘too small’ by most of the participants of this research although it corresponds to the legally-established average for a low-cost (\textit{popular}) two-bedroom dwelling in Mexico.\textsuperscript{13} From the very beginning, therefore, the delivered unit is seen by its occupants merely as a basis on which to build on according to individual needs and financial abilities.

\textsuperscript{10} This transformation of formal houses applies to the development of terraced, single-family housing. In the case of multi-storey apartment buildings, transformations are very much restricted to the ground floor or sometimes balcony conversions (Luque 2014). High-rise apartment blocks thus have been described by Turner as ‘oppressive’ when it comes to meet the survival needs of low-income families (Turner 1978, 48-50).

\textsuperscript{11} Ingold 2013, 47 ff.

\textsuperscript{12} Ingold 2013, 47, 21.

\textsuperscript{13} CONAVI 2010, 55.
In the particular case of Sierra Hermosa, the developer anticipated this growth and prepared the houses not only to allow, but also to encourage and support the growth of the houses. Essential to the initial design is the preparation of the structure to receive a future second floor: the foundations and walls are calculated to bear the additional weight and in one corner of the living room the concrete ceiling lacks reinforcement and can be easily broken through in order to allow for a future staircase.\(^\text{14}\)

Despite these preparations, the formally anticipated direction of growth is not necessarily the first to be followed when adjusting the initial structure and floor plan. Rather, the house first swells towards the street, walling in and roofing over the space originally designated as an open-air parking space. According to the bricklayers who share their experience with me, this is for two reasons: on the one hand, residents want to increase their privacy and security by establishing a solid garage and separation from the street. On the other hand, and more importantly in our context, it is towards the street that additional space is most needed, precisely in order to convert the house into an active agent that helps provide a livelihood. It is by increasing the contact zone with potential clients that the investment in additional space pays off best: carpentry workshops, hairdressing salons, restaurants and, time and again, local convenience stores (\textit{misceláneas}) are what houses, generally speaking, are first extended for, not additional bedrooms.

Thus the formal growth plan is left aside for the time being in favour of an informal yet more productive conversion of the house into an opportunity infrastructure. Santa, for example, is using the kitchen and living room of her house as a restaurant.\(^\text{15}\) With respect to her own and her neighbours’ economic situation, and to the changes that her neighbourhood has undergone in past years, she tells me:

\(^{14}\) Unfortunately, and despite looking back on a rich history of progressive building solutions in Mexico City – the design of the Sierra Hermosa prototype can be traced back to housing types put in practice as early as in 1958 in the today inner-city estate Unidad Santa Fe, developed by modernist architect Mario Pani for the Mexican Social Security Institute IMSS (Luque 2014.) – or forward, for that matter, to much-acclaimed contemporary proposals such as the provision of ‘half-a-house’ for residents to complete by themselves (Elemental 2008; Wiegand 2014.), the present example is nevertheless an exception to the norm of most formal social housing produced in Mexico City and worldwide.

\(^{15}\) Albeit doing so as an interim solution while looking for a different and better-located property to formalise and boost her business.
Almost everybody is looking at how to set up a business. [...] This is the situation: you need to work, to set up a business, like I did, in order to get by. [Because] unemployment is devastating.16

What is consciously budgeted into the equation of such informal conversions is both paying fines to the municipal council for violating building regulations and losing the developer’s guarantee on the house by altering its structure in ways the construction was not designed for.17 Of necessity, the expected return on this informalisation of formal starting-conditions and growth-plans must exceed these costs, showing once again how informality is a ‘zone of penumbra’, as Hernando de Soto framed it.18 In his words, it is a space that shares ‘a long borderline with the legal world and where individuals take refuge when the costs of complying with the law exceed its benefits’.19

Furthermore, what needs to be taken into account are the costs of growing step-by-step. This is to say, the positive payoffs of an economy of scale, as in formal mass-production, cannot be aspired to. On the other hand, the initial costs are very low and the house as opportunity infrastructure can thus unfold in direct correlation to the infrastructural capacities of the resident-builder. In Santa’s words:

People invest little by little in their concrete block and enlarge their homes slowly because they grow with all the limitations they face (por que también crecen con toda las limitaciones de uno). Sometimes you simply can’t, you don’t have the money to buy building materials.

Last but not least, the house is an opportunity asset also when employed as a commodity. Houses can of course be sold at a profit, as Santa did with their former home in Ajusco, Federal District, before moving to Sierra Hermosa. If things go well, the incremental house is incrementing in value, too: first, because the house itself is accumulating brick-by-brick investment and, secondly, the surrounding neighbourhood is consolidating and thus improving in terms of formal services provision.20 Thirdly, with rising levels of both city and cityness,
that is with increasing numbers of houses and thus people with whom to engage in consequential connections, potential clients multiply and business opportunities grow. Hence, the house as infrastructure works also as a tool for inhabitants to speculate on urbanisation just as the formal developer and their shareholders do – albeit on a very different economic scale.

**Investing the Living Body**

Shifting the view from Sierra Hermosa to Colonia Antorcha, the houses we find here are active infrastructures and financial vehicles, too. They, too, provide the operational ground and investment for a (better) future in addition to being a home – only in this case starting the building from scratch.

Alicia Ziccardi and Arsenio González Reynosa argue that the production of informal houses is profoundly social in character and is based on a ‘payment mode of self-financed individual self-production’. More than in other production modes, these authors emphasise that it is the ‘effort [esfuerzo] of the household’ that accomplishes progressive building. Likewise, Ann Varley raises the point that the cost of self-building is not only financial but also ‘physical and emotional, a product of the “suffering” (sacrificio) entailed in building from scratch in an unserviced area’. What the present analysis aims to add to this is to follow up on the corporeal dimension of such effort.

At the same time, I seek to avoid the pitfall of oversimplifying the terminology used to describe the phenomenon of informal housing production. It is well known that despite terms such as *self-built*, residents do not necessarily build with

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at the time of writing, an identical property (without modifications) was on offer at 310,000 pesos seemingly without finding potential buyers for months (Casa Mibe 2013) – her assumption of a general increase in property value is certainly confirmed in light of Tecámac’s rapid urbanisation and improving integration into the metropolitan system (for a similar case of investment in social mobility through housing see for example Zamorano Villarreal 2007).

21 See for example the interview with Doña Margo running her business opposite the pedestrian passage between Provenzal del Bosque and Sierra Hermosa as well as with the car mechanic working on the shore of the freeway to Tizayuca. See a detailed discussion on this matter in chapter six.

22 Ziccardi and González Reynoso 2012, 30, own translation.


their own hands. To the contrary, the informal housing sector is a market like any other, with its own specialist division of labour. Do-it-yourself modes of production are employed in certain cases of land occupation, at determined moments of the process, and in some aspects of the actual construction work only. What is however a constitutive characteristic of self-produced housing is the emphasis on work accomplished directly by the user-proprietor as well as by the use of the hands. In other words, what I want to call attention to is the productive but arduous use of the body – literally working or otherwise being in action – when growing homes.

I do so by looking at how time is employed. Where money is short due to conditions of poverty and marginalisation or due to the lack of formal employment opportunities and limited access to political participation in order to change things, time is one of the few resources that people can invest in improving their situation. Yet time is not free of work, either. Time to invest has to be made by actual physical labour, by the effort of living bodies, whether one’s own or hired.

The first facet of time invested by bodily work we find in the construction technologies employed in the self-building process. As a result of step-by-step building and of limited financial resources much of the actual building of houses in Colonia Antorcha is hand-made (even though not necessarily made by the resident-owner herself). Foundation ditches are excavated with spade and pickaxe and concrete is neither brought by lorry nor mixed by electric mixers but stirred together with the shovel. Building materials in general have to be organised and brought to the construction site in much more time-consuming and corporeal ways – as well as cost intensive ways when we look at the price of each unit – than in the formal, mass-produced and industrialised production of houses. Water has to be brought in by road tankers or collected from rainwater and cement is bought in individual bags according to the process of the construction and financial possibilities of the owner. As a result, construction work is slow and often interrupted by periods of downtime – in addition to being hard work (image 5.1.).

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The second facet of time involved in the making of homes is less obvious. It consists in the actual bodily presence that is being invested. This is, homes on the margin are made to a great extent by *sitting them out*. Extra-legally claimed land has to be secured and while the regular status of the occupation remains unclear, the means to provide this security comes down to materially occupying it with the very body of the claimant. In addition, once a basic home has been established, the presence of one of the members of the household at any time during the day is often the only means at hand to secure the owners’ possessions from theft.  

Occupying space with and for the body, therefore, is the first and best, that is, the most accessible measure to guarantee the foundation and growth of the self-produced house as the basis for subsistence.

In Colonia Antorcha, this investment of time in the form of presence made with the body is institutionalised in several ways. Twenty-four-hours physical presence on the construction site is only one aspect, and a less pressing one, as the organisation has collective means to watch over homes and belongings. However, members are obliged to settle and be present within three months of the moment they are allocated a plot.

More importantly, therefore, is the *body-time* invested in order to grow and secure the home through acquiring and maintaining group membership. Both residents and aspirants for future building plots are asked to present themselves once a week at the colony’s general assembly in order to pay their dues, receive relevant information and discuss matters of general concern. Furthermore, all actual and aspiring settlers are obliged to participate in the Antorcha Movement’s political struggle. This implies travelling to Pachuca, the capital of Hidalgo, and to Mexico City, in order to demand attention to their needs and demonstrate strength before the political institutions. In other words, the basic foundation of the relationship between *settler-members* and the movement is trading participation in the organisation’s struggle, and commitment to its causes, in exchange for the allocation of a building plot. Effectively, this means that complying with the

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26 This is based on interviews I conducted in the municipalities of Nezahualcóyotl and Chimalhuacán, to the east of the ZMVM, in the context of settlements without such strong membership cohesion as under the Antorcha leadership: Álvarez, Rojas Loa, and Wissel 2007, 161. See also interviews conducted with squatters in the inner city borough of Benito Juárez: Wissel 2008.

27 See chapter six.
different obligations set and strongly demanded by the leaders is like pursuing a proper job. A critical bystander, a street vendor selling ice cream on the occasion of the movement’s weekly assembly, explains why the particular housing model of Antorcha does not work for him:

A building plot like these would be brilliant to have but in order to get one [from Antorcha Popular] you need to spend a lot of time on it. You need to support the organisation, go to the sit-ins, to the demonstrations… you need to go wherever they ask you to so you can provide your support (hay que ir a donde lo llamen a uno para apoyar). And no! I don’t have that time. That is why I didn’t want to become a member. Either I dedicate my time to this or I go to work (o dedico mi tiempo a esto o trabajo). So it’s better I go to work. That's how it is.

As a matter of fact, therefore, becoming, being and remaining a member of Antorcha is in itself a form of corporeal work (image 5.2.). Protracted meetings, tedious bus rides and physically demanding marches and sit-ins (plantones) have to be endured, in addition to investing time and money to make them happen. Failing to comply with these obligations leads to being erased from the waiting list or, for those already settled in the neighbourhood, to being expelled from their piece of land. In other words, settlers of Colonia Antorcha pay with their bodily presence in several ways for their home and for the assistance provided by the organisation. This is at the centre of what I refer to as the labour of presence.

As part of this labour as payment, the third facet of invested body-time is the time members are asked to spend on community work. Settlers and aspirants are organised to jointly serve the community by participating in regular work duties (faenas), by which the physical conditions of the settlement are first established and then improved. Together, members level the terrain and prepare the layout of the future building plots and streets (image 5.3.), or they plant trees and build and extend the facilities of the school that is run by the Antorcha Movement. I have referred to such self-accomplished breaking of ground above: where no formal developer is centralising the provision of urban equipment and services, dwellers themselves – right here and now – have to provide these with their presence and hard work. I will continue discussing these collective forms of organisation in chapter six.
Investing the living body and the Labour of Presence: (top to bottom) hand-based construction technologies employed in self-built housing, Sunday assembly of the colony’s settlers and aspirant settlers, and layout of future park, result of previous Sunday’s community work. all January 2012.
**Paper-work**

So far we have seen how houses in the peri-urban realm are grown through bodily work either as actual construction work or as the body-time invested in making presence both for the own house and for the group that sustains it. I will now provide a picture of the fragility of houses when grown through this labour of presence.

The stability that houses in Colonia Antorcha offer to their residents is rooted in the claim of ownership – yet the initial occupation of the land does not, so far, rest on secure legal grounds because the settlement is located on what the official land utilisation plan of Tizayuca (as of 2015) designates as farm land. In addition, houses are not fully secured to their occupiers. They are to a great extent debt financed, either through formal credit schemes as in Sierra Hermosa or, in the case of Colonia Antorcha, by means of a combination of individual micro-credits, membership in non-regulated saving clubs and, most importantly in light of this thesis, obligations to participate in the organisation’s political struggle. The insecurity inherent to mortgage-based real estate is a global phenomenon – one that is integral to the unleashed processes of global urbanisation and financialisation – and has been exemplified, for example, in the US sub-prime mortgage and housing asset-value crisis in 2007. What needs our attention, therefore, are the particular uncertainties built into informally produced and financed houses. In addition to financial risks, these uncertainties find their cause above all in the improvised character of the practices by which ownership is negotiated – practices that could be identified as such thanks to the use of video documentation.

I will describe these practices under the notion of ‘paper-work’. What they make apparent is the fragile relationship between material presence and the socially constructed security thereof. Once again it is through bodily labour that presence

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28 Note that the process of institutionalised regularisation provides ‘de facto security’ for the overall colony (Varley 2002, 454.), yet not for individual members who cannot be issued legal titles yet.
29 Moreno 2014.
is being made – this time however in the form of its registration on paper. This is to say, in the absence of legal property titles, a multitude of hand-scribbled papers and small bank vouchers hold informal ownership in place.

It is in small notebooks and on loose sheets of paper that ‘participation’ and ‘commitment’ are registered. In the hands of the block wardens and other staff members, these lists of names hold the single and ultimate proof of mandatory attendance at the neighbourhood meetings, political activities and other obligatory events. They are also the single and ultimate proof of the mandatory dues paid for printed material and transport to and from the political activities. The effect of one’s name not being on the list can lead, in extreme cases, to the loss of one’s house and plot.

The discrepancy between the material and its fleeting registration on paper becomes apparent in the following example: for a new classroom, settlers had to donate one cement block per building plot. This represents a tangible payment to the community yet the proof of each contribution was translated into tenuous numbers, strokes and check marks on several lists maintained by different staff on loose sheets of paper. It is these notes that count towards remaining in good standing with the Movement; as for securing one’s membership and future in the settlement, the growing pile of cement blocks on the premises of the future classroom is of no use. Translated to houses, this means that regardless of how firm the construction of each settlers’ home, if their participation and commitment is not corroborated on paper, their rights and history can easily be annihilated in the hands of those that control the documents.

At bottom, then, it is not their physical existence that secures the houses of Colonia Antorcha but social relations and the unstable recording thereof. Settlers do not have to pay with money, materials and bodily presence and participation alone: they also have to make sure that their names and plot numbers are registered correctly and stay on the list over time – which in itself is accomplished only by the laborious work of the present body (image 5.4.).

31 For a discussion of property titles and the formalisation of house ownership see Varley 2010.
The accompanying video (video 5.1.) shows the hands-on negotiations this entails. It exemplifies the corporeality and fragility of paper-work in general while giving us a very concrete taste of the particularly unstable relationship between the presence and agency of the body, the material house and the constituent social institution of Colonia Antorcha.  

32 In general terms, documents have always to be sought, kept, periodically presented and, at given moments, exchanged for other documents. However in many of Mexico’s formal and informal securitisation processes the fragility of loose papers is striking. Another example is the often imprecise and overly emended and updated development plans of the person selling building plots along the highway outside the emerging neighbourhoods Diamante and La Gloria that seem to offer anything but a secure foundation for making a financial transaction for a piece of land. See Video 2.1.
Image 5.4.

Video 5.1.  

*Paper-work.* Colonia Antorcha. Video 2.21 min.

*Paper-work:* a woman claiming missing documentation of her previous payments. January 2012.
City Thought out of Incremental Houses

So far in this chapter I have analysed how houses in the northern peri-urban realm of Mexico City are made by bodily work and presence, either from scratch or starting from a ready-to-use minimal unit, but always as a situation-responsive and purpose-built active infrastructure. What role does the infrastructural house play in thinking the relationship between the self and the surrounding urban condition?

As in the previous chapter, the analysis of growing homes has shown how direct bodily engagement plays out in making a living on the periphery. Accordingly, the cityness layers of the Self-made, Laborious and Instant Cities described before find a material expression here in the form of houses and streets that are made by the people, with the body and immediately there where people and houses act together. In the following, I will discuss further aspects of material city-thinking nurtured by the growing of houses.

Prospect City

First of all, employing houses as infrastructure implies aspiring to people’s possibilities of improving their conditions through working out the opportunities they have. There is a suggestion of a capacity to make possibilities happen combined with the effort put into houses, a backing track of hope and faith laid in individual, collective and urban becoming.

Surely, not having any outlook at all would hardly be an option. Why would one make city if it were not to move ahead or, at least, to continue making do? However, the precise way that city and its becoming are being thought as made open is of interest: urban possibilities do not come upon the residents of progressive houses as an ‘urban revolution’ – to point to Lefebvre’s famous expression for describing the dawn of planetary urbanism and its consequences. This is to say that the urban possible does not stand shining ahead of them as a preconceived, more or less distant, utopian future that only waits for its

33 Lefebvre 2008.
completion. Rather, the city-to-come grows precisely by *shaping it in the here and now*.\(^{34}\)

This argument engages with AbdouMaliq Simone’s notion of the ‘city yet to come’ which he coined for the makeshift urban becoming of African cities.\(^{35}\) However, by dropping the word ‘yet’, the immediacy of this urban coming is addressed differently: it is not the case that the city has to be made first in order to become, but that it is ‘now/here’, as Edward Soja has it,\(^{36}\) in the very process of its making. Furthermore, I develop this argument by translating to urban studies Bruno Latour’s analysis of a similar shift in perspective entailed by the Anthropocene. There, he refers to ‘prospects’ rather than to ‘future’ as what humanity can see of its becoming the moment it realises both the possible destruction of the planet and its absolute control over it.\(^{37}\) Hence, I use the term *Prospect City* to refer to that understanding that sees city as a path of own making, as something that is looked in the eye while unfolding through us.

At the same time, the Prospect City points to a reading of the production of houses also in terms of Tim Ingold’s notion of the dwelling perspective.\(^{38}\) Both in Sierra Hermosa and in Colonia Antorcha it becomes apparent how the world – that is, peri-urban socio-ecological relations and their respective material thinking – emerges out of *active engagement with the constituents of one’s own and urban becoming*, that is, out of making houses, neighbourhoods, the self and the collective with and for the living body.

*Uncertain City*

To the same measure that city is perceived as unfolding according to the direct engagement of its multiple makers, it is also perceived as uncertain, that is, as an unknown, never-walked-before path that has to be navigated and mastered day-by-day in order to be of existence at all and lead somewhere, somehow, forward.

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\(^{34}\) Cf. Latour 2010, 485.
\(^{35}\) Simone 2004a.
\(^{36}\) Soja 1992, 94.
\(^{37}\) Latour 2010, 486; See also: Dibley 2012, 5.
\(^{38}\) cf. Ingold 2000, 5, 153.
This is the layer of the *Uncertain City*, describing how cityness is thought out of the incremental house acting as a node in a wide and constantly emerging field of possible, yet also vague and fleeting, relations.

As this chapter has shown, it is on the basis of the house that much of the self-employed, infrastructural opportunity work is set-up, maintained and extended.\textsuperscript{39} This becomes apparent in windows at the front of buildings converted into convenience stores, former garages into hairdresser shops or living rooms and kitchens into home-restaurants. It is visible also in the cases of both Doña Margo and Eduardo and his wife, whom we met in chapter four. They, too, rely on their own and their relatives’ houses in order to anchor and expand their infrastructural operations. Merchandise and street vendors’ equipment need to be stored and prepared at home and the street vending activities are often made possible and enhanced thanks to the relative proximity to the node of family and neighbourhood support networks – as we have seen, for example, through additional child-care provided by Doña Margo in addition to selling cloths.

However, houses in Colonia Antorcha and Sierra Hermosa vary in their conditions and making and thus, I argue, lead to distinct intensities of how the Uncertain City can be felt. Houses in both neighbourhood types represent their owner’s patrimony (*patrimonio*), that is, the property asset by which inhabitants in Mexico and elsewhere aim at securing their own and their families’ survival in the event of age, illness or other economic hardship. Furthermore, in a strict sense, neither type of house is necessarily built with the physical labour of the residents themselves. Yet despite these similarities, the *material engagement* with the house is very different in the two types. This is rooted in the distinct levels of ready-to-use-ability of the houses.

Put simply, in Sierra Hermosa owners move into basic but fully equipped homes.\textsuperscript{40} Both houses and streets are completed in advance and thus receive newcomers with (some) formal services, which inhabitants therefore do not need to provide informally through their own infrastructural, bodily work. Furthermore,

\textsuperscript{39} Notably very different from those workplace-home relationships based on employment where the provision of livelihoods does not rely on the specific material characteristics of the house to produce a purpose-built infrastructure for the work to be done.

\textsuperscript{40} I have discussed Ingold’s rejection of such a description above.
residents hold legal titles to their properties from the outset. In Colonia Antorcha, to the contrary, newcomers start inhabiting nothing more than an empty and dusty piece of land:

When we arrived there was nothing there. Just like now: we don’t have water or electricity, nothing. We arrived to nothing more than the soil of the ground (Venimos así a como está la tierra). We brought our stuff and once we had everything here we started paying for the house. We were very few, maybe some four or five families who lived here from the very beginning. All this was baldo (fallow/waste land), just like the land over there.

Hence, it is the precariousness of the initial stage of the house, the legal instability and the prolonged period of enduring the lack of basic services that marks the difference. In Colonia Antorcha people are obliged to move in to their allocated plot at most after three months. As a result, they start out in very basic huts, often using cardboard, wooden pallets and plastic sheeting for the walls and roof. They start by inhabiting the very soil of the ground, as research participants described it, and even though in most cases this initial state is relatively quickly overcome, the subsequent proto-house made from cement blocks normally provides nothing more than a single room and outdoor cesspit for the entire family.⁴¹

Consequently, in Colonia Antorcha, the emerging city is felt first as an antagonistic and inhospitable place – yet one that is nevertheless being inhabited and made welcoming. The house, as humble as it might be in the beginning, proudly stands against the prevailing precariousness and uncertainty. In this act of claiming and cultivating land to become urban, the Uncertain City resembles aspects of the Self-made, Laborious and Instant Cities discussed in chapter four. Likewise, it points to the individualisation entailed in such city-self-production. Yet what I have described earlier as the failure to socialise the costs and risks of urbanisation⁴² is presented by Melba, the Antorcha Movement’s local leader, as the benefit of each member’s labour of presence:

You come here through hard work (llegan con esfuerzo) and day-by-day you will be making your home. […] Everybody is working for themselves (Cada quien trabaja para lo suyo).

⁴¹ Cf. e.g. Ziccardi and González Reynoso 2012, 29-30.
Regardless of competing evaluations, the progress of each house is essentially perceived as the sole responsibility of each resident-builder (and family). This is despite the fact that it is social relations beyond the family that are the foundations on which houses are grown. As we have seen earlier, houses are both the tangible manifestation of family survival units and sustained by intangible social relations that are only precariously fixed on paper. Therefore, they cannot be regarded as permanent, but rather emerge as the conjunctions of one’s own and other peoples’ lives. Consequently, houses also include the possibility of being left behind if this relationship is not sufficiently beneficial.

Residents of both settlement types repeatedly express how they try, have tried, or missed keeping alternative options open. This is to say, that they read the local constellations, assessing how these constellations provide or do not provide the ground for them to work out the opportunities they seek. Potentially, if they don’t make it here, they might well make it elsewhere. Potentially, also, they are always ready to jump, incorporating spatial mobility into their lives: in 2012 Santa is thinking of selling her house in a few years time – but a few years later, in 2014, has changed her mind; Margarita would follow any job, anywhere, she tells me, and Israel is only residing here temporarily. As soon as he finds a new job, he insists, he will look for a place closer to his future employment.

Certainly, this openness to the possibility of moving on stands in direct relation to the investment already made in the site, to the risks and difficulties implied in selling houses and to the options of alternative location that are envisioned. Yet houses, with or without infrastructural amendments, are put on sale, left abandoned or traded for something similar elsewhere, and the body-time and membership fees of several months or years are written off as a failed investment, if other options seem more feasible. It is out of such inherent nomadism that another layer of socio-material consciousness emerges: the (Potentially)

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41 Varley 2002, 456-457. These implications are still significant, I argue, yet the author refers to informal settlements before the massive expansion of the affordable housing market. Options and their assessment might therefore have changed.
Transitory City, which is, at the same time, the City of (Limited) Choice, because the mobility it suggests often remains imaginary.

The case of Ángel, a proud, self-made man and owner of the building materials store in Colonia Antorcha, provides an example. In our interview, Ángel describes how it was a gamble to settle and open his business right here instead of somewhere else:

We were among the first to arrive. At the beginning it was weird because there was nobody. There were like four houses; so I said: this doesn’t look like it will have any future. But here we are! Now we are only lacking electricity and then we are on the other side. […] See how fast the settlement develops. [I can tell], because I have lived in other settlements, too, and sometimes they just don’t progress. If the neighbourhood and I had not developed I would have looked for another neighbourhood to set up this business, because of the investment [in merchandise] I had already made.

The reasons to move on can be manifold: the lack of clients or following the wrong business idea are only among the most obvious. In the case of two elderly informants, it was the need to make way for the next generation that brought them to start anew on dusty, un-serviced plots in Colonia Antorcha. They tell me that it was a well-considered decision to leave their former homes so that their children would have those as a secure place from which to build the future of their growing families. Others left the colony in more or less open conflict because of disagreement with the Movement’s aims or methods. Furthermore, families might break apart, or different interests and beliefs might lead individuals and groups to turn away from each other. Alexander Jachnow, for example, has demonstrated how party politics impact on the lives of informal settlers\textsuperscript{44} – an issue that also influences Santa’s efforts to organise her neighbours, as we will see in chapter six.

\textsuperscript{44} Jachnow 2003, 82-85.
Having an Address

Thinking the city as potentially transitory, however, requires further attention. It presents a problem to dwellers that I will sketch out by drawing on Doña Margo’s case, first introduced in chapter four. Opening our conversation, the first thing she provides me with is not only her full name but also the precise address of where she is living:

Eighth cul-de-sac of Rancho Nuevo Street, block 56, plot 30, house 2… behind the market, close to the church.

Both the format and the contextualisation of the address are of interest. The four-tier numerical code of street, block, plot and house – the house’s ‘official number’ (número oficial) – is typical for Mexico City’s peripheral neighbourhoods, regardless of their formal or informal provenance. As we have seen, citification is also a technical issue that starts with subdividing land into sellable units. Being able to identify these units both on paper and on the ground is of great importance in order to secure claims and start employing the land by growing houses as infrastructural agents. With this in mind, the four-tier number format of the address has proven to be practical in order to definitively name and translate each plot from plan to ground. But it has also proven to be rather cumbersome when it comes to describing how to actually find these plots in material, lived space. Instead, landmarks like the market and church guide the way in everyday urban practice.45

The question I pursue in this context, however, is less concerned with locating land or with everyday wayfinding, but rather with Doña Margo’s need to initiate our conversation with her address in the first place. Why was the address of importance if we actually meet somewhere else on the street and I did not have to know where her home was? The reason, I suggest, is threefold.

45 Compare Das 2013. This is the case in particular during the early stages of informal settlements when streets still go without a (formal) name as the author pointed out in her reflections on the agency of addresses in informal neighbourhoods in Deli.
First, it is a matter of rhetorical politeness to offer me her home and thus make me feel welcome. Secondly, it is a way to express pride in her accomplishments in the emerging city, demonstrating how her infrastructural work bore fruit in the form of a place she made her own. Most importantly, however, I argue that providing me with an address sustains her claim to be who she declares to be: *This is who I am and I can prove it by means of the location where you can find me.*

In other words, it is in the address that Doña Margo as an individual settler of the 20-million-plus city-region of central Mexico holds proof of her existence in space. ‘Street 8, block 56, plot 30, house 2’ – this is where Doña Margo situates the symbolic centre of her infrastructural being. From here she operates, from here she engages in her daily work of making presence in Sierra Hermosa’s becoming and making this presence of hers productive.

Furthermore, this need to bear proof of one’s existence in space is particularly important when living in unstable legal and social conditions. Doña Margo, for example, lives at this particular address despite the fact that it is not her own house, but that of her daughter, and where she found refuge after the death of her husband. Likewise, the settlers of Colonia Antorcha are to be found under their respective addresses despite the fact that they will not be holding property titles for many years to come. In any case, they do have an address which is employed as if it were a proof of authorisation to remain where they are. This imaginary authorisation gives them a sense of security, as it provides them with a (technical while at the same time intangible) anchor point from which to engage in the urban becoming they are part of.

The address, then, makes it possible to discursively stabilise the shifting grounds of existence. It allows residents to take up a place in relation to the city and society and to sustain their movement within both. Developing such a sense of self-reliance is important precisely because people and houses as infrastructures are ‘flexible, mobile and provisional’ in character. It is imperative also because successfully making it here depends essentially on bodily presence and this presence, in turn, is sheltered by the address.

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46 ‘My home is your home’ (*mi casa es tu casa*) is a common way to express friendship in Mexico.
47 I was pointed to this agency of the address by AbdouMaliq Simone in personal conversation.
48 Simone 2004b, 407.
From the vantage point of the address, furthermore, formal access can be negotiated. With out her address, Doña Margo would not be able to fight, as she does, legal disputes with the state over the pension of her husband, or claim benefits from the municipal authorities such as reduced travel fares and the waiving of street vendor fees for the elderly. Formal operations depend on such proof even though, as we have seen, this is the case despite the fact that the material place represented by the address is often unstable and the documents that are used as proof of ownership are frequently as precarious as the loose papers by which settlers in Colonia Antorcha uphold their claims to their building plots.\footnote{Here it is worth noting that in Mexico in order to prove one’s address it is widely accepted to simply show a telephone bill (which need not even be issued in the name of the person providing it as proof).} At the same time, having an address renders people (relatively) visible for the state and others. They can now be traced, charged taxes, and, in short, held accountable for their lives. In this sense, the address is also a tool of power, a means of fixing peoples’ presences in space. Seen from this viewpoint, the address is revealed as being an essential aspect to the double-sidedness of urban development which AbdouMaliq Simon describes as being ‘not simply about meeting the needs of citizens’ but also about ‘holding people in relations that make them governable’\footnote{Simone 2004a, 7.}.

**Conclusion**

We have seen how houses in peri-urban Mexico City are the material extension of their inhabitants. They are infrastructural machines that help to secure the livelihood of their occupants and wider families precisely because these user-producers grow them in a custom-made fashion. Houses are active tools as well as important assets for providing safety – albeit emerging from differing levels of material engagement and often founded on unstable social relations and an unreliable form of registration. Consequently, as conjunctions come and go, houses not only grow according to the growth of their builder-users but can also remain the same for years or decline even when people’s circumstances, capacities or luck change in the evolving city.
This is to say, in the incremental house of both formal and informal provenance the infrastructural practices of their inhabitants are given material and social stability. At the same time, this perceived stability is not necessarily stable at all but laboriously sustained through the living body and constantly re-negotiated in an array of social relations. These range from making bodily presence, to paperwork, to deploying the power of the address in order to prove one’s own existence. In other words, in order to grow houses residents need to accomplish what I call the labour of presence. At the same time, houses themselves support and expand this presence of their owner-users both materially and as the symbolic and operational nodes from which to access all kinds of relations and frameworks.

Drawing on this agency, I have furthermore shown that houses describe distinct perspectival access points from which residents of the peri-urban realm materially think their own and their surrounding’s urban becoming. The three principal layers of cityness afforded by growing homes are materially thinking the city as unfolding in immediate relation to its making and in line with the engagement of its everyday makers (Prospect City), as appearing in nuances of ambiguity and insecurity (Uncertain City) and as continuously unfolding as real or imagined paths that might or might not be taken (Potentially Transitory City).

Finally, in their quality of providing a material proof of their own existence, houses are also the memory of their infrastructural agency and of the work and bodily effort that has gone into them. This is why documentary photography in combination with wire-frame-like sketches that reveal the material development of houses over time turned out to be particularly useful for this analysis. I believe the following images and drawings (5.5. to 5.11.) provide empirical evidence for my argument. They are a visual inventory of houses and their transformations in Sierra Hermosa and Colonia Antorcha, following with the pen the growth of façades from either of these two neighbourhoods between December 2011 and July 2015.
Drawing 5.5.
(Almost) original design of Sierra Hermosa houses. December 2011.
Drawing 5.6.
Need to set up a business. December 2011.
Drawing 5.7.
Informal extension to the front. December 2011.
Drawing 5.9.
Drawing 5.10.
Image 5.10.

Early stage of the incremental house. January 2012.
Image 5.11.

Ground floor in the process of consolidation. January 2012.
6. Nurturing Neighbourhood

Introduction

This third of five empirical chapters is dedicated to how city is being made and materially thought out of the collective. Certainly, we have come across collectiveness before in previous chapters. Be it in the form of the family, neighbours or customers or, for example, as social movements, in any case, social connections are established and maintained in order to set up networks of exchange or to tap into the resourcefulness of the material condition. Yet while chapter four analysed individual bodies acting as infrastructure and chapter five looked at houses being employed as infrastructural extensions, both of which implied making connections, here now I turn to the making of collectiveness as such, shifting the analytical perspective from the ‘I’ to the ‘we’.

As in previous chapters, I develop my findings by drawing on ethnographic conversations together with participant sensation/observation and my own audio-visual practice in Sierra Hermosa and Colonia Antorcha. However, in order to point to the nuances of nurturing collectiveness, I also draw on additional explorations and encounters in adjacent locations. These are, in particular, the estate of Villas del Real, located on the other side of the road, as well as the open fields surrounding Sierra Hermosa. I do so following the participants of my research into the comparisons they themselves introduce while explaining their respective situations.

Once again, this chapter consists of two sections. The first part will look at the practices by which collectiveness is made. I address this nurturing of neighbourhoods under the notion of collectivity work. The second will discuss the multiple and, at times, contradictory layers of cityness that can be materially thought out of these neighbourhood-nurturing practices and out of the positions they describe.

However, this chapter also shows how other forces, too, impinge on the conditions of becoming that we find in Tecámac and Tizayuca. These forces are public and commercial actors as well as social institutions involved in the process of urbanising the land. Furthermore, there are abstract financial and political conditions as well as tangible geographical criteria (topography, climate,
vegetation, etc.) that each play their role. Together, these forces and agents shape the ecological conditions in which peri-urban selves, houses and collectives emerge. They influence the configuration of neighbourhoods, that is, they affect their socio-spatial forms of organisation and their material expressions. Accordingly, they are relevant, too, when describing what layers of cityness can be thought out of specific peri-urban socio-materialities.

Constructing Unity

In chapters four and five we have come across obligatory work duties that residents and aspirants have to comply with in Colonia Antorcha. In these, I argue, we can find a strong case for the collective acting as a key ingredient for providing lives and growing homes on the margin, gathering and intersecting lives which is also the basis for constituting city in terms of cityness.¹ In other words, people and houses as infrastructure do not exist on their own but need to be inscribed into conjunctions of people and houses in order to sustain them. These conjunctions, I argue, rely essentially also on settlers and residents combining their efforts: people’s own infrastructural work can be boosted by aligning it to the infrastructural work of fellow urban practitioners.² Thus, identifying and pursuing common interests, as well as negotiating difference and resolving conflict, are vital aspects for the praxis of accomplishing opportunity work and growing helpful homes. Constructing collectivity, that is, nurturing neighbourhoods, is a substantial practice for growing both live infrastructures and infrastructural machines on the margin.

In the informal housing sector, roads, building plots and water have to be claimed, organised and executed – all done essentially by mobilising collective work. According to the settlement’s location, its political struggle and its organisational capacity then electricity and public lighting, running water and drainage, street

¹ Simone 2004; see also Knowles 2014, 54.
² A complementary approach focuses on the agency of physical infrastructure – visible or invisible – in bringing people together: Amin 2014; Cf. also Angelo and Hentschel 2015.
pavement, urban facilities (such as schools) and green areas follow. At all times, security has to be provided by the group for its members and by the members for their belongings.

In the formal sector, different requirements and priorities guide the activities of the collective, yet the need to organise nevertheless remains strong. Issues here range from security at the top end to questions of neighbourhood preservation and urban image. In addition, different parties need to be brought together in order to organise wider-than-individual concerns – Santa, for example, has tried negotiating with neighbours about not using the street for storing building materials. Likewise, internal conflicts have to be solved, as Margarita tells me regarding her own experience living in a similar estate close by:

Where I live, which is a closed street, you have to pay a monthly quota for waste collection... And if you do not pay the maintenance fee, you lose the right to park your car. They close the gate, change the locks and won’t give you a key. So what ‘residential life’ is that? It’s nothing but problems. […] We have bylaws… but I reckon they serve no purpose. The truth is they [the development company] are only looking out for themselves.

Getting to Know Each Other and Gathering

The organisation of unity is thus crucial. It points to what Wayne Cornelius has described as the group’s opportunity structure in terms of political participation. This refers to the ‘fields and frequencies of the opportunities’ that residents have to participate in their neighbourhood’s urban becoming and integration, and which they employ on the basis of their experience of the extent to which their needs can be met by collective action.

At the same time, this opportunity structure comes at a certain cost which also has to be taken into account by the infrastructural self. In the case of Colonia Antorcha, settlers repay the Movement with dues, time and commitment, for the work invested in organising the group and its struggle. In Villa del Real, residents are organised in a formal neighbourhood association, based on written bylaws.

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3 See e.g. Ribbeck 2002.
4 Cornelius 1980, 146-8.
Meanwhile, in Sierra Hermosa, where there is neither strong leadership nor institutionalised organisation, getting people to pull together relies on efforts of persuasion. Here, in particular, connections have to be made on the basis of people’s own infrastructural work, establishing individual ties in laborious processes of face-to-face formation of opinion. This collectivity work, I argue, rests on significant neighbour-skills similar to the street-skills of the informal vendors’ opportunity work described in chapter four. Doña Margo has found a memorable slogan for them: ‘conocerse y convidar’ – ‘getting to know each other, gathering and sharing’. Yet while praising the benefits of such work, she also points to the obligations, as well as to the resulting dependencies, that such commitment to mutual support structures imply:

I share with them and they share with me (yo convido y ellas me convidan). This is what I tell them: In a gated street (privada) you could love each other as if you were family. Because who will be there for you if something happens [if not your family and neighbours]? You have to get on well (Tienen que llevarse bien).

Santa’s words confirm the importance of these skills and practices of collectivity:

You make yourself known and build friendships (Uno se hace conocer y también hace amistades).

At the same time, Santa provides a picture of how difficult the actual making of collectivity can be. She once tried to set up a neighbourhood committee in order to protect the appearance of the houses in her street, but it came to nothing. As a result, she feels condemned to stand by and watch as the general aspect of her immediate surrounding deteriorates. The reason she gives for the lack of concern and participation on the part of many of her neighbours is their tenant status. Unlike herself, many of her neighbours do not own their houses but are paying rent, she claims. Consequently, she concludes, they care less about improvements to the houses and street, especially when they entail additional costs. Santa draws on the case of Villa del Real to make her point. Certainly, there, in what is effectively a gated community (image 6.3.), houses look all the same and well-kept even years after the development was first built (image 6.1.). At the

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5 Convidar translates to invite, share.
same time, arguably, residents there do have it easier when it comes to organising the community, particularly because the developer provided them with the formal structure of a neighbourhood association (image 6.2.) which now watches over the development’s social and physical constitution.⁶

What Santa neglects to mention is the price that inhabitants of Villas del Real pay for their aesthetic distinction in the visual and social space of peri-urban northern Mexico City: in addition to monthly quotas for the community committee and a private security company, homeowners in Villas del Real are obliged to comply to a strict regime not only of rules and values established in their contracts of sale, but also of social selection. So, while the neighbourhood statute now safeguards the aesthetic appearance, prohibiting any modifications to the houses and even establishing an obligatory colour code, each resident has also had to pass a tight screening of their socio-economic situation and family structure before being allowed to buy property in the estate. Verónica and Cristina from the Villas del Real neighbourhood association explain the procedure:

They did a socio-economic and a family study and it was assumed that they would not sell you a house if you had more than three children. Supposedly, the prototype of the house is American style (casas americanas) [...]. This is how things were handled in the beginning, for the first and second stages [of the development]. Up as far as Monarcas street people were obliged to finance their houses with [bank-issued, private] real estate mortgages.⁷

Early residents were willing to pay such extra costs because they, too, saw these regulations and institutions as the means by which to build and guard their neighbourhood’s internal cohesion as well as external uniqueness. However, the strict regime was only maintained until 2002, when the developer also started accepting mortgages issued by INFONAVIT. With this increase of eligible credit schemes a less affluent clientele – though one that still had access to formal mortgages – was allowed access to what was still marketed as an exclusive development. As a result, the pressure on transforming houses rose, meaning that the work of the neighbourhood association is now primarily that of preventing the initial agreements from being watered down.

⁶ Surely not without causing its own set of conflicts.
⁷ That is in distinction to loans issued by INFONAVIT and FOVISSSTE as in Sierra Hermosa.
*Community of Common Destiny*

In Colonia Antorcha, to the contrary, negotiating unity works very differently than in both Sierra Hermosa and Villa del Real. Here, group unity is constructed not by statute or infrastructural self-organisation but by strong leadership and by employing the discourse of poverty and resistance. In exchange, the movement demands unconditional loyalty, a dedication that has to be proven by each member, not only in the mandatory participation in assemblies, community work and demonstrations, but also by expressions of *true commitment*. In her Sunday addresses (images 6.4. to 6.6.), Maestra Melba, the movement’s municipal leader, is making this point while rousing participants for the following day’s protest.

Your [level of] participation will show me who among you is committed (*quien este con compromiso*). For me the people who do it only out of obligation are of no use. I need those who do it out of commitment to the just cause.

Listening to Melba reveals a practice of unity-building based on subordinating members to the group. In the style of grand narratives, Antorcha pictures the world in a clear-cut dichotomy where ‘we the poor’ stand against an overwhelming system of oppression maintained by the government and elite. Compliance is constructed as a matter of no choice, according to reductive logics like that of either you are with us or you are against us.

In sum, the group’s cohesion is thus constructed on the grounds of domination, allegiance and a narrative of adverse conditions that can only be vanquished in unity. In addition, these *politics of cohesion* are kept deliberately hazy – exemplified in the obligation to demonstrate true commitment measured on the arbitrary ground of the personal judgement of the movement’s leaders. This technique follows the lines of a political style that constructs and maintains

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8 Interview with Maestra Melba, municipal leader of Antorcha Popular in Tizayuca. She is referred to as *maestra* out of respect and because she holds a university degree. See also MAN 2013. This thesis is the space neither to discuss the existence of poverty and the need to struggle against it nor to dispute Antorcha Popular’s social and political intervention. Rather, my focus is firmly limited to the way unity is build.

9 Interview with Maestra Melba.

10 *Nosotros los pobres* is the title of a popular Mexican drama film from 1948 with film star Pedro Infante (directed by Ismael Rodriguez).
submissive loyalty on the basis of incentives and rewards, championed in Mexico by the political party PRI (Partido Revolucionario Institucional). In the Antorcha Movement, too, opinion is formed not by open political debate but by exercising a hierarchical order that compensates members according to how much their commitment meets the approval of those in power.

The ground, then, on which Antorcha’s leadership model is built is a persistent state of uncertainty regarding both the rules of the organisation, the success of the colony, and people’s own application. At no time is it clear to aspirants when they will receive their building plot, how much it will cost in total, or whether they will even receive it at all. This is because the organisation itself does not know for sure the outcome of its political campaigns or of the informal, extralegal operations it undertakes in order to occupy land and hold on to it as a site for its members. Yet it is also the case because uncertainty itself is the tool by which ever more true commitment can be demanded in order to keep the movement going. As we have seen in chapter five, keeping your name on the multiple waiting and participants’ lists is essential, yet does not guarantee that it will still be there the following week.

In many of the interviews with colonists and aspirants we can appreciate the effectiveness of Antorcha’s politics of group subordination. The logic of incentives and rewards, uncertain rules, and the narrative of resistance are internalised to such a degree that some refuse to talk with me at all out of fear of saying something wrong, while others present the organisation as if it were a strict but caring parent that exercises both power and mercy. As Melba puts it:

A leader is someone who directs yet who also takes care of you (*quien dirige pero también quien se preocupa*). They, the government, are not our leaders.

Furthermore, it is worth noting that Maestra Melba, apparently, knows all the colonists and most applicants by name as well as exercising her power through an extensive cadre of block wardens who control social behaviour, deliver orders and

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11 Román 2014.
12 See interview with settler and block warden Alexandra.
information and report back to her in private. For example, Alexandra, one of the wardens I accompany in her work, tells me how:

As wardens we also check people are keeping their plots tidy and that they comply with settling down here (que ya se vengan a vivir).

When needed, Maestra Melba publicly states her power over those who disobey, so as to bring the group back in line: once during my fieldwork I witness the case of an applicant who lost his temper as a result of the continued delay in the delivery of his promised building plot, and who was subsequently expelled from the group and grounds. The next Sunday, Melba recalled the incident with the following words:

I will not allow any one of you to speak badly of the organisation. Here, there is no such thing as human rights and all that (aquí nada de los derechos humanos ni nada); because this is an Antorcha settlement. I will not allow them to come and speak badly about us in our home.
Façades used as billboards.
Above: ‘In the State of Mexico members of Antorcha are subjected to prosecution and humiliating actions.’ February 2014.
City Thought out of the Material and Practised Neighbourhood

So far we have seen how neighbourhood cohesion is practised – and practised differently in Sierra Hermosa, Colonia Antorcha and Villas del Real – either by people’s own collectivity work, by strong leadership or by formalised neighbourhood statutes. Nurturing neighbourhood, when achieved bottom up among individual residents, was referred to as a practice of getting to know each other, gathering and sharing. When institutionalised by informal politics (Colonia Antorcha) or formal sale contracts and bylaws (Villas del Real) I described it either as the expression of submissive loyalty or as being outsourced to a specialised committee. The following second part of the chapter will draw on these accounts in order to arrive at layers of cityness that can be materially thought out of these distinct positions and practices.

In order to do so, however, what is still missing is taking into account the spatial, material and other contextual (political for example) conditions in which neighbourhoods are set. Getting to know each other, coming together and aligning resources is undoubtedly affected also by population density and geographical distance, by political or administrative frameworks, as well as by environmental influences (heat, whirlwinds of sand and dust, etc.) and the particular tangible and intangible assets (building materials, manual capacities, etc.) at hand. These aspects distinguish local opportunity structures. They, too, play out in the layers of cityness thought out of the collective and its specific collectivity work.

In the following, I will therefore emphasise those particular spatial and material characteristics and political frameworks of the three fieldwork sites that proved to influence local city-thinking. Their relevance was revealed both by my interview partners and by my own sensory research explorations.

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13 Cornelius 1980, 147.
Compartment City

Sierra Hermosa, Colonia Antorcha and Villas del Real in particular, as well as most other sites studied throughout this research, can be described as discrete residential settlements, socially and spatially oriented far more inwardly than towards any of the surrounding urban or non-urban fragments of the peri-urban. This specific land-use pattern has been referred to as island urbanism,\(^{14}\) rooted in the logic of socio-spatial segregation and thus fragmenting both physical and social space.\(^{15}\) This is particularly the case in the peri-urban realm.\(^{16}\) Accordingly, when living inside any of these islands, the cityness layer that first can be thought from such position is that of the Compartment City.

While often brutally \textit{cementing} distance in space,\(^{17}\) segregation and fragmentation are nevertheless not simply fixed arrangements but essentially ongoing processes. They are, to a great extent, the result of practices that aim at group cohesion. The point made is that collectivity work, though aimed to the inside of the group, also points to the outside by separating space into discrete enclaves that stand autonomously or even antagonistically in the peri-urban continuum. The creation of social and material boundaries, the privatisation of the public realm within the estate and its neglect and abandonment on the outside are the well-established consequences.\(^{18}\)

In Colonia Antorcha the group is formed on the inside by means of its subjection to strong leadership and polarising discourse purposefully directed against everything outside, be it in the guise of the capitalist and imperialist system, the elite, critics, or any segment of society that is differentiated as being better-off.\(^{19}\) Or take the case of Villa del Real, where the group is constituted on the ground of strict bylaws and by physically closing off access streets in order to privatise space inside the residential development. In Sierra Hermosa, to the contrary, we have witnessed how Santa struggled to create similar cohesion – and to achieve a similar visual expression thereof by regulating the aesthetics of

\(^{14}\) Urban Catalyst 2007; for Mexico City see Duhau and Giglia 2008, 135 ff.
\(^{15}\) On segregation in Mexico City see e.g. Rubalcava and Schteingart 2000.
\(^{16}\) Aguilar and Escamilla 2011, 6.
\(^{18}\) Caldeira 2000; Davis 2006 among others.
\(^{19}\) Esquivel Castañeda 2014; Plata Pérez 2014. See also interview with Melba.
facades – in the absence of established social and physical, formal and informal rules and institutions.

In all the cases analysed, the most common justification for practicing island urbanism is to be found in the experience of, as well as in the discourse on, crime and security.\textsuperscript{20} Guillermo Heras, head of the administrative unit in Sierra Hermosa describes the situation as follows:

> It is because of security. Security and crime are the order of the day (la seguridad, la delincuencia, estan a la orden del día). So what do people try to do? Well, creating their own little fortresses… This urban development is completely closed. It has its entrance and exit and that’s it. This is how things are. Everything is completely closed.

Whether justified or exaggerated, there is no doubt about the reality of the fear peri-urban dwellers experience, as well as the socio-material consequences it produces. The citification of the periphery has incorporated the gated community as its – seemingly – one and only settlement type, reproducing it in ever new variations according to the purchasing power of its clients. Both up-market and down-market formal developments – and even the informal settlement of Colonia Antorcha to a certain extent – build on the same scheme of one, or at most two, access points that can easily be controlled.

The experience of these fortresses, however, is diverse. While for residents of Sierra Hermosa it stands as a weak promise (due to the fact that the mechanisms of control are weak), for the settlers of Colonia Antorcha it is part of being a community in resistance. Members of the movement see themselves – and are indoctrinated to do so – as vulnerable and dependent on the group. The social fence they build around their settlement provides them with protection from – among other more tangible foes – ideological adversaries and the chaos of competing interpretations of their condition. This culminates in mobilising the walls of their houses to shout out their political claims as much as to defend their territory (images 6.7. and 6.8.).\textsuperscript{21}

\textsuperscript{20} See also chapter three for a reflection on fear and how it affected my fieldwork.

\textsuperscript{21} Tonkiss 2005, 140-1, drawing on both Michel de Certeau’s and Walter Benjamin’s work on urban graffiti.
Very different is the experience of the Compartment City when thought from out of Villa del Real. This residential development presents itself to its inhabitants more as an oasis, as a place that stands out of the surrounding urban field in the fashion of a *retreat from* rather then a *defence against*. A reflection of the social construction of this, supposedly, ‘better-place’ can be found in the attributes by which it is advertised: ‘American-style houses’, ‘residential living’, ‘all private’. Nevertheless – or precisely because of its air of exclusiveness – this oasis is seen by its residents also as a clearly demarcated entity that has to be protected against ‘the city’. Its neighbourhood association therefore primarily works in defence of the gated community’s distinctive features and privileges. One key concern is the fight against the infiltration of street vendors. This is a tricky issue, as the representatives of the association tell me, not least because it is the residents themselves who keep buying from the vendors and thus foster the proliferation of what is perceived as an *assault* on their privacy.

This notion of privacy requires further attention. As presented above, many settlements and residential enclaves of my study are subjected to strong claims of ownership. With these claims often comes an understanding that it is the residents of each compartment alone who decide on the rules and manners of their collective space. Such efforts in practising self-governance intensify the fortification of the Compartment City. But they also turn against the own group members when they are accompanied with further attempts that seek to exercise self-jurisdiction.

In the case of Antorcha, for example, the neighbourhood is understood to be private in the sense of being an extra-jurisdictional space within the wider urban context. Here their *own* laws rule, not those of others who use their laws against us, as leader Melba makes her group understand. At the same time, the *colony* is a space also of controlled and thus limited privacy for its group members. Settlers live not only under the eyes of their neighbours but, through them, under the eyes of the organisation. Irregularities and misbehaviours like absenting oneself from one’s building plot or failing to keep it tidy – but also drinking in public – are reported and brought up at the Sunday general assemblies. Presided over by the

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22 Quotes taken from billboards advertising new developments along the Mexico-Pachuca highway.
23 Interview with the chair and secretary of the Villas del Real neighbourhood association.
municipal leader, and firmly controlled through her, the assembly then rules over those indicted as if they were *offenders against the cause of the movement*. Sentences range from presenting a warning to expelling a member from the organisation, removing his or her plot and passing it on to someone else (which normally would not happen until three warnings go unheeded, I am assured).²⁴ Both the uncertain legal situation of the land titles and the deliberate absence of formal documents stating the exact power of the assembly and the process of its rulings play against the accused.

While Colonia Antorcha and its strong social organisation certainly present an extreme case, practising extra-territoriality nevertheless reveals itself also to be a common feature in weaker expressions of the compartmentalisation of the peri-urban. Walls, gates and the neighbourhood association of Villa del Real, yet also the aspirations of the residents of Sierra Hermosa to exercise control over the appearance of their houses, all point to how socio-spatial self-determination is regarded as an ideal; and how most neighbourhoods are understood to be each group’s ‘home and castle’.

This understanding of the neighbourhood as private home and protected castle becomes apparent in both physical space and social practice. Check points abound and gate-keeping practices manage and control the interaction between what residents experience as discrete yet adjacent private spaces. Though more or less permeable, these practices comprise the recording of date, time, name and reason for crossing the border. An outstanding example can be found between Sierra Hermosa and Provenzal del Bosque where a (pedestrian) door, literally, connects and separates what are two developments built by the same building company yet sold in different socio-economic segments of the market (images 6.9. to 6.11.).

²⁴ See interviews with settlers, wardens and Melba. A more positive reading presented by the block wardens has it that people are happy to help each other with their problems in this village-like social setting.
Proenzal del Bosque: pedestrian door and gate-keeping practice at the border to Sierra Hermosa. February 2014.
Prairie City

Experiencing peri-urban life from the inside of a multitude of socially and physically delimited compartments leads to materially thinking city also being constituted by a vast other-space that is either deliberately left aside or that cannot be integrated into people’s own movements. As a result, their own neighbourhood is perceived as if standing alone in what is necessarily left blank.

The overall low density of the peri-urban realm with its intercepted patches of (still) agricultural land intensifies this perception of solitariness: outside the confines of one’s own neighbourhood and lifeworld, the peri-urban and its urban becoming reign as wide open (images 6.12 and 6.13.). This perception of material openness becomes vividly apparent in Santa’s account of the benefits that new developments might bring to her equally young enclave. In particular, I had asked about the expected relationship with adjacent Provenzal del Bosque, then under construction – a question that Doña Margo and Israel, for example, had answered by expressing their hope for increasing business opportunities. Not so Santa. She, instead, answers by shifting attention to the environmental influence the new development exercises on Sierra Hermosa. For her, first of all…

The new houses cut the wind (las nuevas casas cortan el aire). The force of the wind is reduced thanks to the [new] houses. Before that, the neighbourhood was very exposed because of the way it was laid out.25

By putting the wind first, Santa suggests how inhabitants of Sierra Hermosa perceive their locality to be physically exposed to the environment. In a similar way, settlers of Colonia Antorcha, too, describe how they are at the mercy of sand and dust storms.

Yes, it gets ugly. The storms come, the twisters. Two years ago the wind even took one of the houses, the entire roof was blown away.

The characteristic of the peri-urban realm thought from this position of exposure is that of a mixed sense of vulnerability and resistance, something we might call a

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25 The development is two kilometres long by 300 metres wide. See chapter three.
sense of colonisation born precisely out of the position of standing strong against a not yet domesticated territory. I propose referring to this city layer as the Prairie City: a city that is both ‘nowhere yet now/here’, recalling Edward Soja’s words,\(^{26}\) a city where early settlers work the land in order to claim it for their and the city’s mutual urban becoming – unprotected, for the time being, from the materiality of wind and weather (image 6.14.).

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\(^{26}\) Soja 1992, 94.
Sierra Hermosa: The *wide open* just outside the neighbourhood in January 2010 and its conversion into Provenzal del Bosque in November 2011.
A second aspect contained in materially thinking the peri-urban realm as wide open is that of thinking it as a specific socio-material space, characterised by lower levels of conjunctions (whether this is regarded as good or bad). Most of the research participants, both inside and outside the new settlements and residential developments, describe a distinction between a ‘here’, identified with the local territory in either Tecámac or Tizayuca, and ‘the city’, mainly identified with the Federal District and with Ecatepec. This difference is pinned down, above all, in the overall number of people yet also, more specifically, in the perceived higher levels of contamination, traffic and crime, as well as in the greater number of formal and informal job opportunities and the higher quality of public education and health services in the inner spheres of the city-region. Verónica and Cristina from Villa del Real describe their peri-urban habitat as follows:

It is a very healthy environment (*un ambiente muy sano*). The low level of pollution is a major benefit we have here. I think, in comparison with the environment in the Federal District, it is very healthy here, fortunately. [...] Also, we do not see many drug addicts here. Nor do we see many street vendors. It is healthier. And safe. I mean, like with everything, we do have incidents of theft. There has been all of that, but very little.

Further down the Mexico City-Pachuca country road, just off the junction to the historical village of San Jerónimo, a mechanic I meet in his workshop agrees. In comparison to the residents *escaping* the city, he is instead making a living precisely from the (increasing) number of cars used to integrate the peri-urban here with the city. Furthermore, being of local background, his account incorporates arguments that take their root in a rural point of view: 27

Here it is calmer. People are less stressed. There is less commotion than in the Federal District (*no hay tanto alboroto*). There is less traffic. In the D.F. it’s always a struggle: the subway is always full. Here, with a car, you get around faster. [...] It is just beginning to get urbanised, although it is already very urban. But the city really runs from Ecatepec to the D.F. [...] Tecámac is still very quiet. Ojo de Agua, Loma Bonita... these places are a little bit less because more people live there. But they’re still villages, where they still follow the traditional customs, they’re still rural. From San Cristóbal 28 onwards, it is something else. Already it looks very different.

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27 See chapter eight.
28 He refers to Fuentes de San Cristóbal in Ecatepec where several highways converge. Arguably, what could be referred to as city in his terms already appears some four kilometres further north,
You can see it in the lifestyle of the people, how hurried they are, how they walk faster. [...] Yes, it’s becoming more like the city. I think the city will reach us here in about five to six years. It will not be as soon as one to two years, but in six years or so this place will be very different.

Worth noting is that this distinction between ‘here’ and ‘city’ is maintained even though the citification of Tecámac and Tizayuca is advancing at an accelerated pace and, in effect, is rapidly collapsing many of the differences. In particular, research participants point to the dramatic increase in traffic and crime (though not so much in job opportunities) in the area – yet in their descriptions they keep locating ‘the city’ as ‘otherwhere’ down the road, mostly drawing on visual parameters like the quantity of roads and the complexity of their junctions, or the vast swathes of continuously built-up housing to sustain their argument. In effect, the multiple intersections of highways and country roads in San Cristóbal and the sea of terraced houses in Héroes de Tecámac both stand as proof of physically and socially denser urban affairs towards the municipality of Ecatepec. This points to the prevailing, yet unacknowledged, association of ‘city’ with urbanity, other than cityness. Following the suggested visual references with my camera these references can be described as a morphological gradient by which ‘the city’ (as we used to know it) steadily advances with its forms and structures (over the emerging, practised city that is already here) (images 6.15. to 6.20.).

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that is, at a greater distance from the city centre, on the border of the extensive urban development of Héroes de Tecámac.

29 See discussion in chapter one.
From peripheral here to city otherwhere, described as gradient of roads and houses (top left to bottom right):

México-Pachuca country road at Santa María Ajoloapan (2010); the same road outside Sierra Hermosa (Colonia 5 de Mayo, 2012); house in Ojo de Agua (2012); Héroes de Tecámac (2015); toll booths at San Cristóbal junction (2014) and road-side view of Ecatepec (2012).
Describing a distinction between here and the city in terms of the quantity of conjunctions and, at the same time, acknowledging how quickly this distinction collapses points to another city layer thought out of the relationship between the self and the collective: that of the Pioneer City.

This cityness layer is thought out of a simple equation of demand and supply: the first to arrive is in the best position to make his or her pole position productive, providing what is needed to those who follow. On the scale of the relationship between street vendor and client we have come to see this aspect already in chapter four, in the way Doña Margo invests her down time in order to secure her position at the converted bus stand for later busy times. Now, to address the scale of wider neighbourhood relations, we will meet again with Ángel, owner of the building store in Colonia Antorcha, who was among the first to settle when the neighbourhood was formed in 2009.30

At the beginning, he tells me, there were neither houses nor people – only promises and hopes projected onto empty building sites. But within a short time, the settlement began to grow rapidly and Ángel used his savings – money he had earned working in a restaurant in the United States – to open his business. By the year 2014, his house (his infrastructural machine comprising a house, shop, magazine and hairdresser’s salon in a single premises) is a three-storey construction painted bright pink that towers over the neighbourhood and offers in capital letters what everybody needs in the emerging city: ‘MATERIALES’ (building materials) (images 6.21. and 6.22.). Ángel describes the development of his business:

I opened two years ago. By then there were already several settlers but nobody had the guts to start a business. Because there were no houses – and maybe also because they did not have the resources, who knows – but I said: I will give it a try. I spent some two and a half months without selling anything. Maybe a bag of lime a week; so little that you don’t earn enough to eat. But I was hanging on, till today. [...] It is like this: here, you arrive poor but you make yourself thrive (haz te cuenta, uno aquí llega pobre pero se va haciendo).

30 We met Ángel before, in chapter five.
Ángel’s account shows several crucial aspects of the Pioneer City: in order to make it here what is needed is a business idea, the guts to take risks, good timing, competent reading and activating the circumstances and certain amounts of capital for the initial investment – all common entrepreneurial features yet features that resonate in particular, I argue, with the peri-urban situation because of the material immediacy they acquire. Here, on the frontier of citification, urbanisation’s intimate link with capital accumulation is broken down to hands-on attempts to align one’s own becoming with the social and material becoming of the surroundings.

Furthermore, Ángel’s story of individual achievement implies the possibility of failure. It points, even more significantly in our context, to the working of individualism where each and every urban practitioner seeks to make it on his or her own. This also becomes apparent in how the municipal leader Melba addresses the members of Colonia Antorcha:

Everyone is working for themselves (Cada quien trabaja para lo suyo).

This she proclaims in order to hold people responsible for themselves, despite their contribution to, and control by, the group. Here, then, the Pioneer City is being thought not from out of the (positive) notion of exploring new lands but from its inherent opposite, that is, from out of the (negative) experience of solitariness, from out of the position of being left alone by society and the city. Speaking of the informal sector more broadly, Altvater and Mahnkopf point to the systemic intention and effect of the Pioneer City, describing it indirectly as a project of governance through fostering conditions of uncertainty, drawing on Wilpert’s expression of ‘neoliberalism from below’.

At the same time, from the opposite perspective, the Pioneer City can also be thought out of actual involvement in neighbourhood affairs, in this way evoking a sense of togetherness that is produced on the inside of the emerging neighbourhood. Describing an open contradiction, these two modes constantly shift the perception of people’s own position between the perspective of the ‘I’

31 While also relating back to the Self-made and Laborious City layers described in chapter four.
33 Altvater and Mahnkopf 2003; Wilpert 2003.
and the ‘we’. The building of the church (both the edifice and the process) in Sierra Hermosa or the building of the school in Colonia Antorcha (again, both the edifice and the collective process) stand as examples. They are constructed step by step thanks to the steady commitment of the local residents and it is partly through this small-scale yet continuous engagement that both neighbourhoods are constituted as social institutions. In particular in Sierra Hermosa, where strong social organisation like the Antorcha Movement does not exist, for Santa the growing church building is a symbol of the unity of her neighbourhood.
Colonia Antorcha: the growth of Angel’s house and building supply store. January 2012 (above) and February 2014 (below).
Despite experiencing the peri-urban as a Pioneer City or Prairie City, providing lives, growing homes and nurturing neighbourhood in Mexico’s peri-urban northern realm is not a tale of linear growth and gradual distance alone, but one that is profoundly inscribed also in multiple and parallel space-times, characterised by unsteady temporal development. For example, it is not the wind alone that buffets the settlers, as in Santa’s example from above. With every new election, the discrete housing entities are subject to the competing tidal movements of municipal and state politics, and how their waves break over the peri-urban city-in-the-making. This is the cityness layer of the *Tidal City* where frameworks for action shift back and forth according to logics beyond the immediate control of the inhabitants.

In this light, the entrance to Sierra Hermosa provides a striking example (images 6.23. and 6.24.). Over the years of my fieldwork this entrance area has undergone significant transformation: in 2011/12, during my prolonged research stay on site, the entrance was marked by an arch in the form of a horseshoe declaring the name of the development. Beneath it there was a local taxi stand and behind it, towards the inside of the neighbourhood, several ballgame and children’s playgrounds. To either side of the square there were roadside shops and parking lots and immediately next to the entrance a new building under construction. The ruin of an historic hacienda and a supermarket completed the picture, while on the other side of the road stood a petrol station, a recently-opened furniture store and a small café.

By 2014 this surrounding picture remained broadly the same but the entrance square itself had undergone a prominent face-lift. It had just been renamed the ‘Plaza of the State of Mexico’ with the arch now replaced by a giant Mexican flag, and the sports grounds transformed into a showcase recreation area exhibiting military machinery. The sports facilities had been revamped and extended, the taxi stand relocated to the parking lot and CCTV cameras and loudspeakers constantly playing music had been installed. To the north, the building previously under construction had just opened as a department store.
These changes are significant not only because they demonstrate rapid citification. Certainly, the transformations provide evidence of the growing and – in terms of the socio-economic level of customers – changing shopping infrastructure, thereby speaking of the formation of pockets of peripheral centrality, which have similarly been identified by Adrian Guillermo Aguilar.\textsuperscript{34} Nor do I bring them up to demonstrate yet another case of how public space is handed over to the interests of private sponsors (here, the Mexican Army and Air Forces celebrating the Anniversary of Mexican Independence and Revolution, thus acting as if they were a private sponsor). Rather, the regeneration of the entrance to Sierra Hermosa is of interest here because of the politics that brought it about and because of how these transformations are perceived by residents with regard to their own positioning in space. When we speak for the first time in January 2012, Santa describes the recent opening of the furniture shop as a positive reflection on the area, including her own opportunities to grow in and with the neighbourhood.

Yes, the value of the area is increasing. Because now we have the furniture store that the municipal president kindly gave us (\textit{que se nos hizo el favor de poner}) just opposite the entrance to our neighbourhood.

Two years later, when asked about the recent facelift of the entrance area, she identifies the reason as the competition between the municipality’s two dominant political parties.

Before there wasn’t so much interest. [She laughs]. This is politics, as we all know, right? To keep their faces up they have to work and we have to force them to do so. During the governance of the PAN, unfortunately they didn’t work very hard but now it is the PRI [since 2013] and they work fine because they want to make a difference.

Both her descriptions are revealing in terms of how politics and political agents act and are perceived as acting upon the neighbourhood. It is the municipal president, not any investor, who opens the furniture store in 2012; and, even more importantly, this opening is regarded as a developmental gift as it is seen to drive much of the consolidation process of Sierra Hermosa. Two years later, the improvement work is described as the result neither of necessary

\textsuperscript{34} Aguilar 2008, 134.
maintenance work nor of strategic urban planning but as the materialisation of party political struggle.
Certainly, the growing number of prestigious stores helps the neighbourhood to raise its profile in the market but, equally surely, the municipal president is the biggest beneficiary of what is received by Santa as gift. Likewise, the size, functionality and security of the sports and playgrounds has certainly been improved but it is also true that only the highly visible entrance has benefited from the municipal efforts. Edelgado, a resident from the far end of Sierra Hermosa criticises how maintenance of urban infrastructure and facilities is carried out only where the political payoff is the highest.
Sierra Hermosa: Entrance to the development in November 2012 (above) and February 2014 (below).
In any case, with municipal elections being held every three years, the developmental breeze changes and residents and settlers are used to alternating periods of improvement, stagnation and neglect according to the political tides. In this regard, the changing material conditions of Sierra Hermosa’s entrance are undoubtedly but a small example compared to the stark contrasts in the pace of development of many peri-urban colonies, neighbourhoods and estates in the process of becoming.

In chapter four, accounting for the Instant City, I referred to the spontaneous nature of urban transformations, large and small, in Mexico’s northern peri-urban realm, taking the emergence of Provenzal del Bosque as an example. Here I want to specify that, at the same time, other developments seem to remain unchanged for years. This is the case, for example, of the emerging neighbourhoods of Diamante, La Gloria and Extensión de Emiliano Zapata (image 6.25.), all located to the south of Colonia Antorcha and thus closer to the existing urban fabric of the city of Tizayuca as well as to the continuously built-up area of the ZMVM.

Neither a strong social movement nor any private development company endowed with international capital are commercialising these lands and incorporating them into the process of citification. Rather, those who do so are individual proprietors, or groups of these, who sell plots unit by unit to individual buyers.35

Officially zoned as land for urban development, purchasers of building plots in these colonies receive land titles at the moment of the financial transaction (unlike the case of informal settlements). At the same time, contrary to the formal mass-produced developments, these building plots are sold as un-serviced and, as of 2012, were not yet equipped with a water supply, drainage or electricity (this they share with their informal neighbours). In other words, these lands are undergoing a formal process of growth yet, for the time being, still await the introduction of formal infrastructure. Accordingly, only very few people are already buying, building or moving into these neighbourhoods in formation. Hence, within the notion of the Tidal City – and in antagonistic distinction to the Instant City – we can call the city layer thought out of these sites’ specific material expressions that of the Stand-by City.

35 Interview with roadside sales person.
By 2015, contrary to what one might expect, it is Colonia Antorcha that has now been connected to formal infrastructure networks, while La Gloria remains unconnected. The strong bargaining power of the movement has leap-frogged development despite its lands being located further away from the capital village of Tizayuca and still being classified in the municipal zoning plan for agricultural use only.
Roadside sales agent explaining the future of the neighbourhoods La Gloria and Extensión de Emilio Zapata. February 2014.
Conclusion

In this chapter I have shifted the focus to the role of the collective and to how collectivity is being established in the northern peri-urban realm of Mexico City. Nurturing neighbourhoods, we have seen, is accomplished differently in accordance with the distinct social, legal and physical structures of each settlement or residential compound.

In Colonia Antorcha strong leadership and submissive loyalty force residents into a community of common destiny; in Villas del Real neighbourhood cohesion is held in place by institutionalised rules and practised in special committees; and in Sierra Hermosa individuals try forming loose associations around concrete issues – the church, security or the image of the street – that bring them together (or not). The aim and benefit of all these modes and attempts is to amplify local opportunity structures in order to set up, secure and improve individual and collective growth.

The city-thinking that emanates from such collectivity work as well as from the socio-material specific conditions in which these collectives are established is manifold. In the context of my research I identify four distinct layers of cityness. These are: the Compartment City, describing the practice and materialisation of segregation that encourages thinking the city from many and concrete positions of retreat or defence. The Prairie City layer, which treats the city as wide open due to the peri-urban realm’s characteristic low densities and diffusion of built form, as well as the lack of access to most of the space that is external to the enclave. The Pioneer City where city is thought as the space of opportunities and risks that are entailed by the condition of being the first while, simultaneously, being alone and depending on others to make it. And, finally, the layer of the Tidal City that residents experience in the form of changing circumstances as well as of differing speeds of citification and urban becoming, according to the situation and organisation of each colony of the urban.

What this chapter has shown is how neighbourhoods are being practised in order to maximise their potentials, not in the sense of building coherent communities but in the sense of employing shared conditions in order to maximise individual
benefits. The four cityness layers, furthermore, speak of the impact that spatial-
material as well as social-organisational, legal and political conditions have on
(emerging) neighbourhoods and the notions of individual positionality that people
set within these compounds nurture from them. As with the other layers described
in earlier chapters, these may well be mutually contradictory yet, taken together,
they describe the complexity of the relational perspectives by which peri-urban
practitioners engage with their environment.
7. Riding the highway

Introduction

In the following I will engage with ways of city-making and city-thinking that emanate from the road. This is to say I will pay close attention to how peri-urban practitioners move about in material space, how they incorporate this movement into their lives and make it productive, and what layers of cityness spring from this practice of movement and mobility. As in previous chapters, the intricate connection between bodily city-making and material city-thinking will be divided into two consecutive sections in order to facilitate the analysis.

I introduce in this chapter a specific fieldwork site that so far has not made a proper appearance in this thesis: the road. More precisely, this fieldwork site combines two roads which I analyse both at specific points of action and along extensive linear sections. These two roads are the Mexico-Pachuca toll motorway and the toll-free, historical country road that together connect the multiple settlements, neighbourhoods and residential compounds of the expanding northern peri-urban realm with the Federal District. Lying parallel to each other just a few hundred metres apart, and repeatedly crossing over each other like a braid, these two strings give the periphery a predominantly linear experience.

The operation of this site of movement is extraordinary. On the one hand, the two roads exemplify what Johan Galtung called the ‘feudal centre-periphery structure’ where inter-regional interaction is monopolised by the centre.¹ On the other, the two roads attract all internal movement of the periphery, too. Everybody travelling from, to and in Tecámac and Tizayuca is to be found – albeit at different times of the day – on their combined eight lanes of tarmac. In this sense, the two roads themselves become the (linear) centres of the north-north-eastern stretch of the ZMVM, that is, the vibrant arteries of peri-urban life that attract the ‘linear developments of high density’ that Adrian Guillermo Aguilar identified and that lead to a change in centrality of the periphery as a whole.²

¹ Galtung 1971, 89.
² Aguilar 2008, 134.
The road thus is the device par excellence by which both peripherality and centrality become manifest. Even more important in the present context, however, the road is also where peripherality and centrality are being *practised*. Thinking the highway not as a built thing (alone) but as the practice of *highwaying* means we can challenge our understanding of transport infrastructure by reframing it through the lens of the living body, engaging in a dialogue again with AbdouMaliq Simone’s notion of people as infrastructure, as described above. How, then, do peri-urban practitioners travel near and far? How is the social and material reality of the highway experienced and managed by the body? In other words: what bodily practices are needed to engage with the specific materiality of the roads, and what layers of cityness are being materially thought out of the conjunction and concurrence of living body and road?

In order to answer these questions, this chapter again draws on ethnographic conversations, participant sensation and audio-visual documentation. More than before, however, it also draws on insights gained from the researcher’s own exploratory movement in space and time, repeatedly taking and riding the bus myself.³ Video has been particularly helpful to capture the corporeal and physical action involved in practising the highway, while photography made it possible to get a grip on the ‘visual construction of the megalopolis’⁴ viewed from the road. The highwaying sites analysed are an (informal) bus stop made by stopping buses, infrastructural practices that are afforded by the socio-materiality of the highway and its movements, as well as the spatial relations of which the road network speaks, and the distinct materialities and temporalities of the road and bus ride itself.

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³ See chapter three.
Wrestling with Buses

The first site for my research into the road is a seemingly unremarkable stretch of the Mexico-Pachuca motorway passing between the historic villages of San Francisco Cuautliquixca and, a little bit up the hill, San Pablo Tecalco: two times two lanes of well-kept dark-grey tarmac, accurately marked with white strips, flanked by narrow hard shoulders and fenced in by streamlined guard railings either side of the carriageway. Yet while cars fly by at high speed, coaches keep pulling in, too, swiftly stopping, opening their doors, and pulling out again into the flow of traffic, taking with them traveller after traveller who continually move up the embankment.

This site, then, appears to be precisely what peri-urbanauts\(^6\) refer to as the San Pablo (wayside) bus stop (parada). I come here because it is the highway bus stop nearest to the Sierra Hermosa development and located right between the earlier and later sections of the Villas del Real residential compound placed behind walls to either side of the road. What makes this stop worth noticing is that it is not indicated by any (conventional) sign. Neither built design nor spatial layout – no roofed bus stand or pedestrian bridge, for example, or the widening of the street into a lay-by – mark this site’s purpose. In other words: the site is pure activity, social occurrence without being imprinted into physical form. It is a bus stop made by stopping buses, infrastructural activity, not built infrastructure. As AbdouMaliq Simone might put it, it is the work of people as architecture: architecture materialising not in steel or concrete but in flesh and movement; not a building as a thing but social happening.

The materiality and corporeality of this happening of the bus stop are remarkable. In order to be able to take a bus, prospective travellers first have to climb up the embankment of the highway (image 7.2.). This is a journey in itself: for the first metres they take the concrete ramp leading up from the residential street below the embankment. After a few steps, however, the firm surface vanishes and a narrow path leads on through the bushes. Then they have to climb through a hole.

\(^5\) Aspects of the following analysis have been published in the journal Senses and Society (EPD). Here, I am expanding the scope of the analysis. See Wissel 2016.

\(^6\) Cf. Lozano Rivera 2010, 157 writes: ‘the urbanaut is the one who navigates the urban... also by means of his adaptive... and constructive possibilities’ (own translation).
in a fence and cover the last few metres on a dirt track running up the slope in order to reach the tarmac of the carriageway. One could argue that it is just a few steps, but they are steps that require careful examination of the terrain in order to set one foot before the other.

Once approaching the top, the crash barrier is the next hurdle to be overcome (image 7.3.). Mounted at the very edge of the road surface it is too high to be easily climbed over when standing on the outside of the motorway. Thus physical ability is required in order to swing the body over and enter the road space. Children need to be lifted over and many travellers need a helping hand – not to mention those who are put off from travelling at all by this obstacle. Notably, on my first visit in 2011, loosely piled stepping-stones provided some assistance. By 2014, this had become a more durable step structure (images 7.1. and 7.4.). Inside the road space, however, the crash barrier affords a very different usage: in relation to the highway’s surface it is now only some 60cm high and quickly becomes a bench on which to sit and chat while waiting for the next bus to arrive. This is surprising, as the space that provides for the entire operation of the bus stop is only about two metres wide. Users confirm that feeling at ease requires a considerable amount of confidence with the situation and the constant movement. Everything is taking place in one spot at the same time: waiting, boarding the bus, meeting friends: all caught between the crash barrier and the (moving) bus. At the same time, taking the bus is regarded as an enabling experience, too. One bus stop user describes the operation as stressful and dangerous while at the same time being based on mutual interest and thus consideration:

I feel fragile and physically vulnerable. The coaches are huge and fast. You are stuck in a corner. It is very noisy. It feels like the buses are coming right at you (te vienen encima). But what is surprising is that something so big and fast and alien to your body responds to your request to stop. The bus wants to pick you up, after all… And, you don’t have to wait long…
Another person familiar with the operations\(^7\) supports this picture by drawing on past events:

Yes, there have been accidents. Right here, a bus crashed into this house. For the same reason: since this is not a [proper] bus stop, but there are a lot of people waiting, buses can’t pull over easily (*como no es parada aquí pero es muchisma gente que espera, pues no se puede orillar muy bien*).\(^8\)

With the next bus approaching, attention is shifted to the corporeality and materiality of movement itself (video 7.1.). First, the buses that facilitate the outer region’s integration are not just any buses but specifically *inter*-urban, full-size coaches in distinction to the *intra*-urban minibuses (called *peseros*) that operate on routes located deeper inside the urban agglomeration. Second, identifying and flagging down the right bus involves a whole set of skills and requires quick responses: reading at a distance the small and often hand-written signs stuck to the windscreen of the bus, comparing the place names with one’s mental map of the region, signalling with the hand and, above all, noticing the subtle nod of the driver’s head and answering it with an equally slight gesture of the hand. All this has to be done, and completed within seconds…

…Because seconds later the bus is pulling in – right towards where the passenger-to-be is standing unprotected from the pace and mass of the oncoming vehicle. All at once, the bus is decelerating, opening its door, rolling along while people hurry up the steps, and picking up speed again even before the last traveller has made it into the cabin. What is left behind, is the roaring of the motor and, often, a cloud of burned diesel – in which the next bus arrives. This fleeting yet very tangible encounter between man and machine is exceptional with regard to their relative masses, and the speed at which it occurs: approximately twenty tons of steel and aluminium moving in on the human body, missing it by less than 50cm of distance while snatching it away…

Analysing this purposeful yet violent encounter (images and drawings 7.5. to 7.8.), the crash barrier acquires yet another meaning. It materially demarcates the ring in which access to the city is physically negotiated with the body: an arena

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\(^7\) This person is the kicker whom I will introduce in detail below.

\(^8\) The term *parada* (bus stop), like in English, does not specify its appearance. It is a term used for both the material bus stop and the (social) bus stop *made by stopping buses*.
where opponents engage in close combat, which I suggest is comparable to Mexican free-style wrestling (lucha libre). Taking buses at the San Pablo stop is both about dodging and grappling with the oncoming machine, a highly material-corporeal activity by which bodies, human and artificial, evade and find each other in order to leave together. I call it a practice of wrestling because it relies on the particular acrobatics of rehearsed grappling holds and evasive manoeuvres. Bus drivers and passengers both depend on collectively rehearsed movements and embodied trust and proficiency to manage the situation: pulling away one’s head so as not to be hit by the rear-view mirror, avoiding the opening door and, importantly, in one and the same motion climbing up the steps into the moving vehicle. In other words: only by aligning the body and its movements to the body and movement of the bus can bus stop users merge in flight with the buses in order to overcome and make productive their peripheral position. Comparing this encounter to boxing would limit the attention to how the blows of the oncoming bus are evaded. Comparing it to bullfighting would miss the specific goal of leaving together after the attack of the oncoming bus has been paraded as close as possible to one’s own body.9

The particular body-work involved in wrestling with buses thus becomes apparent in the account of travelling mothers, pointing also to how the highway, the bus stop and the opportunities they entail are ridden differently according to gender and family roles.10

When you travel with children you have to make them become part of your body to be able to move. [...] Climbing up into the coach has to be done very fast. You have to be very agile, being wide-awake... it’s complicated. It causes a lot of stress and physical work. In other words, you have to make an effort (hacer un esfuerzo). You start sweating in this kind of situation.

From a complementary perspective, wrestling with buses also resonates with Henrik Vigh’s description of social navigation as ‘shadowboxing’.11 With this

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9 Interestingly, Sarah Pink has gone from studying bullfighting to studying material and sensory spaces of home to outlining the doing of sensory ethnography. Her research continuum, I argue, thus supports my comparison. Pink 1997; 2004; 2009.
10 See chapter three.
11 Vigh 2009.
notion Vigh depicts how people inserted in shifting social and political contexts ‘attune’ themselves ‘to the movement of the environment’ by means of ‘a flexible and adaptive practice’. In the case of the San Pablo bus stop, this movement of the environment becomes manifest, literally, in the buses pulling on and off the narrow hard shoulder of the highway. This is captured particularly well in the accompanying video documentation.

The point made, therefore, is that taking the bus at the San Pablo bus stop underlines the bodily practice that is navigating the city’s socio-material terrain and constituting and enhancing it through acting as infrastructure. At the same time, jumping on and off the advancing bus, ducking one’s head from the rear-view mirror… these manoeuvres imply knowing the environment for and through the body and its movements. Such knowing, I argue, resembles Paul Carter’s notion of material thinking by which practitioner-maker of space come to know of the world – here, of the peri-urban concurrences of ‘city’ – through corporeal engagement with its materiality.

12 Vigh 2009, 423.
13 Carter 2004; see also: Bolt 2010, 29.
The footpath (below) and staircase (above) leading to the San Pablo bus stop. February 2014.
The guard railing and stepping-stones. December 2011.
Comparison of masses: body versus bus at the San Pablo bus stop.
December 2011.
Drawing 7.5.
The narrow space for operations. December 2011.

Video 7.1. Bodies/matter at the San Pablo bus stop. Video. 2.27 min.
Riding Buses

After this hazardous struggle, the bus stop is forgotten surprisingly soon once inside the vehicle. It is left behind in the time and space of the highway, now that the actual journey to the city otherwhere commences. Every day, inhabitants of the ZMVM spend about one hour—at peak times two or more—on transportation, each way. Thus in comparison with the bus ride, the waiting time and time spent wrestling with buses amount only to a very short – albeit significant and significantly contrasting – moment of the overall experience of the peri-urban realm of Mexico City.

Once you step inside… actually having to climb up the stairs (el hecho de tener que subir una escaleras) makes a difference. These highway coaches are expensive and relatively comfortable with large seats and high backrests. Few people stand in the aisle so you have a private space where you can take refuge (un espacio privado en el que puedes como refugiar del estado de estar en la carretera). At the bus stop you are fully exposed. But inside, the coach protects you. It is a real contrast.

Thus, our next focus of attention is the bus ride itself. How do commuters experience the bus ride and what do they do while riding the bus? For me this means asking: what are the material-corporeal experiences of the bus and how do travellers make their commute productive when expanding their range of action across the region? How does bus time sit within their days and lives?

First of all, travel time is not dead time, but vital time invested in making a living. Most of the passengers use bus time to recover their strength by taking en-route respite from the day or city. They sleep, doze or read the papers, or let their eyes glide over the urban landscape flying by. Even if they ‘kill time’ (matar el tiempo), as José puts it during our bus interview, riding the bus is time spent

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14 Cf. García Canclini, Castellanos, and Mantecón 2013, 43. Bus time between Sierra Hermosa and Indios Verdes is about 35 minutes.
15 Others, for example, have asked about the emergence and agency of human-nonhuman affective atmospheres. See Bissell 2010.
rejuvenating the body and spirit.\textsuperscript{17} In addition, it is valuable time for travellers to reflect on the past, present and future of the city they inhabit.\textsuperscript{18} Furthermore, bus time is used to support self-made businesses. These peri-urban salesmen and women make their profit on the difference between a product’s cost at the central supply market and its retail price on the outskirts. Bus time therefore is spent on labelling pirate music CDs, for example, or going through their orders and numbers. Israel provides a picture of how distance and the structural dependency of the periphery are a lucrative trade.

It is in low-income areas where sales are high because the people who cannot go to the supermarket necessarily buy at the local convenience store. That is why there are so many \textit{misceláneas} in Sierra Hermosa. This is where people spend their money because they do not have enough income to travel to where they would pay less (\textit{deja ahí su dinero porque no tiene ingresos para irse a donde es más barato}).\textsuperscript{19}

The possibilities of the bus and bus ride thus find their counterpart also in certain operating expenses. Repeatedly, bus fares are described as a considerable roadblock to people’s travel abilities as personal and family budgets often operate on a hand-to-mouth basis.\textsuperscript{20} Accordingly, the cash burden is weighed against the other cost of travelling: time. Peri-urbanauts choose consciously between going \textit{por arriba}, that is, ‘up above’ taking the fast yet expensive motorway, or \textit{por abajo}, ‘down below’, riding the toll-free but much slower country road.\textsuperscript{21} Time is also the reason behind people leaving the peri-urban neighbourhoods before sunrise in order to make it to their work places in the inner city ahead of traffic congestion. People on the margins start their day earlier than inhabitants blessed by centrality – and those riding the bus start it earlier than those driving their own car. ‘Those with fewer resources travel longer,’ Nestor García Canclini et al. confirm, though pointing out that traffic congestion diminishes the privilege of the rich.\textsuperscript{22}

\textsuperscript{17} This becomes apparent in both the topics we converse about and in José’s reflections on how he uses bus time: ‘I bring a newspaper, a book… something to kill time.’
\textsuperscript{18} García Canclini 2013, 49.
\textsuperscript{19} Israel’s family is working in the supply of local grocery shops. He speaks of ‘shopping centres’ yet which refers also to low-budget retail parks and supermarkets.
\textsuperscript{20} See interview with Israel.
\textsuperscript{21} See for example bus interview with José.
\textsuperscript{22} García Canclini, Castellanos, and Mantecón 2013, 25, own translation.
For Tecámac and Tizayuca this means that 4.30 in the morning is one of the busiest times of the day – and taking the bus that early an elemental experience of living on the periphery, as José explains.

Everybody working, including my son-in-law, leaves at 4.30 am. If you leave at 6.30 am you’ll be hit by traffic. That’s another thing about living here.

A third cost to take into account is that of the risks entailed by travelling the northern peri-urban realm of Mexico City. People are afraid of assaults and describe to me how the Indios Verdes transport hub, the road, nighttimes and the inside of the bus all hold their dangers. Santa, for example, became a victim herself some years ago. She emphasises:

For me, what I really don’t like about the transport is the danger it involves (el peligro de usarlo).

These gains and losses affect the practice and experience of highwaying. Yet what plays out, too, are the material-corporeal as well as visual dimensions of riding buses. This is to ask: what are the material and audio-visual conditions of the bus and bus ride, and how do travellers relate to them and from them out into the peri-urban realm and city they move across?

Leaning back in the (more or less) upholstered seats of the full-size, inter-urban coaches, or squeezing onto the narrow and often crowded benches of the minibuses, are both (distinct) corporeal experiences. The engine vibrations shake the vehicle and every acceleration and braking has to be resisted by the body. In addition, the surfaces of the highway and country road are felt differently. While the former is predominantly well-maintained tarmac, the latter is littered with speed bumps and often riven by cracks and potholes.

Sound plays its role, too. Music above all, in some coaches a movie, as well as conversations with fellow travellers intervene in the experience of the bus ride. From the outside the noise of the traffic can be heard: the whooshing of tires, the squeaking of brakes and the sudden and determined sounds of horns near and far accompany the journeys.
Undoubtedly, the reception of these material, kinetic and environmental influences varies from person to person. While José highlights the tediousness of riding the freeway because of the many potholes, Doña Margo claims that:

Once you get used to it, you don’t feel it anymore. You cease experiencing the bus ride as tiresome *(cuando ya se acostumbra usted, ya no siente que sea muy pesado).*

Nevertheless, between the lines, both my conversation partners agree on the necessity to relate to the material-corporeal dimension of the ride, be it either by suffering or adapting.

Adding to this, Santa shifts the focus towards the visual perception of the urbanising environment. She describes the bus ride as tiring not only because of the above mentioned aspects but because what she sees through the window is dreary:

The bus ride is tedious, tiresome. I don’t like it. This stretch between here and Indios Verdes I don’t like it because there are all these places where they sell car parts. Its ugly, I mean, that is why I don’t like it. In addition it is degenerated and dangerous *(ratero).* It is not kept orderly and well *(arreglado).* I mean, there is nothing you can appreciate. No, no, no. It is not a landscape of which you would say: ‘oh, how beautiful’. […] It does not have anything of what you would say: ‘that’s alright’: no trees or anything that is nice *(no hay un paisaje que digamos ‘que padre’).* No, I don’t like the way it looks.

To sum up these aspects of practice and their corporeal-material and visual implications, we can conclude with Israel’s words on the work involved in travelling the peri-urban realm:

To get from Sierra Hermosa to the District means getting up earlier, paying more and making a lot more effort *(levantarme más temprano, pagar más dinero y hacer mucho más esfuerzo).*

This making effort is what I suggest analysing as the bodily practice of riding the bus, for which I coin the term *labour of travel.*
Managing Movement

Back at the many bus stops along the way, we come across yet another form of practising the highway worthy of note. Unlike most people who take buses to get elsewhere, some have turned the taking of buses itself into an opportunity for enacting and expanding their possibilities. This is the case of the numerous bus drivers for whom the growth of the city in size and population means an increase in traffic and business.\(^23\) It is also the case of those I refer to as wayside transport professionals, that is, self-infrastructural opportunity workers (cf. chapter four) who make the movement of buses and people their raw material and the tarmac of the road their place of (self-)employment.\(^24\)

The first of these labourers of conjunctions is the checker (*checador*). His work consists in ‘controlling time’ (*control de tiempo*),\(^25\) that is, in managing the steady rhythm of public transport operations along a particular road corridor of the city-region. He operates under both formal and informal working conditions, at wayside formal and informal halts along the main roads of both inner- and peri-urban contexts, as well as at all public transportation hubs.

Juan is checker at the 5 de Mayo bus stop, a little bit further out than the San Pablo wayside halt described earlier in this chapter (image 7.8.). Juan was formally employed by one of the companies as salesperson at this very bus stop until he realised that working as checker on his own account was more rewarding. One of his major assets he took from his previous job is that he knows all the drivers. The other asset, he tells me, is that here, at this particular spot in the direction of travel to Pachuca, *people know him*. Both these assets help him to secure his position as the sole checker on site, keeping at bay possible competitors.

Juan describes his work as a service he is providing to drivers, for which he receives a voluntary payment of one or two pesos each. He helps them to maintain their distance, so that operations are spaced and they ‘know whether they are falling

\(^{23}\) E.g. interview with Edgar, the driver of a minibus.
\(^{24}\) This group of people can be understood as a particular sub-group, albeit not being mentioned, of the ‘workers of the public street’ defined by Crossa 2008, 478.
\(^{25}\) Interview with Juan Espinoza, checker at the 5 de Mayo bus stop.
behind or closing down on’ the previous vehicle (para que sepan si se abran o si se cierran). This affects the possible number of potential passengers at the next bus stop. Interestingly, he claims he does not travel at all – at least not to the Federal District save on very rare occasions – because he cannot stand the traffic jams of the inner city, that is, when movement is hampered and does not run as smoothly as buses do here, at his check point in the peri-urban realm of Tecámac.

I’ve lived here twenty-five years now and I rarely go to the Federal District for the same reason: there is a lot ... how shall I say ... I find it very difficult to go there because of all the traffic. When I come back, it’s with a headache.

The kicker (pateador) is the second wayside transport professional to have made the road and its movements his space and work of opportunity. I meet him at the San Pablo bus stop where passengers wrestle with buses – the precise encounter his business is based on. That is to say, that the kicker makes his living by bringing buses and travellers together with precision and in the shortest time possible, calling out the different destinations and advertising spare seats for a tip from the driver. The name of his profession probably derives from American Football (very popular in Mexico, too), where the kicker is the team member in charge of scoring field goals and thus specialises on the precision of his kicks. His service is particularly appreciated during early morning peak hours, when several buses approach and swiftly stop at the same time yet the sun has not yet come up and it is therefore extremely difficult to decipher the many destinations written by hand on pieces of cardboard or directly on the windscreens of the approaching buses.

I get people onto the bus. I help the buses (Subo a la gente. Ayudo a los camiones) ... because a hell of a lot of people depart from here every day. In the morning it is complicated to see which bus is which... and since people can’t distinguish them, operations slow down.

The kicker’s labour is less skilled than that of the checker as he has no books to keep and does not need to overlook the operation of transport as a whole. His work is not managing the rhythm of buses but supporting it by keeping things up to speed when demand is high. As the day unfolds and buses and passenger numbers

26 I have been pointed to this analogy by an anonymous reviewer of the journal Sense and Society.
ebb, he may well get on one of the buses himself, trying to earn a few extra pesos by selling sweets or simply nurturing his relationship with one of the drivers. This nurturing of good relationships is essential to his work, too. As with the checker, it is by knowing people and being known to people that he can claim his position and enact its possibilities. As with other jobs on the highway (ambulatory vendors and wandering musicians, for example), his operation depends on opening up space for it by navigating social relations that, likewise, keep opening and closing with the environment’s – here the road’s – movements. In this light, both the kicker and the checker resemble the infrastructural work we have learned about already by meeting Doña Margo, Eduardo and Margarita in chapter four.

Finally, I meet the checker of the airbase bus stop half way along the country road to Tizayuca (images 7.9. to 7.11.). This time, it is mainly minibuses that are coordinated by his service, collective taxis (colectivos), as they are colloquially called, that operate on a local scale between the different (historic) villages and their sprawling neighbourhoods of the peri-urban realm. What I would like to highlight by focusing on his way of doing the job is that checkers often work as checkers and kickers at the same time. Expressed in numbers, he claims to coordinate the flow of some 200 vehicles that make stops at his bus stop several times a day. During peak hours, he tells me, he has to handle several vehicles and their customers every minute. Watching him juggle with vans and people, it becomes apparent what this means in terms of coordination and time management yet also in terms of corporeal skill and movement.

With ease, it seems, he administers all the locations that together compose the peri-urban continuum held together by this particular road. He keeps the books and shouts out the many and repeating destinations – in addition to announcing the available spaces on each bus.

Zumpango, la Avenida, los Reyes. Zumpango, la Avenida… There are still some seats (hay lugares)... This one goes to Reyes village, Colonia Ejidal… This one is off to Santa Ana, San Pedro, Santa María Xalalpan… There are still some seats…
Like the other wayside professionals we have met so far, the checker-kicker of the airbase bus stop does this with extraordinary agility of the body. Video documentation captures how he dances like a boxing champion (video 7.2.): skipping light footed, smooth and quick. He is continuously moving back and forth between the arriving and departing minibuses. He shouts and signals to the driver the interval with the previous bus, reviews his chart, opens the sliding door of the combi and turns to the prospective passengers while proclaiming the destinations. Than he moves to the driver’s door to report on current passenger development and rhythm of operations, exchanging some friendly words and receiving his payment. A few seconds later, he hurries back to the passenger door shouting out the destinations once again and providing a helping hand to the last person(s) making it inside the vehicle. With a sliding bang he shuts the door, and while the van picks up speed he takes notes of the departure time in order to have all relevant information ready for the next vehicle to arrive and to repeat his boxer’s dance. On special occasions, he takes extra time to greet the driver with a handshake.
Image 7.8.

Video 7.2.

Navigating buses. Tecámac. Video. 4.50 min.

The transport professional at the Airbase bus stop working as both checker and kicker. January 2010.
City Thought from Practising the Highway

So far, this chapter engaged with the practice of taking and riding the bus in peri-urban Mexico City and on how such activity is made productive through self-infrastructural work, looking at both wayside transport professionals and at the actual travellers themselves. In the following I will draw on these accounts in order to arrive at the layers of cityness that can be materially thought on the basis of this practice.

On the one hand, the activities of stopping buses and managing and supporting transport operations have to be understood as self-infrastructural opportunity work and, in their essence, as bodily labour by which city is made in practice. In this regard, they resemble particular expressions of peri-urban labour of conjunction and presence, as we have come across them above in the context of street vending and the making of houses and neighbourhoods. Taking the bus at the San Pablo bus stop, and working as checker and kicker, constitute city both as the happening of the social, the event of people and things coming together, and as the materialisation of this happening in physical space.

On the other hand, my fieldwork shows that the experience of day-to-day commuting is a constituent part of living in Mexico City’s peri-urban realm. This is the case despite the periphery’s growing centrality.27 It confirms the findings of Nestor García Canclini et al., who picture Mexico City as The City of Travellers.28 By shifting the focus from journeys to journeying I am able to add a nuanced understanding of the bodily practice involved in travelling the metropolitan/peri-urban realm. In line with previous definitions of peri-urban practice developed through my analysis, I frame such bodily practice of riding the highway as a particular labour of travel.

27 Aguilar 2008; Compare also the high level of potential intraregional journeys identified by Ibarra and Lezama 2008, 139-141.
28 García Canclini, Castellanos, and Mantecón 2013. While the authors study the experience and imaginaries of travelling in light of ‘how to live together’, my focus is on how city is being made and thought.
Outpost City

A first cityness layer materially thought out of practising the highway is that of the *Outpost City*. Subjected to elevated travel costs, long travel times and to limited schedules for travelling, this city layer can be thought as a remote and isolated positioning in space and time which is both made and experienced through repetitive, time-consuming, expensive and physically arduous journeying. One particularity of this layer is that it is also thought out of the exposure to the risk of assaults while riding the bus. This results in the Outpost City being imagined moreover as a dangerous space where life is at risk when on the move.\(^\text{29}\) Israel, for example, describes the experience as follows:

Here, what you do is that you go to the D.F. and there you expose yourself to risk. You expose yourself to assaults. The trip is expensive and tiring.

Israel clearly thinks of a division between the here and the Federal District, a division rooted in the difficulties that moving from one to the other implies. What this city layer corresponds to, then, is the urban experience of those for whom the Brazilian geographer Milton Santos has coined the term ‘prisoners of local space’.\(^\text{30}\) The term refers to the peripheral poor who are structurally held in place by distance and poverty. Yet it might also include those who are restricted in their movements by family obligations or fear.\(^\text{31}\) In Mexico’s peri-urban realm, living on the margin of both the city and society might be less pressing than in Brazil,\(^\text{32}\) yet reaching beyond the local here, too, depends on people’s ability to overcome any financial, gender, security and – essentially in this context – always also corporeal-material constraints.

This said, it is pertinent to keep in mind that commuting is subject to contradictory effects and change: with the expanding territory of the peri-urban continuum, practitioners of space cover longer and longer distances, spending

\(^{29}\) Cf. García Canclini and Mantecón 2013, 140.

\(^{30}\) Cited in: Lindón 2006, 21, own translation.

\(^{31}\) See chapter three.

\(^{32}\) The public transport network of Mexico City (public and private operated) can be regarded as relatively inclusive when compared, for example, with that of São Paulo. This is particularly the case with regard to low travel fares that allow the poor to travel the region in search of an income (own comparison and based on conversations with residents of São Paulo in 2008).
more and more hours on transport. At the same time, highways and public transport are gradually being improved so that travel times are reduced even though journeys start and end further and further afield. Likewise, the experience of distance does not replace the experiences of density and ‘massive interaction’ that Nestor García Canclini et al. identify as fundamental to ‘metropolitan travelling’.\(^{33}\) Rather, the juxtaposition of these contradictory experiences constitutes what is materially thought out of riding the highway as the particular Outpost City.

Furthermore, turning to the physical appearance of buses provides an additional aspect of the Outpost City layer. Buses that facilitate the direct integration of Tecámac and Tizayuca into the metropolitan core (for example, running all the way to the Indios Verdes transport hub) are inter-urban, full-size coaches. This points to the ever-growing distances that have to be covered in order to reach from the centre to the extended periphery. In comparison, it is smaller units that operate on shorter routes: intra-urban buses, called peseros, reach out from the Federal District to what is, by now, the inner periphery of the urban agglomeration. At the same time, intra-periphery minibuses, called colectivos, connect neighbourhoods of the extended periphery to specific sites of peripheral centrality such as the capital village of Tecámac, the central supply market in Ecatepec or the terminal station of the Mexibus Bus Rapid Transport system in Ojos de Agua.\(^{34}\)

On a different scale, the experience of the Outpost City is reproduced also on its inside. This is to say that the different ‘outposts’ – the settlements, neighbourhoods and residential compounds scattered about the peri-urban realm – are isolated also among themselves. In Colonia Antorcha, for example, the women who lived in the settlement from the very beginning of its existence describe how they had to take the bus to Tizayuca each time they wanted to go to the nearest shop. To the cost of each pint of milk than, potentially, there has to be added a return trip of almost an hour at the tariff of 10 pesos (a price which is of course mitigated by pooling

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\(^ {33}\) García Canclini, Castellanos, and Mantecón 2013, 25, 33.

\(^ {34}\) This is a rough distinction based on data collected at the Indios Verdes transport hub and bus stops along the Mexico-Pachuca highway. Certain peripheral neighbourhoods are however connected directly to the hub via colectivo vans going all the way.
together journeys and setting up collective shopping lists).\textsuperscript{35} Only since 2013 has Colonia Antorcha had a local \textit{miscelânea}, a small neighbourhood store at that time fairly limited in its offering. By 2015 the number of small shops has risen and signs of specialisation and diversification of products can be observed (for example, one family now sells plants from their house and building plot).

In a comparable experience in Sierra Hermosa, Santa describes how her quality of life is gradually improving with more and more supermarkets opening nearby, thus here too increasing choice and reducing travel time and costs.

What these accounts also show is that neither this nor any layer of cityness is carved in stone. All interviewees recognise the change occurring when it comes to facilitating their basic needs. Increasing the range of provisions is also the achievement of those who turn distance and seclusion into a business opportunity – precisely by travelling: roving vendors, both formal and informal, earn their living by capitalising on the difference in prices that is produced by structural isolation. They supply small convenience stores or sell fruit and vegetables, bread or plastic bags from a van or motorcycle. Their economic success rests on their mobility in distinction to the limited mobility, or even immobility, of their clients in the Outpost City.

\textit{Sequence City}

When life moves back and forth between isolated outposts, the blood vessel that ties them together is the road. As mentioned before, the working of the precise road in question is afforded by its particular condition of doubling – one fast yet expensive, the other slow yet free to use – that together link up all urban, rural and other (industrial, etc…) fragments that compose the peri-urban. Even more important, however, is this road network’s only seemingly banal condition of linearity. It is this linearity that leads to the particular spatial organisation of urban fragments as lined up on one (double) string of shared access.

\textsuperscript{35} Interviews with settlers from Colonia Antorcha.
Following the logic of island urbanism,36 neighbourhoods in Tecámac and Tizayuca do not directly adjoin but are connected only with the highway and through the highway with the surrounding and wider urban field. This necklace-like structure of sequential units influences how people move across their socio-material environment. Accordingly, this particular linear positioning in space (and time) also encourages thinking the city as a chain of things and places, thus adding a specific quality of the socio-spatial consciousness of the peri-urban to the Compartmen and Prairie City layers described in chapter six that think the outside of the neighbourhood as a blank space.

The road, I argue, mediates each compound’s isolation; it connects them but only as channelled by the road and through distance. To get from Sierra Hermosa, for example, to the immediately adjacent public sports ground it is necessary to leave the development and walk down the main road and only then is one able to enter the park. However, as the interview with Santa showed, this movement in ‘U’ is regarded as the natural and only imaginable mode of connection between two adjacent elements of the peri-urban realm. The logic of Island Urbanism is internalised37 as channelled (dis)connections.

If I go for a walk I go to the park, right here, to the sports ground… Yes, you have to walk or take a bus. But no, it is really close, behind the superstore [on the main road].

The analysis of the peri-urban realm as a collated sequence of concrete city entities adds to Eduardo Nivón’s description of the Mexican periphery as a socio-spatial kaleidoscope.38 The image of a settlement pattern made up of multiple and fractured urban enclaves endlessly reflecting each other still holds true, although the structure of ever-smaller units of the same is neither arbitrary nor chaotic. Rather, these enclaves resemble a system of discrete urban bits and pieces that all depend on the area’s two access roads at the same time as resembling an incremental privatisation where (smaller) gated compounds can be found within (larger) ones and so forth. Over and over, I am stopped on my

36 Urban Catalyst 2007; for Mexico City see Duhau and Giglia 2008, 135.
37 This observation anticipates the work of Catherine Malabou regarding the working and making of individual history of the brain, considerations on which I base my understanding of the notion of plasticity below. See Malabou 2008.
38 Nivón Bolán 2005, 155.
explorations by borders and filters multiplying to the inside of the many compounds: socio-economic differences, cultural ambitions and fear, yet also the segregationist logic of planning (under neoliberalism, individualism and, consequently, island urbanism), all shape and subdivide the market and, with the market, fragment the territory.\textsuperscript{39}

For example, Villa del Real and Sierra Hermosa are both divided into sections of houses purchased under different credit schemes. In addition, they are divided into different types of streets, namely \textit{avenidas} (main roads), \textit{calles} (local roads), \textit{cerradas} (cul-de-sacs) and \textit{privadas} (private, gated streets).\textsuperscript{40} These types of streets allow different social activities to take place inside them, thus constituting distinct categories of \textit{openness}.\textsuperscript{41} In addition, they correspond to different legal categories where the three first-mentioned street types are part of the municipality’s public domain while the \textit{privadas} constitute legally and socially privatised land under shared ownership of their respective resident groups.\textsuperscript{42} As with fragmented peri-urban space on the whole, the experience of space and its subdivisions inside each fragment is that of a sequence of access-controlled, socially and materially delimited entities.

\textit{Landscape City}

A third layer thought out of the experience of the bus ride is the \textit{Landscape City}, now shifting the focus to the material-social condition of the bus itself and to the perception the inside affords of what is outside the vehicle. García Canclini suggests that while \textit{living} the bus, travellers also appropriate the urban space they traverse through vision and imagination.\textsuperscript{43} Houses and cars fly by behind the windows of the bus and are loosely related to one’s own life or explicitly connected to reflections on the past and future of the metropolis.\textsuperscript{44} The linearity of the road and the particular route the bus is taking condition the visual apprehension of the space they cross.

\textsuperscript{39} Borsdorf and Hidalgo 2010; Borsdorf, Hidalgo, and Sánchez 2007.
\textsuperscript{40} See also Interview with Guillermo Heras, local administration officer in Sierra Hermosa.
\textsuperscript{41} Lynch 1995, 396. According to Lynch’s definition ‘a space is open if it allows people to act freely’.
\textsuperscript{42} For the legal text see: Ayuntamiento de Tecámac 2004. See the interview also with Mr. Heras.
\textsuperscript{43} García Canclini 2013, 43, 46, 57.
\textsuperscript{44} García Canclini 2013, 46.
The term landscape deliberately refers to the perception of space when apprehended by vision.⁴⁵ This is in contrast to the term environment used to denote the same socio-material space but when experienced in practice.⁴⁶ Differentiating between visual landscape and lived environment allows the description of two ideal poles between which everyday space is incorporated into thinking the city.

At the same time, Ingold argues that seeing is a practice of the body too. That is to say, visual perception is a bodily practice. Seeing the city as landscape is achieved while feeling the road and movement mediated through the bus seat and listening to an accompanying soundscape of music and engine. As a specific practice – that of seeing from the moving bus – it affords a particular kind of notion of ‘the city’, one that is provoked as much as hindered, in a word negotiated, through the experience of distance and speed, through the material quality of the window-as-screen and through the corporeal-material relation of body and bus (seat).

The practice of visual perception, hence, is an affair of two theoretical worlds. Through interpretative seeing the landscape-flying-by is incorporated into the individual construction of the self in relation to the traversed environment: both the city, even in its framed and fleeting apprehension and territorial incomprehensibility, and the subject are established through the specific vision afforded by and emanating from the particular body and its particular positioning in space while accomplishing the viewing (that is sitting on the bus and moving quickly along the linear road).⁴⁷ Simultaneously, the ‘observational acuity of eyesight in watching and looking’, too, is the achievement of the living body.⁴⁸ It is part of the perception by which we dwell in the world, a visual-bodily practice that does not represent ‘an external world’, but, like hearing, ‘participates in the inwardness of the world’s becoming’.⁴⁹ This kind of vision is responsive to the material conditions from which it emanates. Drawing on James Gibson, Ingold describes it as the perception of whole living beings necessarily being emplaced

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⁴⁵ Burckhardt 2006, 33.
⁴⁸ Ingold 2010, 15.
⁴⁹ Ingold 2000, 155-156.
in material environments and as equal to these beings’ ‘own exploratory movement through the world’.  

The Landscape City thus reflects onto travellers as the relational horizon of their lives, in tune with their own becoming. It draws together the many facets, social and material, of each urbanaut’s lifeworld, which are perceived with all the senses and juxtaposed with previous experiences and changing affects. According to different commuters and their physical and emotional conditions, occupations and motivations for journeying, these subjective imaginaries can vary enormously: they range from ‘tedious’ (Santa) to recreational (José) or, as Canclini suggests, from adventurous and playful to reflecting on the urban condition, and even therapeutic in terms of overcoming isolation. Finally, the Landscape City can be removed from one’s consciousness by reducing it to no more than the backdrop of each individual’s journey. However, even in this negation the city is present in sensorial-material ways as the weight – light or heavy, according to lived experience – it brings to bear on each traveller.

The accompanying images present the city from this researcher’s own perspective of looking-out-while-being-on-the-bus (images 7.12. to 7.17.). They cannot reproduce the material-corporeal emplacement from which they emerged, yet they do provide a taste, I believe, of how inside and outside converge on the screen of the window and how interpretative seeing is intertwined with the explorative journey of the eyes of observational looking. In addition, they provide a catalogue of the elements and ‘tropes’ of the peri-urban that can be apprehended from the bus: residential compounds alternating with fields and billboards advertising more residential compounds; houses, land and cars for sale; trees, political advertising, roadside workshops and restaurants; people waiting and moving…

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50 Ingold 2000, 3.  
51 García Canclini and Mantecón 2013.  
52 García Canclini 2013, 46.  
Landscape flying by: impressions of the author’s route-sensitive, linear, mediated visual appropriation of Mexico City’s peri-urban realm. August 2009.
Bottleneck City

After riding the bus, my interest goes back to the wayside bus stop where all practice of journeying (commuting) began. Here, the crash barrier awaits our attention even before the actual wrestling with buses, indicating as it does the delicate line on which the operation of the bus-stopping-activity unfolds.

First, the guard railing marks a frontier between two worlds of movement, giving the highway its sense of linearity and speed. The guard railing separates fast cars from the slow and rambling velocities characteristic of pedestrian movement. Secondly, drawing on the highway’s promise to link up distant destinations, it works as a gateway between the local and an otherwhere – ‘the city’ – that can only be reached precisely by stepping over the railing and, thus, from one world of speed into the other. Thirdly, when seen from the outside of the carriageway, the railing is the last and most difficult obstacle that has to be overcome when climbing up to the bus stop. It acts as a wicket gate separating those who are bodily able from those unable to access the space of potential of the highway, its movements and the city. Finally, when seen from the inside, it also acts as a point of encounter where fellow travellers meet and construct a sense of common enterprise. In other words, the guard railing acts all at once as the marker, obstacle, gate and node of possibilities inherent to practising the bus stop. It exemplifies the multi-layered-ness of mobility to which Kevin Hannam et al. have pointed while, at the same time, collapsing its poles in a single location when enhancing mobility as well as reinforcing immobility.⁵⁴

How, then, is city being thought out of the material condition and bodily practice we find at the San Pablo bus stop? One facet, I argue, can be described as affording an oppressing perspective on the traveller’s own position and potential mobility in the urban realm. This is the first aspect of the Bottleneck City, born out of the experience of the bus stop (with all its components: passing the guard railing and wrestling with buses) as a violent barrier that has to be physically and

⁵⁴ Hannam, Sheller, and Urry 2006, 11-12.
mentally overcome before it will open up as a gate to mobility and expanded possibilities – providing travellers are not put off altogether from the attempt. At the same time, an opposing aspect can equally be thought out of the very same condition and practice. This second connotation of the Bottleneck City can be described as an enabling perspective on the becoming of both individual and city. This second view is rooted in the experience of the bus stop as a door that is swung open precisely through bodily work, conquering all obstacles – even turning them into support devices as in the case of the crash barrier used as a bench – and taking on all adversaries and risks, for example, in the form of full-size coaches pulling in right beside the prospective traveller. Either way, this operation as a bottleneck exemplifies and sets in material form what Soja describes as the ‘socio-spatial dialectic’, a notion by which he reminds us that ‘the geographies in which we live can have negative as well as positive consequences for practically everything we do’.  

### The Social and Material Plasticity of Space

Apart from its actual functioning and the corresponding city-thinking that emanates from it, the San Pablo bus stop is significant also in light of theoretical considerations regarding architecture, urbanism and socio-material space in a broader sense. I try capturing these implications under the notion of the double plasticity of space, social and material. Three interlocked phenomena have to be taken into account. These are: first, the inconstant constancy of the bus stop made by stopping buses (arising anew in each encounter of person and machine, yet describing a site and practice firmly located both in the space of the city and the memory of its practitioners); second, its immaterial materiality (presenting no material sign but the wholly material movement of bodies and buses); and third, the gradual materialisation of these immaterial-material movements (the fact that making a bus stop by taking buses does eventually ‘solidify’, to a certain extend, in the material space where this practice takes place).

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55 Soja 2009, 3.
All three aspects are particularly striking in the case of the bus stop under review, yet hold their validity also for describing the contradictory presences of, for example, Doña Margo’s, Eduardo’s and Margarita’s street stalls described in chapter four.

Plasticity, Catharine Malabou expounds, is defined by being simultaneously ‘susceptible to changes of form’ and ‘having the power to bestow form’.\footnote{Malabou 2000, 203. The author elaborates on the meaning and potential of plasticity by drawing both on Hegel and on the working of the brain; See 2006.} Attributing such double capacity also to space is the ground, I suggest, on which Soja builds his notion of a socio-spatial dialectic as the basis for critical spatial thinking.\footnote{Soja 2009, 2-3.} In this sense, Kevin Lynch suggests space is plastic due to its ability to be actively used and manipulated\footnote{Lynch 1995, 409.} – at the same time as this use and manipulation congeals in specific forms or structures to which further transformations necessarily have to respond (either by building on them or by altering or destroying them).\footnote{Malabou 2000, 204; 2006, 23-24.}

Drawing on this framework, the socio-spatial and material-spatial permanent temporariness\footnote{My use of the term is distinct to Yiftachel 2009, 251, who employs it for a different scale and context.} of what appears like a forever-renewed bus stop is rooted in this very characteristic of being both malleable and emergent. In light of my research, I particularly highlight the material dimension of such reciprocal manipulation of space and the social, drawing on Paul Carter’s description of the ‘plasticity inherent to matter’.\footnote{Carter 2004, 187.} The city, then, thought from out of the malleability and power to mould of urban spatial matter, that is, from out of the site- and activity-specific solidification of practice, is the layer of the Plastic City.

**Plastic City**

At the bus stop we have already touched on the traces of this Plastic City. The kicker, in order to boost his conjunction work, has made some small but
significant modifications to the material space of the immaterial-material bus stop. He was the one who placed the few stones that now help to reduce the guard railing’s height that prospective travellers have to overcome. He diagnosed the situation and, within his possibilities, added what was missing.

It was me who placed those stones. I arranged them [to form the stairs]. I wanted to take out a section of the guard railing but the highway is subject to federal law. It can’t be done.

In other words, the kicker’s intervention gives the permanent temporary bus stop the weight of a now materially solidifying presence. The stepping-stones, loosely placed in 2011 and cemented together in 2014, resemble what could be called a work of proto-architecture (in the process of its becoming). They indicate a particular material place in the continuum of peri-urban journeys, right here, at the very spot where highway and footpath meet at the guard railing.

In addition, the kicker looks after his stones, assuring they do not come loose under people’s feet. In the interval of buses (and when he feels like it) he assists people to climb the barrier, offering them a helping hand, and directs some welcoming words to his clients. He is nursing the bus stop with his labour. In so doing, he is consolidating the site both in the social and in the material sense, as well as strengthening his own position as its kicker.

The footpath up the slope is yet another example of the plasticity of the bus stop, albeit one for which it is impossible to identify a similar, singular authorship. Rather, innumerable feet trotting up the hill – day in, day out – carve out the sandy trail. ‘Step by step’, 62 users imprint their lives into the environment, materialising the first metres of their journey to the city otherwhere by nothing else than practising it with their bodies walking: constant and continual individual ‘ambulatory practice’, as Jean Augoyard frames it in the context of French modernist housing estates, moulding a collective, material pattern in a ‘concrete space-time’. 63

63 Augoyard 2007, 5.
Both examples show, in Tim Ingold’s terms, how ‘the forms of the landscape… emerge as condensations or crystallizations of activity within a relational field’.64 Through the living and acting body, practitioners of the bus stop grow it in their socio-material lifeworlds and endow it with meaning.65 Michel de Certeau, too, described walking as a creative and enunciative art for practising and thinking the city, that is, as a form of urban making (poiësis).66 The city, thus, emerges as make-able, as something that can be moulded through practice, hence as the Plastic City.

This moulding of the world, this solidifying by practising, is certainly not unique to Mexico City’s peri-urban realm and its informal bus stops. Nevertheless, it is not by chance that the tangible manifestation of an intangible bus stop made by stopping buses can be found right here, on the frontier of the expanding metropolis. The specific material condition of peri-urban environments, I argue, is highly responsive to being moulded with the feet. It is particularly malleable by the soft forces of everyday life precisely because it is subjected also to wholesale hard forces (formal citification, capital accumulation, globalisation, etc…) transforming its land use patterns. Here, infrastructure (or the lack of it) channels movement, and movement sediments into infrastructure – in the proto-architectural form of the traces of self-infrastructure labour of conjunctions and travel: the continuous turnover and permanent-temporary becoming of the peri-urban environment affords its particular plastic condition that allows stones to be assembled into staircases and paths to be carved into bare patches of earth.

Established Improvisation

In addition to thinking the condition of peri-urban space, the notion of space’s plasticity also intervenes in the debate on informality. The bus stop in question is commonly described as being informal, understood as a set of practices by which the excluded/marginalised find a way around, or even resist, the constraints of the formal while dwelling in a state of unscripted, formless and

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64 Ingold 2004, 333.
65 Ingold 2000, 153. See chapter one.
66 de Certeau 1988, 97-98, xii; see also: Tilley 1994, 28.
The San Pablo bus stop challenges these descriptions by allowing several observations:

First, this bus stop shows that informal practices are not directed against the formal but are a way to tie into the formal on terms made available by self-infrastructural work in accordance with the given circumstances. It is part of the endeavour and process of modernisation, directed not against urbanisation but as a particular form of urbanisation, as Libby Porter et al. and Ananya Roy expound.68

Second, the bus stop’s immaterial materiality demonstrates that alternative routeing – let alone resisting marginalisation – is not a smooth affair of ‘flowing’ but a matter of pulling and pushing. Here I follow Caroline Knowles in her analysis of how urban life is being navigated,69 adding again the particular focus on the materiality of the social. Hence, I understand the informal register as a form of arduous, bodily urban labour that shapes material space just as its formal counterpart, ‘official’ urban development, does. The difference being that informality does so not through tangible manifestations of things alone (houses, roads, built bus stops) but also in the form of intangible yet very material presences and movements (the practice of stopping buses).

Third, the existence and persistence of the bus stop made by stopping buses, that is, its inconstant constancy, shows how authorities hide from their responsibilities to provide favourable urban conditions. Both federal and municipal authorities tacitly approve of the San Pablo wayside halt despite its violating highway regulations. This discloses informality’s interiority to the system,70 with the state and system benefiting from externalising the risks and costs onto de-collectivised subjects who thereby live under ‘the permanent condition of uncertainty’.71 A fellow user of the San Pablo bus stop explains:

This stop has been here for years. It’s because people need it… We need something safe, mostly because of the accidents. There is not enough space [for the operations of the bus stop].

67 Cf. e.g. Brissac Peixoto 2009; For a critical discussion see Varley 2013 and chapter one.
68 Porter et al. 2011; Roy 2005.
70 Cf. de Soto 1987, 12-13, in particular his notion of the ‘penumbra’ in which informality operates.
71 Altvater and Mahnkopf 2003, 20, own translation; see also Gilbert and De Jong 2015.
Drawing these considerations together, I argue that the bus stop’s continuous happening provides an example of how the informal is not (necessarily) unscripted and formless but rather the working of well-established and rehearsed procedures. The San Pablo wayside halt is made up of a collectively agreed-upon set of specific practices at a precise location. In that sense, it can be described as the work of collective improvisation, yet not at all, for that reason, as being arbitrary and chaotic. Fellow users describe the bus stop precisely as:

Improvised, yet established (*improvisado, pero establecido*).

These are usually either/or conjunctions and thinking them together is revealing for how to make sense of informal urban mobility.

Christopher Dell points to the structured nature of improvisation, translating from free jazz to the urban realm that it denotes a practice based on experience and skill, anticipation and being attuned with the other players.\(^72\) He also argues that improvisation is important for responding to the generally provisional and messy character of the urban.\(^73\)

At the same time, Bormann et al. specify that improvisation is not determined by the absence of rules but ‘inaugurates processes *at the border* of rules, including the rupture with these rules, by which new forms and spaces of possibility for action are opened up’ (*can be opened up, I would suggest*).\(^74\) Hence, drawing on Alfasi and Portugali we can frame the bus stop made by stopping buses as self-organised according to a ‘pull approach’ to meeting the needs of urban mobility.\(^75\)

Buses stop as travellers *pull them to be picked up* along the highway. This the authors describe as a particular mode of just-in-time planning and management, ‘highly suited to the open, complex nature of the self-organized city’.\(^76\) It is in this sense that what is improvised is nevertheless established as a particular mode of organising the practice of bus-stopping.

\(^72\) Dell 2007, spelling out his conception of a *performance of space*; drawing on Dell see also my own writing on Situative Urbanism: Wissel 2010.
\(^73\) Dell 2011, 36, 45.
\(^74\) Bormann, Brandstetter, and Matzke 2010, 9, own translation, emphasis original.
\(^75\) Alfasi and Portugali 2004, 31.
\(^76\) Alfasi and Portugali 2004, 30.
Conclusion

In this chapter I have directed the gaze to the highway and to how it is being practised both by travellers and by wayside professionals. I have analysed both the labour of travel implied in making a bus stop by walking it into being and by wrestling with buses, and the labour of conjunctions inherent to the infrastructural management of movement, provided in the example of the kicker and checker.

The bodily work by which a stretch of highway is acted out as a bus stop is characteristic of how people expand themselves beyond the local when excluded from centrality. Practitioners on the social or spatial margin (or on both) grow as much as they can their material grounds-of-access to the city’s possibilities. They do so through their active engagement with their environment and out of the opportunities inscribed into this very engagement. People and buses are brought together and distance is made productive by working out – and then putting to work – the times, spaces and conjunctions afforded by the highway. In other words, practitioners of the road beat the flow by aligning their own (moving) bodies with the movement of the bodies of the other actors, human and non-human.  

The city-thinking born from such practice is multiple. I have identified five layers of cityness: the Outpost and Sequence Cities, the Landscape City, the Bottleneck and the Plastic City. The first two derive from practising the spatial implications of the highway, that is, from overcoming distance and being subjected to linearity. The third layer focuses on the visual experience of the bus ride and how it sets into motion and frames the city in fleeting images. The fourth layer describes the enabling and, at the same time, oppressive experience of gateways that control access to ‘centrality and its movements’. The last layer, in turn, provides a picture of how the peri-urban realm can be thought as particularly plastic, that is, as receiving form from and giving form to the specific practices it affords. The immaterial materiality and continuous becoming of bus

77 Despite my focus on human bodily practice, at this point, including non-human ‘actants’ (Latour’s term) seems pertinent in order to capture the multiplicity and multiple agency of moving ‘bodies’ on the road. See chapter one. Cf. e.g. Farias 2011.
78 Lefebvre 2008, 150.
stops made by stopping buses or permanently temporary street vendor stalls, for example, provide the ground for its particular notion of cityness.

Furthermore, the San Pablo bus stop at the centre of this chapter points to a juxtaposition of urban and rural logics that has not yet been addressed, but which is highly characteristic of the peri-urban condition.\textsuperscript{79} I will develop the rural perspective in more detail in the next chapter. For the time being I want to point to the difference in the appearance of the wayside halts of San Pablo and of the popular neighbourhood 5 de Mayo down the road, a formerly informal settlement now regularised and well integrated into the urban fabric and movement. This second bus stop is equipped with the (solid) architecture of a pedestrian bridge, lay-bys and roofed bus stands, while the historic village of San Pablo has been omitted from planning and left with its permanent-provisional, informal arrangement. Comparing the two, I argue, we can identify a direction of travel traversing that of the highway, that is, a movement that runs from village to agricultural field instead of running from peri-urban satellite to city. This is despite the fact that year-by-year this movement is diminishing as fields are sold and rapidly urbanised. The \textit{permanent temporariness} of the bus stop, then, stands out as a marker of the crossing of urban and rural relations. It can be read as a rural interference in the citification of Mexico City’s northern peri-urban continuum.

\textsuperscript{79} E.g. Brook and Dávila 2000; Douglas 2006; Rakodi 1999.
8. Counter-urban Endeavours

Introduction

In the following chapter, I will move things around. I will challenge the urban perspective and give voice to the analytical other that constitutes the peri-urban: the rural. As discussed in chapter one, neither the urban nor the rural can easily be defined as independent value systems, nor does any clear-cut dichotomy between the two withstand our scrutiny once we analyse their interdependency and ongoing cross-fertilisation. What they do offer us, instead, are two pools of material and corporeal-practical positions, with their corresponding perspectives, that are analytically useful for feeling our way into the practices and experiences of the peri-urban.

As has been outlined, the principle contribution of the rural perspective is its heightened awareness of the material, ecological and non-human influences on the social production of space (this is, in the rural context, the awareness of soil, climate, flora and fauna).¹ The principle criticism of rural scholars towards their urban colleagues is that they subsume the rural under the urban and repeatedly underestimate the complexities and processualities of the so-called countryside, which is inscribed into global restructuring and constructed by local performativities (of rurality) just like its urban (conceptual) counterpart.²

Declarations about moving things around to give voice to an ‘other’ are of course claims far too big to fully sustain. With my background as a European suburban-urbanite, it is difficult for me to truly empathise with Mexican rural lifeworlds and their corresponding ontologies. Hence the title of this chapter, Counter-urban Endeavours: even if the rural perspective is in focus, it is in focus as a particular way of thinking city from its conceptual outside. At the same time, the starting point for everything continues to be the urban, and from the farmers’ and my own attempts to resist its regime (in my case, in order to describe it).

¹ Woods 2009, 851; Heley and Jones 2012, 211.
For the following considerations, I draw on my own observations made in the fields along the fringes of Sierra Hermosa and Colonia Antorcha, as well as on ethnographic conversations with farmers from the villages of San Pedro Atzompa and San Francisco Cuautliquixca. Additional interviews were held during the regular meetings of the board of the San Pedro ejido. Together, they carve out the rural logics, materialities and corresponding relational practices by which city is being thought *rurally* in Tecámac and Tizayuca. As my informants expressed, it is often against the financial, political and cultural, the real and imagined hegemony of the city that their rural positions and identities are forged. Their voices will stand as analytical counterpoints to the more city-oriented perspectives of the settlers and commuters of the residential neighbourhoods who were at the centre of the previous chapters.
Fields adjacent to Sierra Hermosa.  
Seen from inside Sierra Hermosa (above, October 2010) 
and vista from fields towards Provenzal del Bosque (below, January 2012).
Here/Gone. Efforts in Imagining Rural Resistance

The first rural sites I take into account are the fields adjacent to Sierra Hermosa (images 8.1. and 8.2.). Revisiting these fields over several years allowed me to capture their material and social transformation. To cut a long story short, what in early 2010 was a field of crops by 2014 was the newly built Provenzal del Bosque development. I had witnessed the birth of yet another fragment of the expanding metropolis; and I had seen the former practitioners of this space, the farmers of San Francisco Cuatliquixca, gradually retreat – partly voluntarily and partly involuntarily – but not without telling me their story.

Language and the Value of Land

I meet Don Goyo and Rubén coming down the farm track from their plots of ejido land. From the outset, they share their rural perspective with me not only by laying out to me their concerns but also, as the unintentional side effect of our conversation, by introducing me into their language. For example, they speak of ‘sowing houses’ (plantar casas), not of building them, and in doing so, I argue, they shift the focus from house to ground. It is the fertile soil in which all things have their beginning – despite the fact that they clearly see, just like the developers and politicians do, that growing homes is far more lucrative than growing crops. The market for houses is much stronger than that for corn, alfalfa or barley – an assessment that is confirmed by Guillermo Estévez Prieta, the president of the ejido of San Pedro Atzompa, and by the other members of the farmer organisation’s council. During our interview, their language is repeatedly that of care and respect for the ground and clearly separating land from market:

The land is noble. It produces what we put into it (La tierra es muy noble. Si produce lo que nosotros le ponemos). Unfortunately the market for us is very bad.

3 Names changed on request.
The point made, then, is that land sits differently within the urban and the rural logics. While in the rural perspective it is the bearer of all production, and this production is circular both in terms of the seasons and of crop rotation, in the urban perspective land itself is the commodity and its value is that of linear accumulation. This differentiation in the evaluation of land from the urban and rural perspectives holds true even if in general terms land and the land market mean the same for both realms: land is a legal object, economic asset and productive factor, as well as an important reference for the representation of economic and social relations. As such, it lies at the heart of both collective and individual existences; and ownership and capacity of decision over land are important aspects of power.4

Differences in the urban and rural understandings of land become apparent also in the Spanish term baldío as it was used by my informants in the urban fragments of Mexico City’s northern peri-urban realm.5 Technically, the term baldío denotes both fallow agricultural land, that is, land that is left uncultivated in order to regain its nutrients, and future development land, that is, land left bare for construction yet nevertheless productive in the process of urban accumulation as it is gaining in value precisely because of its (temporal) non- or under-usage. In popular convention, however, the term denotes barren land, or wasteland, land that is supposedly dead and unproductive. This third meaning is the most common among the dwellers of Sierra Hermosa and Colonia Antorcha as it sustains two implicit claims by which they define and justify their own peri-urban position and identity: there was nothing there before we came and it was through our coming, including our building of houses, that the land was given its value. The contrast of this third meaning of baldío in relation to the farmers speaking of fertile soil and noble land could not be more significant. It highlights the competing reference systems and perceptions regarding the purpose and value of land that are characteristic of the peri-urban realm.

4 Dieterich 1994.
5 E.g. in the interviews with the chair and secretary of the neighbourhood association in Villas del Real and with the settlers of Colonia Antorcha.
Between Refused Protection, Relative Poverty and Growing Populations

Despite the pace and inexorability with which the urban is moving in on them – Don Goyo, for example, describes how the ‘built-up area is already upon’ them (ya estamos con la mancha encima) – the farmers vacillate between feeling overwhelmed by the development and recognising their own role in the transformation of their habitat. They clearly see how their way of life is threatened both by external and by internal factors, and how rurality is performed differently in light of the ‘de-progress’ (des-progreso), as Don Goyo and Rubén put it, of what they describe as traditional rural practices.

The double tipping point of their lives as farmers, the two-headed beginning of the end of rural Tecámac, were Mexico’s external debt crisis followed by the hyper devaluation of the Mexican Peso in 1982/84 and the signing of the North American Free Trade Agreement (NAFTA) in 1994, they tell me. The disastrous policies of the administrations of President López Portillo first led to an abrupt break down of the economy, so that their parents were forced to sell the foundations of their lives as farmers. The neo-liberal policies by which presidents de la Madrid and Salinas de Gortari responded to the situation, enforced also by the regime of the International Monetary Fund and World Bank and culminating in the NAFTA treaty, then dealt them what they see as their deathblow. First the subsistence economic model of the small-scale, family-based minifundio producers was severely weakened and then the medium-scale agricultural producers were out-competed, from one day to the next, by the highly industrialised and subsidised US agricultural industry. In Tizayuca, in particular, the milk industry partially collapsed, drawing the forage producers of Tecámac with it into the downward spiral.

The growing metropolis, they argue, is only a by-product of Mexico’s neoliberal project and absorption into the global economy. In the 1980s, informal settlements started emerging on illegally sold communal land while the municipality was formally integrated into the Metropolitan Area. With the 1992 reform of articles

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7 Interview with ejidatarios of San Pedro. Cf. Camacho 2010.
8 Garcia Balderas 2011.
27 and 115 of the Mexican Constitution, the practices by which these lands were incorporated into the urban market were legalised and, subsequently, scaled up through legal and policy changes shifting the exploitation of land from agricultural use to real estate exchange value.\(^9\)

However, it was not until the wholesale restructuring of the housing finance system revealed its effects in the late 1990s that the large-scale buyout of agricultural land and the mass construction of vast urban developments took off.\(^10\)

Up to the year 2000, my interviewees did not perceive the expansion of the urban fabric to be an issue of concern. From that time on, however, they relate to it as a hostile take over by the city, physically and culturally, absorbing and annihilating the little that was left of their rural way of life. Now they keep referring to the residential developments of Casa Geo and other developers as ‘drowning’ them in houses (\textit{nos están ahogando}).\(^11\)

Nestor Granillo Bogorjes, appointed chronicler of the municipality of Tecámac, expresses the urgency of the transformation in the following words:

\begin{quote}
It so happened that just when a new century, a new millennium, was dawning, was when the developments started to come thick and fast. In December 1999 I still maintained the notion of Tecámac with its 12 villages and 20 colonias, more or less. But as soon as 2000 arrived, the first big estate to get established was Villas del Real, it just took over an area of land that for centuries was agricultural fields.
\end{quote}

As a result, the lives and practices of the members of the ejido as farmers are changing. With regard to the only market that allows them to earn money from the land they control, the urban market of housing, they describe themselves as having been weak and innocent in light of the offers made to them by the developers. Rubén and Don Goyo justify their active role in the land use change that they now regret by explaining how for the first transactions the developers gave them false ideas of the value of their lands thus making them sell at prices far below fair rates.

\begin{flushleft}
\(^9\) García Balderas 2011, 48-51; Jones and Ward 1998. See also chapter three. \\
\(^{10}\) Connolly 1998; Monkkonen 2011. \\
\(^{11}\) Here, for example, Don Estéban, secretary of the ejidal council of San Pedro Atzompa.
\end{flushleft}
As we never had much money, and they come and pile up a little mountain of it in front of you… well, this way it is very easy that they convince you to sell.

At that time, when the first sales took place… well, they really took us for a ride, and we sold it too cheap, far too cheap… Once we’d opened our eyes a bit, we started to up the prices, to get a fair price. But it never happened. They never paid a decent price for it.\footnote{At the same time, they themselves recognise that in comparison to the rural continuum of Mexico and Central America their situation in Tecámac is quite privileged both in climate and with respect to the levels of poverty and marginalisation.}

With regard to the \textit{materials} they work with as farmers, they have changed the crops that the city ‘allows’ them to grow – referring by ‘the city’ to urban dwellers, policies and laws issued in favour of urban conditions: They stopped cultivating corn because they were losing a significant proportion of their crop to residents from the urban developments stealing the cobs and destroying the plants. Now they concentrate on alfalfa and barley, which give good animal forage, too, but are of less interest to brazen urban dwellers, as they tell me. What is most noteworthy is that this is not the first time that the city has dictated what they grow: for a long time now they have been obliged to produce for animal feed only, due to the fact that it is with (urban) grey waters that they irrigate their fields.

\textit{Differentiated Countrymen Subjected to Urban Politics}

Adding up the multiple losses to the very foundations of their work, farmers in Tecámac started to ask themselves if their way of life and their cultural identity had a future. The ‘de-progress’, in their perspective, of their economic model, the reduction of their land together with the degradation of the particular use-value they give it and the experience of being entirely at the mercy of the urban has put both their ways of doing and their values under pressure. ‘Urban sprawl is overwhelming us and it is finishing with our customs’, Don Goyo and Rubén summarise their situation, and it is their own numbers – in addition to the disappearance of their agricultural lands – that seem to prove them right: out of 100 members of the ejido of San Pedro Atzompa only fifteen are left labouring
as active agricultural producers. The others, as Don Guillermo puts it, are ‘farmers in name only’.

By now, we are farmers in name only (Ya somos campesinos de nombre). We have changed our professions and dedicate ourselves to other things, above all trading.

At the same time, hope in cultural resistance is kept high: Don Goyo and Rubén actively resist the idea that their village by now is part of the city.

They tell us that we are part of the city now. – But no! As long as we want to be of the village there will be a village! (Mientras que nosotros queramos que seamos pueblo va hacer pueblo).

Altogether, there are twelve such villages in Tecámac, legally recognised by municipal statutes as the historic birthplaces of the municipality. But their status of pueblo originario (original village) is merely rhetorical, invented to protect their distinctiveness in response to the continuous loss of political powers initiated with the 1992 reforms. Today, the farmers’ ‘ancestral spaces’ are challenged by external and internal factors, just like their historical political standing and social identity as farmers.

With actual farming on the downturn, the farmers-in-name-only have taken up other fields to safeguard their economic and social reproduction. They have become ‘differentiated countrymen’ in accordance with the economic, social, political and cultural parameters, yet nevertheless still ‘shaping the development trajectories of [their] rural localities’. Retail, transportation and handcrafts are only the most prominent of the activities by which to secure their livelihoods as farmers plus. Their double income strategy is typical for the peri-urban realm. At the same time, these new post-agricultural production modes, too, have suffered under global influences and no longer present viable alternatives, as is
claimed by the council members of the ejido: the proliferation of mega stores has outcompeted local retailers (this is the story of Don Guillermo); the multiplication and brutalisation of organised crime together with rising petrol prices have made roads too dangerous and journeys too costly for small hauliers (this is the experience of Don Carlos); and high silver prices coupled with the rise of all-inclusive tourism and cheap competition from China have destroyed the markets for artisans (this is the case of Don Adrián). Don Guillermo concludes:

So far, we have survived because somehow we have to defend ourselves [...] We have come to evolve *(hemos venido evolucionando)*.

The principle force they respond to with their tactic of defence by evolution is that of the *urbanisation of politics*. As we have seen above, citification is a subordinate phenomenon to the economic transformations they face, albeit its scale and the physical change it entails means it is a decisive one for the annihilation of their habitat as they used to know it. Hernán Correa Ortíz shows in the example of disputes over the control of water resources how political powers are shifted away from the ejido councils to municipal administrations despite the fact that these councils are still recognised as local bodies with federally bestowed authority even after the 1992 reforms.18 This ‘municipalisation’ *(municipalización)*19 of political decisions – a positive step, we might argue, away from Mexican top-down presidentialism towards decentralised, democratic and locally-accountable institutions – was perceived by the farmers as the submission of their (rural) autonomy to urban logics.

Without doubt, it is urban interests that are prioritised over all rural concerns. As a result, support for agricultural production has come too late and continues to come too late every year. Not only have the farmers been left alone with the impacts of the NAFTA treaty but current subsidy programmes are also executed in a way that shows that the (urban) administrative bodies have little to no idea of the logics of the rural. To give an example, Don Goyo and Rubén describe the federal programmes intended to help them buy seeds but implemented at a time of the

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18 Correa Ortiz 2010.
19 Correa Ortiz 2010, 83.
year when the cycle of agricultural production has long gotten underway and the money is of no use anymore.

What’s more, the subsidies come at the wrong time. They arrive, but too late: sowing time is in March, but the subsidy arrives in June or July.

The only viable agricultural response, they conclude, is the intensified production enabled by greenhouses; but even this industrialisation of agriculture is clearly perceived as giving in to the urban logic. In any case, they do not have the financial resources to invest in such a shift in technology; and even if they did have, Don Guillermo points out, they would never be able to gain ground against their large-scale U.S. competitors.

Thus, it all comes down to the fact that urban interests make for higher returns. Years ago, Don Guillermo heard Enrique Peña Nieto, the current Mexican president and former governor of the State of Mexico, declare on the radio that he was going to make the municipalities of the northern Valley of Mexico a ‘Macropolis’ – ‘and now he is doing it’ he concludes in indignation. Towards the end of our conversation, he frames their lost cause as farmers and rural people by re-interpreting a celebrated slogan from the Mexican Revolution:

Land and freedom (tierra y libertad); but today, lamentably, all that is left is the freedom to sell our land (sí tierra y libertad, pero ahora es libertad para venderla).
Peri-urban Conjunctions: Agency and Praxis of Rural Persistence

So far we have heard about the loss of the rural (as we used to know it) and its values and means of production in Tecámac. But there is also a complementary story to be told: that of rural agency and praxis of persistence, in particular, that of emerging peri-urban forms of rural-urban and urban-rural conjunctions. In the following, therefore, I will present traces of practices, above all, by which the rural is defended by evolving, as Don Guillermo has put it. Again, I will start my journey on the fields, cultivated, left bare or sold, that lie adjacent to the Sierra Hermosa development.

Good Times until the Air is Gone

Halfway into my years of fieldwork, suddenly, I hear Mexican folk music when walking the fields again after several months of absence from my research sites. I have come to document the advance of the Provenzal del Bosque estate now being built on what I used to know as farmland from earlier visits. Thanks to the music I am diverted from my objective and drawn into a very distinct form of post-agricultural activity unfolding before me: in one of the self-built structures that are scattered across the plain, Doña Reyna has opened a modest pulquería, a bar that serves a traditional alcoholic beverage obtained from the fermented sap of the maguey (image 8.3.).

The pulquería sits in between the rural and its urbanisation, the local and its globalisation. Drinking pulque is strongly tied to an awareness of its cultivation and artisanal production at plantations, in particular, in the Valley of Apan, in the state of Hidalgo, some 60 kilometres distant from Tecámac and Tizayuca. In the collective imaginary of both urban and rural populations it is a marker of ‘traditional’ Mexico, charged with a sense not necessarily of the rural but of resistance to the loss of local identity in the process of mega-urban and global restructuring. At the same time, the fact that Doña Reyna was able to open a pulquería on this particular site owes itself to this very plot’s privatisation and consecutive exclusion from agricultural production through the construction of a house.
Doña Reyna is unaware of the inherent tension in her and her business’s position; but she knows that her days are numbered. ‘Magueys are dying’, she tells me, but, above all, it is the residential developments that she perceives as the threat. Her critique, however, is distinct from that of the farmers we have heard earlier. Doña Reyna is not an active cultivator of the soil herself, but appreciates agricultural production as the backdrop to and representation of what she regards as a valuable (rural) life. Her engagement with the surrounding is visual, as landscape, not based on physical labour, on laying hands on the environment. Thus, while claiming rural points of view her actual way of looking is that of the urbanite – albeit not that of the urban developer. That is to say, she has no interest in making what she sees productive, other than by contemplating its aesthetic value. Furthermore, the aesthetic value is aligned with consideration of the ecological sustainability of her habitat, while in her account the city is something that asphyxiates.

How can I put it? All these houses; already they are buying up these fields to build houses and soon this will all be finished. Why is it a shame? Because... it is beautiful to watch them [the farmers] when they sow, to see the plants grow: corn, fava bean... but now they are getting rid of all this. Soon we won’t even have air to breath (y al rato ya no vamos a tener ni para respirar). This is what is good for us: to have a little bit of clean air (tener un poquito de aire limpio).

Indeed, only a year later, I find the building abandoned and the memory of the pulquería fading.

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20 For a distinction between landscape and environment see chapter seven.
While the pulquería with its urban perspective appeared and disappeared from a rural context, a few hundred metres away a rural site resists its urban ‘takeover’. Located within the Provenzal del Bosque development, one plot of agricultural land persists among the newly built rows of houses (images 8.4. and 8.5.). Already during the construction of the new neighbourhood, the site had been a peculiar image of the rural-urban confrontation: a hectare of agricultural land surrounded by the busy activity of workers and machines erecting houses in record time. Now that residents have moved into their new homes, the field has been turned into an agro-industrial greenhouse plantation. In both its states, the site materialises how rural land is penned in by the urban and cut off from its condition as the wide open that Santa, the restaurant owner we met in previous chapters, described as the (former) context of Sierra Hermosa.

The site, thus, provides an idea of how the relationship between urban and rural is at a tipping point: if Sierra Hermosa was the lone urban development amidst agricultural production when I started my research, by this point unusual land use in Tecámac’s development corridor is represented by a field of crops. This points to an inversion of real and perceived spatial distinctions between the rural and the urban. While the farmers from the ejido council measured the principal difference between village and urban development by the size of each plot of land – Don Guillermo claims the residential compounds (fraccionamientos) are composed of plots each measuring some 70 m2, while the average village plot spreads over at least 1,000 m2 – this relation of what is spacious and what is not, of what is enclosed in distinction to what is open, is effectively turned around when looking at the overall proportion of land uses between the two poles of the equation.

The reason for the field surrounded by houses is the extraordinary struggle of one of the farmers from San Francisco Cuautliquixca, who resisted selling his share of ejido land. Members of the ejido have different standpoints and interests, of course, as well as different means and convictions that lead them to fight or not for what they think is the right thing to do. Hernández et al. have depicted this
internal conflict among farmers. Their struggle might be considered a lost cause in the light of wholesale urbanisation, yet those who take up the fight do have an impact on how things evolve. As we can see in the present example, their fields stand out as anti-housing, as the material-spatial defiance to the expanding city, partly delaying citification and altering its physical layout. And it is their practice, too, that defies Tecámac’s urban future: sowing, cultivating and harvesting crops in the middle of urban dwellers, and bringing agro-industrial machinery and agricultural products in and out on the difficult access route through the development is engaging in symbolic resistance to the urban way of life of the new neighbours becoming the norm.

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Field caught inside the Provenzal del Bosque development. November 2011 (above) and February 2012 (below).
Modern Hunters

One of the main reasons the participants of my research offer in order to explain why their fellow farmers sell their land is the question of age. Being a farmer, today, is the profession of the older generations and farming, they tell me, will die with them when they die. Their children have no interest in stepping into their parents’ footsteps, nor do they have an interest in keeping alive their identities as farmers. According to Don Guillermo:

Today, our children, my children, don’t want to work in the fields any longer. They have a different mentality, one that is supposedly ‘more modern’ (ya tienen otra mentalidad, ya ‘más moderna’, entre comillas). But farming doesn’t interest them anymore because they see how little money there is in it.

In their children’s eyes, their parents tell me, the city offers less laborious options than the hard physical work of cultivating the land and living with the seasons and crop cycles. What the village youths don’t take into consideration, however, is the bodily labour of opportunity work that became apparent in the findings of chapter four, although it might well be that it is less laborious than farming and, in any case, with farming there is no (or not enough) money to be earned. Hence, Don Goyo and Rubén conclude:

The young folk don’t want anything to do with this. We work hard and for little gain. So they look for ways to make an easier living and earn a bit more.

Despite the loss of rural practices that the (old) farmers lament, other ways of doing associated with rural environments live on and acquire new and distinct forms in spite, or because of, the process of urban becoming. Such is the case with the activity of a group of peri-urban hunters and gatherers that I meet on the border between Sierra Hermosa and its adjacent rural space (image 8.6.). The three men tell me that they are only living here temporarily, in a house belonging to the uncle of one of them. They are out of work and came to Sierra Hermosa in order to reduce their expenses, as they are allowed to stay rent-free. What they are actually doing when I meet them is hunting grasshoppers, which, as they proudly explain, make for a healthy and protein-rich diet in addition to being a tasty meal that comes wholly free.
Grasshoppers are a delicacy in Mexican cuisine and fairly expensive if you buy them in a restaurant in the city. Out here, however, in the peri-urban juxtaposition of habitats, they abound right by one’s doorstep, literally jumping into one’s open mouth (at least if it is the right season). Hunting lunch is nevertheless a rare sight: it requires the right mix of urban and rural imagination, time and praxis. Self-managing rural workers (farmers) might have less time to hunt a plastic bag full of insects when they are hungry than those who are unemployed from (urban) wage labour. At the same time, urbanites might feel more remote from the idea of hunting and eating what jumps and creeps in the grass next to the pavement than those who presume to live in closer relation with animals and nature.

Lacking data for a more detailed analysis, we can nevertheless state that hunting grasshoppers for lunch sits between the poles of competing peri-urban logics. It links to the possible ruralisation of urban dwellers at times when rural dwellers are gradually becoming urbanised. As in the undoubtedly distant case of Detroit’s urban deindustrialisation referred to by Monika Krause, urban deindustrialisation referred to by Monika Krause, twenty-third primary sector activities are returning to the city – here, to city-bound peri-urban lifestyles – yet this is happening precisely in a context where primary sector workers are increasingly pulled towards earning their living in the secondary and tertiary economies.

23 Krause 2013, 239.
24 Hernández et al. 2001, 49.
Grasshopper hunters in Sierra Hermosa. October 2010.
Conclusion

This chapter aimed to provide insights into how the urban transformation of Tecámac is perceived and made sense of by the rural population that considers itself to have been there long before Mexico City and its metropolitan area.\textsuperscript{25} Paying more attention to a rural perspective has helped me to observe variations in language and value systems, and in the very constitution of the rural subjects, their practices, identities and spatial expressions. This confirmed notions of the ‘differentiated countryside’.\textsuperscript{26} It also challenged urban assumptions about the homogeneity of the rural hinterland. Farmers were revealed as farmers plus and conflicts among generations and along the fault line of whether to sell or not to sell their agricultural land has depicted them as active agents who, one way or the other, intervene in the course of things.

At the same time, these research encounters have shown how rural ways of life are subjected to urban logics of planning and governing. In particular, we have seen how the seasons are disregarded by administrative budgeting, that is, how urban logics pay little or no attention to what rural logics require. Furthermore, the physical city turning agricultural land into housing, it became apparent, has only been a secondary phenomenon, albeit the one that by now deals the countryside, as we used to know it, its final deathblow. Before that, it was Mexico’s economic restructuring and incorporation into the global market that had planted the seed of unavoidable transformation. Forceful but seemingly intangible economic relations thus revealed their very material workings on the ground of the ‘global countryside’.\textsuperscript{27}

Furthermore, by acknowledging and taking seriously rural agency, we have come to see how the peri-urban is modelled also by the incorporation, exclusion and juxtaposition of its analytical other, be it in the (urban) visual construction of (rural) landscapes,\textsuperscript{28} in the formation of gaps in the urban fabric by materialising

\textsuperscript{25}Néstor Granillo Bojorges, the chronicler of Tecámac, dates the origins of the village back to pre-Columbian times and prior to the foundation of Mexico-Tenochtitlán.

\textsuperscript{26}Murdoch et al. 2005.

\textsuperscript{27}Woods 2007.

\textsuperscript{28}Burckhardt 2006, 33.
what I have called *anti-housing*, or in practising fusions of urban-rural imaginaries and times. Through these cases, the peri-urban emerges as a quality, as a socio-material condition of duality and a set of equally contradictory as well as associative practices where growing crops aligns with growing houses and commutingmingles with hunting grasshoppers.
Conclusion: Peri-urban Infrastructural Practice and Thinking City Through Making

Introduction

This thesis has focused on peri-urban space and its dwellers, on infrastructural practice accomplished through the work of the body and on practice- and site-specific socio-spatial apprehension of ‘the city’. The peri-urban is a geographical setting characterised by its urban fringe location combined with rapid and wholesale change. It is also a social condition characterised by the experience of peripheralisation and the overlapping of rural and urban logics. Infrastructural practice, in turn, is a radical expression of everyday doings through which social and material relations are laid out and made productive and thus city is being made. By work of the body I refer to the physical labour implied in such city-making. Socio-spatial apprehension, finally, describes the sensory awareness of social positions and fields of possibilities that can be gained from specific ways of inhabiting specific spaces. My understanding of it is a particular one: not the city imagined as something fixed and thus outside of bodily practice but as cityness practised, that is, as the unfolding entanglement of the self and city thought through the relational making of both.

In particular, this thesis has dealt with the interplay of these elements. It did so by attending to the characteristics of Mexico City’s northern peri-urban realm and, within this realm, by addressing those practices of infrastructural labour of urban becoming that respond to and deal with its specific socio-material conditions. From there, it points to the particular layers of cityness afforded by the peri-urban entanglement of practices and situations.

In this last chapter, I will draw together the findings from the analytical sections of this thesis in order to conclude on how the peri-urban northern sphere of the Metropolitan Area of the Valley of Mexico (ZMVM) is materially thought through infrastructural making. Doing so, I will summarise the fifteen layers of cityness discussed throughout this thesis as well as read rural against urban perspectives in order to complete the picture. I will then outline the contributions of my analysis to the study of cities and their peripheries more generally, spelling
out the intervention made by thinking the city as practice and by understanding spatial practitioners essentially as makers of city. Third, I will sketch out some open questions for future research, focusing in particular on what I call the labour of urban citizenship.

**Inside Peri-urbanisation**

The most significant outcome of my research is its proposal to rethink the object of study, the object that is in fact the *process* that we refer to as the peri-urban. In order to do so, I suggest fifteen layers of cityness that can be extracted from the concrete infrastructural practices and corresponding socio-material situations I encountered in the northern stretch of the ZMVM, and which I presented and discussed in chapters four to seven. Without possibly claiming to cover the full range of phenomena, these findings reveal important threads for describing – and thus for materially (re)thinking – the peri-urban from inside (table 9.1.).

On the outset of this thesis I posed a series of questions inspired by my analysis of existing peri-urban literature. These were: How is the peri-urban made in everyday life? How is it thought out of such making? How do the formal and informal cut across peri-urban making? And what analytical insight is available when we turn to the corporeality of such making practice and to the specific (peri-urban) socio-materiality in which it occurs? I developed these questions to great extend in response to a dominant narrative of the peri-urban as a phenomenon of crisis. This is not to argue against problematising the phenomenon as such, but rather to include in our analysis how it comes to be treated as a problem. While most authors focus on the ecological urgency posed by land use changes and on the difficulty of formulating adequate responses due to the pace of the transformations, few are the voices that raise awareness of what might get lost from view if the peri-urban is exclusively framed as ‘uneasy’.\(^1\) In other words, without denying its troublesome implications, I set out to understand the peri-urban as lived experience, practised and apprehended through the body when acting as infrastructure.

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\(^1\) Allen, da Silva, and Corubolo 1999, 3.
| Graph 9.1. | 1. **Self-made City:** In this cityness layer, opportunities are pursued on the basis of taking individual risks. It describes a city that is made and thought not by sharing responsibilities but by employing each other to one's own benefit.  
Laborious City: This layer emphasises how sustaining one's life and house in the context of disadvantaged socio-material conditions implies making bodily efforts, that is, putting to work one's body and, accordingly, making and thinking city through such bodily work.  
3. **Instant City:** This layer speaks of the need to appropriate space and to ride opportunities the instant they open up (because they can soon be gone again or shift in other directions). It is the response to living with uncertainty, ambiguity and un sureness, making the most of provisional conditions.  
4. **Prospect City:** The Prospect City perceives the city as made in direct engagement with its ongoing becoming, unfolding through individual and collective action. It describes the city-to-come as being present already in the here and now.  
Uncertain City: In this layer, city is thought as an unknown, never-walked-upon path that has to be navigated and mastered day-by-day in order to come into existence and to lead somewhere, somehow, forward.  
(Potentially) Transitory City: This layer speaks of the (perceived) possibility to move on if local conditions are unfavourable. It does so in direct relation to the investments already made on site that weigh against moving on.  
7. **Compartment City:** The Compartment City describes the practice and materialisation of segregation that encourages thinking the city from the position of retreat and/or defence.  
8. **Prairie City:** This cityness layer thinks the city-to-come as a vast other-space and one's own position within this material and social vastness as solitary. Both the context's vastness and one's own solitariness are thought as specific.  
9. **Pioneer City:** This layer describes the city in terms of demand and supply. The first to come is in the pole position to make this pole position productive. At the same time, it implies the risk of failing to do so.  
Tidal City: In the Tidal City attention is paid to the shifting frameworks of action that affect peoples' lives, as well as to the different speeds by which fragments of the peri-urban develop (or fail to do so).  
Outpost City: This layer thinks peri-urban fragments as remote and isolated, as a result of the experience of repetitive, time consuming, expensive and physically arduous journeying.  
11. **Sequence City:** This layer speaks of the particular spatial structure of the territory, which encourages thinking the city as a chain of things and places in space and time.  
12. **Landscape City:** This layer describes the city as visually apprehended when the observer is materially detached from it, while nevertheless remaining in bodily contact through the mediation of the highway/bus. Here, the city appears as the relational horizon of one's own movements and becoming.  
13. **Bottleneck City:** In this layer, the city lies in reach of individuals expanding themselves beyond their local context, yet filtered by obstacles that first need to be mastered.  
14. **Plastic City:** In the Plastic City layer, the city is thought as make-able, as something that can be moulded through practice – at the same time as it gives form 'back' to the specific practices it affords.  

The four types of city-making labour that lead to the analysis of fifteen layers of cityness.
Layers of Peri-urban Cityness

As this research has confirmed, the experience of the peri-urban is multiple. As has been shown, too, these many experiences are gained through different bodily practices and entail different notions of individuals’ own positions and possibilities in relation to the wider urbanising environment.

In chapter four the peri-urban realm of northern Mexico City shines through as layers of Self-made, Laborious and Instant Cities. These cityness layers describe the experience of a process of urban becoming that, one, is rooted in individual opportunity work, two, builds on arduously labouring bodies while caught up in self-responsibility and, three, is accomplished essentially in the here and now. Appropriating and diverting space and things, riding opportunities the instant they open up (because they may just as soon be gone again or shift in other directions), grasping people, things and ideas as they move in order to align their movement to one’s own… all this crystallises in working together not by sharing responsibilities but by employing and using each other while pursuing individual growth. In this light, peri-urban cityness – the making of consequential relations in conditions of structural marginalisation – suggests rejecting the conception of informality as resistance, and instead reveals how infrastructural practices are a mode of integration into the formal economy and city by making the most of the individual’s body.

On the one hand, peri-urban cityness thus appears as an optimistic proposition, embracing ‘provisional conditions’ and possibly even turning them into assets, as Simone suggests.2 On the other hand, cityness under these conditions appears as the fatalistic subjection to uneven urbanisation because any growing or riding of opportunities is essentially accomplished only by playing oneself out against one’s odds (and opportunities are grown and exploited differently according to gender and household/family roles). In sum, this points to infrastructural beings deploying themselves in the form of what Wilpert coined as a ‘neoliberalism from

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2 Simone 2015, 382.
below’,\textsuperscript{3} that is, as acting along those lines of possibilities that a global project of informalisation lays out for them under a regime of uncertainty.\textsuperscript{4}

In chapter five, attention shifted from people to incremental houses as the extension of people’s infrastructural labour. This gave rise to conceptualising peri-urban cityness as varying modes of self-making that are differentiated by concrete socio-material conditions (which are the expression of uneven socio-spatial development). Hence, the notion of the Prospect City (layer four) describes peri-urban cityness as processual unfolding. This is to say, that the city does not stand waiting ahead as a clear-cut idea of any future-yet-to-be-reached (regardless of whether this future is pictured as either better in terms of opportunities, or worse in terms of traffic, contamination and crime), but evolves as a relational view that is felt forward through bodily work along with, not ahead of, the specific socio-material path of individuals’ own making.

In cityness layer five, the Uncertain City, this emerging of the city in line with people’s own engagement can be understood, in addition, as being differentiated through nuances of ambiguity and volatility. These variations of uncertainty evolve both from the practices needed/afforded and from the site-specific socio-materiality provided/nurtured in each case.

As a result, cityness in peri-urban Mexico – here in its expression as the materialisation of unfolding relations in various qualities of housing and the way they are secured through bodily practice – also describes a condition of latent mobility. This sixth layer of cityness, the (Potentially) Transitory City, describes how peri-urban unfolding through individual making runs along real and imagined paths that could, could not, or – in the case of arising conflicts – have to be taken.

Turning to houses, furthermore, allowed the discussion of overlaps and distinctions in the formal and informal production modes of houses. In spite of emerging from differing material starting conditions and consecutive socio-material engagements, both these registers require infrastructural and bodily manoeuvres of their inhabitants in order to provide material and social stability for the house.

\textsuperscript{3} Wilpert 2003, 112.
\textsuperscript{4} Altvater 2005; Altvater and Mahnkopf 2003, 20.
Chapter six then moved from individuals to collectives, focusing on those layers of cityness that can be materially thought out of the nurturing of neighbourhoods. Responding to the materialisation of the expanding city as an intrinsically segregated island urbanism, and writing this island urbanism in itself, the collectivity work identified in this chapter, although aimed at constructing group coherence on the inside, also essentially affects the outside by separating space into discrete enclaves. This encourages thinking city as compartmentalised (cityness layer seven); with cityness occurring more or less in concrete pockets of city (as well as along lines of centrality like the highway, as we saw in chapter seven). Consequently, cityness – just like spatial development – is revealed to occur unevenly throughout the peri-urban realm.

Furthermore, focusing on the perspective of those emplaced in a particular socio-spatial and socio-material compartment allowed us to understand how other compartments, and the space between them, are perceived as inaccessible and thus placed at a distance. This distancing of other space is decisive for the formation of compartmentalised notions of the city. At the same time, it fosters thinking that which is not part of people’s own lifeworlds as a vast other-space while simultaneously thinking this vastness, and individuals’ own position within it, as specific. This double-edged relation I described as the layer of the Prairie City (layer eight). In it, each perceiving body’s own infrastructural practice, and the ‘piece’ of cityness this individual body makes, is held up against what is experienced as surrounding ‘non-cityness’.

Such experience of characteristic solitariness, then, gives rise to a socio-spatial consciousness of the city that I coined the Pioneer City. This ninth layer describes peri-urban cityness as the socio-spatial conjunction of opportunities and practices that are entailed precisely by being among the first to make, and thus to ride them. The life of a pioneer, however, comes with corresponding costs and risks: being alone implies the lack of both conventional ‘hard’ infrastructure and of the ‘soft’ nodes that are other infrastructural beings, required in order to align with and put to work consequential intersections. Thus, the possibility of failure is built into the system, which indicates close ties to the Self-made and Uncertain City layers summarised above. Drawing these layers together allows recognition of how

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5 I borrow the term deliberately from Soja 1992, 95.
intimately linked individual opportunity work is to its materialisation in space, and how strongly it relies on the openness and multiplicity of connections to any kind of collective in order to be effective.\(^6\)

At the same time, the analysis of concrete situations showed that external forces have their effect, too, on the unfolding, and \textit{uneven} unfolding, of cityness. Layer number ten describes what peri-urban dwellers experience in the form of changing circumstances as well as of inconsistent speeds of citification according to the specific development history of each \textit{colony of the urban} (with or without international capital, on legal or illegal grounds, socially organised or not, self-built or mass-produced, etc…). In line with the ups and downs of this Tidal City, people’s frameworks for action shift back and forth according to logics beyond their immediate control. By way of a note to the debate on what assemblage thinking contributes to critical urbanism and vice versa,\(^7\) thinking city from concrete situations upwards enables recognition of how ‘underlying contexts and causes of urban sociospatial polarization, marginalization and deprivation’\(^8\) materialise in socio-material space and \textit{infuse} socio-material space with their agency.\(^9\)

Chapter seven, finally, turned the attention from local streets, houses and neighbourhoods to the artery that acts as Tecámac’s and Tizayuca’s lifeline. Hence the layers of cityness described in this chapter all derive from practicing the socio-material and spatial implications of the highway. Layers eleven and twelve describe the experience of the peri-urban as Outpost and Sequence Cities, that is, as the overcoming of distance while being subjected to spatial linearity. The repetitive, time-consuming, expensive and physically arduous journeying implied in peri-urban travel, together with the additional segregation among compartments and the structural dependency of the periphery materialised in the

\(^6\) ‘Collective’ is understood very widely here, ranging from membership relations (Colonia Antorcha), to formal neighbourhood associations (Villa del Real) or issue-centred attempts of street-wide action (Sierra Hermosa) to conventional client-street vendor relationships.

\(^7\) For an introduction and overview see Swanton 2011a; 2011b; 2011c.

\(^8\) Brenner, Madden, and Wachsmuth 2011, 234.

\(^9\) Take for example the referred agency of global capitalism and local planning through the materialisation of Island Urbanism, or national identity politics and local party political competition through Sierra Hermosa’s new entrance sponsored by the Mexican Army.
available communication network, all lead to individuals’ own positions being thought as remote and isolated, as well as consecutively placed in space and time. At the same time, journeying implies passing through what is perceived as other-spaces that are accessible only to the eyes while sitting on the bus. This is what I call the Landscape City (layer thirteen). Essentially, it describes a visual-sensory engagement with the ‘panorama’ of the city-to-come. On the one hand, the city flying by outside the moving bus is constructed as landscape because its apprehension is distanced through the window. On the other hand, this perception of the city is a bodily practice too, one that emerges from feeling the road, the bus seat and the roaring engine. The engaged detachment with/from the outside world of the bus forms the travelling self at the same time as it makes linear cityness by way of practising the road. Through it, the traveller materially thinks her or his own (moving) position against what is perceived as the context of individual life. What distinguishes this layer from the Prairie City is the difference in perception: experiencing peri-urban and urban other-space not as what is excluded from individuals’ own lifeworld and practice but as what is included through visual comprehension, mediated by the bus, when riding the highway.

Once off the bus, the labour of travel entails more layers of cityness characteristic of the peri-urban. In the activity of stopping buses at a wayside bus stop we have seen how the highway and its material constituents interfere both as a violent barrier that has to be physically and mentally overcome and as a potentially enabling gateway, precisely because distance is conquered and turned into a resource through spatial practitioners’ own bodily work. This contradictory experience and related thinking of space is described in the notion of the Bottleneck City (layer fourteen). At the same time, thinking city from the wayside bus stop challenges conceptualisations of the informal as unscripted and formless. Rather, it is experienced as an established practice based on an improvised mode of following forward the bus stop’s unfolding as travellers attract buses to pick them up.

Last but not least, cityness layer number fifteen of my analysis points to what I have framed as the Plastic City. The socio-spatial and explicitly material consciousness described by this layer is that of the possibility of inscribing people’s own becoming into the becoming of the environment. Peri-urban
cityness here emerges as the capacity to make space, to mould space in practice—not only socially but also, and above all, materially. At the same time, plasticity speaks of the material memory of space. By this I mean the quality of physical space to both receive form from practice and to give form to the practices it enables, that is, to be both malleable and emergent. This quality, while certainly applying to all space, is particularly present in peri-urban space because here the ‘soft’ forces of everyday practice work on the environment in conjunction with the ‘hard’ forces of citification. This is to say that on the frontier of Mexico City’s urban becoming we can witness how formal infrastructure channels movement as much as movement, in light of the lack of formal infrastructure, creates and sediments in new, informal infrastructure.

*Rural Perspective*

Chapter eight marked a rupture in the development of the arguments of this thesis. While previous accounts all described the perspective of those peri-urbanites that come from, or aspire to, city life, this last of the analytical chapters turned to real and imagined counter-urban endeavours of rural, formerly rural, and differentiated rural practitioners. The purpose of this intervention was to describe the peri-urban from a vantage point that challenges the ‘intellectual imperialism of the urban’ without neglecting the dominance of the urban process. This acknowledged the multiplicity of perspectives and their complex and partially antagonistic attempts to simultaneously make sense of the peri-urban out of everyday practice. What the insights presented in chapter nine suggest is that the material transformation of peri-urban space can be understood as a secondary phenomenon to processes of global adaptation that affect rural space as much, and as directly, as they affect the urban. It showed that rural logics and concerns are largely marginalised. And it exemplified how the rural has its own agency in the socio-material *moulding* of peri-urban space, leading to contradictory expressions of urban-rural nexuses of practice, perception and imagination as well as to the

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10 Malabou 2000.
11 Krause 2013, 234.
creation and entrenchment of material ruptures between housing and fields (what I called anti-housing).

Furthermore, the objective of these explorations of the rural perspective was not simply to mark their opposition to urban perspectives, but rather to strengthen my description of layers of socio-material apprehension by highlighting the similarities and dissimilarities in practising and thinking peri-urban space from both vantage points. In the following, I will read the positions, practices and perspectives described in chapter nine against the types of city-making labour and the layers of cityness as summarised above.

The first thing to note is that both the rural practices (agricultural work) and those practices that incorporate the rural and urban (hunting grasshoppers, operating a pulquería) resist being described as infrastructural and city-making. Opportunities are to be sought, too, from their perspective, and surely they bring people and things together and are heavily subjected to processes of their urbanisation (as is the case with industrial farming), yet in their essence, I argue, they do not aspire to making consequential intersections that produce city. 12 Rather, the connections they make aim at doing things differently from what is regarded as the doings of city life. Working the field, hunting grasshoppers and resisting the pace of the city and its growth by drinking pulque in the shade – which is how Reina and her customers specifically asked me to interpret their doing – exemplify what I have termed counter-urban practices.

Nevertheless, and secondly, from their particular standpoint cityness, too, is being materially thought. The arduous body-work implied in agricultural labour is comparable to that of opportunity work, described in the Laborious City layer; while hunting lunch resembles some of the aspects described as Instant and Self-made City: food is brought to the table as it is unearthed from the immediate environment through self-infrastructural work. At the same time, the cyclical understanding of the relationship with the soil and what it offers marks an important difference to the notions of self-made and instant, as well as to the layers of the Prospect and Uncertain City. Opportunities are not seen as coming and going in a linear fashion but as coming around in circles, thanks to the

12 Compare the definition of cityness by Sassen 2010, 14.
nobility of the land. More consciously than in the urban practices, the work of rural practitioners is grounded in what the material world offers – not as what can be projected onto it but as what can be nurtured with it – and uncertainty is contained within cyclical becoming.

Thirdly, the rural perspective upholds claims of a historically-legitimised priority over space and, to this end, regards the rural as holding a counter-centrality to Mexico City. This consciousness of primacy runs contrary to the socio-material understanding described by the (potentially) Transitory and Pioneer City layers, as well as by that of the Outpost City. Duhau and Giglia describe it as the experience afforded by the ‘ancestral’ spaces of inhabitation of the metropolis.\textsuperscript{13} At the same time, real and imagined centrality is certainly under pressure, not only from the process of municipalisation\textsuperscript{14} but also by the marginalisation of the farmers’ original occupation as farmers in favour of other livelihoods, by the generational gap with their children pursuing different lives and, last but not least, by the physical diminution of farmland.

With regard to this last aspect, the experience of the peri-urban as Compartment Cities set within a Prairie City is turned upside down: from the rural perspective, the expanse of the land is being sliced up and fenced in to resemble ever smaller *compartments of prairie*. Accordingly, the cityness layer of the Tidal City, too, acquires a different meaning. Exposure to politics and other external processes is not thought as an up and down, nor as building up to an improvement of the situation if one waits long enough, but rather as the steady reduction and unavoidable corrosion of the countryside as we used to know it.

Finally, rural space is thought as running in perpendicular movement to urban space. While the highway afforded thinking the peri-urban as a sequential line running from city to its fragments, real and imaginary (fading) connections between village and field cut across this unidirectionality. The permanent temporality of the San Pablo bus stop marks the point where these two lines converge. Furthermore, the (hypothetical) immediate material engagement with the land in farming, and thus the (equally hypothetical) absence of its visual apprehension, for example, through the bus window while commuting, highlights

\textsuperscript{13} Duhau and Giglia 2008, 361 ff.
\textsuperscript{14} Correa Ortiz 2010.
the theoretical difference put forward by Ingold between a socio-material awareness *built* as visual landscape or *dwelled* within as relational environment.\(^\text{15}\)

Last but not least, turning to a rural perspective picks up the discussion on the plasticity of space. Working with the soil and living things entails a particular awareness of the materiality of space\(^\text{16}\) which also suggests a particular awareness of how material space simultaneously and interdependently receives and bestows form to life. Drawing on Catherine Malabou’s work on the plasticity of the brain, we can thus argue that thinking space differently out of urban and rural practices is the result of different ways of engaging with its concrete materialisations. Not only is there a difference between working the street and the field in terms of the material resources mobilised by each one of them, but, essentially, practitioners of one and the other condition allow space to co-author their socio-material awareness differently according to the ‘brain-worlds’\(^\text{17}\) they inhabit. In Malabou’s words, ‘the brain “co-occurs with… the environment”.’\(^\text{18}\) This is to say, the way in which we grasp the world *with our hands* is precisely the way we materially think the world and ourselves in mutual becoming.

**The City as Practice of the Body**

Rethinking the peri-urban entails also rethinking the city more broadly. That is to say that re-thinking space-time necessarily entails questioning how we come to think of it in the first place. A central intervention undertaken by this thesis, therefore, is to speak of the city as a verb, that is, to speak of *city-ing* and *doing city*, rather than to speak of it as a noun defined by grades of urbanity.\(^\text{19}\) This is thinking the city as practice.

\(^{15}\) The fact that visual apprehension is also a materially situated bodily practice has been discussed in chapter seven. See Ingold 2000, 154.

\(^{16}\) Heley and Jones 2012, 211 drawing on Murdoch 2003, 264.

\(^{17}\) Malabou 2008.

\(^{18}\) Malabou 2008, xxii cited by Marc Jeannerod in the foreword.

\(^{19}\) I recognise that my definition is partial, invested by my own and inherited theoretical accounts, yet sustain that this particular view allows for specific insights as laid out in this thesis. For a discussion on such purposeful partiality see: Isin 2008.
Such city-thinking departs from dominant understandings mobilised within urban studies. For methodological and political reasons, urban processuality – even if decidedly acknowledged – is predominantly addressed not directly but through locatable and quantifiable spaces and relations after they have been made. At the same time, thinking city as socially produced has long been central to urban studies. Most prominently, Henri Lefebvre raised awareness of space’s foundation in practice. David Harvey emphasised the need to see urbanisation as social process in order to respond to it accordingly, and Ash Amin and Nigel Thrift proposed re-imagining the city ‘as an agitation of thought and practice’. Nevertheless, there are relatively few explorations – such as for example the writing by AbdouMaliq Simone – that grapple with the making of city from inside its lived unfolding. In other words, most studies treat cities as the outcome of the social, that is, as the material things and social relations that exist only once practice is concluded (and, in a second step, which then constitute the ground for further practice to take place).

Seldom are cities examined as practice-in-action, as the weaving of social and material intersections and doing of infrastructures that make social space in real time and as materially concrete situations. Only frequently are urban space and practice seen as an indissoluble unity in a process of ongoing, mutual and material becoming.

This thesis aimed at exploring this second path of analysis, turning to the intimate relation between making the city and the implicit knowing of the city it contains. This approach builds on an understanding of knowledge – and thus knowledge of the city – as a knowing-in-practice, as a dynamic and relational ‘tacit knowing’ grown out of the live entanglement of minds, bodies and environment. It contributes to our wider understanding of cityness by exploring such concrete entanglements for the case of Mexico City, deriving the fifteen layers of cityness outlined above. It furthermore adds to AbdouMaliq Simone’s and Saskia Sassen’s accounts of cityness by bringing into view the material constituents of the environment that people draw upon, put to work or circumvent, in addition to

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20 Lefebvre 2009.
21 Harvey 1996.
23 Cf. what Soja 2009 calls the socio-spatial dialectic.
24 Polanyi 1962.
25 Marchand 2010, 2; See also Ingold 2000.
social connections, when employing themselves as infrastructural beings. By these material constituents I mean both the materiality of things, people and spaces and the materiality of the practising body – that is, the practitioner’s own corporeality – when drawing these elements into the practising body’s infrastructural enactment. In response to Tim Ingold’s and James Gibson’s writing I call this an ‘ecological’ understanding of the making and thinking of space and the city.27

Within the proposed shift from city-as-object to city-as-practice I particularly focus on the resources mobilised for and through city-making. Following research participants into their infrastructural doing – and coming to register how this activity served to constitute both themselves and their habitat through their mutual engagement – inspired this awareness. Speaking of resources is deliberately aimed at evoking all its meanings, from asset to facility, from expedient to initiative.28 Time then is made a resource and employed resourcefully as much as houses, family networks and specific social constellations.29 Likewise, the specific features of the environment and materiality of fast and wholesale urban transformation, the plasticity of peri-urban space, is made as productive as the practitioners’ own bodies and the work they can accomplish.

Essentially, then, such creation and mobilisation of resources implies the work of the body in relation to the socio-materiality of the situation. I have come to frame such body-work as a labour of urban becoming or city-making labour. With this notion I refer to the physical effort that needs to be accomplished when socially and materially producing urban space.

In particular, I identify four different kinds of such labour: the labour of conjunction, the labour of presence, the labour of cohesion and the labour of travel. The first of these labours describes the effort implied in nurturing, handling or unearthing opportunities or, inversely, in enduring their absence or disappearance (chapter four). The second speaks of the effort of investing work, time and social relations in the materialisation of houses (chapter five). The third shifts the attention to the effort involved in forming or aligning to collectives and

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28 See synonyms suggested by the Oxford American Dictionary.
29 As has been shown throughout this thesis and confirming also earlier research by Turner, Lomnitz and Cornelius, which I have discussed in chapter two.
amplifying local opportunity structures (chapter six). The fourth labour of urban becoming captures the effort put into expanding one’s reach either by overcoming uneven spatial development or by making it a resource in itself (chapter seven).

The tangible materiality of space and its equally tangible counterpart, the corporeality of spatial practice, are often foreclosed from academic accounts of either city or cityness. This can be the case even when materiality is explicitly problematised, as Hilary Angelo remarks in her response to the dispute between critical urban theory and urban assemblage thinking. In turn, by bringing bodily practice into view the focus on materiality is strengthened. Practices are negotiations of bodies and things in space and thus necessarily bound to physical existence. In my own response to the debate on the analytical possibilities of assemblage thinking I therefore introduce the notion of dwelling urbanism. Drawing on Tim Ingold, dwelling urbanism describes a being in and making of the city (and of the world more generally) based on each spatial practitioner’s continuous yet widely unconscious and unacknowledged direct engagement with all sorts of human and non-human materialities. This conception expands on Edward Soja’s thesis of the ‘socio-spatial dialectic’ by extending its view to the vitality of the material world. While in Soja’s account, space shapes the social and vice versa, the expanded understanding of this dialectic has the materialities of space shape the social as much as the social shaping spatial materialities. In Ingold’s terms, this denotes the gathering of people and things in a ‘meshwork’, that is, in ‘a tangle of threads and pathways’ that dissolves the boundaries of the concrete and redefines their relation not as based on the inanimate connections of a network (as Actor-Network-Theory, ANT, and urban assemblage thinking would have it) but as mutually becoming on the lines along which life is lived.

30 Angelo 2011 discussing McFarlane 2011b and Brenner, Madden, and Wachsmuth 2011.
31 Reckwitz 2003, 290.
32 Soja 2009.
33 Cf. Ingold 2011.
34 Ingold 2011, 91.
Thinking Through Making

The notion of dwelling urbanism brings to the fore also the second intervention of this thesis with regard to the thinking of cities more broadly. How are we to think body-space interactions that constitute the ground for socio-material practising and thus for the enacted emergence and apprehension of urban and peri-urban space? This is not to look at the symbolic value of bodies in space nor to turn to the subjectivity of bodies,\textsuperscript{35} but to catch up, as Felicity Callard suggests, ‘with understanding the abject, and abjected, labouring body’,\textsuperscript{36} and to do so within urban studies.

In the context of structural uncertainty\textsuperscript{37} as we find it in Mexico City and elsewhere, this labouring body is less the body of the industrial worker and more and more that of the infrastructural practitioner. Similarly, the work done by many of these bodies is no longer engaging with a machine\textsuperscript{38} but employing their own corporeality as the means of production. This production and social reproduction is precisely rooted in making connections and making these connections work through and for the body. Doing infrastructure is thus the work of the labouring body accomplished on peri-urban streets in Mexico and beyond.

This turn to the labouring urban body implies asking about how we see the practising body and, from there, asking how we make sense of the perspective that this body has on the world. Here, I argue, it is rewarding to shift our framing of body-work from embodied labour to bodily practice. Not the tangible or visible form of labour written on the body but the doing of labour with and through the body is what is of interest. As in the case of the city, earlier, I suggest resisting fixing labour as a thing in order to keep track of the actual activity of labouring. Only then can we begin to imagine the perspective entailed in doing and, according to this research, the perspective entailed in doing city.

\textsuperscript{35} As much of feminist and queer studies do. Cf. Callard 1998.
\textsuperscript{36} Callard 1998, 399.
\textsuperscript{37} Being the effect of the transformations entailed by post-Fordist production, individualisation and informalisation. See Böhle and Wehrich 2010, 11; Beck, Giddens, and Lash 1994; Altvater 2005.
\textsuperscript{38} As it surfaces in Marx’s writing and is sporadically picked up by critical urban theorists. See Callard 1998. David Harvey, for example, builds on the concept of the labouring body in relation to capitalist accumulation: Harvey 2000, 97; cited in Pettinger 2015, 298.
The perception of the environment, Ingold reminds us, is nurtured from the human body being alive\textsuperscript{39} and growing within unfolding relations.\textsuperscript{40} By emphasising such related entanglement and mutual becoming of world and self we can then understand both making and thinking as one indissoluble practice accomplished not \textit{on} materials and material space but \textit{with} them (that is, not as preconceived ideas that are then cast upon a substrate, but as emerging in active engagement).\textsuperscript{41} ‘Practice’, Ingold concludes, ‘entails […] the alignment of movements through a coordination of actions and perceptions’ and thinking, accordingly, happens not before, but \textit{through} making.\textsuperscript{42} This is what Paul Carter frames as ‘material thinking’.\textsuperscript{43} It is also how the participants of this research think city through making city in infrastructural practice: Doña Margo, Eduardo and Margarita, for example, from their positions of running their street vendors’ stalls, and Ivan from swinging his hammer (chapter four). Tim Ingold frames such material thinking as a ‘thinking through making’.\textsuperscript{44} Its particularity, he elaborates, is that ‘thinking does have a habit of running ahead’, while material making stays in the ‘labours of proximity’.\textsuperscript{45} In this way, what is close at hand – materials, the environment, the practising body, movement – is drawn together in one and the same act with what is running ahead – the prospect of city and of the practitioner’s situated and acting self, entailed in bodily making. Michel de Certeau noted that everyday practices ‘bring into play a “popular” ratio, a way of thinking invested in a way of acting’.\textsuperscript{46} Here, then, our understanding of the working of urban practice is expanded to include both the socio-material environment with which practice engages (the proximate city) and the socio-material consciousness that people derive from the environment by practising it (the prospect of city).

\textsuperscript{39} Ingold 2011; 2013, 96.  
\textsuperscript{40} Ingold 2000, 3.  
\textsuperscript{41} Ingold 2010. See the detailed discussion in chapter one.  
\textsuperscript{42} Ingold in Välitalo 2012.  
\textsuperscript{43} Carter 2004.  
\textsuperscript{44} Välitalo 2012.  
\textsuperscript{45} Ingold in Välitalo 2012.  
\textsuperscript{46} de Certeau 1988, xv, emphasis original.
From the City We See to the City We Want

The third ground on which this thesis makes its intervention is a political one. Research methods, Law and Urry remind us, are always also political as they produce the world through performing empirical knowledge. They ‘make realities’, thus compelling us to decide how ‘we want to interfere (because interfere we will, one way or another)’. The reality made by the methods of this research is that of infrastructural bodily practice, of the materiality in which it unfolds and of the relational socio-material awareness it nurtures. This reality, I argued, is specific and important yet often underrepresented in academic accounts of the peri-urban (and of cities in general). My aim, therefore, is to make it become available for the study of the urban and, ultimately, for urban policy-making.

David Harvey has stressed the importance of paying close attention to ‘[t]he way we see our cities’ as it is the very kind of seeing that essentially yet in a mostly unacknowledged manner ‘affects the policies and actions we undertake’ in order to change them. In the city as process, urban change cannot be simply from ‘A’ to ‘B’, but must be an ongoing and collective stirring, a pushing and pulling, of a multitude of simultaneous and necessarily also antagonistic interests and transformations. Thanks to its understanding of these negotiations from the inside, the city as practice has a lot to offer.

This is not to discard from analysis the forceful intervention of external forces, operating from way beyond individual, on-the-ground practice. Both the ‘context of contexts’ (capitalism, post-Fordism, technological changes, etc…) and the ‘institutional authoring’ by which the powerful design and rule over the circumstances of the marginalised certainly have the strongest effects on material space and the practices and social relations it affords. Rather, what the city as practice emphasises is how these forces work and materialise also through everyday (and, therefore, in the context of this thesis, infrastructural) practice. I

48 Law and Urry 2004, 404, emphasis original.
49 Harvey 1996, 38.
50 Brenner, Madden, and Wachsmuth 2011, 233; see also Brenner, Marcuse, and Mayer 2009.
51 Amin 2014, 155.
have raised this issue, for example, in light of the discussion on informal activities as part of a project of governance through informalisation.\textsuperscript{52}

At the same time, the objective of rethinking the city as practice is not to argue against urban planning as such but rather to critically review the epistemologies it relies on and the ontology it produces. As I have begun to do above, this is to take practice as a window for engaging with the theory of knowledge and the nature of being of the city. Turning to infrastructural practice, I argue, reveals much of planning’s bias and unravels its working as a decisive operational vector by which institutional force is exercised. In this sense, on the one hand, the city as practice supports a project that criticises urban planning for ‘realigning [space] to the needs of industry, real estate, commerce and bureaucracy.’\textsuperscript{53} On the other hand, it takes its stand with the practitioners of the street in order to challenge any visions of the city that official planning bodies come up with. In the everyday encounter with, for example, physical infrastructure, bodily city-making practice poses questions regarding whose visions are being pursued and how they are generated. This is to ask: how is urban planning going to listen? And, above all, how is urban planning going to listen to those on the margin of both society and urban space, that is, those populating multiple peripheries, as it is they who continue to be structurally excluded from its mechanisms?\textsuperscript{54}

Drawing on the anthropological foundations of this thesis, the turn to thinking through making thus fosters critical reflection on planning’s intimate relationship with building, and allows us to ask what would happen if urban planning were to adopt a \textit{perspective of dwelling}. In other words, even if – in the best-case scenario – urban planning were exercised as an ongoing and democratic decision-making \textit{process}, the notion of its ‘vision’ needs to be challenged. How far are visions of the city – that is, images of the city that are projected by political and administrative bodies and then laid down to follow by converting them into plans and guidelines – \textit{detached} from the city’s unfolding life (while, at the same time, channelling this very unfolding of life lived)? In chapter four, Eduardo and his wife suggested that their labour of urban becoming rests heavily on both seeing

\textsuperscript{52} Altvater 2005. \\
\textsuperscript{53} UN-Habitat 2013, 10. \\
\textsuperscript{54} For a similar discussion with regard to the poor see Amin 2013.
movement and handling it in practice so as to align their own movements with the movements of others. What if planning were able to achieve a similar *moving with movements* from which to exercise its power?

*Making Centrality and its Movements*

By way of a conclusion, making oneself and making one’s home, neighbourhood and bus stop with one’s own hands comprises *feeling forward* the materialisation of the expanding city. Such *handling* of the materiality of space is nurturing the conditions of continuous socio-material transformation, be it for better or worse, towards the urban or counter-urban. At the same time, handling space, things, other people and their movement is a growing of individual and collective prospects on the city by making urban space and making one’s own position within space from which to access this mutual growth.

Infrastructural bodily practice, therefore, supports Engin Isin’s understanding of the city as a site – and process, for that matter – ‘that *makes things possible* rather than as a space in which things happen’.55 Doing city, we can thus argue, materially enacts also ‘the social formations of citizens’.56 In other words, making city through bodily labour is a way of materially claiming also what Henri Lefebvre coined as the ‘right to the city’, ‘the right not to be excluded from centrality and its movement’.57 The multiple forms of labour of urban making which this thesis identified allow us to further elaborate on Lefebvre’s conception. They show that the involvement in centrality he calls for is achieved precisely by making connections, by generating, stirring and intercepting the movement of people and things and that such making of connections is a participating with the individual’s own body in what peri-urban/urban people and things do and do next.58

Even so, a gap remains between what we want and what we can achieve through infrastructural practice: what is at the heart of all making is that in the making

55 Isin 2008, 266 emphasis added.
56 Isin 2008, 266.
57 Lefebvre 2008, 150.
58 In a similar move Suzanne Hall 2015 describes ‘making as a mode of participation’ in ‘ordinary cities and everyday resistance’, albeit without the particular focus on the body at work.
itself makers continuously think ahead their own and their world’s becoming. By engaging with the *material* world we come closer to the possibilities of this world from a perspective rooted in activating its actionable properties. This includes materially thinking also the ‘context of contexts’ by sounding out and laying hands on the unevenness of space as it materialises around us. ‘[P]olitics’, Mark Davidson and Kurt Iveson remind us, ‘does not occur within the abstract’ but is a *practice* that brings the concrete (here the materialisation of uneven spatial development, inequality) into dialogue with the abstract (participation in centrality, democracy).  

This is why cities and their everyday material conditions (and processes) have long been identified as fundamental to the renegotiation of membership in society. In this sense, I conclude, *doing infrastructure* is a way of rethinking the peri-urban, the city and the unfolding world by asking with the practising, corporeal self ‘what matters?’

**Towards a Labour of Citizenship**

Coming to the very end of my argument, I want to close by raising outstanding questions and sketching out possible paths for future research, in order to continue advancing our understanding of the lived experience of the peri-urban in conjunction with urban infrastructural bodily practice and the making and thinking of city it entails.

In terms of understanding the peri-urban experience in the Mexican, Latin American and wider context, similar visual-sensory explorations could be expanded to include the analysis of other concrete relations between corporeal practices and material sites. Drawing on the possibilities of comparative studies, these explorations could also include studying inner-urban contexts in order to define more clearly the differences and/or overlaps between the peri-urban and the (general) urban experiences. Some of the layers of cityness identified in this thesis point to specific socio- and material-spatial conditions of the northern

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59 Davidson and Iveson 2015, 659 drawing on Jacques Rancière’s political philosophy.
60 Holston and Appadurai 1996.
61 Carter 2004, xi.
metropolitan area of Mexico City, while others address cityness and infrastructural labour more generally.

The insights taken from Tim Ingold’s anthropological approach, I suggest, promise to be rewarding for the study of urban human-material relationships more broadly. Likewise, the insights derived from AbdouMaliq Simone’s accounts of people as infrastructure seem to lay out a still under-attended path for advancing the discussions on both the social working that becomes infrastructure and on the ifs and buts of informality.

Addressing these issues remains highly important. Planetary urbanisation continues its expansion over greenfield sites on the fringes of existing agglomerations. If these peripheral developments are to be the ground – materially and literally speaking – for the beneficial personal development of its dwellers, than the *citying possibilities* they entail need to be better recognised. This includes attending to the infrastructural practices that material space affords in addition to seeing to these sites’ endowment with conventional material infrastructure. Hence policy actions are needed that acknowledge and value infrastructural doing yet without exploiting it in order to transfer urbanisation costs to urban practitioners alone. The social and ecological sustainability of cities in general, and of the peri-urban realm in particular, requires joint action on all scales of intervention. This in turn, requires paying justice to the corporeal experiences and, nurtured through these experiences, to the bodily-practical understandings of people’s own and urban becoming. In this regard, I therefore raise the question of a labour of urban citizenship.

The notion of citizenship *labour* is to focus on the characteristic divergence between citizen *status* being formally granted and the effective exercise and everyday *formation* of citizenship. As mentioned above, making city through bodily labour is a way of materially claiming one’s right to the city. This allows us to address what Aihwa Ong posed as an important challenge to both practice theory and citizenship studies: ‘to consider the reciprocal construction of practice [...] in processes of capital accumulation’. Doing so, she introduces the notion of ‘flexible citizenship’ by which she refers to how contemporary capitalism

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63 Ong 2006, 5.
‘induce[s] subjects to respond fluidly and opportunistically to changing political-economic conditions’.

Related to our context, this is to ask about the body-work implied in enacting citizen flexibility in the peri-urban condition. At the same time, it is to critically engage with the notion of flexibility in itself. As mentioned earlier, for Catherine Malabou flexibility implies the subject’s *adaptation* to the circumstances alone. That is to say, in flexible citizenship people are understood to *go along* with changing conditions while essentially lacking the capacity to themselves enact change upon these conditions. In this light, I suggest, turning to the plasticity of space allows us to rethink the possibilities of peri-urban human-material relations with regard to the struggle for centrality, for which they can provide the ground. AbdouMaliq Simone, I argue, also suggests this path in pointing to the entanglement of periphery and possibility.

At the same time, James Holston points to ‘insurgent’ formulations of citizenship that emanate not from taking the public square (alone) but that evolve primarily out of mobilisations that tackle the precariousness of quotidian urban life in the place of (peripheral) residence. A sense of the corporeal labour implied in such citizenship formation could already be grasped in the paper-work and other practices of the labour of presence described in chapter five, as well as in the bodily practices at the heart of nurturing neighbourhoods described in chapter six. I also touched upon the political commitments that Antorcha settlers are obliged to take on in order to participate in formal social development and planning processes, as well as to comply with their movement’s membership requirements. However, the bodily labour at the centre of this thesis exceeds the processes and conditions for which Holston suggests speaking of alternative ‘participatory practices’. Therefore, rather than limiting the notion of citizenship practice to explicit struggles of participation with regard to ‘housing, property, plumbing, 

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64 Ong 2006, 6; elaborating on Harvey who points to the ‘evident insecurities’ and the ‘climate conducive to authoritarianism’ produced by flexible regimes of accumulation. See: Harvey 2008, 124, 168.
65 Malabou 2006, 23.
66 Simone 2010a, 33, 40.
68 Holston 2009, 256-257.
day-care, security, and other aspects of residential life; 69 I suggest opening it up to include the growth of relational understandings of individual and urban becoming. This is to think the city as a common good to which urban citizenship holds the key. 70 In light of the expanding peri-urban conditions arising from planetary urbanisation, to acknowledge the bodily effort entailed in opportunity work, in growing houses, in nurturing neighbourhoods, and in highwaying is to lay a path towards forging more just social and ecological relations in the city-to-come-now/here.

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69 Holston 2009, 246.
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### Appendix A: Table of Interviews

<table>
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<tr>
<th>No.</th>
<th>Name</th>
<th>Occupation or short description</th>
<th>Date of interview</th>
<th>Place of interview</th>
</tr>
</thead>
<tbody>
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<td>A</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1</td>
<td>Marcos Mora</td>
<td>Resident of Buena Vista and owner of a grocery store</td>
<td>August 2010</td>
<td>Local street in Buena Vista, Ecatepec. Outside his business</td>
</tr>
<tr>
<td>2</td>
<td>Patricia Domínguez</td>
<td>Resident of Buena Vista since 1987</td>
<td>August 2010</td>
<td>Local street in Buena Vista, Ecatepec</td>
</tr>
<tr>
<td>3</td>
<td>Antonio Martínez Anaya</td>
<td>Resident of Buena Vista since 1988</td>
<td>August 2010</td>
<td>Local street in Buena Vista, Ecatepec</td>
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</tr>
<tr>
<td>4</td>
<td>Alicia Sandoval</td>
<td>Owner of the stationary store</td>
<td>September 2010</td>
<td>Inside the Sierra Hermosa market building</td>
</tr>
<tr>
<td>5</td>
<td>José Jesús Martínez and 2 friends</td>
<td>Temporary residents in Sierra Hermosa, hunting grasshoppers</td>
<td>September 2010</td>
<td>On the narrow strip between the last row of houses and the surrounding fields, Sierra Hermosa</td>
</tr>
<tr>
<td>6</td>
<td>Anon.</td>
<td>Taxi driver based at the taxistand at the entrance of Sierra Hermosa</td>
<td>17 January 2010</td>
<td>Sierra Hermosa</td>
</tr>
<tr>
<td>7</td>
<td>Victor</td>
<td>One-man mobile grocery store operator/owner</td>
<td>17 January 2010</td>
<td>Local street, Sierra Hermosa, next to his grocery van</td>
</tr>
<tr>
<td>8</td>
<td>Margarita Flores Cárdenas (Doña Margo)</td>
<td>Resident of Sierra Hermosa, selling clothes from an appropriated bus stand</td>
<td>December 2011</td>
<td>Local street at the rear of Sierra Hermosa, at her street vendor's stall</td>
</tr>
<tr>
<td>9</td>
<td>Edgar</td>
<td>Minivan driver based at the bus stand at the rear of Sierra Hermosa</td>
<td>December 2011</td>
<td>Bus stand at the rear of Sierra Hermosa</td>
</tr>
<tr>
<td>10</td>
<td>Lic. Guillermo Heras</td>
<td>Local administration officer in Sierra Hermosa</td>
<td>December 2011</td>
<td>Local administration office, Sierra Hermosa</td>
</tr>
<tr>
<td>11</td>
<td>Anon.</td>
<td>Employee at the local administration office in Sierra Hermosa</td>
<td>December 2011</td>
<td>Local administration office, Sierra Hermosa</td>
</tr>
<tr>
<td>12</td>
<td>Victor Galindo Solares</td>
<td>Former local administration officer in Sierra Hermosa</td>
<td>December 2011</td>
<td>Outside local administration office, Sierra Hermosa</td>
</tr>
<tr>
<td>13</td>
<td>Eduardo and his wife</td>
<td>Residents of Sierra Hermosa, orange juice street vendors</td>
<td>09 January 2012</td>
<td>Main road, Sierra Hermosa</td>
</tr>
<tr>
<td>14</td>
<td>Anon. (2 persons)</td>
<td>Residents of Sierra Hermosa, sitting outside their houses talking</td>
<td>10 January 2012</td>
<td>Local street, Sierra Hermosa</td>
</tr>
<tr>
<td>15</td>
<td>Israel</td>
<td>Temporary resident of Sierra Hermosa</td>
<td>10 January 2012</td>
<td>Walking the streets of Sierra Hermosa</td>
</tr>
<tr>
<td>16</td>
<td>Anon. (2 persons)</td>
<td>Brick layers</td>
<td>16 January 2012</td>
<td>Main road, Sierra Hermosa</td>
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<tr>
<td>17</td>
<td>Anon.</td>
<td>Resident of Sierra Hermosa</td>
<td>16 January 2012</td>
<td>Local street, Sierra Hermosa</td>
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<tr>
<td>18</td>
<td>Santa</td>
<td>Resident of Sierra Hermosa, owner of a converted restaurant</td>
<td>16 January 2012</td>
<td>Walking the streets of Sierra Hermosa</td>
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<tr>
<td>19</td>
<td>Anon. (several)</td>
<td>Users of the new sports facilities</td>
<td>22 February 2014</td>
<td>“Plaza Estado de México”, entrance to Sierra Hermosa</td>
</tr>
<tr>
<td>20</td>
<td>Anon.</td>
<td>Taxi driver based at the (now relocated) taxistand at the entrance of Sierra Hermosa</td>
<td>22 February 2014</td>
<td>“Plaza Estado de México”, entrance to Sierra Hermosa</td>
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<tr>
<td>21</td>
<td>Anon.</td>
<td>Gardener, maintaining the green areas</td>
<td>22 February 2014</td>
<td>“Plaza Estado de México”, entrance to Sierra Hermosa</td>
</tr>
<tr>
<td>22</td>
<td>Anon.</td>
<td>Resident of Sierra Hermosa, selling toys from her house</td>
<td>25 February 2014</td>
<td>House opposite “Plaza Estado de México” sports grounds, entrance to Sierra Hermosa</td>
</tr>
<tr>
<td>23</td>
<td>Erika with her parents</td>
<td>Residents of Sierra Hermosa since 2012. Erika is visiting her parents</td>
<td>25 February 2014</td>
<td>Local street, Sierra Hermosa</td>
</tr>
<tr>
<td>24</td>
<td>Anon.</td>
<td>Officer on duty</td>
<td>26 February 2014</td>
<td>Security control room, “Plaza Estado de México”, entrance to Sierra Hermosa</td>
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<tr>
<td>25</td>
<td>Santa</td>
<td>Resident of Sierra Hermosa, former owner of a converted restaurant</td>
<td>01 March 2014</td>
<td>Sierra Hermosa, at her house</td>
</tr>
<tr>
<td>26</td>
<td>Edelgado</td>
<td>Resident of Sierra Hermosa</td>
<td>01 March 2014</td>
<td>Local Street to the rear of Sierra Hermosa</td>
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</tr>
<tr>
<td>27</td>
<td>Anon. (3 persons)</td>
<td>Farmers</td>
<td>20 April 2009</td>
<td>Fields outside Hacienda del Bosque, Tecámac</td>
</tr>
<tr>
<td>28</td>
<td>Anon.</td>
<td>Salesman of Hacienda del Bosque</td>
<td>20 April 2009</td>
<td>Sales office of Hacienda del Bosque, Tecámac</td>
</tr>
<tr>
<td>29</td>
<td>Jesús Camacho</td>
<td>Mechanic, resident of San Jerónimo</td>
<td>02 January 2010</td>
<td>Outside his workshop along Camino a San Jerónimo, Tecámac</td>
</tr>
<tr>
<td>30</td>
<td>Desiderio</td>
<td>Resident of Hacienda del Bosque since 2009</td>
<td>03 January 2010</td>
<td>Small public green park in Hacienda del Bosques, Tecámac</td>
</tr>
<tr>
<td>31</td>
<td>Anon.</td>
<td>Street vendor, selling bread out of a basket</td>
<td>11 January 2010</td>
<td>Just outside Villas del Real, Tecámac</td>
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<tr>
<td>No.</td>
<td>Name</td>
<td>Role and Information</td>
<td>Date</td>
<td>Location</td>
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<tr>
<td>32</td>
<td>Veronica Ortíz and Cristina Díaz</td>
<td>Chair and secretary of Villas del Real neighbourhood association</td>
<td>14 January 2010</td>
<td>Neighbourhood association's office, Villa del Real, Tecámac</td>
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<tr>
<td>33</td>
<td>Anon.</td>
<td>Saleswoman of Villas del Real</td>
<td>15 January 2010</td>
<td>Sales office of Villas del Real, Tecámac</td>
</tr>
<tr>
<td>34</td>
<td>Pablo Mena with 4 work colleagues</td>
<td>Technicians of the public water company Odapas</td>
<td>December 2011</td>
<td>At the municipal water well located in the fields to the west of Sierra Hermosa</td>
</tr>
<tr>
<td>35</td>
<td>Margarita</td>
<td>Resident of a development by the company Urbi, selling blacksmith works</td>
<td>05 January 2012</td>
<td>At the entrance of Provenzal Bosque</td>
</tr>
<tr>
<td>36</td>
<td>Guillermo Estévez Prieto</td>
<td>President of the San Pedro Atzompa ejido</td>
<td>06 January 2012</td>
<td>Offices of the ejido (Casa Ejidataria) of San Pedro Atzompa</td>
</tr>
<tr>
<td></td>
<td>Esteban Pandilla</td>
<td>Secretary of the San Pedro Atzompa ejido</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jesus (Chucho) González Aguilar</td>
<td>Treasurer of the San Pedro Atzompa ejido</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ernesto Estévez</td>
<td>Member of the San Pedro Atzompa ejido</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carlos</td>
<td>Member of the San Pedro Atzompa ejido</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Torillo Hernández</td>
<td>Member of the San Pedro Atzompa ejido</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Don Goyo and Rubén</td>
<td>Farmers, residents of San Francisco Cuautitlán</td>
<td>11 January 2012</td>
<td>Fields between Sierra Hermosa and San Pedro Atzompa, on the road</td>
</tr>
<tr>
<td>38</td>
<td>Reyna</td>
<td>Owner and bartender of the pulquería</td>
<td>11 January 2012</td>
<td>Fields between Sierra Hermosa and San Pedro Atzompa</td>
</tr>
<tr>
<td>39</td>
<td>Anon.</td>
<td>Farmer</td>
<td>11 January 2012</td>
<td>Fields between Sierra Hermosa and San Pedro Atzompa</td>
</tr>
<tr>
<td>40</td>
<td>Iván</td>
<td>Resident of San Pedro Atzompa, recycling reinforcing steel</td>
<td>11 January 2012</td>
<td>Wasteland outside Provenzal Bosque</td>
</tr>
<tr>
<td>41</td>
<td>Anon.</td>
<td>Resident of Provenzal Bosques</td>
<td>22 April 2014</td>
<td>Local street, Provenzal Bosque</td>
</tr>
</tbody>
</table>

**D. Colonia Antorcha and surrounding neighbourhoods and fields, Tizayuca**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Role and Information</th>
<th>Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>Anon.</td>
<td>Roadside saleswoman of building plots in La Gloria</td>
<td>13 January 2012</td>
<td>Local street of La Gloria</td>
</tr>
<tr>
<td>43</td>
<td>Anon. (2 persons)</td>
<td>Builders, residents of Colonia Antorcha, building someone else's house</td>
<td>13 January 2012</td>
<td>Colonia Antorcha</td>
</tr>
<tr>
<td>44</td>
<td>Anon.</td>
<td>Settler, building his own house</td>
<td>13 January 2012</td>
<td>Colonia Antorcha</td>
</tr>
<tr>
<td>45</td>
<td>Nico</td>
<td>Co-ordinator of the weekly assembly, representative of Antorcha Popular Tizayuca</td>
<td>15 January 2012</td>
<td>Colonia Antorcha, after the weekly assembly</td>
</tr>
<tr>
<td>46</td>
<td>Anon. (2 persons)</td>
<td>Settler, former residents of a village in the state of Hidalgo, building the house of one of them</td>
<td>15 January 2012</td>
<td>Colonia Antorcha, after the weekly assembly</td>
</tr>
<tr>
<td>47</td>
<td>Anon.</td>
<td>Ice-cream seller, resident of the city of Tizayuca</td>
<td>15 January 2012</td>
<td>Outside Colonia Antorcha, in the fields between settlement and country road</td>
</tr>
<tr>
<td>48</td>
<td>Anon.</td>
<td>Roadside sales agent of building plots in Tizayuca</td>
<td>17 January 2012</td>
<td>México-Pachuca country road</td>
</tr>
<tr>
<td>49</td>
<td>Anon.</td>
<td>Resident of La Gloria</td>
<td>17 January 2012</td>
<td>Local street of La Gloria</td>
</tr>
<tr>
<td>50</td>
<td>Anon.</td>
<td>Resident of La Gloria</td>
<td>17 January 2012</td>
<td>Local street of La Gloria</td>
</tr>
<tr>
<td>51</td>
<td>Anon.</td>
<td>Resident of Diamante, building his own house</td>
<td>17 January 2012</td>
<td>Diamante, outside his house</td>
</tr>
<tr>
<td>52</td>
<td>Alejandra</td>
<td>Block warden</td>
<td>16 February 2014</td>
<td>Colonia Antorcha</td>
</tr>
<tr>
<td>53</td>
<td>Angel Rodríguez</td>
<td>Resident of colonia Antorcha since 2010. Owner of the building material store</td>
<td>16 February 2014</td>
<td>Colonia Antorcha, in his shop</td>
</tr>
<tr>
<td>54</td>
<td>Anon. (3 persons)</td>
<td>Block wardens</td>
<td>16 February 2014</td>
<td>Colonia Antorcha, primary school premises, after the weekly assembly</td>
</tr>
<tr>
<td>55</td>
<td>Anon.</td>
<td>Street vendor</td>
<td>16 February 2014</td>
<td>Colonia Antorcha, primary school premises</td>
</tr>
<tr>
<td>56</td>
<td>Anon. (3 persons)</td>
<td>Residents of both Hacienda Tizayuca and colonia Antorcha (two of them are cousins)</td>
<td>16 February 2014</td>
<td>On our way to the pulquería south of Diamante</td>
</tr>
<tr>
<td>57</td>
<td>Maestra Melba</td>
<td>Municipal leader of Antorcha Popular in Tizayuca</td>
<td>23 February 2014</td>
<td>Colonia Antorcha</td>
</tr>
<tr>
<td>58</td>
<td>Anon. (various)</td>
<td>Settlers</td>
<td>23 February 2014</td>
<td>Colonia Antorcha, outside the primary school premises after the weekly assembly</td>
</tr>
<tr>
<td>59</td>
<td>Anon.</td>
<td>Roadside sales agent of building plots in La Gloria and Extensión Emilio Zapata</td>
<td>16 February 2014</td>
<td>Future road between Diamante and Extensión Emilio Zapata</td>
</tr>
</tbody>
</table>
### E. Representatives of additional key institutional actors

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Title/Role</th>
<th>Date</th>
<th>Location/Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>Victor Martinez Suarez</td>
<td>Director of the Subdirección de Planeación (Urban Planning Department) of Tecámac</td>
<td>November 2011</td>
<td>Planning Department, Townhall (Palacio de Gobierno), City of Tecámac</td>
</tr>
<tr>
<td>61</td>
<td>Enrique Ribera</td>
<td>Sales agent of Casas Geo</td>
<td>December 2011</td>
<td>Casas Geo sales offices at Ozumbilla</td>
</tr>
<tr>
<td>62</td>
<td>Salvador Bedoya</td>
<td>Manager (Jefe de grupo) of Casas Geo sales office</td>
<td>December 2011</td>
<td>Casas Geo sales offices at Ozumbilla</td>
</tr>
<tr>
<td>63</td>
<td>Nestor Granillo Bojórquez</td>
<td>Chronicle of Tecámac</td>
<td>December 2011</td>
<td>In his office at the Cultural Institute (Casa de Cultura), City of Tecámac</td>
</tr>
<tr>
<td>64</td>
<td>Anon.</td>
<td>Sales agent of unidad habitacional Galaxias</td>
<td>25 January 2012</td>
<td>Sales office at the entrance to the Galaxias estate</td>
</tr>
</tbody>
</table>

### F. Transport professionals along the highway/country road and at the hub

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Title/Role</th>
<th>Date</th>
<th>Location/Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>65</td>
<td>Rafael</td>
<td>Checker</td>
<td>02 January 2010</td>
<td>&quot;Base Adrea&quot; wayside bus stop</td>
</tr>
<tr>
<td>66</td>
<td>Juan Espinosa</td>
<td>Checker</td>
<td>09 January 2010</td>
<td>&quot;Re del Mayo&quot; bus stop</td>
</tr>
<tr>
<td>67</td>
<td>Anon.</td>
<td>Passenger</td>
<td>13 January 2010</td>
<td>Indios Verdes transport hub</td>
</tr>
<tr>
<td>68</td>
<td>Anon.</td>
<td>Kicker</td>
<td>13 January 2010</td>
<td>Indios Verdes transport hub</td>
</tr>
<tr>
<td>69</td>
<td>Anon.</td>
<td>Checker</td>
<td>13 January 2010</td>
<td>Indios Verdes transport hub</td>
</tr>
<tr>
<td>70</td>
<td>Anon.</td>
<td>Bus driver</td>
<td>15 January 2010</td>
<td>Indios Verdes transport hub</td>
</tr>
<tr>
<td>71</td>
<td>Anon.</td>
<td>Regular bus stop user 1 (female)</td>
<td>12 January 2012</td>
<td>San Pablo wayside bus stop</td>
</tr>
<tr>
<td>72</td>
<td>Anon.</td>
<td>Regular bus stop user 2 (male)</td>
<td>12 January 2012</td>
<td>San Pablo wayside bus stop</td>
</tr>
<tr>
<td>73</td>
<td>Anon.</td>
<td>Kicker</td>
<td>12 January 2012</td>
<td>San Pablo wayside bus stop</td>
</tr>
<tr>
<td>74</td>
<td>Anon. (2 persons)</td>
<td>Street musicians</td>
<td>12 January 2012</td>
<td>San Pablo wayside bus stop</td>
</tr>
<tr>
<td>75</td>
<td>Flora</td>
<td>Bus stop user</td>
<td>12 January 2012</td>
<td>On the bus, after taking it together at the San Pablo wayside bus stop</td>
</tr>
<tr>
<td>76</td>
<td>José</td>
<td>Father visiting his daughter who lives in Hacienda Tizayuca</td>
<td>17 January 2012</td>
<td>On the bus, from Hacienda Tizayuca to Indios Verdes</td>
</tr>
<tr>
<td>77</td>
<td>Anon.</td>
<td>Regular bus stop user 3 (male)</td>
<td>26 January 2012</td>
<td>San Pablo wayside bus stop</td>
</tr>
<tr>
<td>78</td>
<td>Anon.</td>
<td>Indios Verdes administration officer</td>
<td>04 December 2012</td>
<td>Indios Verdes transport hub, with participants of the Archis Research Workshop &quot;invisible Borders&quot;</td>
</tr>
<tr>
<td>79</td>
<td>Anon.</td>
<td>Regular bus stop user</td>
<td>26 February 2014</td>
<td>San Pablo wayside bus stop</td>
</tr>
</tbody>
</table>

### G. Academics and Visual Practitioners

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Role/Title</th>
<th>Date</th>
<th>Location/Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>Alfredo Cottin</td>
<td>Urban Photographer</td>
<td>14 March 2010</td>
<td>London</td>
</tr>
<tr>
<td>81</td>
<td>Jeremy Clouser</td>
<td>Urban Photographer and lecturer at Universidad Iberoamericana</td>
<td>05 August 2010</td>
<td>Mexico City, in his studio</td>
</tr>
<tr>
<td>82</td>
<td>Oscar Farfán</td>
<td>Urban Photographer, author of the longterm photographic investigation &quot;Atlas: Mexico City&quot;</td>
<td>06 August 2010</td>
<td>Mexico City, in his studio</td>
</tr>
<tr>
<td>83</td>
<td>Peter Krieger</td>
<td>Senior Researcher at Instituto de Investigaciones Estéticas, UNAM and Senior Lecturer at Posgrado en Arquitectura, UNAM</td>
<td>08 August 2010</td>
<td>Mexico City, in his house</td>
</tr>
<tr>
<td>84</td>
<td>Pablo López Luz</td>
<td>Urban Photographer</td>
<td>10 August 2010</td>
<td>Mexico City, in his studio</td>
</tr>
<tr>
<td>85</td>
<td>Ónnis Luque</td>
<td>Arquitect and Urban Photographer</td>
<td>12 August 2010</td>
<td>Mexico City, in his studio</td>
</tr>
<tr>
<td>86</td>
<td>Nirvana Paz</td>
<td>Urban Photographer and lecturer at Centro de las Artes, San Luis Potosí</td>
<td>19 August 2010</td>
<td>Mexico City, in his studio</td>
</tr>
<tr>
<td>87</td>
<td>Federico Gama</td>
<td>Urban Photographer, former visual editor of the newspaper Diario Monitor and Photo Editor of the magazine DF</td>
<td>16 August 2010</td>
<td>Mexico City, in his studio</td>
</tr>
<tr>
<td>88</td>
<td>Peter Krieger</td>
<td>as above</td>
<td>24 August 2010</td>
<td>Group discussion &quot;We, citizens: perception and imaginary of the megalopolis&quot;, moderated by Valeria Marruenda and myself; La Miscelánea, Mexico City</td>
</tr>
<tr>
<td>89</td>
<td>Oscar Farfán</td>
<td>as above</td>
<td>24 August 2010</td>
<td>Group discussion &quot;We, citizens: perception and imaginary of the megalopolis&quot;, moderated by Valeria Marruenda and myself; La Miscelánea, Mexico City</td>
</tr>
<tr>
<td>90</td>
<td>Benjamín Albán</td>
<td>Director of El Faro de Oriente and former director of El Faro de Ecatepec</td>
<td>24 August 2010</td>
<td>Group discussion &quot;We, citizens: perception and imaginary of the megalopolis&quot;, moderated by Valeria Marruenda and myself; La Miscelánea, Mexico City</td>
</tr>
<tr>
<td>91</td>
<td>Juan Carlos Martínez</td>
<td>Resident of Valle de Chalco; founding member of Radio Cualli Otí A.C.</td>
<td>24 August 2010</td>
<td>Group discussion &quot;We, citizens: perception and imaginary of the megalopolis&quot;, moderated by Valeria Marruenda and myself; La Miscelánea, Mexico City</td>
</tr>
<tr>
<td>92</td>
<td>Flor Marin</td>
<td>Architect, employee at the Federal District's Authority for Public Space (Autoridad del Espacio Público)</td>
<td>17 December 2011</td>
<td>Walking the streets of Sierra Hermosa and adjacent fields</td>
</tr>
<tr>
<td>93</td>
<td>Moritz Bernoully</td>
<td>Architect and Urban Photographer</td>
<td>17 December 2011</td>
<td>Walking the streets of Sierra Hermosa and adjacent fields</td>
</tr>
<tr>
<td>94</td>
<td>Valentina Rojas Loa</td>
<td>Urban Researcher</td>
<td>26 January 2012</td>
<td>On the bus, after taking it together at the San Pablo bus stop</td>
</tr>
</tbody>
</table>